# Text and topology in in human interaction networks: differences among Erdös sectors and correlation of metrics (Supporting Information document)

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This Supporting Information document exposes extensive measurements on interaction networks erived from email lists, Twitter, Participabr and IRC.

## SI. MEASURES

A. General characteristics of activity distribution among participants

1. Snapshots of 1000 messages

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	g.	p.	i.	h.
N	116	62	46	8
$N_{\%}$	100.00	53.45	39.66	6.90
M	999.00	120.00	394.00	485.00
$M_{\%}$	100.00	12.01	39.44	48.55
Γ	205.00	58.00	96.00	51.00
$\Gamma_{\%}$	100.00	28.29	46.83	24.88
$\frac{\Gamma}{M}\%$	20.52	48.33	24.37	10.52
$ \stackrel{\scriptscriptstyle M}{\mu}(\gamma) $	2.60	2.24	2.76	2.73
$\sigma(\gamma)$	0.49	0.43	0.43	0.45
chars	553435	68986	179933	304516
$chars_{\%}$	100.00	12.47	32.51	55.02
spaces chars	15.60	15.25	15.70	15.61
$\frac{punct}{chars-spaces}$	6.74	6.51	6.33	7.03
$\frac{digits}{chars-spaces}$	1.48	1.89	1.56	1.34
$\frac{letters}{chars-spaces}$	89.92	89.66	90.23	89.80
$rac{vogals}{letters} \ rac{uppercase}{}$	36.15	35.87	36.01	36.30
$\frac{uppercase}{letters}$	5.34	5.92	5.70	4.99
tokens	120403	14760	39269	66375
$tokens_{\%}$	100.00	12.26	32.61	55.13
$tokens \neq$	6.90	16.18	11.09	8.83
$ \frac{knownw}{tokens} \\ knownw \neq $	35.19	33.38	35.60	35.36
$knownw \neq knownw \\ stopw$	10.01	28.86	17.44	13.89
$egin{array}{c} stopw \ \hline knownw \ punct \end{array}$	100.10	99.27	98.20	101.40
$egin{array}{c} punct \\ tokens \\ contrac \\ \end{array}$	20.61 1.13	$\begin{vmatrix} 21.48 \\ 0.65 \end{vmatrix}$	20.16 $1.07$	20.68 1.26
tokens				
$\mu(tokens)$	3.81	3.88	3.79	3.80
$\sigma(tokens)$	2.86	3.14	2.87	2.79
$\begin{vmatrix} \mu(knownw) \\ \sigma(\overline{knownw}) \end{vmatrix}$	5.70 $2.27$	5.79 $2.28$	5.63 $2.22$	5.72 2.29
$\frac{\sigma(knownw)}{\mu(knownw\neq)}$	6.82	6.38	6.56	6.76
$\sigma(\overline{knownw} \neq)$	2.57	2.41	2.46	2.52
$\mu(\overline{stopw})$	2.75	2.67	2.70	2.80
$\sigma(\overline{stopw})$	1.11	1.10	1.12	1.12
sents	4120	538	1382	2201
$sents_{\%}$	99.98	13.06	33.54	53.41
$\mu_S(chars)$	133.10	126.79	129.10	137.10
$\sigma_S(chars)$	126.36	167.14	126.29	114.02
$\mu_S(tokens)$	29.27	27.44	28.43	30.22
$\sigma_S(tokens)$	27.68	36.57	27.77	24.91
$\begin{vmatrix} \mu_S(knownw) \\ \sigma_S(knownw) \end{vmatrix}$	9.19 7.99	8.10 7.65	8.97 8.37	9.59 7.78
$\mu_S(stopw)$	9.06	7.73	8.60	9.68
$\begin{vmatrix} \mu_S(stopw) \\ \sigma_S(stopw) \end{vmatrix}$	7.51	6.65	7.38	7.73
$\mu_S(puncts)$	6.07	5.90	5.75	6.30
$\sigma_S(puncts)$	9.83	14.69	9.47	8.46
msgs	999	120	394	485
$msgs_{\%}$	100.00	12.01	39.44	48.55
$\mu_M(sents)$	4.96	5.40	4.42	5.28
$\sigma_M(sents)$ $\mu_M(tokens)$	5.51 122.21	4.58 124.05	4.30	6.48 138.95
$\sigma_M(tokens)$	156.44	170.65	101.00	181.18
$\mu_M(knownw)$	38.43	36.65	31.92	44.17
$\sigma_M(knownw)$	46.12	38.27	37.08	53.24
$\mu_M(stopw)$	36.85	34.42	29.74	43.24
$\sigma_M(stopw)$	45.03	35.03	35.08	52.83
$\mu_M(puncts)$	26.39	27.23	21.28	30.33
$\sigma_M(puncts)$	48.68	63.42	25.34	57.68
$\mu_M(chars)$ $\sigma_M(chars)$	551.97 674.26	573.65 794.67	455.12 502.11	625.27 749.84
OM (Chars)	014.20	194.01	002.11	143.04

TABLE S1. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 0

	g.	p.	i.	h.
N	163	87	53	23
$N_{\%}$	100.00	53.37	32.52	14.11
M	1000.00	144.00	327.00	519.00
$M_{\%}$	100.00	14.55	33.03	52.42
Γ	274.00	67.00	99.00	108.00
$\Gamma_{\%}$	100.00	24.45	36.13	39.42
$\frac{\Gamma}{M}\%$	27.40	46.53	30.28	20.81
$ \mu(\gamma) $	2.65	2.46	2.71	2.70
$\sigma(\gamma)$	0.48	0.50	0.46	0.46
chars	516456	86876	164545	265035
$chars_{\%}$	100.00	16.82	31.86	51.32
spaces chars	13.36	12.80	13.32	13.57
$\frac{punct}{chars-spaces}$	9.10	9.87	8.45	9.25
$\frac{digits}{chars-spaces}$	2.37	3.59	1.54	2.48
$\frac{letters}{chars-spaces}$	86.53	83.66	88.22	86.43
vogals	35.08	33.79	35.55	35.19
$\frac{\overline{letters}}{uppercase}$ $\overline{letters}$	7.12	9.43	6.63	6.68
tokens	112922	20293	35087	57543
$tokens_{\%}$	100.00	17.97	31.07	50.96
$tokens \neq$	12.69	21.65	18.02	15.07
$\begin{array}{c} \underline{knownw} \\ tokens \\ knownw \neq \end{array}$	24.46	24.37	25.07	24.12
	7.22	15.55	10.01	10.01
$\begin{array}{ c c c }\hline knownw\\\hline stopw\\\hline knownw\\punct\end{array}$	34.72	29.73	33.41	37.33
$egin{array}{c} punct \\ tokens \\ contrac \\ \end{array}$	29.31	29.51	28.44	29.77
tokens	0.07	0.08	0.03	0.09
$\mu(tokens)$	3.89	3.66	3.99	3.91
$\sigma(tokens)$	3.04	2.97	3.05	3.06
$\begin{vmatrix} \mu(knownw) \\ \sigma(\overline{knownw}) \end{vmatrix}$	4.23 2.19	4.16 $2.20$	$4.16 \\ 2.15$	4.30 $2.22$
$\frac{\sigma(knownw)}{\mu(knownw\neq)}$	5.62	5.14	5.13	5.52
$\left  \frac{\mu(knownw \neq)}{\sigma(\overline{knownw} \neq)} \right $	$\frac{3.02}{2.45}$	$\frac{5.14}{2.44}$	$\frac{5.13}{2.38}$	2.43
$\frac{\overline{\mu(\overline{stopw})}}{\overline{\mu(\overline{stopw})}}$	2.13	2.10	2.07	2.18
$\sigma(stopw)$	0.96	0.98	0.92	0.98
sents	4915	731	1575	2611
$sents_{\%}$	99.96	14.87	32.03	53.10
$\mu_S(chars)$	103.83	117.72	103.22	100.22
$\sigma_S(chars)$	129.23	183.30	113.95	118.82
$\mu_S(tokens)$	22.98	27.76	22.28	22.04
$\sigma_S(tokens)$	32.31	52.34	25.24	28.39
$\begin{vmatrix} \mu_S(knownw) \\ \sigma_S(knownw) \end{vmatrix}$	4.64 6.68	5.16 8.71	$4.67 \\ 6.11$	$4.47 \\ 6.32$
$\mu_S(stopw)$	1.63	1.68	1.59	1.65
$\sigma_S(stopw)$	2.38	2.42	2.21	2.47
$\mu_S(puncts)$	6.74	8.20	6.34	6.56
$\sigma_S(puncts)$	11.58	20.17	8.42	9.74
msgs	990	144	327	519
$msgs_{\%}$	100.00	14.55	33.03	52.42
$\mu_M(sents)$	5.96	6.05	5.81	6.02
$\sigma_M(sents)$	2.97	3.83	2.73	2.84
$\mu_M(tokens)$	115.01	141.84	108.18	111.87
$\sigma_M(tokens)$	98.22	179.36	64.58	81.30
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	23.97 $17.82$	27.06 $24.77$	23.39 $13.77$	23.47 17.69
$\mu_M(stopw)$	8.11	8.54	7.68	8.27
$\sigma_M(stopw)$ $\sigma_M(stopw)$	7.74	7.10	4.34	9.40
$\mu_M(puncts)$	33.51	41.69	30.56	33.11
$\sigma_{M}(puncts)$	30.96	58.92	19.90	24.31
$\mu_M(chars)$	521.57	603.14	503.16	510.55
$\sigma_M(chars)$	383.91	580.21	307.30	355.04

TABLE S2. Messages sizes in each Erdös sector ( ${f p}_{f \cdot}$  for periphery,  ${f i}_{f \cdot}$  for intermediary,  ${f h}_{f \cdot}$  for hubs). TAG: 2

	g.	p.	i.	h.
N	89	47	35	7
$N_{\%}$	100.00	52.81	39.33	7.87
M	1000.00	115.00	348.00	537.00
$M_{\%}$	100.00	11.50	34.80	53.70
$\Gamma$	254.00	87.00	104.00	63.00
$\Gamma_{\%}$	100.00	34.25	40.94	24.80
$\frac{\Gamma}{M}\%$	25.40	75.65	29.89	11.73
$\left  \stackrel{M}{\mu} \stackrel{\circ}{\gamma} \right $	2.69	2.70	2.80	2.49
$\sigma(\gamma)$	0.46	0.46	0.40	0.50
chars	779504	92973	392241	294290
$chars_{\%}$	100.00	11.93	50.32	37.75
spaces chars	16.04	14.72	16.51	15.84
$\left  rac{enars}{punct} \right $	7.55	7.92	7.72	7.20
digits	2.72	2.85	3.54	1.61
chars-spaces letters	87.71	87.17	86.76	89.14
$\frac{chars-spaces}{vogals}$	35.97	35.79	35.75	36.31
letters uppercase	7.81	8.31	8.28	7.06
tokens	174202	21314	87882	65006
$tokens_{\%}$	100.00	12.24	50.45	37.32
$tokens \neq$	4.99	13.42	6.97	7.45
knownw	34.80	34.90	32.78	37.50
$tokens \atop knownw \neq$	7.66	22.60	11.65	12.04
knownw	83.48	77.49	82.69	86.24
knownw punct	24.07	24.76	25.82	21.46
tokens	0.94	0.95	0.90	1.00
$\mu(\overline{tokens})$	3.68	3.64	3.65	3.73
$\sigma(\overline{tokens})$	2.97	$\frac{3.04}{2.97}$	$\frac{3.03}{3.12}$	$\frac{3.73}{2.74}$
$\frac{b(\overline{knownw})}{\mu(\overline{knownw})}$	5.49	5.51	5.44	5.54
$\sigma(\overline{knownw})$	2.45	$\frac{3.31}{2.45}$	2.40	$\frac{3.54}{2.52}$
$\mu(\overline{knownw} \neq)$	6.94	6.51	6.72	6.84
$\sigma(\overline{knownw} \neq)$	2.55	2.50	2.46	2.55
$\mu(\overline{stopw})$	2.75	2.66	2.73	2.80
$\sigma(\overline{stopw})$	1.10	1.09	1.10	1.10
sents	6346	685	2711	2951
sents <sub>%</sub>	99.98	10.79	42.71	46.49
$\mu_S(chars)$	121.54	134.45	143.24	98.56
$\sigma_S(chars)$	295.26	265.54	407.95	131.26
$\mu_S(tokens)$ $\sigma_S(tokens)$	27.45 64.88	31.12 64.50	32.42 87.68	22.03 31.14
				6.50
$\begin{vmatrix} \mu_S(knownw) \\ \sigma_S(knownw) \end{vmatrix}$	7.54 11.08	$8.54 \\ 13.07$	8.42 13.60	7.24
$\mu_S(stopw)$	6.82	7.09	7.53	6.11
$\begin{vmatrix} \mu_S(stopw) \\ \sigma_S(stopw) \end{vmatrix}$	7.02	7.12	7.63	6.31
$\mu_S(puncts)$	6.61	7.71	8.38	4.73
$\sigma_S(puncts)$	29.25	27.82	40.31	12.66
msgs	1000	115	348	537
$msgs_{\%}$	100.00	11.50	34.80	53.70
$\mu_M(sents)$	7.25	6.87	8.65	6.43
$\sigma_M(sents)$	6.15	4.83	7.33	5.37
$\mu_M(tokens)$	176.08	187.21	255.09	122.50
$\sigma_M(tokens)$	264.15	245.50	374.55	138.47
$\mu_M(knownw)$	48.29	51.34	66.22	36.02
$\sigma_M(knownw)$	57.71	58.18	77.58	34.88
$\mu_M(stopw)$	42.78	41.57	57.86	33.26
$\sigma_M(stopw)$	47.13	38.80	62.87	31.85
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	43.59 103.20	47.65 $92.43$	67.52 $150.25$	27.20 52.26
$\mu_M(puncis)$ $\mu_M(chars)$	777.34	806.06	1123.88	546.63
$\left  egin{array}{c} \mu_M(chars) \\ \sigma_M(chars) \end{array} \right $	1226.60	1039.90	1807.09	568.07
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TABLE S3. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 3

	g.	p.	i.	h.
N	519	463	44	12
$N_{\%}$	100.00	89.21	8.48	2.31
M	855.00	496.00	90.00	262.00
$M_{\%}$	100.00	58.49	10.61	30.90
Γ	633.00	492.00	58.00	83.00
$\Gamma_{\%}$	100.00	77.73	9.16	13.11
$\frac{\Gamma}{M}\%$	74.04	99.19	64.44	31.68
$\mu(\gamma)$	2.14	2.00	2.74	2.54
$\sigma(\gamma)$	0.35	0.00	0.44	0.50
chars	961793	697786	100398	163609
chars%	100.00	72.55	10.44	17.01
$\frac{spaces}{chars}$	15.27	14.88	14.78	17.20
chars-spaces	11.18	11.62	13.59	7.69
$\frac{digits}{chars-spaces}$	4.36	4.55	3.10	4.33
$\frac{letters}{chars-spaces}$	81.88	81.11	81.13	85.74
$rac{vogals}{letters} \ uppercase$	32.97	32.45	32.60	35.35
letters	8.51	8.84	8.79	6.97
tokens	229950	169417	24497	36037
$tokens_{\%}$	100.00	73.68	10.65	15.67
$tokens \neq knownw$	8.27	9.78	10.72	9.64
$\frac{knownw}{tokens}$ $knownw \neq$	32.84	33.23	29.87	33.05
$\frac{knownw}{knownw}$ $stopw$	12.10	14.80	17.08	16.42
$\frac{stopw}{knownw}$ $punct$	62.21	57.66	57.64	86.48
$\frac{tokens}{contrac}$	27.73 0.39	27.62 $0.25$	34.99 0.42	23.31 1.04
tokens				
$\mu(tokens)$	3.49	3.46	3.42	3.68
$\sigma(tokens)$	2.69	2.60	3.15	2.76
$\mu(knownw)$	5.30	5.27	5.11	5.55
$\sigma(knownw)$	2.33 6.74	2.25	2.62 6.28	2.53
$ \frac{\mu(\overline{knownw} \neq)}{\sigma(\overline{knownw} \neq)} $	2.41	6.68 $2.38$	2.51	6.60 2.46
$\frac{b(knownw \neq)}{\mu(stopw)}$	2.75	2.77	$\frac{2.51}{2.57}$	2.46
$\sigma(\overline{stopw})$	1.13	1.13	1.13	1.12
sents	5435	3649	454	1334
$sents_{\%}$	99.96	67.11	8.35	24.54
$\mu_S(chars)$	175.66	189.91	219.81	121.38
$\sigma_S(chars)$	617.17	727.57	476.27	149.99
$\mu_S(tokens)$	42.34	46.47	53.97	27.02
$\sigma_S(tokens)$	189.97	226.13	125.46	38.44
$\mu_S(knownw)$	11.92	13.21	14.42	7.52
$\sigma_S(knownw)$	34.44	40.06	31.62	8.66
$\mu_S(stopw)$	7.40	7.65	7.26	6.75
$\sigma_S(stopw)$	10.28	11.59	9.46	5.67
$\mu_S(puncts)$	11.76	12.87 $94.89$	18.89	6.30
$\sigma_S(puncts)$	79.86		55.27	16.28
msgs	848	496	90	262
$msgs_{\%} = \mu_M(sents)$	100.00 7.27	58.49 8.16	10.61 5.99	30.90 6.04
$\sigma_M(sents)$	8.59	10.48	3.99 4.54	4.49
$\mu_M(tokens)$	272.62	342.71	273.70	139.55
$\sigma_{M}(tokens)$	504.82	625.09	360.33	116.20
$\mu_M(knownw)$	76.78	97.46	73.24	38.85
$\sigma_M(knownw)$	112.68	136.28	89.23	30.78
$\mu_M(stopw)$	47.10	56.12	36.19	33.78
$\sigma_M(stopw)$	63.93	78.85	30.25	27.77
$\mu_M(puncts)$	76.32	95.30	96.40	33.50
$\sigma_M(puncts)$	210.38	262.51	157.44	40.44
$\mu_M(chars)$	1132.79	1405.79	1113.91	622.46
$\sigma_M(chars)$	1748.97	2128.22	1411.94	489.36

TABLE S4. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 6

	g.	p.	i.	h.
N	183	88	77	18
$N_{\%}$	100.00	48.09	42.08	9.84
M	1000.00	121.00	467.00	410.00
$M_{\%}$	100.00	12.12	46.79	41.08
L.	221.00	45.00	105.00	71.00
Γ%	100.00	20.36	47.51	32.13 17.32
$\frac{\Gamma}{M}\%$ $\mu(\gamma)$	22.10 $2.71$	2.47	$\frac{22.48}{2.76}$	$\frac{17.32}{2.77}$
$\begin{vmatrix} \mu(\gamma) \\ \sigma(\gamma) \end{vmatrix}$	0.46	0.50	0.43	0.42
chars	439032	65184	206313	167535
chars $chars$	100.00	14.85	46.99	38.16
spaces	14.97	14.05	15.18	15.07
chars punct	8.16	8.30	8.30	7.94
$\frac{chars-spaces}{digits}$	4.50	6.32	4.77	3.44
chars-spaces letters	85.37	83.42	84.94	86.67
chars-spaces vogals	31.41	30.47	30.72	32.60
$\frac{letters}{uppercase}$	9.72	9.72	9.80	9.62
tokens	91012	14018	42963	34033
$tokens_{\%}$	100.00	14018 $15.40$	42963 $47.20$	34033
$tokens \neq$	16.17	27.29	19.92	19.98
knownw	17.95	18.30	17.71	18.12
$tokens \atop knownw \neq$	10.98	29.04	14.84	15.12 $15.37$
stopw_	36.03	33.68	34.77	38.57
knownw	29.38	29.88	29.54	28.97
$\frac{tokens}{contrac}$ $tokens$	0.03	0.06	0.04	0.00
$\mu(\overline{tokens})$	4.02	3.92	3.99	4.10
$\sigma(\overline{tokens})$	3.62	3.54	3.61	3.68
$\frac{b(tokens)}{\mu(\overline{knownw})}$	3.93	4.29	3.89	3.82
$\sigma(\overline{knownw})$	2.13	2.33	2.10	$\frac{3.62}{2.07}$
$\mu(\overline{knownw} \neq)$	5.51	5.17	5.23	5.16
$\sigma(\overline{knownw} \neq)$	2.46	2.37	2.41	2.44
$\mu(\overline{stopw})$	1.66	1.71	1.60	1.70
$\sigma(\overline{stopw})$	0.97	0.96	0.97	0.97
sents	3211	441	1629	1143
$sents_{\%}$	99.94	13.73	50.70	35.57
$\mu_S(chars)$	135.35	146.67	125.07	145.39
$\sigma_S(chars)$	168.99	186.56	151.78	183.11
$\mu_S(tokens)$	28.35	31.80	26.38	29.78
$\sigma_S(tokens)$	40.92	48.66	40.17	38.40
$ \mu_S(knownw) $ $ \sigma_S(knownw) $	4.31	4.63	$3.89 \\ 6.29$	4.77
$\mu_S(\kappa nownw)$ $\mu_S(stopw)$	7.10	7.78 1.73	1.44	7.85
$\sigma_S(stopw)$ $\sigma_S(stopw)$	$\frac{1.03}{2.61}$	2.56	$\frac{1.44}{2.24}$	3.06
$\mu_S(puncts)$	8.34	9.51	7.80	8.63
$\sigma_S(puncts)$	14.80	17.69	15.27	12.68
msgs	998	121	467	410
$msgs_{\%}$	100.00	12.12	46.79	41.08
$\mu_M(sents)$	4.17	4.60	4.42	3.74
$\sigma_M(sents)$	3.36	4.57	3.25	3.01
$\mu_M(tokens)$	92.14	116.83	92.97	83.91
$\sigma_M(tokens)$	100.80	150.09	96.14	85.49
$\mu_M(knownw)$	14.82	17.85	14.56	14.22
$\sigma_M(knownw)$	18.18	26.13	15.96	17.60
$\mu_M(stopw)$	5.30	6.31	5.02	5.32
$\sigma_M(stopw)$	6.69	7.94	6.15	6.84
$\mu_M(puncts)$	26.82	34.69	27.21	24.05
$\sigma_M(puncts)$	32.43 439.89	49.03 538.64	31.90 441.75	25.81 408.62
$\mu_M(chars)$ $\sigma_M(chars)$	439.89	607.79	386.04	384.61
o <sub>M</sub> (chars)	440.01	001.19	000.04	004.01

TABLE S5. Messages sizes in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 7

	g.	p.	i.	h.
N	160	99	52	9
$N_{\%}$	100.00	61.88	32.50	5.62
M	990.00	128.00	315.00	544.00
$M_{\%}$	100.00	12.97	31.91	55.12
Γ	201.00	74.00	59.00	68.00
$\Gamma_{\%}$	100.00	36.82	29.35	33.83
$\frac{\Gamma}{M}\%$	20.30	57.81	18.73	12.50
$ \mu(\gamma) $	2.64	2.28	2.88	2.82
$\sigma(\gamma)$	0.48	0.45	0.32	0.38
chars	572130	142137	143038	286955
$chars_{\%}$	100.00	24.84	25.00	50.16
spaces chars	16.17	13.98	16.93	16.88
$\frac{punct}{chars-spaces}$	8.76	11.92	6.50	8.26
$\frac{digits}{chars-spaces}$	3.68	4.13	5.57	2.51
$\frac{letters}{chars-spaces}$	85.69	82.32	85.97	87.27
vogals	34.45	30.60	35.36	35.86
$\frac{letters}{uppercase}$ $\frac{letters}{letters}$	8.02	18.81	4.19	4.69
tokens	131585	33589	30532	67464
$tokens_{\%}$	100.00	25.53	23.20	51.27
$tokens \neq$	8.02	13.94	15.78	8.03
$\frac{knownw}{tokens}$ $knownw \neq$	33.87	34.18	33.72	33.78
$\frac{knownw \neq}{knownw}$ $\underline{stopw}$	10.83	19.27	24.02	13.78
$egin{array}{c} stopw \ \hline knownw \ punct \end{array}$	83.37	44.63	96.10	97.14
$egin{array}{c} punct \ tokens \ contrac \end{array}$	24.84	31.17	19.20	24.24
$\frac{contrac}{tokens}$	1.28	0.26	1.31	1.77
$\mu(\overline{tokens})$	3.58	3.58	3.82	3.47
$\sigma(\overline{tokens})$	2.68	2.78	2.87	2.53
$\mu(\overline{knownw})$	5.33	5.05	5.52	5.39
$\sigma(\overline{knownw})$	2.25	2.33	2.22	2.21
$\mu(\overline{knownw} \neq)$	6.62	6.22	6.42	6.57
$\sigma(\overline{knownw} \neq)$	2.50	2.47	2.43	2.42
$\mu(\overline{stopw})$	2.78	2.71	2.78	2.80
$\sigma(\overline{stopw})$	1.12	1.10	1.11	1.13
sents	3800	588	943	2271
sents <sub>%</sub>	99.95	15.47	24.80	59.73
$\mu_S(chars)$	149.21	240.22	150.47	124.99
$\sigma_S(chars)$	296.94	590.17	295.45	135.59
$\mu_S(tokens)$	34.64	57.15	32.38	29.72
$\sigma_S(tokens)$ $\mu_S(knownw)$	72.69 9.96	150.28 12.72	58.22 9.91	37.80 9.26
$\sigma_S(knownw)$	13.39	25.14	9.91	10.00
$\mu_S(stopw)$	8.68	7.62	9.36	8.67
$\sigma_S(stopw)$	7.59	8.22	7.97	7.22
$\mu_S(puncts)$	8.62	17.83	6.22	7.22
$\sigma_S(puncts)$	29.74	63.85	19.24	15.63
msgs	987	128	315	544
$msgs_{\%}$	100.00	12.97	31.91	55.12
$\mu_M(sents)$	4.70	5.49	3.96	4.93
$\sigma_M(sents)$	4.56	5.58	3.14	4.91
$\mu_M(tokens)$	135.20	263.37	98.49	126.29
$\sigma_M(tokens)$	274.84	622.60	130.08	176.98
$\mu_M(knownw)$	38.96	58.70	30.24	39.37
$\frac{\sigma_M(knownw)}{\mu_M(stopw)}$	55.82 32.75	99.18 34.80	30.62	51.57 35.31
$\begin{vmatrix} \mu_M(stopw) \\ \sigma_M(stopw) \end{vmatrix}$	37.40	50.55	27.50	38.20
$\mu_M(stopw)$ $\mu_M(puncts)$	34.85	82.50	19.91	32.28
$\sigma_{M}(puncts)$	108.12	258.67	37.96	62.93
$\mu_M(chars)$	577.08	1109.51	452.24	524.09
$\sigma_M(chars)$	1072.10	2365.00	638.17	674.52

TABLE S6. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 8

	g.	p.	i.	h.
N	349	266	76	7
$N_{\%}$	100.00	76.22	21.78	2.01
M	998.00	373.00	340.00	284.00
$M_{\%}$	100.00	37.41	34.10	28.49
Γ	549.00	337.00	207.00	5.00
$\Gamma_{\%}$	100.00	61.38	37.70	0.91
$\frac{\Gamma}{M}\%$	55.01	90.35	60.88	1.76
$\mu(\gamma)$	2.44	2.41	2.50	2.60
$\sigma(\gamma)$	0.50	0.49	0.50	0.49
chars	725760	264396	274737	186627
$chars_{\%}$	100.00	36.43	37.86	25.71
spaces chars	17.14	17.36	16.94	17.13
$\frac{punct}{chars-spaces}$	6.51	7.19	6.71	5.27
$\frac{digits}{chars-spaces}$	4.11	5.77	4.36	1.38
$\frac{letters}{chars-spaces}$	87.32	84.94	86.95	91.23
vogals	35.68	35.42	35.61	36.14
letters uppercase	6.38	7.30	6.56	4.94
tokens	162138	59654	61985	40499
$tokens_{\%}$	102138	36.79	38.23	24.98
$tokens \neq $	6.20	10.38	9.53	9.10
knownw	34.97	34.08	34.98	36.27
$\frac{tokens}{knownw\neq}$	7.98	14.82	13.65	15.80
knownw	92.33	85.64	88.18	107.72
$\frac{\overline{knownw}}{punct}$	20.25	20.82	21.43	17.61
$\frac{tokens}{contrac}$	1.06	0.65	0.78	2.08
tokens				
$\mu(\underbrace{tokens})$	3.63	3.59	3.61	3.74
$\frac{\sigma(tokens)}{\sigma(tokens)}$	2.59	2.65	2.61	2.49
$\mu(\underbrace{knownw})$	5.74	5.73	5.68	5.86
$\sigma(knownw)$	2.36	2.42	2.35	2.29
$\mu(\underbrace{knownw\neq})$	6.76	6.57	6.59	6.70
$\sigma(\overline{knownw} \neq)$	2.61	2.58	2.52	2.49
$\mu(\overline{stopw})$	2.73	2.69	2.71	2.81
$\sigma(stopw)$	1.09	1.08	1.11	1.07
sents	5007	2032	2001	976
$sents_{\%}$	99.96	40.57	39.95	19.48
$\mu_S(chars)$	143.44	128.61	135.77	189.77
$\sigma_S(chars)$	178.99	170.38	182.08	182.31
$\mu_S(tokens)$	32.40	29.37	30.99	41.52
$\sigma_S(tokens)$	44.14	44.29	44.91	40.90
$\mu_S(knownw)$	9.49	8.07	9.09	13.23
$\sigma_S(knownw)$ $\mu_S(stopw)$	9.90	7.54	9.87	12.90
$\begin{vmatrix} \mu_S(stopw) \\ \sigma_S(stopw) \end{vmatrix}$	9.21 9.73	7.34 7.17	8.24 7.63	15.06 $14.69$
$\mu_S(stopw)$ $\mu_S(puncts)$	6.57	6.13	6.65	7.33
$\sigma_S(puncts)$	14.08	12.57	16.99	7.33 9.76
msgs	997	373	340	284
msgs%	100.00	37.41 6.31	34.10	28.49
$ \mu_M(sents) $ $ \sigma_M(sents) $	5.90 5.83	5.27	$6.76 \\ 7.24$	$\frac{4.34}{4.06}$
$\mu_M(tokens)$	164.57	161.23	183.99	145.71
$\sigma_M(tokens)$ $\sigma_M(tokens)$	206.67	207.77	250.58	131.36
$\mu_M(knownw)$	48.33	44.41	54.13	46.53
$\sigma_M(knownw)$	54.25	45.15	67.74	45.82
$\mu_M(stopw)$	45.54	39.53	47.90	50.60
$\sigma_M(stopw)$ $\sigma_M(stopw)$	50.37	39.98	60.71	48.12
$\mu_M(puncts)$	34.68	34.36	40.52	28.12
$\sigma_{M}(puncts)$	54.17	53.39	69.72	25.61
$\mu_M(chars)$	725.53	707.30	806.14	652.95
$\sigma_{M}(chars)$	879.39	852.82	1075.45	601.20
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TABLE S7. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 9

	g.	p.	i.	h.
N	216	123	83	10
$N_{\%}$	100.00	56.94	38.43	4.63
M	1000.00	171.00	484.00	345.00
$M_{\%}$	100.00	17.10	48.40	34.50
Γ	278.00	78.00	113.00	87.00
$\Gamma_{\%}$	100.00	28.06	40.65	31.29
$\frac{\Gamma}{M}\%$	27.80	45.61	23.35	25.22
$\mu(\gamma)$	2.52	2.50	2.51	2.54
$\sigma(\gamma)$	0.50	0.50	0.50	0.50
chars	623572	105938	358477	159157
$chars_{\%}$	100.00	16.99	57.49	25.52
spaces chars	15.22	14.32	15.60	14.94
$\frac{punct}{chars-spaces}$	5.91	6.26	5.70	6.13
$\frac{digits}{chars-spaces}$	1.57	1.61	1.67	1.30
letters	90.61	90.12	90.76	90.60
$\frac{chars-spaces}{vogals}$	37.71	37.52	37.72	37.82
$\frac{\overline{letters}}{uppercase}$	4.06	4.23	3.90	4.31
tokens	130345	21929	73978	34439
$tokens_{\%}$	100.00	16.82	56.76	26.42
$tokens \neq$	7.43	18.17	9.11	$\frac{20.42}{11.17}$
knownw	35.53	36.94	35.07	35.63
$tokens \atop knownw \neq$	9.89	26.16	12.94	18.55
knownw stopw	92.10	77.89	94.73	95.90
$\overline{knownw}$ $punct$	20.06	21.40	19.69	19.99
$\frac{tokens}{contrac}$	0.78	0.62	0.58	1.30
tokens				
$\mu(\underbrace{tokens})$	3.98	4.06	4.01	3.86
$\sigma(\overline{tokens})$	2.98	3.05	3.04	2.78
$\mu(\underbrace{knownw})$	6.00	6.05	6.06	5.82
$\sigma(knownw)$	2.64	2.72	2.67	2.53
$\mu(\underline{knownw \neq})$	6.86	6.60	6.74	6.66
$\sigma(knownw \neq)$	2.62	2.59	2.59	2.55
$\mu(\overline{stopw})$	2.78	2.74	2.78	2.81
$\sigma(\overline{stopw})$	1.07	1.07	1.07	1.05
sents	4844	763	2720	1363
$sents_{\%}$	99.96	15.74	56.13	28.13
$\mu_S(chars)$	127.23	137.44	130.14	115.52
$\sigma_S(chars)$	114.50	130.78	118.40	93.99
$\mu_S(tokens)$	26.92	28.75	27.20	25.28
$\sigma_S(tokens)$	27.30	29.92	28.96	21.64
$\mu_S(knownw)$	8.15	8.84	8.19	7.68
$\sigma_S(knownw)$	7.37	10.14	7.13	5.77
$\mu_S(stopw)$	7.89	7.40	8.10	7.75
$\sigma_S(stopw)$	6.68	7.06	6.78	6.22
$\mu_S(puncts)$	5.41	6.16	5.36	5.06
$\sigma_S(puncts)$	10.99	10.96	12.48	7.14
msgs	1000	171	484	345
$msgs_{\%}$	100.00	17.10	48.40	34.50
$\mu_M(sents)$	5.78	5.35	6.55	4.91
$\sigma_M(sents)$	7.20	6.39	8.92	4.10
$\mu_M(tokens)$	131.68	129.29	154.06	101.47
$\sigma_M(tokens)$	214.57	201.99 39.77	269.93	96.95 $30.97$
$\mu_M(knownw)$	40.01		46.53	
$\sigma_M(knownw)$	67.19	67.00	83.26	31.52
$\mu_M(stopw)$	37.80 64.94	32.75 53.21	45.12 83.32	30.04 $30.50$
$\sigma_M(stopw)$	27.17	28.26	30.99	21.28
$\begin{array}{c} \mu_M(puncts) \\ \sigma_M(puncts) \end{array}$	47.56	28.20 47.81	58.95	21.28
$\mu_M(chars)$	622.09	618.25	739.37	459.46
$\sigma_M(chars)$	1054.80	1022.33	1322.30	456.30
o <sub>M</sub> (chais)	1004.00	1022.00	1022.00	100.00

TABLE S8. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 10

	g.	p.	i.	h.
N	76	48	22	6
$N_{\%}$	100.00	63.16	28.95	7.89
M	1000.00	99.00	337.00	564.00
$M_{\%}$	100.00	9.90	33.70	56.40
	278.00	60.00	177.00	41.00
Γ%	100.00	21.58	63.67	14.75
$\frac{\Gamma}{M}\%$ $\mu(\gamma)$	27.80 $2.67$	60.61 $2.45$	52.52 $2.75$	7.27 $2.63$
$\begin{vmatrix} \mu(\gamma) \\ \sigma(\gamma) \end{vmatrix}$	0.47	0.50	0.43	0.48
	1541843	94451	852580	594812
$ chars   chars_{\%} $	100.00	6.13	55.30	38.58
spaces	16.56	16.49	16.91	16.07
chars punct	4.05	4.68	4.49	3.31
$\frac{chars-spaces}{digits}$	1.09	1.47	1.34	0.69
chars-spaces letters	92.63	91.54	91.76	94.03
chars-spaces   vogals	37.20	36.91	37.05	37.45
$\frac{letters}{uppercase}$	4.70	4.97	5.45	3.62
tokens	323627	19431	182163	122034
$tokens_{\%}$	100.00	6.00	56.29	37.71
$tokens \neq$	4.80	19.93	5.99	7.54
knownw	38.64	38.43	38.34	39.13
$tokens \atop knownw \neq 1$	7.57	33.61	9.96	13.15
knownw stopw knownw	100.77	93.09	95.39	109.84
knownw punct tokens	14.55	17.36	15.48	12.70
$rac{tokens}{contrac} \ \hline tokens$	0.51	0.66	0.34	0.74
$\mu(\overline{tokens})$	3.90	3.97	3.82	4.02
$\sigma(\overline{tokens})$	2.69	2.81	2.66	2.70
$\mu(\overline{knownw})$	6.04	6.12	5.92	6.21
$\sigma(\overline{knownw})$	2.54	2.62	2.53	2.52
$\mu(\overline{knownw} \neq)$	7.35	6.94	7.20	7.27
$\sigma(\overline{knownw} \neq)$	2.68	2.64	2.67	2.63
$\mu(stopw)$	2.79	2.80	2.76	2.83
$\sigma(\overline{stopw})$	1.08	1.07	1.07	1.10
sents	13130	832	6893	5407
sents <sub>%</sub>	99.98	6.34	52.49	41.17
$\mu_S(chars)$	115.90	111.90	121.93	108.78
$\sigma_S(chars)$	92.44	90.14	96.27	87.10
$\mu_S(tokens)$	24.65	23.36	26.43	22.57
$\sigma_S(tokens)$	20.17 7.77	19.28	7.93	18.28
$\begin{vmatrix} \mu_S(knownw) \\ \sigma_S(knownw) \end{vmatrix}$	6.12	7.13 5.68	6.36	$7.65 \\ 5.86$
$\mu_S(stopw)$	8.65	7.50	8.73	8.72
$\sigma_S(stopw)$ $\sigma_S(stopw)$	6.97	6.59	7.26	6.63
$\mu_S(puncts)$	3.59	4.06	4.10	2.87
$\sigma_S(puncts)$	5.13	5.12	5.43	4.63
msgs	1000	99	337	564
$ msgs_{\%} $	100.00	9.90	33.70	56.40
$\mu_M(sents)$	14.09	9.26	21.39	10.57
$\sigma_M(sents)$	16.37	9.35	22.72	10.15
$\mu_M(tokens)$	325.77	197.90	542.84	218.51
$\sigma_M(tokens)$	422.68	197.20	607.01	217.38
$\mu_M(knownw)$	102.78	60.42	163.11	74.17
$\sigma_M(knownw)$	128.42	58.85	181.29	75.41
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	113.05 141.87	62.70 64.40	177.92 199.76	83.13 85.21
$\mu_M(stopw)$ $\mu_M(puncts)$	48.74	35.38	85.54	29.09
$\sigma_{M}(puncts)$	65.60	37.92	92.24	32.68
$\mu_M(chars)$	1539.83	952.44	2527.69	1052.66
$\sigma_M(chars)$	1981.30	946.94	2831.64	1063.39
	55			

TABLE S9. Messages sizes in each Erdös sector ( ${f p}_{f \cdot}$  for periphery,  ${f i}_{f \cdot}$  for intermediary,  ${f h}_{f \cdot}$  for hubs). TAG: 11

	g.	p.	i.	h.
N	255	148	99	8
$N_{\%}$	100.00	58.04	38.82	3.14
M	996.00	246.00	481.00	268.00
$M_{\%}$	100.00	24.72	48.34	26.93
Γ	528.00	214.00	203.00	111.00
$\Gamma_{\%}$	100.00	40.53	38.45	21.02
$\frac{\Gamma}{M}\%$	53.01	86.99	42.20	41.42
$\mu(\gamma)$	2.33	2.26	2.50	2.18
$\sigma(\gamma)$	0.47	0.44	0.50	0.38
chars	1087364	224263	566893	296208
$chars_{\%}$	100.00	20.62	52.13	27.24
spaces chars	17.86	14.03	19.22	18.16
$\frac{punct}{chars-spaces}$	7.83	8.12	8.17	6.94
$\frac{digits}{chars-spaces}$	2.49	2.63	2.12	3.07
$\frac{letters}{chars-spaces}$	87.42	86.98	87.42	87.78
vogals	35.97	35.97	36.15	35.64
$\frac{\overline{letters}}{uppercase}$ $\overline{letters}$	6.66	6.70	6.35	7.20
tokens	228756	49907	117955	60895
$tokens_{\%}$	100.00	21.82	51.56	26.62
$tokens \neq$	4.59	9.91	5.69	8.83
knownw tokens	35.86	35.21	35.55	36.98
$\frac{knownw\neq}{knownw}$	5.44	13.91	7.94	12.06
$\frac{stopw}{knownw}\\ punct$	71.92	72.06	71.91	71.83
$egin{array}{c} punct \\ tokens \\ contrac \end{array}$	26.63	27.23	27.41	24.62
$\frac{contrac}{tokens}$	0.47	0.45	0.48	0.45
$\mu(\overline{tokens})$	3.82	3.78	3.79	3.89
$\sigma(\overline{tokens})$	3.21	3.22	3.24	3.13
$\mu(\overline{knownw})$	5.78	5.77	5.75	5.83
$\sigma(\overline{knownw})$	2.37	2.34	2.40	2.34
$\mu(\overline{knownw} \neq)$	6.92	6.62	6.86	6.89
$\sigma(knownw \neq)$	2.57	2.50	2.55	2.50
$\mu(\underbrace{stopw})$	2.71	2.65	2.71	2.75
$\sigma(\overline{stopw})$	1.08	1.07	1.09	1.08
sents	6937	1343	3511	2085
sents <sub>%</sub>	99.97	19.35	50.60	30.05
$\mu_S(chars)$	154.22	165.38	158.21	140.14
$\sigma_S(chars)$	327.06	407.65	335.93	241.85 29.21
$\mu_S(tokens)$ $\sigma_S(tokens)$	32.98 77.36	37.17 $109.74$	33.60 76.78	46.93
$\mu_S(knownw)$	10.00	109.74	10.78	8.92
$\sigma_S(knownw)$	19.50	24.35	20.86	12.19
$\mu_S(stopw)$	7.40	8.12	7.46	6.85
$\sigma_S(stopw)$	6.96	8.20	6.59	6.63
$\mu_S(puncts)$	8.79	10.13	9.21	7.20
$\sigma_S(puncts)$	37.62	51.27	39.10	20.90
msgs	995	246	481	268
$msgs_{\%}$	100.00	24.72	48.34	26.93
$\mu_M(sents)$	7.88	6.31	8.19	8.77
$\sigma_M(sents)$	8.56	4.80	10.04	8.17
$\mu_M(tokens)$	231.31	203.93	246.73	228.79
$\sigma_M(tokens)$	342.52	322.50	394.25	244.98
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	70.23 94.74	59.91 $77.28$	75.62 111.29	70.03 73.91
$\mu_M(stopw)$	51.24	43.96	54.03	52.89
$\sigma_{M}(stopw)$ $\sigma_{M}(stopw)$	58.82	35.17	68.91	55.85
$\mu_M(puncts)$	62.31	56.19	68.41	56.97
$\sigma_{M}(puncts)$	144.45	139.69	171.74	80.59
$\mu_M(chars)$	1091.36	910.45	1176.93	1103.85
$\sigma_{M}(chars)$	1511.77	1232.84	1758.14	1224.29

TABLE S10. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 12

	g.	p.	i.	h.
N	410	376	23	11
$N_{\%}$	100.00	91.71	5.61	2.68
M	989.00	402.00	68.00	490.00
$M_{\%}$	100.00	41.88	7.08	51.04
$\Gamma_{\%}$	534.00	387.00 72.47	22.00 4.12	$125.00 \\ 23.41$
	100.00	96.27	32.35	$\frac{25.41}{25.51}$
$\frac{\Gamma}{M}\%$ $\mu(\gamma)$	2.19	2.00	2.95	$\frac{25.51}{2.64}$
$\begin{vmatrix} \mu(\gamma) \\ \sigma(\gamma) \end{vmatrix}$	0.39	0.00	0.21	0.48
chars	1130382	713909	47644	368829
chars%	100.00	63.16	4.21	32.63
spaces	20.70	22.99	15.37	16.97
chars	7.29	7.37	12.35	6.47
chars-spaces digits	5.79	7.90	4.97	2.10
tetters letters	82.99	79.59	80.56	89.41
$\frac{chars-spaces}{vogals}$	32.09	29.59	34.41	35.82
letters uppercase	7.95	10.35	5.18	4.44
tokens	222662	135705	10228	76731
$tokens_{\%}$	100.00	60.95	4.59	34.46
$tokens \neq$	19.96	28.74	20.25	8.65
knownw tokens	27.19	21.83	29.93	36.31
$knownw\neq$	11.42	14.55	34.89	13.63
$\frac{knownw}{stopw} \\ \hline knownw \\ punct$	79.02	57.14	82.98	101.86
	20.58	21.27	27.82	18.39
$\frac{tokens}{contrac} \\ \hline tokens$	0.62	0.10	0.67	1.53
$\mu(\overline{tokens})$	3.97	4.01	3.86	3.91
$\sigma(\overline{tokens})$	3.62	3.95	3.81	2.92
$\mu(\overline{knownw})$	5.12	4.62	5.29	5.64
$\sigma(\overline{knownw})$	2.48	2.49	2.54	2.33
$\mu(\overline{knownw} \neq)$	6.62	6.07	6.26	6.98
$\sigma(knownw \neq)$	2.61	2.56	2.50	2.52
$\mu(\overline{stopw})$	2.78	2.71	2.71	2.82
$\sigma(\overline{stopw})$	1.09	1.04	1.09	1.12
sents	5870	2448	307	3117
sents <sub>%</sub>	99.97	41.69	5.23	53.08
$\mu_S(chars)$	188.07 348.56	283.12 495.63	259.33	$\frac{116.69}{129.45}$
$\sigma_S(chars)$ $\mu_S(tokens)$	37.95	55.46	33.33	24.63
$\sigma_S(tokens)$	97.58	144.88	52.39	27.34
$\mu_S(knownw)$	8.23	8.07	8.91	8.28
$\sigma_S(knownw)$	14.86	20.84	11.34	7.83
$\mu_S(stopw)$	7.13	5.95	7.26	8.03
$\sigma_S(stopw)$	6.55	6.88	6.55	6.11
$\mu_S(puncts)$	7.82	11.81	9.28	4.54
$\sigma_S(puncts)$	30.72	45.15	21.83	10.29
msgs	960	402	68	490
$msgs_{\%}$	100.00	41.88	7.08	51.04
$\mu_M(sents)$	7.04	7.03	5.43	7.28
$\sigma_M(sents)$	9.94	8.07	5.16	11.67
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	233.62 441.81	338.31 582.91	151.68 175.60	159.09 289.66
$\mu_M(tokens)$ $\mu_M(knownw)$	50.82	49.35	40.71	53.43
$\left  \frac{\mu_M(\kappa nownw)}{\sigma_M(knownw)} \right $	87.75	80.13	46.79	97.43
$\mu_M(stopw)$	43.05	36.23	32.32	50.13
$\sigma_M(stopw)$	76.87	49.45	41.79	96.04
$\mu_M(puncts)$	49.20	72.18	42.87	31.21
$\sigma_M(puncts)$	110.62	152.16	62.51	60.61
$\mu_M(chars)$	1175.54	1775.50	699.03	749.44
$\sigma_M(chars)$	1736.65	2037.58	814.73	1379.21

TABLE S11. Messages sizes in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 13

	g.	p.	i.	h.
N	332	134	189	9
$N_{\%}$	100.00	40.36	56.93	2.71
M	995.00	190.00	639.00	166.00
$M_{\%}$	100.00	19.10	64.22	16.68
Γ	603.00	187.00	397.00	19.00
$\Gamma_{\%}$	100.00	31.01	65.84	3.15
$\frac{\Gamma}{M}\%$	60.60	98.42	62.13	11.45
$ \mu(\gamma) $	2.31	2.01	2.44	2.47
$\sigma(\gamma)$	0.46	0.10	0.50	0.50
chars	900140	250570	548772	100798
$chars_{\%}$	100.00	27.84	60.97	11.20
spaces chars punct	18.22	16.45	18.60	20.59
chars-spaces	6.12	6.38	6.15	5.22
$\frac{digits}{chars-spaces}$	4.17	3.34	4.60	3.92
$\frac{letters}{chars-spaces}$	87.46	87.84	87.02	88.89
vogals	35.08	33.43	35.58	36.65
$\frac{letters}{uppercase}$ $\frac{letters}{letters}$	8.68	13.67	7.01	4.94
tokens	197568	55523	120380	21666
$tokens_{\%}$	100.00	28.10	60.93	10.97
$tokens \neq$	6.59	12.62	7.25	16.05
tokens	35.68	36.92	35.11	35.72
$\frac{knownw \neq}{knownw}$ $stopw$	8.43	17.63	10.36	26.54
$egin{array}{c} stopw \ knownw \ punct \end{array}$	86.62	75.21	89.34	102.00
$egin{array}{c} punct \\ tokens \\ contrac \\ \end{array}$	19.45	20.06	19.76	16.15
$\frac{contrac}{tokens}$	0.64	0.36	0.70	1.03
$\mu(\overline{tokens})$	3.65	3.69	3.63	3.62
$\sigma(\underline{tokens})$	2.57	2.59	2.58	2.46
$\mu(\underline{knownw})$	5.55	5.51	5.57	5.52
$\sigma(\underline{knownw})$	2.39	2.47	2.37	2.28
$\mu(\overline{knownw} \neq)$	6.81	6.60	6.73	6.51
$\sigma(knownw \neq)$	2.60	2.58	2.55	2.45
$\mu(stopw)$	2.78	2.77	2.79	2.75
$\sigma(\overline{stopw})$	1.08	1.06	1.09	1.09
sents	6906	1783	4294	831
sents%	99.97	25.81	62.16	12.03
$\mu_S(chars)$	128.73 192.68	139.01	126.19	119.47
$\sigma_S(chars)$	28.61	214.01 31.15	180.28	204.91
$ \begin{array}{c c} \mu_S(tokens) \\ \sigma_S(tokens) \end{array} $	45.58	53.94	43.32	36.09
$\mu_S(knownw)$	8.23	8.55	8.07	8.34
$\sigma_S(knownw)$	10.45	12.33	9.88	8.77
$\mu_S(stopw)$	7.55	6.96	7.61	8.53
$\sigma_S(stopw)$	7.26	6.54	7.17	8.90
$\mu_S(puncts)$	5.57	6.26	5.54	4.21
$\sigma_S(puncts)$	14.86	21.54	12.52	5.13
msgs	995	190	639	166
$msgs_{\%}$	100.00	19.10	64.22	16.68
$\mu_M(sents)$	7.83	10.26	7.60	5.92
$\sigma_M(sents)$	6.99	8.86	6.60	4.97
$\mu_M(tokens)$	200.16	293.52	190.02	132.33
$\sigma_M(tokens)$	233.62	359.51	195.06	133.31
$\mu_M(knownw)$	57.52	80.52	54.64	42.25
$\sigma_M(knownw)$	63.04	95.41	53.36	39.68
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	51.97 51.67	64.96 65.12	48.83	$\begin{vmatrix} 42.30 \\ 40.97 \end{vmatrix}$
$\mu_M(stopw)$ $\mu_M(puncts)$	39.91	59.69	38.58	22.42
$\sigma_{M}(puncts)$	64.02	115.26	46.13	20.18
$\mu_M(chars)$	902.93	1317.38	856.96	605.54
$\sigma_M(chars)$	1004.60	1459.03	860.78	683.61
171 ( )		55.00		

TABLE S12. Messages sizes in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 15

	g.	p.	i.	h.
N	252	120	117	15
$N_{\%}$	100.00	47.62	46.43	5.95
M	979.00	142.00	381.00	447.00
$M_{\%}$	100.00	14.64	39.28	46.08
Γ	353.00	125.00	148.00	80.00
$\Gamma_{\%}$	100.00	35.41	41.93	22.66
$\frac{\Gamma}{M}\%$	36.06	88.03	38.85	17.90
$\mu(\gamma)$	2.30	2.02	2.50	2.38
$\sigma(\gamma)$	0.46	0.15	0.50	0.48
chars	971223	302606	349078	319539
chars%	100.00	31.16	35.94	32.90
$\frac{spaces}{chars}$	15.04	12.84	16.99	15.00
chars-spaces	11.70	15.58	10.68	9.03
$\frac{digits}{chars-spaces}$	3.48	5.50	2.56	2.51
$\frac{letters}{chars-spaces}$	82.66	76.87	84.64	86.18
vogals letters	33.79	31.85	34.02	35.23
$\frac{letters}{uppercase}$ $letters$	8.00	11.04	6.67	6.77
tokens	230102	75530	82213	72359
$tokens_{\%}$	100.00	32.82	35.73	31.45
$tokens \neq$	5.76	8.96	7.63	8.40
knownw tokens	32.92	34.09	32.19	32.52
$\frac{knownw \neq}{knownw}$	7.14	11.54	11.52	13.24
$\frac{stopw}{knownw}$	68.99	47.55	74.67	86.07
$\frac{punct}{tokens}$	29.62	33.77	28.97	26.03
$\frac{contrac}{tokens}$	0.68	0.29	0.80	0.95
$\mu(\overline{tokens})$	3.51	3.42	3.45	3.67
$\sigma(tokens)$	2.78	2.49	2.89	2.92
$\mu(\overline{knownw})$	5.12	4.99	4.99	5.43
$\sigma(\overline{knownw})$	2.45	2.28	2.54	2.50
$\mu(\overline{knownw} \neq)$	6.83	6.55	6.60	6.72
$\sigma(knownw \neq)$	2.61	2.58	2.54	2.56
$\mu(\underline{stopw})$	2.77	2.76	2.74	2.80
$\sigma(\overline{stopw})$	1.13	1.12	1.14	1.13
sents	6341	1407	2255	2681
sents%	99.97	22.18	35.55	42.27
$\mu_S(chars)$	151.62	213.56	153.23	117.64
$\sigma_S(chars)$ $\mu_S(tokens)$	514.89 36.31	989.77 53.72	315.94	160.55 27.00
$\sigma_S(tokens)$	148.04	280.73	99.42	$\frac{27.00}{43.76}$
$\mu_S(knownw)$	10.34	15.05	10.45	7.76
$\sigma_S(knownw)$	46.12	89.39	28.34	12.02
$\mu_S(stopw)$	7.16	7.30	7.61	6.70
$\sigma_S(stopw)$	7.22	8.37	7.02	6.67
$\mu_S(puncts)$	10.77	18.17	10.59	7.03
$\sigma_S(puncts)$	66.51	125.51	46.65	17.92
msgs	970	142	381	447
$msgs_{\%}$	100.00	14.64	39.28	46.08
$\mu_M(sents)$	7.48	10.82	6.82	6.97
$\sigma_M(sents)$	12.86	20.48	5.30	14.05
$\mu_M(tokens)$	239.09	533.75	217.79	163.65
$\sigma_M(tokens)$	500.31	1021.12	288.34	327.74
$\mu_M(knownw)$ $\sigma_M(knownw)$	68.18 145.82	149.68 315.73	62.45 $82.84$	47.18 $77.74$
$\mu_M(stopw)$	46.18	71.75	44.36	39.60
$\sigma_M(stopw)$ $\sigma_M(stopw)$	69.81	134.44	41.53	55.76
$\mu_M(puncts)$	71.92	181.29	64.26	43.70
$\sigma_{M}(puncts)$	204.52	428.20	124.45	121.15
$\mu_M(chars)$	999.15	2129.11	913.90	712.85
$\sigma_M(chars)$	1904.00	3769.90	1033.08	1395.90

TABLE S13. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 16

	g.	p.	i.	h.
N	125	63	43	19
$N_{\%}$	100.00	50.40	34.40	15.20
M	1000.00	109.00	318.00	573.00
$M_{\%}$	100.00	10.90	31.80	57.30
Γ	150.00	42.00	53.00	55.00
$\Gamma_{\%}$	100.00	28.00	35.33	36.67
$\frac{\Gamma}{M}\%$	15.00 2.80	$38.53 \\ 2.76$	16.67 $2.81$	$9.60 \\ 2.82$
$\begin{vmatrix} \mu(\gamma) \\ \sigma(\gamma) \end{vmatrix}$	0.40	0.43	0.39	0.39
,				
$chars \\ chars_{\%}$	630149 100.00	70362 $11.17$	246202 39.07	313585 49.76
spaces	14.32	13.65	14.12	14.62
chars punct	9.88	9.18	9.71	10.18
$\frac{chars-spaces}{digits}$	5.91	5.66	6.89	5.20
chars-spaces letters	82.33	83.46	81.58	82.68
chars-spaces vogals	34.56	34.58	34.13	34.89
$\frac{letters}{uppercase}$	7.86	8.33	8.36	7.37
tokens	150380	16681	59346	74353
$tokens_{\%}$	100.00	10081 $11.09$	39.46	49.44
$tokens \neq$	5.94	16.97	8.29	7.89
knownw	30.57	31.41	30.36	30.55
$\frac{tokens}{knownw\neq}$	7.83	27.60	12.35	11.52
knownw stopw	70.72	67.94	67.75	73.71
knownw punct tokens	29.22	28.61	29.79	28.90
$\frac{tokens}{contrac}$	0.57	0.64	0.48	0.63
$\mu(\overline{tokens})$	3.52	3.58	3.50	3.53
$\sigma(\overline{tokens})$	3.03	2.99	3.03	3.04
$\mu(\overline{knownw})$	5.32	5.63	5.28	5.28
$\sigma(\overline{knownw})$	2.25	2.43	2.21	2.24
$\mu(\overline{knownw} \neq)$	6.65	6.37	6.32	6.60
$\sigma(\overline{knownw} \neq)$	2.55	2.53	2.42	2.52
$\mu(\overline{stopw})$	2.74	2.70	2.74	2.76
$\sigma(\overline{stopw})$	1.08	1.10	1.09	1.07
sents	3394	454	1214	1728
$sents_{\%}$	99.94	13.37	35.75	50.88
$\mu_S(chars)$	184.37	153.80	201.45	180.18
$\sigma_S(chars)$	381.49	221.05	352.17	430.63
$\mu_S(tokens)$	44.32	36.76	48.89	43.03
$\sigma_S(tokens)$	103.21	60.51	92.60	117.93
$\mu_S(knownw)$ $\sigma_S(knownw)$	11.29 19.09	9.31 $12.19$	12.12 $17.82$	11.23 21.27
$\mu_S(stopw)$	8.50	6.84	8.91	8.64
$\sigma_S(stopw)$ $\sigma_S(stopw)$	8.69	6.15	10.24	7.99
$\mu_S(puncts)$	12.95	10.53	14.57	12.44
$\sigma_S(puncts)$	47.45	26.73	39.15	56.16
msgs	1000	109	318	573
$msgs_{\%}$	100.00	10.90	31.80	57.30
$\mu_M(sents)$	4.32	5.10	4.75	3.93
$\sigma_M(sents)$	4.46	5.05	5.01	3.94
$\mu_M(tokens)$	151.53	154.29	187.84	130.86
$\sigma_M(tokens)$	299.60	323.47	361.27	251.31
$\mu_M(knownw)$	38.82	39.06	46.74	34.38
$\frac{\sigma_M(knownw)}{\mu_M(stopw)}$	58.92 28.52	55.27 28.23	75.26 33.64	47.75 25.74
$\sigma_M(stopw)$ $\sigma_M(stopw)$	30.87	28.23 $22.48$	33.64	25.74
$\mu_M(stopw)$ $\mu_M(puncts)$	44.81	44.77	56.50	38.33
$\sigma_{M}(puncts)$	123.69	144.09	135.01	111.88
$\mu_M(chars)$	628.93	644.19	772.97	546.08
$\sigma_M(chars)$	1142.63	1136.70	1424.91	942.09

TABLE S14. Messages sizes in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 17

$\begin{array}{c ccccc} M_{\%} & 100.00 & 9.14 & 26.00 \\ \hline \Gamma & 294.00 & 62.00 & 49.00 \\ \hline \Gamma_{\%} & 100.00 & 21.09 & 16.67 \\ \hline \frac{\Gamma}{M}\% & 29.52 & 68.13 & 18.92 \\ \mu(\gamma) & 2.55 & 2.29 & 2.73 \\ \hline \end{array}$	7 6.31 646.00 64.86 183.00 62.24 28.33 2.59 0.49
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	646.00 64.86 183.00 62.24 28.33 2.59
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	64.86 183.00 62.24 28.33 2.59
$\begin{array}{c ccccc} \Gamma & & 294.00 & 62.00 & 49.00 \\ \Gamma \% & & 100.00 & 21.09 & 16.67 \\ \hline \frac{\Gamma}{M}\% & & 29.52 & 68.13 & 18.92 \\ \mu(\gamma) & & 2.55 & 2.29 & 2.73 \\ \end{array}$	183.00 62.24 28.33 2.59
$\begin{array}{ c c c c c c }\hline \Gamma_\% & & 100.00 & 21.09 & 16.67 \\ \hline \frac{\Gamma}{M}\% & & 29.52 & 68.13 & 18.92 \\ \mu(\gamma) & & 2.55 & 2.29 & 2.73 \\ \hline \end{array}$	62.24 28.33 2.59
$ \begin{array}{ c c c c c c }\hline \frac{\Gamma}{M}\% & & 29.52 & 68.13 & 18.92 \\ \mu(\gamma) & & 2.55 & 2.29 & 2.73 \\ \hline \end{array} $	28.33 2.59
$ \mu(\gamma) $   2.55   2.29   2.73	2.59
$ \mu(\gamma) $   2.55   2.29   2.73	
	0.49
$\sigma(\gamma)$ 0.50 0.45 0.44	
chars     922859   99269   226361   5	597229
$  chars_{\%}  $	64.72
$\frac{spaces}{chars}$ 17.04 13.67 18.51	17.04
$\left  \frac{char_{punct}}{chars-spaces} \right  \left  6.76 \right  \left  13.59 \right  \left  6.65 \right $	5.62
$\frac{digits}{chars-spaces}$   2.36   3.79   3.96	1.52
letters 88 56 78 20 87 15	90.88
chars-spaces	36.49
uppercase 6.13 8.48 6.69	5.58
letters	128571
$tokens_{\%}$   $toke$	63.52
$tokens\%$ $tokens \neq$ $tokens \Rightarrow$	6.46
knownw 34.41 22.60 22.22	34.78
$\frac{tokens}{knownw\neq}$ 8 17   24 20   17 68	9.77
knownw   0.11   24.20   11.00	106.85
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	17.94
$\frac{tokens}{contrac}$   0.89   0.39   0.68	1.06
$\mu(tokens)$ 3.69 3.27 3.69	3.78
$\sigma(tokens)$   3.05   3.27   3.05   $\sigma(tokens)$   2.61   2.50   2.62	2.63
$\mu(\overline{knownw})$   5.48   4.94   5.42	5.61
$\sigma(\overline{knownw})$   3.48   4.54   5.42   $\sigma(\overline{knownw})$   2.27   2.40   2.22	2.24
$\mu(\overline{knownw} \neq)$ 6.86 6.34 6.49	6.88
$\left  \sigma(\overline{knownw \neq}) \right  2.59  2.55  2.49$	2.53
$\mu(stopw)$ 2.79 2.68 2.77	2.80
$\sigma(\overline{stopw}) \qquad    1.10     1.11     1.11$	1.10
sents   6906   457   1645	4806
$ sents_{\%} $   99.97   6.62   23.81	69.57
1, ~ \	123.12
	146.14
$\mu_S(tokens)$   29.33   54.81   29.68	26.77
$\sigma_S(tokens)$   54.69   155.49   44.51	35.39
$\mu_S(knownw) = 9.01 + 15.65 + 8.75$	8.46
$\sigma_S(knownw)$   14.07   39.99   10.29	9.57
$\mu_S(stopw)$ 8.85 9.23 8.41	8.96
$\sigma_S(stopw)$   8.26   9.98   8.19   $\mu_S(puncts)$   5.97   17.54   6.12	8.10 4.82
$\begin{vmatrix} \mu_S(puncts) \\ \sigma_S(puncts) \end{vmatrix} = \begin{vmatrix} 5.97 \\ 22.97 \end{vmatrix} = 17.54 \begin{vmatrix} 6.12 \\ 70.94 \end{vmatrix} = 15.64 \end{vmatrix}$	$\frac{4.62}{13.48}$
	646
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	64.86
$\mu_M(sents)$   7.83   5.86   7.29	8.33
$\sigma_M(sents)$   8.20   5.55   7.99	8.53
$\mu_M(tokens)$   205.31   276.57   190.04	201.39
$\sigma_M(tokens)$   271.08   413.07   248.48   1	252.35
$\mu_M(knownw)$   63.08   79.02   56.02	63.67
$\sigma_M(knownw)$   79.93   107.75   71.93	78.00
$\mu_M(stopw)$   60.74   46.00   53.12	65.87
$\sigma_M(stopw)$   72.63   49.37   68.03	76.51
$\mu_M(puncts)$   43.20   89.12   40.15	37.95
$\sigma_M(puncts)$   87.55   192.34   66.22	67.24
/ \	921.48
$\sigma_M(chars)$     1165.79   1382.27   1173.69   1	1126.51

TABLE S15. Messages sizes in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 18

	g.	p.	i.	h.
N	127	69	44	14
$N_{\%}$	100.00	54.33	34.65	11.02
M	999.00	119.00	299.00	581.00
$M_{\%}$	100.00	11.91	29.93	58.16
$\Gamma$	319.00	70.00	106.00	143.00
$\Gamma_{\%}$	100.00	21.94	33.23	44.83
$\frac{\Gamma}{M}\%$	31.93	58.82	35.45	24.61
$\mu(\gamma)$	2.51	2.40	2.60	2.49
$\sigma(\gamma)$	0.50	0.49	0.49	0.50
chars	514624	89224	112807	312593
chars%	100.00	17.34	21.92	60.74
$\frac{spaces}{chars}$	16.58	14.99	16.15	17.19
chars-spaces	6.41	12.34	6.81	4.53
$\frac{digits}{chars-spaces}$	1.16	2.14	1.30	0.82
$\frac{letters}{chars-spaces}$	90.45	83.38	89.92	92.71
vogals letters	35.55	32.93	35.03	36.43
$rac{letters}{uppercase} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	5.95	8.15	6.18	5.28
tokens	115461	21713	25302	68446
$tokens_{\%}$	100.00	18.81	21.91	59.28
$tokens \neq$	7.53	14.89	14.95	8.49
tokens	34.41	31.22	33.61	35.72
$\frac{knownw \neq}{knownw}$ $stopw$	12.24	25.01	26.19	15.44
$\frac{stopw}{knownw}\\punct$	107.63	71.38	102.52	119.46
$egin{array}{c} punct \ tokens \ contrac \end{array}$	19.49	31.69	20.79	15.13
$\frac{contrac}{tokens}$	1.55	0.73	1.41	1.86
$\mu(\overline{tokens})$	3.64	3.42	3.66	3.71
$\sigma(tokens)$	2.56	2.73	2.67	2.46
$\mu(\underline{knownw})$	5.61	5.22	5.52	5.75
$\sigma(knownw)$	2.35	2.53	2.30	2.30
$\mu(\underline{knownw \neq})$	6.83	6.29	6.39	6.85
$\sigma(knownw \neq)$	2.55	2.49	2.43	2.50
$\mu(\underline{\overline{stopw}})$	2.72	2.66	2.69	2.74
$\sigma(\overline{stopw})$	1.12	1.11	1.14	1.11
sents	4375	476	880	3021
sents%	99.95	10.88	20.11	69.02
$\mu_S(chars)$	116.37	185.96	126.84	102.28
$\sigma_S(chars)$	169.98	394.59	125.01	107.93
$\mu_S(tokens)$	26.40	45.66	28.76	22.66
$\sigma_S(tokens)$	47.74	122.43	29.05	7.36
$\begin{vmatrix} \mu_S(knownw) \\ \sigma_S(knownw) \end{vmatrix}$	8.09 9.64	11.75 18.48	8.60 8.20	7.65
$\mu_S(stopw)$	8.58	8.96	8.62	8.50
$\sigma_S(stopw)$	8.25	8.90	7.74	8.29
$\mu_S(puncts)$	5.15	14.50	5.98	3.43
$\sigma_S(puncts)$	21.44	60.37	10.30	6.48
msgs	999	119	299	581
$msgs_{\%}$	100.00	11.91	29.93	58.16
$\mu_M(sents)$	5.33	4.92	3.89	6.16
$\sigma_M(sents)$	6.04	6.77	3.46	6.73
$\mu_M(tokens)$	117.63	184.12	86.10	120.23
$\sigma_M(tokens)$	199.33	450.51	83.32	147.48
$\mu_M(knownw)$	36.12	47.47	25.84	39.08
$\sigma_M(knownw)$	55.92	110.52	26.68	49.18
$\mu_M(stopw)$	36.89	35.31	24.87	43.41
$\sigma_M(stopw)$	50.33	62.86	28.15	54.96
$\mu_M(puncts)$	24.35	59.23	18.83	20.04
$\sigma_M(puncts)$	75.30	203.57	20.36	27.66
$\begin{vmatrix} \mu_M(chars) \\ \sigma_M(chars) \end{vmatrix}$	512.61 797.73	747.73 1653.93	375.55 370.41	534.98 664.71
o <sub>M</sub> (chars)	191.13	1000.30	010.41	004.11

TABLE S16. Messages sizes in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 19

# 2. Snapshots of 2000 messages

g.	p.	i.	h.
N   149	81	58	10
$N_{\%}$   100.00	54.36	38.93	6.71
	186.00	822.00	992.00
$M_{\%}$   100.00	9.30	41.10	49.60
	70.00	212.00	65.00
70	20.17	61.10	18.73
M	37.63	25.79	6.55
$\mu(\gamma)$ 2.76	2.56	2.80	2.88
$\sigma(\gamma)$   0.42	0.50	0.40	0.33
	14115	497484	534615
chars% 100.00	9.96	43.40	46.64
<u>chars</u> 10.04	15.37	16.71	15.56
chars-spaces 0.50	8.24	7.04	6.47
chars-spaces 1.01	1.20	1.06	1.06
chars-spaces	88.42	90.02	90.67
letters	35.91	36.49	36.64
letters 4.90	6.89	4.86	4.52
	24597	106854	116194
tokens <sub>%</sub>   100.00	9.93	43.15	46.92
/ 11 1	13.62	6.70	6.33
tokens , 35.00	34.84	35.34	36.12
knownw   0.40	22.52	10.66	9.85
knownw   30.10	90.51	97.55	100.15
tokens	24.02	21.65	20.26 $1.33$
tokens 1.13	0.71	1.06	
$\mu(tokens)$ 3.81	3.84	3.81	3.82
$\sigma(tokens)$ 2.81	2.98	2.85	2.75
$\mu(knownw)$ 5.73	5.86	5.73	5.70
$\sigma(knownw)$ 2.25	2.25	2.28	2.22
$\begin{vmatrix} \mu(knownw \neq) \\ \sigma(\overline{knownw} \neq) \end{vmatrix} = 6.99$ $2.54$	6.54 2.41	$6.85 \\ 2.53$	6.85 $2.46$
$\mu(stopw)$ 2.76	2.41	2.72	2.40
$\sigma(stopw)$ 2.10 $\sigma(stopw)$ 1.11	1.14	$\frac{2.72}{1.11}$	1.09
	891	3762	3840
	10.49	44.30	45.21
	126.79	130.84	138.12
, ,	71.15	489.08	121.31
	27.68	28.42	30.31
/	39.35	93.19	26.63
$\mu_S(knownw)$ 9.36	8.51	9.07	9.84
$\sigma_S(knownw)$   12.30	7.78	15.98	8.35
$\mu_S(stopw)$ 9.06	7.46	8.62	9.86
$\sigma_S(stopw)$ 8.47	6.72	9.09	8.12
$\mu_S(puncts)$ 6.23	6.70	6.16	6.18
	18.94	40.64	8.62
msgs 2000	186	822	992
$msgs\%$ $100.00$ $\mu_M(sents)$ $5.11$	9.30	41.10	49.60
$ \begin{array}{c cc} \mu_M(sents) & 5.11 \\ \sigma_M(sents) & 9.33 \end{array} $	5.72 8.99	5.49 $12.92$	$4.68 \\ 4.67$
,	133.51	131.60	119.00
	288.74	357.60	118.63
	41.17	42.06	38.60
	84.93	95.40	40.89
$\mu_M(stopw)$ 37.90	35.41	38.91	37.53
$\sigma_M(stopw)$   54.68	52.86	66.73	42.58
/	32.71	29.56	25.55
	111.25	136.53	25.47
	512.19	603.15	536.70
/ / /	381.41	1703.99	548.91

TABLE S17. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 0

	g.	p.	i.	h.
N	308	169	118	21
$N_{\%}$	100.00	54.87	38.31	6.82
M	1999.00	277.00	956.00	745.00
$M_{\%}$	100.00	14.00	48.33	37.66
Γ	590.00	126.00	311.00	153.00
$\Gamma_{\%}$	100.00	21.36	52.71	25.93
$\frac{\Gamma}{M}\%$	29.51	45.49	32.53	20.54
$ \mu(\gamma) $	2.63	2.48	2.68	2.67
$\sigma(\gamma)$	0.48	0.50	0.47	0.47
chars	1088548	144189	547262	397097
$chars_{\%}$	100.00	13.25	50.27	36.48
spaces chars	13.70	13.54	13.66	13.80
$\frac{punct}{chars-spaces}$	9.26	9.61	8.86	9.68
$\frac{digits}{chars-spaces}$	2.96	2.11	2.92	3.33
letters	85.86	86.24	86.26	85.16
$\frac{chars-spaces}{vogals}$	35.45	35.14	35.53	35.45
letters uppercase	7.09	8.03	6.94	6.95
tokens	239130	31280	120073	87779
$tokens_{\%}$	100.00	13.08	50.21	36.71
$tokens \neq 1$	9.86	20.44	12.50	12.96
knownw	23.86	24.60	24.20	23.14
$tokens \atop knownw \neq$	4.69	13.40	6.05	7.28
knownw	34.68	33.72	34.21	35.70
$\frac{\overline{knownw}}{punct}$	29.79	29.42	28.97	31.05
$\frac{tokens}{contrac}$	0.04	0.05	0.03	0.05
tokens	3.85	3.91	3.86	3.83
$\mu(tokens)$		3.21	3.01	
$\sigma(tokens)$	3.04			3.02
$\mu(\underbrace{knownw}_{l})$	4.12	4.03	4.10	4.18
$\sigma(knownw)$	2.14	2.14	2.17	2.10
$\mu(\underbrace{knownw \neq})$	5.59	5.03	5.37	5.34
$\sigma(knownw \neq)$	2.41	2.33	2.34	2.37
$\mu(stopw)$	2.06	2.10	2.04	2.08
$\sigma(stopw)$	0.96	1.00	0.96	0.94
sents	10285	1405	5036	3846
sents <sub>%</sub>	99.98	13.66	48.95	37.39
$\mu_S(chars)$	104.55	101.50	107.50	101.76
$\sigma_S(chars)$	191.12	110.08	169.38	235.95
$\mu_S(tokens)$	23.25	22.27	23.85	22.83
$\sigma_S(tokens)$	47.09	26.73	40.96	58.92
$\begin{vmatrix} \mu_S(knownw) \\ \sigma_S(knownw) \end{vmatrix}$	4.59 7.20	4.48 5.93	4.76 7.71	4.42 6.93
$\mu_S(stopw)$	1.59	1.46	1.65	1.57
$\begin{vmatrix} \mu_S(stopw) \\ \sigma_S(stopw) \end{vmatrix}$	2.40	2.28	$\frac{1.05}{2.51}$	2.29
$\mu_S(puncts)$	6.93	6.55	6.91	7.09
$\sigma_S(puncts)$	17.78	10.02	15.36	22.35
	1978	277	956	745
$ msgs   msgs_{\%} $	1978	14.00	48.33	37.66
$\mu_M(sents)$	6.19	6.06	6.26	6.16
$\sigma_M(sents)$ $\sigma_M(sents)$	3.49	3.81	3.84	2.84
$\mu_M(tokens)$	121.82	113.81	126.51	118.78
$\sigma_M(tokens)$	117.10	73.74	108.11	139.03
$\mu_M(knownw)$	24.84	23.62	26.00	23.80
$\sigma_M(knownw)$	17.94	14.60	19.70	16.56
$\mu_M(stopw)$	8.29	7.40	8.71	8.08
$\sigma_M(stopw)$	5.27	4.75	5.88	4.53
$\mu_M(puncts)$	36.07	33.27	36.43	36.65
$\sigma_M(puncts)$	41.09	23.54	36.87	50.29
$\mu_M(chars)$	550.26	520.45	572.39	532.94
$\sigma_M(chars)$	502.46	340.76	477.30	577.53
. , ,				

TABLE S18. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 2

	g.	p.	i.	h.
N	180	122	52	6
$N_{\%}$	100.00	67.78	28.89	3.33
M	2000.00	274.00	636.00	1090.00
$M_{\%}$	100.00	13.70	31.80	54.50
$\Gamma$	446.00	143.00	157.00	146.00
$\Gamma_{\%}$	100.00	32.06	35.20	32.74
$\frac{\Gamma}{M}\%$	22.30	52.19	24.69	13.39
$\mu(\gamma)$	2.73	2.77	2.84	2.58
$\sigma(\gamma)$	0.44	0.42	0.37	0.49
chars	1315736	212215	488036	615485
chars%	100.00	16.13	37.09	46.78
$\frac{chars}{chars}$	15.04	15.59	14.95	14.93
chars-spaces digits	7.52	7.33	7.71	7.43
chars-spaces	2.62	2.61	3.39	2.00
$\frac{letters}{chars-spaces}$	87.60	88.09	86.97	87.94
$egin{array}{c} vogals \ letters \ uppercase \end{array}$	35.92	36.12	35.79	35.95
$\frac{uppercase}{letters}$	8.11	7.91	8.27	8.05
tokens	301820	48463	113579	139778
$tokens_{\%}$	100.00	16.06	37.63	46.31
$tokens \neq knownw$	4.84	9.89	6.41	7.13
tokens	35.21	35.30	34.09	36.09
$\begin{array}{c} \underline{knownw \neq} \\ \underline{knownw} \\ \underline{stopw} \end{array}$	6.11	16.12	10.72	9.02
$\frac{stopw}{knownw}$ $punct$	82.02	82.67	82.49	81.44
$\frac{tokens}{contrac}$	23.30	23.54	24.64	22.14
tokens	0.78	0.79	0.90	0.69
$\mu(\underbrace{tokens})$	3.63	3.62	3.58	3.67
$\sigma(tokens)$	2.76	2.84	2.80	2.70
$\mu(\underbrace{knownw}_{l})$	5.52	5.51	5.47	5.56
$\sigma(knownw)$	2.39	2.39	2.33	2.43
$\begin{vmatrix} \mu(knownw \neq) \\ \sigma(\overline{knownw} \neq) \end{vmatrix}$	6.97 $2.58$	6.56 $2.47$	6.78 2.49	6.92 2.56
$\frac{b(khowhw \neq)}{\mu(\overline{stopw})}$	2.78	2.47	2.49	2.84
$\sigma(\overline{stopw})$	1.09	1.08	1.09	1.09
sents	12233	1919	4209	6107
$ sents_{\%} $	99.98	15.68	$\frac{4205}{34.40}$	49.91
$\mu_S(chars)$	106.30	109.15	114.71	99.56
$\sigma_S(chars)$	181.85	137.90	201.01	179.79
$\mu_S(tokens)$	24.68	25.26	26.99	22.89
$\sigma_S(tokens)$	48.89	34.74	54.42	48.59
$\mu_S(knownw)$	7.00	7.16	7.42	6.65
$\sigma_S(knownw)$	9.89	8.04	9.90	10.38
$\mu_S(stopw)$	6.04	6.17	6.41	5.73
$\sigma_S(stopw)$	6.32	6.15	6.12	6.48
$ \begin{vmatrix} \mu_S(puncts) \\ \sigma_S(puncts) \end{vmatrix} $	5.75 20.62	5.94 13.93	6.65 $23.74$	5.07 $20.03$
		274		
$ msgs   msgs_{\%} $	2000 100.00	13.70	636 31.80	1090 54.50
$\mu_M(sents)$	7.09	7.94	7.59	6.58
$\sigma_M(sents)$	5.62	5.93	5.68	5.45
$\mu_M(tokens)$	152.26	178.49	180.37	129.27
$\sigma_M(tokens)$	252.69	209.23	253.03	260.06
$\mu_M(knownw)$	43.16	50.64	49.62	37.50
$\sigma_M(knownw)$	47.08	52.97	48.49	43.82
$\mu_M(stopw)$	36.54	42.61	41.86	31.90
$\sigma_M(stopw)$	35.99	40.73	36.45	33.72
$\mu_M(puncts)$	36.37	43.04	45.64	29.29 87.05
$\frac{\sigma_M(puncts)}{\mu_M(chars)}$	93.56 656.35	77.23 772.59	107.27 765.20	87.95 563.62
$\sigma_M(chars)$	886.58	854.25	928.82	858.20
OM (Chars)	000.00	004.20	020.02	555.20

TABLE S19. Messages sizes in each Erdös sector ( ${f p.}$  for periphery,  ${f i.}$  for intermediary,  ${f h.}$  for hubs). TAG: 3

N 201 98 86	
	17
$N_{\%}$   100.00   48.76   42.79	8.46
M 1274.00 151.00 607.00	514.00
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	40.41
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	55.00 21.48
$\frac{\Gamma_{\%}}{M}\%$   100.00   21.88   30.04   $\frac{\Gamma_{\%}}{M}\%$   20.09   37.09   23.89	10.70
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\frac{10.70}{2.85}$
$\begin{vmatrix} \rho(\gamma) \\ \sigma(\gamma) \end{vmatrix} = \begin{vmatrix} 0.16 \\ 0.44 \end{vmatrix} = \begin{vmatrix} 0.50 \\ 0.42 \end{vmatrix}$	0.35
chars   656548   106449   279581	270518
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	41.20
<u>spaces</u> 15 20 14 80 15 07	15.48
$\begin{array}{ c c c c c c }\hline chars & 10.20 & 11.00 & 10.01 \\\hline \frac{punct}{chars - spaces} & 7.11 & 5.85 & 7.30 \\\hline \end{array}$	7.40
	4.46
chars-spaces         3.00         2.30         3.40           letters         87.26         89.89         87.29	86.19
vogals	33.03
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	8.88
tokens   133672   21746   56921	55007
$tokens_{\%}$   $toke$	41.15
$tokens \neq   14.94   25.03   18.90  $	17.54
$\frac{knownw}{tokens}$   20.48   28.94   18.46	19.22
$\frac{tokens}{knownw} \neq 11.51 31.24 13.01$	11.23
knownw   11.01   01.21   10.01	37.48
$\frac{1}{tokens}$   23.99   21.22   20.30	27.27
$\frac{contrac}{tokens}$   0.14   0.50   0.07	0.08
$\mu(\overline{tokens})$ 4.08 4.09 4.09	4.08
$\sigma(\overline{tokens})$ 3.44 3.15 3.48	3.50
$\mu(\overline{knownw})$   4.29   5.30   4.13	3.85
$ \begin{array}{c cccc} \sigma(\underline{knownw}) & 2.37 & 2.45 & 2.42 \end{array} $	2.09
$\mu(\underline{knownw \neq})$ 6.07   6.22   5.40	5.10
$\sigma(\overline{knownw} \neq)$ 2.56 2.50 2.46	2.39
$\mu(stopw)$ 2.15 2.70 1.92	1.81
$\sigma(\overline{stopw})$   1.19   1.17   1.09	1.08
sents 5345 999 2301	$\begin{vmatrix} 2047 \\ 38.28 \end{vmatrix}$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	38.28 130.99
$\begin{vmatrix} \mu_S(chars) \\ \sigma_S(chars) \end{vmatrix}$ 121.43 103.32 119.71 173.66 101.15 147.43	221.56
$\mu_S(tokens)$   25.02   21.77   24.76	26.88
$\sigma_S(tokens)$   35.66   21.58   34.67	41.61
$\mu_S(knownw)$   4.33   5.35   3.89	4.31
$\sigma_S(knownw)$   5.96   5.26   6.24	5.90
$\mu_S(stopw)$ 2.27 3.99 1.96	1.79
$\sigma_S(stopw)$ 3.32 4.40 3.20	2.44
$\mu_S(puncts)$   6.51   4.62   6.59	7.34
$\sigma_S(puncts)$   12.23   6.94   12.91	13.32
msgs   1272   151   607	514
$msgs\%$   100.00   11.87   47.72   $\mu_M(sents)$   5.14   7.56   4.72	40.41
$\mu_M(sents)$ 5.14 7.56 4.72 $\sigma_M(sents)$ 9.82 26.16 4.03	$\frac{4.92}{4.07}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	107.88
$\begin{vmatrix} \mu_M(tokens) & 105.95 & 140.41 & 94.45 \\ \sigma_M(tokens) & 192.95 & 478.80 & 95.12 \end{vmatrix}$	116.10
$\mu_M(knownw)$   18.88   36.24   15.39	17.91
$\left  \begin{array}{c c} \sigma_M(knownw) \end{array} \right  \left  \begin{array}{c c} 71.84 \end{array} \right  \left  \begin{array}{c c} 201.30 \end{array} \right  \left  \begin{array}{c c} 18.07 \end{array} \right $	19.46
$\mu_M(stopw)$ 9.54 26.20 7.42	7.14
$\sigma_M(stopw)$   59.87   170.62   11.66	8.09
$\mu_M(puncts)$   27.47   31.28   24.98	29.29
$\sigma_M(puncts)$ 37.59 66.30 29.33	34.28
$\mu_M(chars)$ 515.98 704.07 460.52	526.22
$\sigma_M(chars)$   955.93   2397.08   447.87	567.75

TABLE S20. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 7

	g.	p.	i.	h.
N	172	110	40	22
$N_{\%}$	100.00	63.95	23.26	12.79
M	885.00	145.00	236.00	503.00
$M_{\%}$	100.00	16.40	26.70	56.90
$\Gamma$	169.00	65.00	47.00	57.00
$\Gamma_{\%}$	100.00	38.46	27.81	33.73
$\frac{\Gamma}{M}\%$	19.10	44.83	19.92	11.33
$\mu(\gamma)$	2.63	2.37	2.79	2.79
$\sigma(\gamma)$	0.48	0.48	0.41	0.41
chars	421928	88544	108566	224818
$chars_{\%}$	100.00	20.99	25.73	53.28
spaces chars	15.91	15.30	15.97	16.12
$\frac{punct}{chars-spaces}$	7.00	7.02	6.99	7.00
$\frac{digits}{chars-spaces}$	3.21	4.95	2.88	2.68
$\frac{letters}{chars-spaces}$	87.89	86.19	88.25	88.40
vogals	35.40	35.00	35.17	35.67
$rac{letters}{uppercase}$	5.46	6.61	5.72	4.88
tokens	93969	19551	23744	50675
$tokens_{\%}$	100.00	20.81	25.27	53.93
$tokens \neq$	9.49	20.97	15.33	10.74
knownw tokens	34.38	33.16	35.08	34.53
$knownw\neq$	13.66	33.48	24.71	17.43
knownw stopw knownw	95.69	87.82	95.25	98.82
$\frac{\overline{knownw}}{punct}$	21.31	21.80	20.70	21.41
$rac{tokens}{tokens}$	1.50	0.94	1.58	1.69
$\mu(\overline{tokens})$	3.70	3.77	3.77	3.65
$\sigma(\overline{tokens})$	2.81	2.88	2.98	2.70
$\mu(\overline{knownw})$	5.52	5.70	5.48	5.47
$\sigma(\overline{knownw})$	2.24	2.35	2.19	2.22
$\mu(\overline{knownw} \neq)$	6.65	6.43	6.35	6.45
$\sigma(\overline{knownw} \neq)$	2.50	2.46	2.39	2.43
$\mu(\overline{stopw})$	2.80	2.78	2.79	2.81
$\sigma(\overline{stopw})$	1.13	1.11	1.14	1.13
sents	3200	628	752	1822
$sents_{\%}$	99.94	19.61	23.49	56.90
$\mu_S(chars)$	130.47	139.53	143.04	122.01
$\sigma_S(chars)$	155.43	197.85	160.28	134.81
$\mu_S(tokens)$	29.38	31.14	31.58	27.82
$\sigma_S(tokens)$	34.62	43.45	34.52	30.94
$\mu_S(knownw)$	9.13	8.89	10.11	8.81
$\sigma_S(knownw)$	9.32	10.76	9.14	8.82
$\mu_S(stopw)$	8.60	8.05	9.36	8.46
$\sigma_S(stopw)$	7.92 6.27	9.41 6.80	7.98 6.54	7.29 5.97
$\mu_S(puncts)$ $\sigma_S(puncts)$	12.22	14.07	0.54 $13.18$	11.06
,	884	14.07	236	503
$msgs \ msgs_{\%}$	100.00	16.40	$\frac{250}{26.70}$	56.90
$\mu_M(sents)$	4.51	5.19	4.14	4.48
$\sigma_M(sents)$	4.19	5.25	3.33	4.18
$\mu_M(tokens)$	108.20	136.45	102.52	102.72
$\sigma_M(tokens)$	119.27	159.06	101.87	112.08
$\mu_M(knownw)$	33.83	39.05	33.07	32.68
$\sigma_M(knownw)$	36.10	43.03	32.80	35.25
$\mu_M(stopw)$	30.39	34.38	28.94	29.93
$\sigma_M(stopw)$	33.34	38.85	30.07	32.99
$\mu_M(puncts)$	24.27	30.71	22.44	23.28
$\sigma_M(puncts)$	34.04	48.35	28.14	31.24
$\mu_M(chars)$	475.02 523.80	608.93 680.06	457.81 468.75	444.49 489.43
$\sigma_M(chars)$	JZ3.6U	000.00	400.70	409.43

TABLE S21. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 8

	g.	p.	i.	h.
N	149	80	61	8
$N_{\%}$	100.00	53.69	40.94	5.37
M	776.00	103.00	316.00	357.00
$M_{\%}$	100.00	13.27	40.72	46.01
Γ	274.00	47.00	81.00	146.00
$\Gamma_{\%}$	100.00	17.15	29.56	53.28
$\frac{\Gamma}{M}\%$	35.31	45.63	25.63	40.90
$ \mu(\gamma) $	2.30	2.21	2.48	2.23
$\sigma(\gamma)$	0.46	0.41	0.50	0.42
chars	969730	488982	199190	281558
chars%	100.00	50.42	20.54	29.03
$\frac{spaces}{chars}$	13.64	12.22	15.06	15.11
chars-spaces	10.36	15.13	5.32	5.37
$\frac{digits}{chars-spaces}$	2.88	4.80	1.17	0.64
$\frac{letters}{chars-spaces}$	85.43	79.38	91.58	91.94
$\frac{vogals}{letters}$	32.43	25.66	38.24	38.81
$\frac{letters}{uppercase} \ \hline letters$	11.48	19.99	3.61	3.84
tokens	232258	133191	41530	57539
$tokens_{\%}$	100.00	57.35	17.88	24.77
$tokens \neq$	8.21	9.99	12.09	9.97
knownw tokens	35.40	34.02	36.87	37.55
$\frac{knownw\neq}{knownw}$	7.56	7.22	19.67	15.85
$\begin{array}{c} knownw\\ stopw\\ \hline knownw\\ punct \end{array}$	52.09	16.21	96.70	95.72
$\frac{punct}{tokens} \\ contrac$	27.96	35.25	18.43	17.96
$\frac{contrac}{tokens}$	0.36	0.07	0.84	0.68
$\mu(\overline{tokens})$	3.56	3.21	4.00	4.07
$\sigma(tokens)$	2.66	2.42	2.88	2.87
$\mu(\underline{knownw})$	5.05	4.20	6.03	6.13
$\sigma(knownw)$	2.54	2.18	2.61	2.56
$\mu(\underline{knownw \neq})$	6.78	6.21	6.81	6.92
$\sigma(knownw \neq)$	2.64	2.59	2.60	2.61
$\mu(\underline{stopw})$	2.74	2.57	2.78	2.78
$\sigma(\overline{stopw})$	1.08	1.13	1.08	1.06
sents	5086	1320	1518	2250
$sents_{\%}$	99.96	25.94	29.83	44.22
$\mu_S(chars)$	188.62	365.97	130.02	123.96
$\sigma_S(chars)$	1353.15	2641.15	116.84	111.11
$\mu_S(tokens)$	45.67	100.91	27.37	25.58
$\sigma_S(tokens)$	422.83	826.41	25.58	24.66
$\mu_S(knownw)$	11.54	20.38	8.71	8.25
$\sigma_S(knownw)$ $\mu_S(stopw)$	72.63 7.51	141.62 4.85	7.69 8.73	7.42 8.24
$\sigma_S(stopw)$	7.87	8.62	7.42	7.32
$\mu_S(puncts)$	12.78	35.58	5.05	4.60
$\sigma_S(puncts)$	191.40	374.50	8.50	8.15
msgs	776	103	316	357
$msgs_{\%}$	100.00	13.27	40.72	46.01
$\mu_M(sents)$	7.49	13.67	5.73	7.26
$\sigma_M(sents)$	31.78	85.39	6.02	6.82
$\mu_M(tokens)$	300.69	1294.27	132.87	162.59
$\sigma_M(tokens)$	3300.48	8985.97	156.94	175.05
$\mu_M(knownw)$	76.14	261.61	42.30	52.58
$\sigma_M(knownw)$	630.29	1713.00	52.30	54.85
$\mu_M(stopw)$	48.87	61.83	41.61	51.56
$\sigma_M(stopw)$	129.14	325.73	52.84	55.37
$\mu_M(puncts)$	84.77	456.76	25.34	30.06
$\frac{\sigma_M(puncts)}{\mu_M(chars)}$	1320.11 1248.17	3600.05 4746.09	32.80 628.80	42.29 787.20
$\sigma_M(chars)$	11483.70	31226.23	761.31	856.46
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TABLE S22. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 10

	g.	р.	i.	h.
N	68	42	20	6
$N_{\%}$	100.00	61.76	29.41	8.82
M	642.00	79.00	265.00	298.00
$M_{\%}$	100.00	12.31	41.28	46.42
Γ	148.00	39.00	100.00	9.00
$\Gamma_{\%}$	100.00	26.35	67.57	6.08
$\frac{\Gamma}{M}\%$	23.05	49.37	37.74	3.02
$\mu(\gamma)$	2.61	2.41	2.69	2.56
$\sigma(\gamma)$	0.49	0.49	0.46	0.50
chars	935187	72511	468195	394481
$chars_{\%}$	100.00	7.75	50.06	42.18
$\frac{spaces}{chars} \\ punct$	16.18	16.15	16.53	15.76
chars-spaces	4.78	4.83	4.74	4.82
$\frac{digits}{chars-spaces}$	1.16	1.06	1.15	1.19
$\frac{letters}{chars-spaces}$	91.79	91.77	91.84	91.74
vogals	36.86	36.82	36.84	36.89
$\frac{letters}{uppercase} \\ \hline letters$	5.29	5.28	5.41	5.15
tokens	200497	15394	99959	85146
$tokens_{\%}$	100.00	7.68	49.86	42.47
$tokens \neq$	5.78	19.54	8.78	8.24
knownw tokens	38.25	38.61	38.60	37.78
$tokens \atop knownw \neq \atop knownw$	9.29	35.42	14.07	14.90
$\frac{knownw}{stopw} \\ \hline knownw \\ punct$	95.09	97.88	93.28	96.73
$\frac{punct}{tokens} \\ contrac$	16.89	17.06	16.57	17.24
$\frac{contrac}{tokens}$	0.51	0.94	0.44	0.51
$\mu(\overline{tokens})$	3.84	3.86	3.84	3.83
$\sigma(\overline{tokens})$	2.74	2.74	2.69	2.80
$\mu(\overline{knownw})$	5.93	6.03	5.91	5.94
$\sigma(\overline{knownw})$	2.57	2.48	2.57	2.57
$\mu(\overline{knownw} \neq)$	7.29	6.83	7.19	7.14
$\sigma(\overline{knownw} \neq)$	2.69	2.59	2.69	2.65
$\mu(\overline{stopw})$	2.78	2.76	2.78	2.78
$\sigma(\overline{stopw})$	1.11	1.07	1.10	1.12
sents	7697	590	3772	3337
$sents_{\%}$	99.97	7.66	48.99	43.34
$\mu_S(chars)$	119.96	121.06	122.39	116.95
$\sigma_S(chars)$	99.57	100.21	99.95	98.93
$\mu_S(tokens)$	26.05	26.10	26.51	25.52
$\sigma_S(tokens)$	23.04	21.81	23.18	23.08
$\left  \begin{array}{l} \mu_S(knownw) \\ \sigma_S(knownw) \end{array} \right $	8.00 6.56	$8.02 \\ 6.91$	8.04 6.61	7.95 6.44
$\mu_S(stopw)$	8.48	8.80	8.60	8.28
$\sigma_S(stopw)$	7.06	7.63	7.24	6.74
$\mu_S(puncts)$	4.41	4.46	4.40	4.40
$\sigma_S(puncts)$	6.84	5.94	6.46	7.38
msgs	642	79	265	298
$msgs_{\%}$	100.00	12.31	41.28	46.42
$\mu_M(sents)$	12.93	8.25	15.17	12.18
$\sigma_M(sents)$	14.62	8.27	15.19	15.04
$\mu_M(tokens)$	314.51	197.11	379.42	287.90
$\sigma_M(tokens)$	372.21	217.94	387.37	379.90
$\mu_M(knownw)$	96.73	60.51	115.25	89.87
$\sigma_M(knownw)$	113.72	70.00	119.12	115.09
$\frac{\mu_M(stopw)}{\sigma_M(stopw)}$	101.25 121.57	65.18 $75.98$	121.96 126.83	92.40 $123.27$
$\mu_M(stopw)$ $\mu_M(puncts)$	54.36	35.08	64.19	50.73
$\sigma_{M}(puncts)$	62.93	36.68	64.42	65.48
$\mu_M(chars)$	1454.81	915.65	1764.81	1322.06
$\sigma_{M}(chars)$	1705.27	1020.58	1787.75	1722.31
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TABLE S23. Messages sizes in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 11

	g.	p.	i.	h.
N	210	80	120	10
$N_{\%}$	100.00	38.10	57.14	4.76
M	490.00	111.00	284.00	95.00
$M_{\%}$	100.00	22.65	57.96	19.39
Γ	294.00	107.00	171.00	16.00
$\Gamma_{\%}$	100.00	36.39	58.16	5.44
$\frac{\Gamma}{M}\%$	60.00	96.40	60.21	16.84
$\mu(\gamma)$	2.31	2.00	2.47	2.62
$\sigma(\gamma)$	0.46	0.00	0.50	0.48
chars	548406	167975	298740	81691
chars%	100.00	30.63	54.47	14.90
$\frac{spaces}{chars}$	18.18	19.47	17.35	18.52
$\frac{chars-spaces}{digits}$	5.87	5.21	6.21	5.96
chars-spaces	4.26	4.50	4.32	3.53
$\frac{letters}{chars-spaces}$	87.63	87.95	87.26	88.34
$rac{vogals}{letters} \ rac{uppercase}{letters}$	35.88	36.14	35.65	36.20
letters	6.86	7.57	6.84	5.52
tokens	119673	36645	65344	17685
$tokens_{\%}$	100.00	30.62	54.60	14.78
$tokens \neq knownw$	7.18	12.06	9.20	17.07
$tokens \atop knownw \neq$	36.03	35.43	36.34	36.14
$\frac{knownw}{stopw}$	10.18 81.86	18.70 76.95	13.92 82.90	28.45 88.00
$\frac{\overline{knownw}}{punct}$	19.23	17.37	82.90 $20.22$	19.44
$\frac{\overline{tokens}}{contrac}$	0.77	0.64	0.87	0.63
tokens				
$\mu(tokens)$	3.67	3.61	3.70	3.68
$\sigma(tokens)$	2.55	2.47 5.24	2.61	2.50
$\mu(knownw)$	5.50 2.41	2.49	5.63 $2.39$	5.58 $2.30$
$\sigma(knownw)$	6.68	6.37	6.64	6.35
$\begin{vmatrix} \mu(knownw \neq) \\ \sigma(\overline{knownw} \neq) \end{vmatrix}$	2.61	2.60	$\frac{0.04}{2.54}$	$\frac{0.35}{2.47}$
$\frac{b(\kappa now nw \neq)}{\mu(\overline{stopw})}$	2.77	2.76	2.78	2.47
$\sigma(\overline{stopw})$	1.08	1.06	1.08	1.08
sents	4117	1162	2389	568
$sents_{\%}$	99.95	28.21	58.00	13.79
$\mu_S(chars)$	131.64	142.98	123.50	142.18
$\sigma_S(chars)$	160.29	170.67	125.86	243.73
$\mu_S(tokens)$	29.08	31.54	27.36	31.15
$\sigma_S(tokens)$	35.09	37.91	27.03	53.72
$\mu_S(knownw)$	8.63	9.02	8.17	9.75
$\sigma_S(knownw)$	9.19	8.26	7.04	16.20
$\mu_S(stopw)$	7.51	7.48	7.20	8.86
$\frac{\sigma_S(stopw)}{\mu_S(puncts)}$	7.42 5.60	6.71 5.49	6.28 $5.54$	11.77 6.06
$\sigma_S(puncts)$ $\sigma_S(puncts)$	10.43	9.86	$\frac{5.54}{8.97}$	15.83
	490	111	284	95
$msgs \ msgs_{\%}$	100.00	22.65	57.96	95 19.39
$\mu_M(sents)$	9.28	11.29	9.27	6.96
$\sigma_M(sents)$	10.08	11.29	10.01	8.45
$\mu_M(tokens)$	246.46	332.53	232.48	187.68
$\sigma_M(tokens)$	339.87	472.19	300.97	227.60
$\mu_M(knownw)$	73.19	95.14	69.46	58.69
$\sigma_M(knownw)$	92.11	125.30	80.92	70.90
$\mu_M(stopw)$	62.43	77.40	59.81	52.75
$\sigma_M(stopw)$	62.25	63.25	60.89	62.08
$\mu_M(puncts)$	48.85	59.48	48.53	37.38
$\sigma_M(puncts)$	78.51 1116.57	84.49 1510.50	81.95 1049.00	55.74 858.29
$\mu_M(chars)$ $\sigma_M(chars)$	1116.57 $1452.95$	1975.69	1049.00 $1289.54$	1046.40
$\sigma_M(cnars)$	1404.90	1919.09	1409.04	1040.40

TABLE S24. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 15

## B. POS tags and wordnet synsets

### 1. Snapshots of 1000 messages

	g.	p.	i.	h.
NOUN	25.93	26.17	26.79	25.37
X	0.11	0.15	0.14	0.08
ADP	12.14	12.10	11.42	12.56
DET	11.87	11.82	11.66	12.01
VERB	21.95	22.22	21.96	21.89
ADJ	5.76	5.52	5.76	5.81
ADV	7.46	6.88	7.24	7.71
PRT	3.97	4.40	3.94	3.89
PRON	6.91	6.98	7.27	6.69
NUM	0.58	0.58	0.65	0.55
CONJ	3.32	3.19	3.18	3.43
PUNC	0.00	0.00	0.00	0.00
N	54.73	54.72	54.14	55.09
ADJ	11.33	10.98	11.14	11.51
VERB	6.33	6.01	5.92	6.65
ADV	27.61	28.29	28.80	26.75
POS	32.80	31.22	33.19	32.92
POS!	96.27	96.18	96.26	96.29

TABLE S25. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 0

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	72.61	73.71	71.38	73.10
physical_entity.n.01	27.39	26.29	28.62	26.90
total	100.00	100.00	100.00	100.00
psychological_feature.n.01	21.89	24.03	21.57	21.64
communication.n.02	20.47	20.38	19.80	20.88
object.n.01	15.50	14.08	15.71	15.66
measure.n.02	12.98	13.05	13.50	12.65
attribute.n.02	7.24	6.66	6.28	7.93
causal_agent.n.01	6.50	6.23	7.21	6.14
group.n.01	6.41	6.62	6.77	6.15
matter.n.03	4.39	5.35	4.63	4.05
relation.n.01	3.60	2.97	3.46	3.81
process.n.06	0.53	0.36	0.57	0.54
thing.n.12	0.48	0.28	0.50	0.51
set.n.02	0.02	0.00	0.00	0.03
total	100.00	100.00	100.00	100.00
cognition.n.01	15.36	16.39	14.56	15.61
whole.n.02	13.18	12.36	13.64	13.07
event.n.01	13.04	15.33	13.16	12.50
definite_quantity.n.01	12.99	13.00	13.16	12.88
message.n.02	11.90	10.45	11.24	12.59
person.n.01	8.44	8.22	9.24	8.02
location.n.01	5.87	5.09	5.97	5.96
written_communication.n.01	4.78	4.14	4.20	5.26
substance.n.01	4.41	5.78	5.07	3.75
state.n.02	3.92	4.03	3.69	4.04
collection.n.01	3.49	3.34	3.35	3.60
part.n.01	2.62	1.86	2.71	2.72
total	100.00	100.00	100.00	100.00

TABLE S26. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 0

	g.	p.	i.	h.
public.a.01	29.61	26.04	31.73	28.98
like.a.01	13.21	20.71	10.95	13.16
new.a.01	11.82	8.88	15.77	9.93
different.a.01	7.62	5.92	7.05	8.31
chief.s.01	7.24	4.73	8.16	7.16
certain.a.02	5.78	5.33	5.01	6.35
first.a.01	4.70	7.10	3.90	4.73
good.a.01	4.38	7.10	3.53	4.39
able.a.01	4.38	7.69	4.64	3.58
specific.a.01	3.88	0.59	4.27	4.27
many.a.01	3.75	4.14	3.15	4.04
particular.s.01	3.62	1.78	1.86	5.08
total	100.00	100.00	100.00	100.00

TABLE S27. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 0

evaluate.v.02		g.	p.	i.	h.
think.v.03         11.93         9.96         11.14         12.90           move.v.02         11.63         14.94         13.49         9.65           change.v.01         9.78         11.27         8.32         10.39           travel.v.01         8.12         9.17         8.13         7.88           get.v.01         7.23         9.70         8.46         5.85           change.v.02         6.91         5.24         8.22         6.44           use.v.01         4.70         3.41         4.46         5.15           perceive.v.01         4.77         3.41         4.46         5.15           perceive.v.01         4.37         4.19         4.51         4.32           necessitate.v.01         4.19         1.18         3.38         5.42           total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.74         16.27         11.76         26.00           put.v.01         12.55         18.11         13.73         10.54           create.verbally.v.01         11.74         5.51         6.95	make.v.03	12.80	10.22	10.86	14.68
move.v.02         11.63         14.94         13.49         9.65           change.v.01         9.78         11.27         8.32         10.39           travel.v.01         8.12         9.17         8.13         7.88           get.v.01         7.23         9.70         8.46         5.85           change.v.02         6.91         5.24         8.22         6.44           use.v.01         5.93         4.33         6.39         6.01           desire.v.01         4.70         3.41         4.46         5.15           perceive.v.01         4.37         4.19         4.51         4.32           necessitate.v.01         4.19         1.18         3.38         5.42           total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.74         16.27         11.76         12.60           put.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97	act.v.01	12.40	16.38	12.64	11.31
change.v.01         9.78         11.27         8.32         10.39           travel.v.01         8.12         9.17         8.13         7.88           get.v.01         7.23         9.70         8.46         5.85           change.v.02         6.91         5.24         8.22         6.41           use.v.01         4.70         3.41         4.46         5.15           perceive.v.01         4.70         3.41         4.46         5.15           perceive.v.01         4.73         4.19         4.51         4.32           necessitate.v.01         4.19         1.18         3.38         5.42           total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.74         16.27         11.76         12.60           put.v.01         12.55         18.11         13.73         10.54           create.verbally.v.01         11.74         5.51         6.95         16.29           try.v.01         7.51         12.07         8.91         5.57           state.v.01         6.82         6.04         6.86	think.v.03	11.93	9.96	11.14	12.90
travel.v.01	move.v.02	11.63	14.94	13.49	9.65
get.v.01         7.23         9.70         8.46         5.85           change.v.02         6.91         5.24         8.22         6.44           use.v.01         5.93         4.33         6.39         6.01           desire.v.01         4.70         3.41         4.46         5.15           perceive.v.01         4.37         4.19         4.51         4.32           necessitate.v.01         4.19         1.18         3.38         5.42           total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.74         16.27         11.76         26.00           put.v.01         12.55         18.11         13.73         10.54           create.verbally.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17	change.v.01	9.78	11.27	8.32	10.39
change.v.02         6.91         5.24         8.22         6.44           use.v.01         5.93         4.33         6.39         6.01           desire.v.01         4.70         3.41         4.46         5.15           perceive.v.01         4.37         4.19         4.51         4.32           necessitate.v.01         4.19         1.18         3.38         5.42           total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.74         16.27         11.76         12.60           put.v.01         12.55         18.11         13.73         10.54           create.verbally.v.01         11.74         5.51         6.95         16.29           try.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change.magnitude.v.01         6.14         4.20         6.95         6.03           see.v.01         6.82         6.04         4.63	travel.v.01	8.12	9.17	8.13	7.88
change.v.02         6.91         5.24         8.22         6.44           use.v.01         5.93         4.33         6.39         6.01           desire.v.01         4.70         3.41         4.46         5.15           perceive.v.01         4.37         4.19         4.51         4.32           necessitate.v.01         4.19         1.18         3.38         5.42           total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.75         18.11         13.73         10.54           create_verbally.v.01         11.74         5.51         6.95         16.29           try.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         6.14         4.20         6.95         6.03           send.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17	get.v.01	7.23	9.70	8.46	5.85
use.v.01         5.93         4.33         6.39         6.01           desire.v.01         4.70         3.41         4.46         5.15           perceive.v.01         4.37         4.19         4.51         4.32           necessitate.v.01         4.19         1.18         3.38         5.42           total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.74         16.27         11.76         12.60           put.v.01         12.55         18.11         13.73         10.54           create_verbally.v.01         11.74         5.51         6.95         16.29           try.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63		6.91		8.22	6.44
desire.v.01         4.70         3.41         4.46         5.15           perceive.v.01         4.37         4.19         4.51         4.32           necessitate.v.01         4.19         1.18         3.38         5.42           total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.74         16.27         11.76         12.60           put.v.01         12.55         18.11         13.73         10.54           create_verbally.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         6.14         4.20         6.95         6.03           see.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         18.24         8.33         11.80		5.93	4.33	6.39	6.01
Derceive.v.01	desire.v.01	4.70	3.41		5.15
necessitate.v.01         4.19         1.18         3.38         5.42           total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.74         16.27         11.76         12.60           put.v.01         12.55         18.11         13.73         10.54           create.verbally.v.01         11.74         5.51         6.95         16.29           try.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change.magnitude.v.01         6.14         4.20         6.95         6.03           seev.01         6.82         6.04         6.86         6.97           change.magnitude.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attack.v.01         18.72         24.21         18.91 </td <td>perceive.v.01</td> <td></td> <td></td> <td></td> <td>4.32</td>	perceive.v.01				4.32
total         100.00         100.00         100.00         100.00           evaluate.v.02         18.66         15.22         17.74         20.04           interact.v.01         12.74         16.27         11.76         12.60           put.v.01         12.55         18.11         13.73         10.54           create_verbally.v.01         11.74         5.51         6.95         16.29           try.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80 <td>_</td> <td></td> <td></td> <td></td> <td></td>	_				
interact.v.01         12.74         16.27         11.76         12.60           put.v.01         12.55         18.11         13.73         10.54           create_verbally.v.01         11.74         5.51         6.95         16.29           try.v.01         7.51         12.07         8.91         5.57           state.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         6.14         4.20         6.95         6.03           send.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         7.11           increase.v.01         9.39         6.35         11.50					100.00
interact.v.01         12.74         16.27         11.76         12.60           put.v.01         12.55         18.11         13.73         10.54           create_verbally.v.01         11.74         5.51         6.95         16.29           try.v.01         7.51         12.07         8.91         5.57           state.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         6.14         4.20         6.95         6.03           send.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         7.11           increase.v.01         9.39         6.35         11.50	ovaluato v 02	18.66	15 99	17.74	20.04
put.v.01         12.55         18.11         13.73         10.54           create_verbally.v.01         11.74         5.51         6.95         16.29           try.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         6.14         4.20         6.95         6.03           send.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50					
try.v.01					
try.v.01         7.51         12.07         8.91         5.57           state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         6.14         4.20         6.95         6.03           send.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.01         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11 </td <td>1^</td> <td></td> <td>-</td> <td></td> <td></td>	1^		-		
state.v.01         7.20         6.56         6.06         8.08           see.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         6.14         4.20         6.95         6.03           send.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         3.82         7.54         4.08         2.86					
see.v.01         6.82         6.04         6.86         6.97           change_magnitude.v.01         6.14         4.20         6.95         6.03           send.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         5.66         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47<		1			
change_magnitude.v.01         6.14         4.20         6.95         6.03           send.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         3.82         7.54         4.08         2.86					
send.v.01         4.77         3.41         8.11         2.87           look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68					
look.v.02         4.70         4.99         5.17         4.34           keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12					
keep.v.03         3.64         3.67         4.63         2.99           attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         4.35         2.78         3.63         5.11           run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           reda.v.01         17.19         14.81         16.92         17.88			0	-	
attach.v.01         3.52         3.94         3.12         3.69           total         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           repair.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.	111111				
total         100.00         100.00         100.00         100.00         100.00           communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           repair.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         1	-				
communicate.v.02         18.72         24.21         18.91         17.42           write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         4.35         2.78         3.63         5.11           run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11				_	
write.v.01         18.24         8.33         11.80         24.09           think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69 <td>total</td> <td>100.00</td> <td>100.00</td> <td>100.00</td> <td>100.00</td>	total	100.00	100.00	100.00	100.00
think.v.01         11.32         7.14         11.65         12.05           install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         4.35         2.78         3.63         5.11           run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69					
install.v.01         10.35         21.83         11.65         7.11           increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         4.35         2.78         3.63         5.11           run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00     <					
increase.v.01         9.39         6.35         11.50         8.84           rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         4.35         2.78         3.63         5.11           run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96					
rate.v.01         6.29         5.56         8.62         5.11           expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         4.35         2.78         3.63         5.11           run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.23      <					
expect.v.01         5.66         5.56         4.84         6.15           save.v.02         4.50         3.57         6.66         3.47           name.v.01         4.35         2.78         3.63         5.11           run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         17.77         5.96           see.v.05         4.39         1.85         5.05         4.23           overlap.v.01         4.30         1.85         5.05         4.23					
save.v.02         4.50         3.57         6.66         3.47           name.v.01         4.35         2.78         3.63         5.11           run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.23           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88	****				-
name.v.01         4.35         2.78         3.63         5.11           run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46	-				
run.v.01         3.82         7.54         4.08         2.86           repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.23           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.61         2.78         3.54         3.85	save.v.02				
repair.v.01         3.77         2.78         2.57         4.68           read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.61         2.78         3.54         3.85					
read.v.01         3.58         4.37         4.08         3.12           total         100.00         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85					
total         100.00         100.00         100.00         100.00         100.00           inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85	-	1			
inform.v.01         25.68         31.48         19.44         29.23           add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         8.33         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85					
add.v.01         17.19         14.81         16.92         17.88           upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85	total	100.00	100.00	100.00	100.00
upgrade.v.01         12.60         12.96         14.39         11.15           record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85	inform.v.01	25.68	31.48	19.44	29.23
record.v.01         9.08         8.33         11.11         7.69           submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85	add.v.01	17.19	14.81	16.92	17.88
submit.v.01         6.54         4.63         9.09         5.00           assume.v.01         4.59         8.33         1.77         5.96           see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85		12.60	12.96	14.39	11.15
assume.v.01     4.59     8.33     1.77     5.96       see.v.05     4.39     1.85     5.05     4.42       overlap.v.01     4.30     1.85     5.05     4.23       post.v.01     4.30     8.33     5.05     2.88       think.v.02     4.00     2.78     5.05     3.46       replace.v.01     3.71     1.85     3.54     4.23       talk.v.02     3.61     2.78     3.54     3.85	record.v.01	9.08	8.33	11.11	7.69
see.v.05         4.39         1.85         5.05         4.42           overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85	submit.v.01	6.54	4.63	9.09	5.00
overlap.v.01         4.30         1.85         5.05         4.23           post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85	assume.v.01	4.59	8.33	1.77	5.96
post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85	see.v.05	4.39	1.85	5.05	4.42
post.v.01         4.30         8.33         5.05         2.88           think.v.02         4.00         2.78         5.05         3.46           replace.v.01         3.71         1.85         3.54         4.23           talk.v.02         3.61         2.78         3.54         3.85	overlap.v.01	4.30	1.85	5.05	4.23
think.v.02     4.00     2.78     5.05     3.46       replace.v.01     3.71     1.85     3.54     4.23       talk.v.02     3.61     2.78     3.54     3.85					
replace.v.01 3.71 1.85 3.54 4.23 talk.v.02 3.61 2.78 3.54 3.85					
talk.v.02 3.61 2.78 3.54 3.85					
	total	100.00	100.00	100.00	100.00

TABLE S28. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 0

	g.	p.	i.	h.
besides.r.02	14.40	17.86	20.88	10.40
still.r.01	12.07	5.36	16.50	11.09
possibly.r.01	10.24	9.82	9.76	10.57
well.r.01	9.94	9.82	8.42	10.75
already.r.01	8.01	20.54	4.38	7.45
even.r.01	7.00	6.25	7.41	6.93
yet.r.01	6.90	6.25	6.73	7.11
however.r.01	6.59	9.82	7.74	5.37
probably.r.01	6.39	5.36	4.71	7.45
truly.r.01	6.29	7.14	4.04	7.28
actually.r.01	6.09	0.89	5.05	7.63
quite.r.01	6.09	0.89	4.38	7.97
total	100.00	100.00	100.00	100.00

TABLE S29. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 0

	g.	p.	i.	h.
NOUN	66.26	68.07	68.43	64.31
X	0.22	0.23	0.25	0.19
ADP	10.92	8.85	11.08	11.52
DET	4.89	4.08	4.72	5.27
VERB	8.61	8.90	7.76	9.03
ADJ	2.28	3.20	1.87	2.22
ADV	0.77	0.95	0.43	0.92
PRT	3.93	3.38	3.95	4.10
PRON	0.68	0.58	0.37	0.91
NUM	1.13	1.43	0.91	1.15
CONJ	0.32	0.31	0.22	0.38
PUNC	0.00	0.00	0.00	0.00
N	87.54	86.77	89.05	86.90
ADJ	3.25	4.25	2.68	3.24
VERB	0.33	0.26	0.17	0.45
ADV	8.88	8.72	8.11	9.41
POS	22.53	22.94	22.42	22.44
POS!	96.32	95.68	96.34	96.55

TABLE S30. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 2

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	64.40	63.61	62.39	65.94
physical_entity.n.01	35.60	36.39	37.61	34.06
total	100.00	100.00	100.00	100.00
communication.n.02	25.51	20.59	26.92	26.41
matter.n.03	17.08	18.59	17.92	16.00
psychological_feature.n.01	16.36	13.39	16.75	17.18
measure.n.02	11.85	14.93	8.72	12.69
causal_agent.n.01	9.52	7.80	9.96	9.85
object.n.01	8.59	9.41	9.39	7.80
attribute.n.02	7.97	10.10	7.45	7.53
relation.n.01	1.47	2.65	1.24	1.19
group.n.01	1.24	1.96	1.31	0.94
thing.n.12	0.22	0.30	0.20	0.20
process.n.06	0.20	0.30	0.13	0.21
total	100.00	100.00	100.00	100.00
message.n.02	23.95	17.88	25.54	25.06
substance.n.01	15.74	18.13	16.15	14.67
definite_quantity.n.01	11.47	14.63	8.73	12.09
event.n.01	11.00	9.95	11.31	11.17
person.n.01	10.15	8.54	10.50	10.49
whole.n.02	7.39	7.98	8.07	6.76
cognition.n.01	6.67	5.04	6.64	7.26
property.n.02	5.79	7.93	5.43	5.28
substance.n.07	2.48	2.49	2.77	2.29
state.n.02	2.24	2.38	2.11	2.28
location.n.01	1.58	2.25	1.64	1.31
signal.n.01	1.53	2.80	1.12	1.35
total	100.00	100.00	100.00	100.00

TABLE S31. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 2

	g.	p.	i.	h.
apt.s.01	20.96	21.13	30.61	16.74
net.a.01	12.63	14.08	6.12	14.98
capable.s.02	11.62	7.04	17.35	10.57
local.a.01	9.34	28.17	5.10	5.29
all_right.s.01	7.58	2.82	4.08	10.57
free.a.01	7.32	7.04	9.18	6.61
chief.s.01	6.31	9.86	9.18	3.96
best.a.01	6.06	2.82	3.06	8.37
anti.a.01	5.05	0.00	4.08	7.05
unstable.a.01	4.80	1.41	6.12	5.29
common.a.01	4.29	4.23	4.08	4.41
difficult.a.01	4.04	1.41	1.02	6.17
total	100.00	100.00	100.00	100.00

TABLE S32. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 2

	g.	p.	i.	h.
act.v.01	58.75	49.08	64.83	58.71
move.v.02	8.36	8.90	7.03	8.92
travel.v.01	6.96	8.59	7.22	6.24
think.v.03	4.38	5.52	2.85	4.84
change.v.02	4.32	4.91	4.75	3.87
get.v.01	4.10	3.68	4.56	3.98
make.v.03	3.14	3.07	0.19	4.84
change.v.01	3.03	4.29	3.23	2.47
have.v.01	2.02	1.84	0.76	2.80
remove.v.01	1.91	2.45	2.09	1.61
make.v.01	1.68	3.99	1.71	0.86
designate.v.01	1.35	3.68	0.76	0.86
total	100.00	100.00	100.00	100.00
interact.v.01	72.55	68.27	85.42	67.35
evaluate.v.02	5.11	7.21	3.39	5.40
send.v.01	3.72	3.37	3.12	4.11
put.v.01	3.43	4.33	2.34	3.73
create_verbally.v.01	3.36	3.85	0.00	4.88
keep.v.03	2.63	2.88	1.04	3.34
change_magnitude.v.01	2.04	0.96	1.56	2.57
label.v.01	1.75	5.77	1.04	1.03
destroy.v.01	1.53	0.00	0.00	2.70
state.v.01	1.31	1.92	0.26	1.67
try.v.01	1.31	1.44	1.82	1.03
give.v.03	1.24	0.00	0.00	2.19
total	100.00	100.00	100.00	100.00
communicate.v.02	78.79	65.58	90.11	76.91
write.v.01	3.65	3.72	0.00	5.59
save.v.02	2.78	2.33	1.10	3.82
install.v.01	2.62	3.72	1.10	3.09
think.v.01	2.22	0.93	0.82	3.38
increase.v.01	2.14	0.93	1.65	2.79
name.v.01	1.91	5.58	1.10	1.18
rate.v.01	1.83	1.86	1.92	1.76
deny.v.01	1.11	4.65	1.10	0.00
convey.v.03	1.03	4.19	0.27	0.44
read.v.01	0.95	1.40	0.82	0.88
confront.v.02	0.95	5.12	0.00	0.15
total	100.00	100.00	100.00	100.00
reach.v.04	83.64	73.49	89.17	83.22
record.v.01	3.11	3.01	1.14	4.28
inform.v.01	3.02	9.64	2.85	1.32
see.v.05	2.22	1.20	0.85	3.29
upgrade.v.01	2.04	2.41	1.99	1.97
add.v.01	1.87	0.60	0.85	2.80
communicate.v.01	0.98	5.42	0.28	0.16
power.v.01	0.89	0.00	0.00	1.64
overlap.v.01	0.80	0.60	1.14	0.66
network.v.01	0.53	0.60	1.14	0.16
acknowledge.v.06	0.44	3.01	0.00	0.00
permit.v.01	0.44	0.00	0.57	0.49
total	100.00	100.00	100.00	100.00

TABLE S33. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 2

	g.	p.	i.	h.
never.r.01	11.90	16.67	25.00	7.14
back.r.01	9.52	33.33	12.50	3.57
soon.r.01	9.52	0.00	0.00	14.29
typically.r.01	9.52	0.00	12.50	10.71
right.r.01	9.52	0.00	12.50	10.71
enough.r.01	7.14	16.67	12.50	3.57
subsequently.r.01	7.14	0.00	0.00	10.71
forward.r.01	7.14	16.67	25.00	0.00
by_and_large.r.01	7.14	0.00	0.00	10.71
possibly.r.01	7.14	0.00	0.00	10.71
precisely.r.01	7.14	16.67	0.00	7.14
well.r.01	7.14	0.00	0.00	10.71
total	100.00	100.00	100.00	100.00

TABLE S34. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 2

	g.	p.	i.	h.
NOUN	30.58	31.89	30.73	30.03
X	0.13	0.13	0.17	0.08
ADP	11.89	11.48	12.21	11.63
DET	11.22	10.32	10.43	12.39
VERB	21.54	21.47	21.42	21.69
ADJ	5.76	5.78	5.67	5.85
ADV	6.36	6.00	6.48	6.32
PRT	3.76	3.89	3.60	3.91
PRON	5.77	5.82	5.96	5.54
NUM	0.80	0.83	0.81	0.78
CONJ	2.20	2.39	2.51	1.78
PUNC	0.00	0.00	0.00	0.00
N	59.89	60.15	61.10	58.31
ADJ	10.45	10.17	10.30	10.73
VERB	5.13	4.34	4.88	5.70
ADV	24.52	25.34	23.72	25.27
POS	33.30	33.38	32.09	34.93
POS!	93.78	93.50	93.33	94.44

TABLE S35. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 3

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	67.98	66.54	68.94	67.20
physical_entity.n.01	32.02	33.46	31.06	32.80
total	100.00	100.00	100.00	100.00
measure.n.02	19.35	18.06	22.53	15.62
psychological_feature.n.01	19.18	17.31	17.58	21.87
object.n.01	19.12	20.33	19.00	18.88
communication.n.02	16.42	18.50	16.52	15.62
causal_agent.n.01	7.03	7.83	6.67	7.23
attribute.n.02	6.84	6.45	6.35	7.60
matter.n.03	4.73	4.35	4.43	5.24
relation.n.01	3.14	2.99	3.10	3.25
group.n.01	3.05	3.22	2.85	3.24
thing.n.12	0.72	0.47	0.60	0.95
process.n.06	0.43	0.49	0.35	0.50
set.n.02	0.00	0.00	0.01	0.00
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	20.32	18.86	23.85	16.08
event.n.01	17.51	15.85	15.23	21.13
whole.n.02	13.89	16.34	12.16	15.38
person.n.01	8.57	9.34	8.07	9.00
message.n.02	6.86	10.20	6.48	6.23
cognition.n.01	6.48	5.30	6.57	6.76
message.n.01	5.74	5.59	6.01	5.44
location.n.01	4.81	5.16	4.25	5.45
land.n.04	4.50	2.89	6.42	2.47
substance.n.01	4.21	4.10	3.84	4.74
written_communication.n.01	3.86	3.24	3.91	4.00
state.n.02	3.25	3.12	3.22	3.32
total	100.00	100.00	100.00	100.00

TABLE S36. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 3

	g.	p.	i.	h.
net.a.01	39.38	41.98	32.52	46.15
like.a.01	11.53	9.26	14.79	8.68
new.a.01	10.07	8.33	12.24	8.24
general.a.01	7.32	16.67	8.03	3.19
high.a.01	7.05	4.01	5.58	9.78
certain.a.02	3.90	1.85	3.04	5.60
compact.a.01	3.64	4.01	3.33	3.85
good.a.01	3.59	0.93	3.33	4.84
chief.s.01	3.50	2.16	5.88	1.32
all_right.s.01	3.46	4.94	4.51	1.76
first.a.01	3.37	2.16	3.04	4.18
able.a.01	3.19	3.70	3.72	2.42
total	100.00	100.00	100.00	100.00

TABLE S37. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 3

	g.	p.	i.	h.
act.v.01	12.90	12.00	13.10	12.98
transfer.v.05	12.35	11.73	9.27	15.85
travel.v.01	11.34	14.32	12.02	9.67
move.v.02	9.37	8.15	11.16	7.84
think.v.03	9.33	8.33	8.88	10.12
get.v.01	8.65	10.03	9.38	7.45
use.v.01	7.83	7.34	7.05	8.83
change.v.01	6.55	7.16	6.26	6.66
make.v.03	6.49	4.66	7.86	5.59
perceive.v.01	6.09	8.06	5.47	6.13
be.v.01	4.60	4.74	5.00	4.13
change.v.02	4.50	3.49	4.56	4.75
total	100.00	100.00	100.00	100.00
give.v.03	22.14	21.06	17.03	27.68
interact.v.01	11.32	9.16	11.89	11.40
evaluate.v.02	10.55	10.29	11.35	9.82
see.v.01	9.85	12.86	8.88	9.92
travel_rapidly.v.01	8.83	12.54	10.38	6.12
try.v.01	7.56	8.84	7.04	7.70
put.v.01	6.77	6.59	7.67	5.92
state.v.01	5.80	5.14	6.21	5.57
look.v.02	5.03	5.47	6.02	3.90
reason.v.03	4.27	2.89	3.54	5.43
send.v.01	4.12	2.89	5.73	2.86
keep.v.03	3.76	2.25	4.27	3.70
total	100.00	100.00	100.00	100.00
support.v.02	30.94	32.14	22.96	38.91
communicate.v.02	15.71	14.84	16.60	15.02
run.v.01	13.93	21.43	16.01	9.65
think.v.01	5.49	3.30	6.21	5.37
calculate.v.01	5.26	3.02	4.49	6.69
read.v.01	4.82	1.92	7.11	3.27
expect.v.01	4.52	6.59	4.56	3.89
install.v.01	4.22	6.59	4.94	2.80
rebuild.v.01	4.05	0.55	5.39	3.66
increase.v.01	3.78	3.02	3.74	4.05
save.v.02	3.68	2.47	4.04	3.66
name.v.01	3.58	4.12	3.96	3.04
total	100.00	100.00	100.00	100.00
sponsor.v.01	52.38	53.67	43.18	59.88
inform.v.01	17.35	16.06	19.97	15.45
record.v.01	6.24	4.13	7.59	5.63
add.v.01	3.80	2.75	5.06	2.99
enumerate.v.01	3.46	8.26	4.08	1.68
assume.v.01	2.83	5.50	3.09	1.92
think.v.02	2.78	3.67	2.95	2.40
talk.v.02	2.66	1.38	3.80	2.04
unify.v.01	2.32	0.92	1.97	2.99
address.v.01	2.21	1.83	2.67	1.92
write.v.07	2.04	0.00	3.09	1.68
roll_up.v.02	1.93	1.83	2.53	1.44
total	100.00	100.00	100.00	100.00
	1 20.00	1200.00	1 200.00	1 200.00

TABLE S38. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 3

	g.	p.	i.	h.
besides.r.02	17.44	16.94	20.15	14.65
well.r.01	16.85	12.10	12.52	22.66
still.r.01	9.77	9.68	12.70	6.64
possibly.r.01	9.44	11.29	9.62	8.79
truly.r.01	8.42	11.29	9.26	6.84
even.r.01	6.99	9.68	7.80	5.47
merely.r.01	6.66	6.45	3.09	10.55
never.r.01	5.98	4.84	6.53	5.66
however.r.01	4.80	5.65	5.08	4.30
right.r.01	4.72	5.65	3.27	6.05
far.r.01	4.63	2.42	4.17	5.66
back.r.01	4.30	4.03	5.81	2.73
total	100.00	100.00	100.00	100.00

TABLE S39. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 3

	g.	p.	i.	h.
NOUN	36.79	38.78	37.07	28.71
X	0.12	0.13	0.16	0.06
ADP	9.41	8.90	9.28	11.50
DET	9.40	9.22	8.42	10.61
VERB	20.45	19.92	19.62	22.99
ADJ	6.53	6.61	6.61	6.19
ADV	5.40	5.45	4.05	5.90
PRT	2.59	2.33	2.59	3.62
PRON	5.70	5.27	6.80	6.85
NUM	1.17	0.91	3.35	1.10
CONJ	2.43	2.48	2.05	2.46
PUNC	0.00	0.00	0.00	0.00
N	63.16	63.93	65.34	58.18
ADJ	10.16	9.99	10.06	11.02
VERB	4.13	4.27	2.25	4.65
ADV	22.55	21.81	22.35	26.15
POS	32.19	32.43	29.91	32.61
POS!	90.97	90.02	92.74	94.47

TABLE S40. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 6

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	67.31	67.17	69.53	66.45
physical_entity.n.01	32.69	32.83	30.47	33.55
total	100.00	100.00	100.00	100.00
measure.n.02	16.63	14.04	30.38	20.30
object.n.01	16.44	16.22	14.39	18.97
psychological_feature.n.01	14.20	12.66	17.44	19.83
attribute.n.02	13.83	16.65	4.93	5.57
communication.n.02	13.75	14.04	9.58	15.22
matter.n.03	7.17	7.65	8.21	4.02
causal_agent.n.01	6.61	6.33	5.58	8.79
group.n.01	5.33	5.86	4.18	3.44
relation.n.01	3.56	3.93	3.03	2.08
thing.n.12	1.53	1.52	1.92	1.33
process.n.06	0.94	1.11	0.38	0.44
set.n.02	0.00	0.00	0.00	0.01
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	17.71	14.36	34.58	21.71
whole.n.02	13.01	12.90	9.75	15.79
property.n.02	10.26	13.49	1.75	0.98
event.n.01	9.61	9.01	10.93	11.51
person.n.01	8.14	7.93	6.55	10.26
cognition.n.01	8.05	7.06	9.57	11.62
substance.n.01	7.60	8.16	9.01	3.98
location.n.01	6.93	7.30	6.77	5.32
message.n.02	6.21	5.43	5.09	10.66
signal.n.01	5.54	7.37	0.30	0.60
state.n.02	4.19	4.32	3.22	4.20
written_communication.n.01	2.76	2.67	2.49	3.38
total	100.00	100.00	100.00	100.00

TABLE S41. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 6

	g.	p.	i.	h.
common.a.01	13.80	4.88	49.66	6.22
net.a.01	13.34	19.62	3.74	8.44
new.a.01	11.20	13.50	5.10	11.11
like.a.01	9.91	8.62	7.82	13.56
small.a.01	8.16	12.00	4.08	4.00
mobile.s.01	7.12	0.12	0.68	23.78
mathematical.a.01	7.06	0.00	0.68	23.78
glib.s.01	7.06	1.50	26.19	4.44
good.a.01	6.67	10.38	1.36	3.56
great.s.01	5.51	9.75	0.68	1.11
contrary.s.01	5.12	9.88	0.00	0.00
strong.a.01	5.05	9.75	0.00	0.00
total	100.00	100.00	100.00	100.00

TABLE S42. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 6

	g.	p.	i.	h.
act.v.01	18.49	19.61	12.16	17.84
change.v.02	11.90	14.86	2.11	6.12
travel.v.01	11.03	11.41	10.25	10.01
express.v.02	10.69	13.74	2.91	3.42
move.v.02	9.45	10.35	6.93	7.42
think.v.03	7.51	7.36	5.73	9.13
make.v.03	6.42	4.60	10.35	11.19
change.v.01	6.34	5.87	3.62	9.72
be.v.01	5.15	5.36	5.53	4.12
include.v.01	4.58	0.96	27.84	5.01
get.v.01	4.36	4.05	4.12	5.71
use.v.01	4.08	1.82	8.44	10.31
total	100.00	100.00	100.00	100.00
interact.v.01	22.02	20.57	22.16	30.77
state.v.01	19.89	22.67	8.68	8.95
reorient.v.03	11.41	14.26	0.30	0.00
evaluate.v.02	10.39	8.88	11.68	18.84
give.v.03	5.93	5.61	3.29	9.26
cover.v.03	5.14	6.44	0.00	0.00
keep.v.03	5.00	1.53	30.84	12.40
set_about.v.01	4.73	5.89	0.00	0.16
put.v.01	4.73	3.97	7.49	7.85
see.v.01	3.86	3.40	4.49	6.28
come.v.01	3.48	4.02	1.20	1.41
label.v.01	3.42	2.75	9.88	4.08
total	100.00	100.00	100.00	100.00
communicate.v.02	31.92	29.89	33.03	42.48
align.v.01	17.50	22.24	0.45	0.00
cross.v.05	7.86	10.00	0.00	0.00
confront.v.02	7.26	9.19	0.00	0.22
think.v.01	7.16	6.20	5.88	13.05
name.v.01	5.25	4.29	14.93	5.75
answer.v.01	4.58	5.59	0.45	1.11
store.v.01	4.23	0.36	30.32	12.61
cut.v.01	3.95	4.70	0.90	1.33
increase.v.01	3.60	2.63	3.17	9.07
run.v.01	3.34	1.50	7.24	11.50
support.v.02	3.34	3.40	3.62	2.88
total	100.00	100.00	100.00	100.00
inform.v.01	31.45	36.65	28.21	17.45
talk.v.02	9.73	14.21	0.00	1.87
roll_up.v.02	8.46	0.81	33.85	16.51
telecommunicate.v.01	7.40	0.20	1.03	33.33
ask.v.01	7.26	9.44	3.59	2.80
sponsor.v.01	7.00	8.53	4.10	4.05
communicate.v.01	5.80	7.51	5.13	0.93
record.v.01	5.33	2.23	18.46	6.85
talk.v.01	5.20	7.31	0.51	1.56
add.v.01	4.60	2.34	3.08	12.46
admit.v.01	4.33	6.60	0.00	0.00
believe.v.01	3.46	4.16	2.05	2.18
total	100.00	100.00	100.00	100.00
	11 - 3.00			

TABLE S43. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 6

	g.	р.	i.	h.
besides.r.02	14.94	12.00	20.00	26.67
well.r.01	14.83	15.41	6.67	14.67
therefore.r.01	11.15	13.33	6.67	2.67
still.r.01	7.47	5.93	17.78	11.33
truly.r.01	7.36	6.37	11.11	10.67
right.r.01	6.90	8.15	4.44	2.00
even.r.01	6.44	6.22	0.00	9.33
indeed.r.01	6.32	8.15	0.00	0.00
always.r.01	6.21	6.81	0.00	5.33
never.r.01	6.21	6.52	4.44	5.33
however.r.01	6.21	5.48	11.11	8.00
long.r.01	5.98	5.63	17.78	4.00
total	100.00	100.00	100.00	100.00

TABLE S44. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 6

	g.	p.	i.	h.
NOUN	56.40	54.24	58.05	55.28
X	2.83	2.74	2.65	3.08
ADP	2.95	3.03	2.44	3.52
DET	14.58	12.51	14.72	15.25
VERB	9.65	12.31	8.99	9.38
ADJ	7.82	7.93	7.93	7.64
ADV	1.33	2.10	1.15	1.24
PRT	1.81	1.92	1.59	2.04
PRON	1.06	0.58	1.08	1.23
NUM	1.30	2.19	1.15	1.12
CONJ	0.27	0.44	0.24	0.22
PUNC	0.00	0.00	0.00	0.00
N	83.39	81.55	84.31	83.07
ADJ	9.77	8.97	9.77	10.14
VERB	0.23	0.50	0.21	0.14
ADV	6.61	8.97	5.71	6.65
POS	19.19	21.38	19.14	18.34
POS!	89.88	90.27	88.84	91.09

TABLE S45. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 7

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	70.20	73.66	69.46	69.56
physical_entity.n.01	29.80	26.34	30.54	30.44
total	100.00	100.00	100.00	100.00
measure.n.02	23.38	33.05	22.93	19.43
communication.n.02	20.64	17.30	20.43	22.48
object.n.01	12.53	13.17	12.46	12.32
attribute.n.02	12.08	9.65	11.95	13.38
matter.n.03	9.30	6.34	10.17	9.54
psychological_feature.n.01	7.00	6.71	7.11	6.98
causal_agent.n.01	6.46	5.11	6.53	7.00
group.n.01	4.62	4.09	4.51	5.01
relation.n.01	2.49	2.86	2.52	2.27
thing.n.12	0.97	0.61	1.04	1.06
process.n.06	0.54	1.10	0.35	0.52
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	24.93	35.00	24.85	20.45
written_communication.n.01	18.51	13.93	18.93	20.05
whole.n.02	11.08	12.51	11.06	10.45
shape.n.02	9.74	7.14	9.61	11.09
substance.n.01	8.65	5.77	9.12	9.34
person.n.01	5.81	5.03	5.70	6.31
event.n.01	5.17	4.94	5.26	5.16
social_group.n.01	4.49	2.88	4.58	5.09
state.n.02	3.27	3.67	3.01	3.42
cognition.n.01	2.97	2.98	3.06	2.85
message.n.02	2.76	3.37	2.49	2.85
location.n.01	2.62	2.79	2.32	2.93
total	100.00	100.00	100.00	100.00

TABLE S46. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 7

	g.	p.	i.	h.
public.a.01	87.23	84.15	84.79	91.13
apt.s.01	2.44	4.92	3.65	0.18
net.a.01	2.29	2.73	3.80	0.37
all_right.s.01	1.25	0.55	0.63	2.22
ill.a.01	1.18	1.64	0.95	1.29
excess.s.01	0.89	1.09	0.48	1.29
free.a.01	0.89	1.64	1.27	0.18
available.a.01	0.81	1.64	0.32	1.11
chinese.a.01	0.81	0.00	1.74	0.00
logical.a.01	0.74	0.00	1.58	0.00
cardinal.s.01	0.74	0.55	0.00	1.66
local.a.01	0.74	1.09	0.79	0.55
total	100.00	100.00	100.00	100.00

TABLE S47. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 7

	g.	р.	i.	h.
change.v.01	23.52	12.64	26.51	27.45
move.v.02	14.31	16.67	13.76	13.33
act.v.01	10.04	13.22	8.39	9.80
make.v.03	9.90	8.62	8.39	12.55
think.v.03	8.39	5.75	4.36	14.90
change.v.02	7.84	4.02	11.07	6.67
get.v.01	6.46	10.34	7.72	2.35
travel.v.01	4.95	7.47	3.36	5.10
make.v.01	3.99	6.32	4.36	1.96
necessitate.v.01	3.71	9.77	2.35	1.18
use.v.01	3.58	4.60	3.69	2.75
express.v.02	3.30	0.57	6.04	1.96
total	100.00	100.00	100.00	100.00
damage.v.01	23.68	13.75	23.44	27.86
put.v.01	13.11	16.25	14.58	10.45
evaluate.v.02	12.47	11.25	6.25	18.91
interact.v.01	11.42	21.25	9.38	9.45
create_verbally.v.01	10.78	8.75	8.33	13.93
state.v.01	5.07	1.25	9.38	2.49
modify.v.01	4.86	1.25	7.29	3.98
keep.v.03	4.44	2.50	6.77	2.99
end.v.02	4.23	3.75	8.33	0.50
travel_rapidly.v.01	3.38	5.00	3.65	2.49
establish.v.01	3.38	5.00	1.04	4.98
send.v.01	3.17	10.00	1.56	1.99
total	100.00	100.00	100.00	100.00
mar.v.01	27.93	17.46	28.66	30.94
write.v.01	12.72	11.11	10.19	15.47
communicate.v.02	12.72	23.81	10.83	10.50
install.v.01	12.47	19.05	13.38	9.39
think.v.01	7.73	1.59	0.00	16.57
save.v.02	4.74	1.59	8.28	2.76
update.v.01	4.49	1.59	8.28	2.21
run.v.01	3.99	6.35	4.46	2.76
read.v.01	3.49	7.94	1.91	3.31
rate.v.01	3.49	4.76	3.82	2.76
name.v.01 break.v.10	3.24	4.76 0.00	$\frac{2.55}{7.64}$	3.31 0.00
total	100.00	100.00	100.00	100.00
inform.v.01	15.15	8.33	20.00	12.50
record.v.01	14.39	4.17	21.67	10.42
carry.v.04	13.64	54.17	0.00	10.42 10.42
upgrade.v.01 interrupt.v.01	9.09	12.50	20.00	0.00
adhere.v.06	7.58	4.17	1.67	16.67
communicate.v.01	7.58	4.17	6.67	10.07
enumerate.v.01	5.30	0.00	11.67	0.00
grow.v.02	4.55	4.17	3.33	6.25
promise.v.01	4.55	0.00	3.33	8.33
restrain.v.01	3.79	0.00	1.67	8.33
route.v.01	3.79	8.33	0.00	6.25
total	100.00	100.00	100.00	100.00
υσυαι	100.00	100.00	100.00	100.00

TABLE S48. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 7

	g.	р.	i.	h.
already.r.01	16.67	0.00	36.36	0.00
back.r.01	16.67	11.11	18.18	25.00
practically.r.01	12.50	33.33	0.00	0.00
forward.r.01	8.33	0.00	0.00	50.00
probably.r.01	8.33	11.11	9.09	0.00
normally.r.01	8.33	0.00	18.18	0.00
even.r.01	8.33	22.22	0.00	0.00
early_on.r.01	4.17	11.11	0.00	0.00
newly.r.01	4.17	11.11	0.00	0.00
yet.r.01	4.17	0.00	9.09	0.00
half.r.01	4.17	0.00	0.00	25.00
readily.r.01	4.17	0.00	9.09	0.00
total	100.00	100.00	100.00	100.00

TABLE S49. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 7

	g.	p.	i.	h.
NOUN	29.48	50.17	25.25	23.74
X	0.22	0.77	0.10	0.06
ADP	11.36	8.17	12.05	12.24
DET	10.26	8.06	11.50	10.51
VERB	21.12	14.56	22.57	22.90
ADJ	5.57	5.44	5.39	5.70
ADV	7.91	3.29	8.35	9.43
PRT	3.64	2.51	4.11	3.85
PRON	6.54	4.33	6.65	7.30
NUM	1.26	0.85	1.15	1.46
CONJ	2.64	1.85	2.89	2.81
PUNC	0.00	0.00	0.00	0.00
N	58.79	74.99	55.27	52.55
ADJ	10.09	8.16	10.31	10.93
VERB	7.05	2.32	7.71	9.04
ADV	24.07	14.53	26.71	27.48
POS	32.49	31.70	33.31	32.51
POS!	94.78	92.60	94.90	95.81

TABLE S50. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 8

			•	
	g.	р.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	67.38	68.44	66.19	67.24
physical_entity.n.01	32.62	31.56	33.81	32.76
total	100.00	100.00	100.00	100.00
measure.n.02	22.88	17.29	24.48	25.97
object.n.01	21.17	17.58	23.71	22.41
communication.n.02	13.53	17.02	10.89	12.41
psychological_feature.n.01	13.32	8.54	16.28	15.20
attribute.n.02	9.52	16.38	6.92	6.03
matter.n.03	6.26	8.51	4.22	5.70
group.n.01	5.27	6.77	5.05	4.34
causal_agent.n.01	4.14	4.33	4.91	3.62
relation.n.01	2.86	2.44	2.58	3.28
process.n.06	0.56	0.60	0.60	0.52
thing.n.12	0.49	0.54	0.37	0.51
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	23.27	14.48	25.59	27.81
whole.n.02	21.80	15.44	24.56	24.57
event.n.01	9.33	6.16	11.40	10.38
cognition.n.01	7.07	5.06	8.25	7.80
substance.n.01	6.39	9.15	4.51	5.51
message.n.02	6.23	4.15	6.29	7.53
property.n.02	5.74	13.97	2.20	2.14
signal.n.01	4.60	13.03	0.62	1.10
location.n.01	4.28	7.08	4.16	2.53
person.n.01	4.24	5.28	4.67	3.37
written_communication.n.01	3.57	3.26	4.07	3.53
state.n.02	3.48	2.93	3.68	3.73
total	100.00	100.00	100.00	100.00

TABLE S51. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 8

	g.	p.	i.	h.
like.a.01	19.42	4.18	24.00	24.70
new.a.01	15.73	6.43	20.36	18.18
public.a.01	13.64	34.08	6.55	6.97
initial.s.01	10.03	37.62	0.36	1.06
good.a.01	7.38	3.54	10.18	8.03
certain.a.02	5.70	2.57	6.91	6.67
least.a.01	5.38	3.54	2.91	7.27
last.s.01	5.30	1.93	10.55	4.70
old.a.01	4.49	0.32	6.18	5.76
much.a.01	4.33	1.29	4.73	5.61
current.a.01	4.33	1.29	4.00	5.91
different.a.01	4.25	3.22	3.27	5.15
total	100.00	100.00	100.00	100.00

TABLE S52. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 8

	g.	p.	i.	h.
act.v.01	13.51	24.81	12.55	11.14
change.v.01	11.28	6.15	13.45	11.63
think.v.03	9.88	5.82	11.25	10.31
make.v.03	9.72	8.01	7.76	10.96
move.v.02	9.54	7.79	10.09	9.74
change.v.02	9.02	16.14	8.41	7.54
travel.v.01	7.62	5.16	8.21	7.97
get.v.01	7.50	7.57	7.12	7.64
make.v.01	6.09	4.61	5.17	6.84
use.v.01	6.01	5.60	7.18	5.63
be.v.01	5.69	4.61	4.20	6.57
express.v.02	4.13	3.73	4.59	4.04
total	100.00	100.00	100.00	100.00
	l		18.74	
evaluate.v.02	16.79	8.02 18.55	18.74	18.08 12.77
interact.v.01	14.90			
construct.v.01	13.52	5.51	8.35	17.54
state.v.01	9.25	8.52	10.40	8.95
put.v.01	8.52	6.77	8.49	8.95
change_magnitude.v.01	6.96	2.76	9.52	6.92
see.v.01	6.16	5.76	7.03	5.91
look.v.02	5.66	4.26	5.12	6.21
keep.v.03	4.71	5.26	5.27	4.36
better.v.02	4.68	2.01	3.66	5.73
try.v.01	4.50	3.26	5.27	4.47
set_about.v.01	4.35	29.32	0.15	0.12
total	100.00	100.00	100.00	100.00
communicate.v.02	24.48	19.35	30.71	23.81
think.v.01	12.21	3.81	14.47	14.75
increase.v.01	11.34	2.72	15.99	12.89
confront.v.02	7.40	31.88	0.25	0.23
repair.v.01	6.97	1.63	5.08	10.10
align.v.01	6.54	28.88	0.00	0.00
test.v.01	5.92	1.36	8.38	6.74
install.v.01	5.61	3.00	5.58	6.74
update.v.01	5.24	0.82	3.55	7.90
expect.v.01	4.99	1.63	4.31	6.74
run.v.01	4.93	3.81	6.35	4.76
interrupt.v.04	4.38	1.09	5.33	5.34
total	100.00	100.00	100.00	100.00
inform.v.01	27.03	40.43	26.83	24.26
add.v.01	19.43	7.45	20.73	21.28
roll_up.v.02	8.88	11.70	7.32	9.15
record.v.01	7.46	9.57	7.32	7.09
propose.v.01	6.31	3.19	3.66	8.47
address.v.01	5.41	10.64	2.85	5.72
talk.v.02	4.76	4.26	6.10	4.12
unify.v.01	4.50	2.13	2.85	5.95
hang.v.02	4.25	0.00	8.54	2.75
ask.v.01	4.25	3.19	5.28	3.89
think.v.02	3.99	1.06	2.85	5.26
see.v.05	3.73	6.38	5.69	2.06
total	100.00	100.00	100.00	100.00
1	1			

TABLE S53. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 8

	g.	p.	i.	h.
upriver.r.01	14.72	7.59	10.88	16.86
besides.r.02	12.44	20.25	18.73	9.30
truly.r.01	12.13	8.86	12.39	12.33
still.r.01	8.27	3.80	6.65	9.30
well.r.01	8.19	13.92	8.46	7.56
probably.r.01	8.03	6.33	7.85	8.26
possibly.r.01	8.03	3.80	7.55	8.60
actually.r.01	6.93	3.80	6.95	7.21
even.r.01	6.14	12.66	7.85	4.88
already.r.01	6.14	7.59	6.34	5.93
back.r.01	4.57	6.33	4.83	4.30
alternatively.r.01	4.41	5.06	1.51	5.47
total	100.00	100.00	100.00	100.00

TABLE S54. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 8

	g.	p.	i.	h.
NOUN	29.04	31.04	29.94	25.38
X	0.17	0.22	0.16	0.13
ADP	11.97	11.09	11.46	13.74
DET	11.52	11.09	11.46	12.13
VERB	21.76	21.54	21.35	22.58
ADJ	5.64	5.64	6.01	5.14
ADV	6.12	5.38	6.17	6.97
PRT	3.74	3.71	3.86	3.61
PRON	6.22	6.19	6.04	6.50
NUM	0.66	0.72	0.60	0.68
CONJ	3.14	3.38	2.94	3.12
PUNC	0.00	0.00	0.00	0.00
N	59.96	61.65	60.48	56.66
ADJ	10.30	10.25	10.62	9.88
VERB	4.74	3.62	4.92	6.11
ADV	25.00	24.48	23.98	27.34
POS	34.05	33.85	34.41	33.78
POS!	91.77	89.59	93.03	93.14

TABLE S55. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 9

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	70.91	69.84	72.34	70.27
physical_entity.n.01	29.09	30.16	27.66	29.73
total	100.00	100.00	100.00	100.00
measure.n.02	20.49	23.17	21.91	13.83
communication.n.02	17.50	16.15	16.79	20.84
psychological_feature.n.01	16.34	15.23	16.12	18.46
object.n.01	16.20	15.41	15.70	18.32
group.n.01	8.13	7.61	8.51	8.34
causal_agent.n.01	7.02	8.47	6.40	5.72
attribute.n.02	6.29	5.54	7.14	6.10
matter.n.03	4.53	5.13	4.22	4.06
relation.n.01	2.14	2.11	1.84	2.69
process.n.06	0.67	0.55	0.65	0.90
thing.n.12	0.66	0.59	0.69	0.72
set.n.02	0.02	0.02	0.02	0.00
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	21.68	24.94	23.07	14.06
whole.n.02	13.86	13.27	12.72	16.76
event.n.01	12.37	12.39	11.85	13.22
message.n.02	9.14	8.53	8.76	10.78
person.n.01	8.04	10.00	7.20	6.32
cognition.n.01	7.28	6.12	7.26	9.20
collection.n.01	6.40	5.10	7.11	7.28
written_communication.n.01	5.67	4.79	5.24	7.80
location.n.01	4.96	4.75	5.44	4.48
substance.n.01	4.12	4.39	3.95	3.97
property.n.02	3.25	2.56	3.88	3.31
state.n.02	3.23	3.16	3.53	2.83
total	100.00	100.00	100.00	100.00

TABLE S56. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 9

	g.	p.	i.	h.
aeriform.s.02	42.64	45.72	47.65	25.45
like.a.01	10.23	11.28	9.62	9.41
capable.s.02	7.12	7.06	7.16	7.12
new.a.01	6.19	5.20	3.64	13.74
possible.a.01	5.80	5.82	5.05	7.38
able.a.01	5.36	5.45	4.81	6.36
different.a.01	4.24	2.11	5.40	6.11
first.a.01	4.04	3.47	4.11	5.09
net.a.01	3.85	3.47	3.05	6.36
local.a.01	3.75	7.06	1.64	1.53
certain.a.02	3.46	1.36	3.52	7.63
good.a.01	3.31	1.98	4.34	3.82
total	100.00	100.00	100.00	100.00

TABLE S57. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 9

	g.	p.	i.	h.
act.v.01	15.33	17.48	14.35	13.91
make.v.03	12.76	11.31	12.37	15.12
move.v.02	11.58	12.47	12.10	9.77
use.v.01	11.04	10.71	11.05	11.43
travel.v.01	8.92	9.62	9.06	7.83
think.v.03	8.45	6.91	8.59	10.22
change.v.01	7.15	6.80	7.55	7.07
get.v.01	5.83	7.51	6.06	3.38
perceive.v.01	5.63	4.93	5.96	6.08
change.v.02	5.18	4.37	5.46	5.85
express.v.02	4.25	3.81	3.61	5.67
be.v.01	3.89	4.09	3.84	3.69
total	100.00	100.00	100.00	100.00
interact.v.01	16.36	17.63	14.28	17.43
re-create.v.01	13.25	12.34	13.34	14.29
evaluate.v.02	11.94	10.39	12.84	12.75
put.v.01	9.46	9.51	9.85	8.88
try.v.01	8.24	9.82	9.16	5.00
state.v.01	7.65	6.74	6.61	10.17
see.v.01	6.75	6.30	6.30	7.91
travel_rapidly.v.01	6.66	7.62	6.30	5.89
send.v.01	6.54	6.80	7.29	5.25
keep.v.03	5.64	5.86	6.23	4.60
interpret.v.01	3.79	2.33	3.74	5.73
look.v.02	3.72	4.66	4.05	2.10
total	100.00	100.00	100.00	100.00
communicate.v.02	24.20	27.37	21.18	24.24
represent.v.09	20.69	20.40	20.59	21.18
run.v.01	10.56	12.59	9.95	8.94
think.v.01	7.52	5.72	8.97	7.83
install.v.01	6.09	9.78	4.33	3.92
save.v.02	5.59	5.41	5.62	5.75
read.v.01	5.44	3.33	5.52	7.83
increase.v.01	5.12	3.54	6.11	5.75
expect.v.01	4.08	3.02	4.83	4.41
declare.v.01	3.87	3.85	4.14	3.55
salvage.v.01 write.v.01	3.44	2.39	5.12 3.65	2.57
total	100.00	100.00	100.00	100.00
capture.v.01	32.47	30.96	32.69	34.15
inform.v.01	25.26	25.91	21.79	28.83
record.v.01	8.93	8.21	9.13	9.61
add.v.01	7.22	4.90	8.17	9.00
roll_up.v.02 address.v.01	4.64	6.32	5.29	1.64
filter.v.01	3.49	4.90 2.53	3.69	1.43 4.70
promise.v.01	3.38	2.05	4.01	4.70
see.v.05	3.21	4.11	3.21	2.04
write.v.02	3.04	3.63	3.21	2.04
propose.v.01	2.58	3.63	2.40	1.43
balance.v.01	2.41	2.84	3.21	0.82
Salance. V.O.	2.71	2.01	0.21	0.02
total	100.00	100.00	100.00	100.00

TABLE S58. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 9

	g.	p.	i.	h.
besides.r.02	17.98	18.15	20.60	15.06
probably.r.01	11.83	7.04	12.04	14.81
however.r.01	11.11	11.11	10.88	11.36
possibly.r.01	10.57	6.67	12.50	11.11
well.r.01	8.67	8.15	6.48	11.36
still.r.01	7.23	11.11	7.64	4.20
truly.r.01	7.05	7.78	7.41	6.17
even.r.01	6.68	8.89	6.71	5.19
alternatively.r.01	5.69	6.30	5.09	5.93
presently.r.02	4.97	5.93	2.31	7.16
already.r.01	4.25	3.70	3.70	5.19
actually.r.01	3.97	5.19	4.63	2.47
total	100.00	100.00	100.00	100.00

TABLE S59. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 9

	g.	p.	i.	h.
NOUN	27.24	31.28	27.43	24.40
X	0.45	0.57	0.43	0.40
ADP	12.51	12.04	12.89	12.00
DET	11.52	10.65	12.02	10.99
VERB	21.57	20.20	20.86	23.87
ADJ	6.93	7.46	6.91	6.64
ADV	6.23	5.30	6.22	6.80
PRT	3.79	3.21	3.75	4.23
PRON	6.32	5.51	6.05	7.38
NUM	0.55	0.44	0.58	0.54
CONJ	2.91	3.32	2.86	2.75
PUNC	0.00	0.00	0.00	0.00
N	56.34	59.18	57.55	51.91
ADJ	12.98	13.43	13.00	12.63
VERB	5.65	4.83	5.48	6.54
ADV	25.04	22.56	23.98	28.93
POS	34.29	35.13	34.07	34.23
POS!	95.66	95.29	95.78	95.65

TABLE S60. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 10

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	74.15	73.30	74.41	74.15
physical_entity.n.01	25.85	26.70	25.59	25.85
total	100.00	100.00	100.00	100.00
communication.n.02	25.32	24.69	24.16	28.56
psychological_feature.n.01	17.56	16.73	18.06	17.01
measure.n.02	16.95	15.85	17.81	15.75
object.n.01	10.30	11.58	10.46	8.99
causal_agent.n.01	8.58	8.66	9.24	6.94
matter.n.03	6.07	5.72	5.00	8.87
attribute.n.02	5.44	6.97	5.37	4.46
group.n.01	4.97	6.25	4.76	4.49
relation.n.01	3.89	2.78	4.25	3.87
process.n.06	0.50	0.44	0.54	0.47
thing.n.12	0.40	0.31	0.35	0.57
set.n.02	0.01	0.02	0.00	0.02
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	15.54	14.39	16.48	14.16
event.n.01	14.28	14.48	13.97	14.85
message.n.02	12.87	13.31	11.82	15.05
person.n.01	11.00	11.27	11.74	9.03
cognition.n.01	8.70	7.77	9.50	7.48
whole.n.02	7.46	7.65	7.95	6.17
substance.n.01	6.42	6.48	5.57	8.41
indication.n.01	5.73	5.05	5.50	6.79
location.n.01	5.41	6.86	5.08	5.13
language.n.01	5.05	4.58	5.89	3.38
fundamental_quantity.n.01	3.89	4.41	3.86	3.60
written_communication.n.01	3.64	3.74	2.65	5.95
total	100.00	100.00	100.00	100.00

TABLE S61. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 10

	g.	p.	i.	h.
new.a.01	14.99	21.46	15.05	11.45
like.a.01	13.96	14.17	12.78	15.77
english.a.01	13.55	12.96	10.92	18.14
net.a.01	9.99	2.02	16.78	3.24
free.a.01	7.60	9.72	6.66	7.99
capable.s.02	6.23	8.10	9.19	0.43
personal.a.01	6.02	0.40	2.13	15.33
many.a.01	5.75	8.10	5.86	4.32
good.a.01	5.61	6.07	4.93	6.48
possible.a.01	5.54	4.05	7.32	3.46
japanese.a.01	5.41	0.81	2.66	12.31
public.a.01	5.34	12.15	5.73	1.08
total	100.00	100.00	100.00	100.00

TABLE S62. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 10

	g.	p.	i.	h.
act.v.01	25.76	30.65	26.60	22.05
move.v.02	10.02	8.49	8.67	13.02
change.v.01	9.43	9.14	11.13	6.71
think.v.03	9.35	9.57	10.26	7.72
make.v.01	6.61	4.52	7.80	5.60
change.v.02	6.08	7.10	5.25	7.01
use.v.01	5.84	4.73	5.28	7.32
get.v.01	5.70	3.23	5.01	8.02
travel.v.01	5.57	5.27	5.82	5.30
make.v.03	5.52	4.95	6.00	4.99
satisfy.v.02	5.09	7.96	4.47	4.79
express.v.02	5.01	4.41	3.72	7.47
total	100.00	100.00	100.00	100.00
interact.v.01	35.09	38.27	36.72	30.68
evaluate.v.02	11.63	9.65	12.71	10.84
please.v.01	8.66	12.31	7.73	8.30
state.v.01	8.52	6.82	6.43	12.94
send.v.01	7.05	8.15	4.82	10.23
help.v.01	5.25	5.32	5.65	4.55
see.v.01	5.17	4.33	5.08	5.77
modify.v.01	4.76	3.66	3.06	8.22
change_magnitude.v.01	3.78	5.82	3.84	2.62
look.v.02	3.78	1.66	5.65	1.75
put.v.01	3.24	2.16	4.10	2.36
take.v.01	3.05	1.83	4.20	1.75
total	100.00	100.00	100.00	100.00
communicate.v.02	51.85	53.79	55.31	45.15
think.v.01	8.26	4.98	9.35	8.28
update.v.01	6.43	4.50	4.12	11.25
increase.v.01	5.41	7.58	5.71	3.75
place.v.12	4.35	2.61	6.42	1.94
note.v.01	3.99	1.18	1.19	10.09
coincide.v.01	3.83	2.61	3.96	4.27
convey.v.03	3.38	1.42	4.91	1.94
expect.v.01	3.34	1.90	4.52	2.20
write.v.01	3.22	1.90	4.28	2.20
send.v.02	3.01	0.47	0.24	8.93
cross.v.05	2.93	17.06	0.00	0.00
total	100.00	100.00	100.00	100.00
inform.v.01	53.16	55.36	57.02	45.50
add.v.01	6.44	8.30	6.87	4.76
overlap.v.01	5.17	3.81	5.20	5.82
talk.v.02	4.73	7.61	5.10	2.65
communicate.v.01	4.57	2.08	6.45	2.65
ask.v.01	4.35	3.81	3.43	6.17
mail.v.01	4.07	0.69	0.31	12.17
see.v.05	3.91	4.50	4.58	2.47
fund-raise.v.01	3.74	1.73	4.27	3.88
propose.v.01	3.63	4.84	2.71	4.59
talk.v.01	3.14	3.81	1.98	4.76
permit.v.01	3.08	3.46	2.08	4.59
total	100.00	100.00	100.00	100.00
	1 20.00			

TABLE S63. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 10

	g.	p.	i.	h.
besides.r.02	18.06	35.25	17.16	12.64
still.r.01	12.77	12.23	17.16	6.74
probably.r.01	10.98	5.76	3.16	24.16
well.r.01	10.08	9.35	10.45	9.83
already.r.01	9.28	8.63	7.69	11.80
freely.r.01	6.39	1.44	7.50	6.74
yet.r.01	6.39	5.76	5.72	7.58
however.r.01	6.09	3.60	8.09	4.21
presently.r.02	5.79	2.88	8.68	2.81
soon.r.01	5.39	5.04	4.93	6.18
even.r.01	4.49	4.32	4.73	4.21
always.r.01	4.29	5.76	4.73	3.09
total	100.00	100.00	100.00	100.00

TABLE S64. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 10

	g.	p.	i.	h.
NOUN	26.68	27.93	28.60	23.87
X	0.30	0.33	0.30	0.29
ADP	14.64	14.17	15.05	14.15
DET	13.35	13.12	13.24	13.52
VERB	18.52	18.75	17.58	19.77
ADJ	7.60	7.57	7.73	7.42
ADV	6.95	6.68	6.43	7.69
PRT	2.97	2.52	2.82	3.23
PRON	5.30	4.82	4.35	6.67
NUM	0.75	0.83	0.83	0.63
CONJ	2.95	3.29	3.06	2.76
PUNC	0.00	0.00	0.00	0.00
N	56.32	57.70	58.82	52.33
ADJ	15.07	14.47	14.96	15.33
VERB	7.08	6.93	6.55	7.91
ADV	21.53	20.91	19.67	24.43
POS	37.05	36.59	37.17	36.94
POS!	95.60	95.02	95.42	95.96

TABLE S65. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 11

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	69.95	69.62	67.25	74.56
physical_entity.n.01	30.05	30.38	32.75	25.44
total	100.00	100.00	100.00	100.00
psychological_feature.n.01	18.82	18.18	16.63	22.64
communication.n.02	17.90	19.05	16.11	20.73
measure.n.02	14.71	15.91	16.13	12.09
object.n.01	13.09	12.60	14.13	11.41
causal_agent.n.01	9.36	11.55	9.58	8.62
relation.n.01	6.87	6.41	7.05	6.65
attribute.n.02	5.93	5.85	5.62	6.47
group.n.01	5.71	4.22	5.72	5.96
matter.n.03	5.22	4.82	6.30	3.46
thing.n.12	1.85	1.00	2.31	1.21
process.n.06	0.54	0.41	0.43	0.75
set.n.02	0.00	0.00	0.00	0.01
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	14.47	15.15	16.48	10.87
cognition.n.01	13.49	11.41	11.41	17.47
person.n.01	12.11	14.72	12.25	11.41
event.n.01	10.75	11.35	9.92	12.07
location.n.01	7.80	6.42	9.00	5.97
whole.n.02	7.62	8.54	7.33	7.96
part.n.01	6.90	6.24	7.21	6.49
language.n.01	6.63	6.27	6.49	6.95
message.n.02	6.62	7.48	6.32	6.99
substance.n.01	5.65	4.27	6.97	3.63
written_communication.n.01	4.69	4.74	3.53	6.68
fundamental_quantity.n.01	3.26	3.40	3.09	3.52
total	100.00	100.00	100.00	100.00

TABLE S66. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 11

	g.	p.	i.	h.
hebraic.a.02	16.73	13.04	16.97	16.91
biblical.a.01	11.92	17.87	12.62	9.81
like.a.01	10.37	9.18	8.96	12.91
historical.a.01	9.59	2.42	13.57	4.08
many.a.01	8.02	8.21	7.01	9.66
late.a.01	7.67	2.42	9.59	5.28
different.a.01	7.27	10.14	5.75	9.36
first.a.01	6.73	6.28	6.92	6.49
public.a.01	6.52	13.53	5.02	7.92
ancient.s.01	5.99	9.18	7.51	2.94
linguistic.a.01	4.68	2.42	2.81	8.15
good.a.01	4.52	5.31	3.26	6.49
total	100.00	100.00	100.00	100.00

TABLE S67. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 11

	g.	р.	i.	h.
act.v.01	22.51	27.92	22.84	21.36
think.v.03	14.72	12.27	14.49	15.33
express.v.02	9.49	10.40	9.81	8.98
travel.v.01	8.90	6.54	9.75	8.19
make.v.03	7.56	8.76	7.82	7.09
be.v.01	6.18	7.13	6.10	6.14
move.v.02	5.97	5.84	5.66	6.36
perceive.v.01	5.36	4.21	5.49	5.35
change.v.01	5.06	4.79	5.08	5.08
make.v.01	4.99	3.50	4.56	5.72
understand.v.01	4.73	4.09	3.87	5.86
know.v.01	4.53	4.56	4.52	4.54
total	100.00	100.00	100.00	100.00
interact.v.01	27.78	34.13	28.75	25.66
evaluate.v.02	16.29	11.56	15.29	18.23
state.v.01	14.22	15.96	14.10	14.13
see.v.01	6.67	4.40	6.85	6.75
create_verbally.v.01	5.67	6.24	6.48	4.57
look.v.02	5.65	6.06	5.56	5.71
interpret.v.01	5.46	4.22	4.31	7.09
associate.v.01	5.31	5.50	5.58	4.93
put.v.01	3.32	2.20	3.06	3.82
take.v.01	3.27	4.40	2.96	3.51
come.v.01	3.20	2.39	3.45	3.01
label.v.01	3.15	2.94	3.61	2.60
total	100.00	100.00	100.00	100.00
communicate.v.02	39.61	48.09	41.11	36.51
think.v.01	11.33	7.65	10.95	12.34
write.v.01	8.57	9.29	9.83	6.89
read.v.01	7.69	5.74	6.03	10.07
think_of.v.04	6.29	6.01	6.78	5.72
accept.v.01	5.43	4.37	4.91	6.23
declare.v.01	4.74	5.19	3.58	6.15
name.v.01	4.71	4.37	5.38	3.92
expect.v.01	4.37	3.83	4.07	4.82
supply.v.01	2.56	2.46	1.74	3.60
increase.v.01	2.36	0.82	2.52	2.39
note.v.01	2.33	2.19	3.11	1.37
total	100.00	100.00	100.00	100.00
inform.v.01	43.63	50.84	45.37	40.11
talk.v.02	10.21	12.61	9.06	11.39
mention.v.01	10.18	9.24	10.62	9.73
see.v.05	7.23	5.04	7.89	6.66
propose.v.01	6.28	6.72	4.19	9.06
believe.v.01	5.30	3.36	5.51	5.33
talk.v.01	4.54	2.10	5.36	3.80
ask.v.01	3.38	2.94	3.02	3.93
add.v.01	2.64	1.26	2.88	2.53
suit.v.01	2.56	0.84	2.24	3.26
assume.v.01	2.19	1.68	2.00	2.53
ignore.v.01	1.87	3.36	1.85	1.67
total	100.00	100.00	100.00	100.00

TABLE S68. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 11

	g.	р.	i.	h.
besides.r.02	15.57	23.12	13.75	16.48
even.r.01	13.82	12.50	13.29	14.53
well.r.01	11.71	6.88	13.75	10.23
truly.r.01	7.97	5.00	6.57	9.77
possibly.r.01	7.49	10.62	8.48	6.09
never.r.01	7.28	2.50	10.24	4.84
however.r.01	7.13	6.25	5.73	8.67
therefore.r.01	6.80	12.50	7.64	5.23
far.r.01	6.66	7.50	6.42	6.80
still.r.01	5.49	6.25	4.05	6.88
wholly.r.01	5.06	2.50	5.19	5.23
back.r.01	5.02	4.38	4.89	5.23
total	100.00	100.00	100.00	100.00

TABLE S69. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 11

	g.	p.	i.	h.
NOUN	35.49	36.23	35.20	35.46
X	0.15	0.18	0.16	0.12
ADP	10.86	10.76	10.98	10.72
DET	11.00	11.56	10.73	11.08
VERB	21.22	20.37	21.07	22.16
ADJ	5.36	5.14	5.52	5.26
ADV	4.78	4.77	4.79	4.78
PRT	3.35	3.18	3.38	3.42
PRON	4.83	4.57	5.15	4.46
NUM	0.55	0.81	0.51	0.44
CONJ	2.38	2.44	2.50	2.12
PUNC	0.00	0.00	0.00	0.00
N	61.95	64.00	61.40	61.32
ADJ	9.52	8.94	9.96	9.19
VERB	3.29	2.88	3.40	3.40
ADV	25.24	24.18	25.24	26.09
POS	33.08	33.08	32.57	34.07
POS!	95.99	94.86	96.65	95.69

TABLE S70. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 12

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	65.96	67.13	65.58	65.70
physical_entity.n.01	34.04	32.87	34.42	34.30
total	100.00	100.00	100.00	100.00
psychological_feature.n.01	25.04	26.83	24.50	24.55
object.n.01	23.29	23.61	23.03	23.51
communication.n.02	14.68	13.22	14.87	15.56
measure.n.02	11.12	13.15	10.81	10.01
causal_agent.n.01	6.53	5.55	6.86	6.72
group.n.01	6.07	5.04	6.11	6.85
attribute.n.02	6.06	5.70	6.37	5.80
matter.n.03	3.16	2.71	3.38	3.13
relation.n.01	2.99	3.19	2.93	2.92
process.n.06	0.53	0.29	0.64	0.52
thing.n.12	0.53	0.72	0.51	0.42
set.n.02	0.00	0.00	0.00	0.01
total	100.00	100.00	100.00	100.00
event.n.01	22.04	23.59	21.43	21.87
whole.n.02	16.85	16.56	16.24	18.20
definite_quantity.n.01	11.27	13.77	11.02	9.64
cognition.n.01	8.82	9.38	8.90	8.21
person.n.01	7.95	6.74	8.40	8.12
message.n.02	7.75	6.20	8.09	8.41
location.n.01	5.61	4.82	5.78	5.94
collection.n.01	5.03	3.84	5.06	5.95
land.n.04	4.86	4.90	5.60	3.46
state.n.02	3.45	3.86	3.21	3.56
written_communication.n.01	3.38	3.59	3.16	3.61
substance.n.01	3.00	2.75	3.11	3.02
total	100.00	100.00	100.00	100.00

TABLE S71. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 12

	g.	p.	i.	h.
public.a.01	27.58	16.32	25.77	40.32
new.a.01	16.09	24.13	12.67	17.32
internal.a.01	13.06	15.80	16.50	3.38
chief.s.01	10.91	15.97	11.00	6.77
like.a.01	9.34	7.81	10.26	8.53
able.a.01	4.30	5.21	3.96	4.33
capable.s.02	3.68	3.47	4.82	1.35
certain.a.02	3.31	3.65	3.03	3.65
good.a.01	3.20	2.08	3.03	4.47
true.a.01	3.03	1.74	3.09	3.92
different.a.01	2.90	1.91	3.15	3.11
first.a.01	2.59	1.91	2.72	2.84
total	100.00	100.00	100.00	100.00

TABLE S72. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 12

	g.	p.	i.	h.
make.v.03	16.17	14.94	15.36	18.50
act.v.01	14.13	13.52	14.46	14.02
change.v.01	12.79	14.90	11.91	12.76
travel.v.01	10.25	11.26	10.04	9.85
move.v.02	8.08	8.46	7.89	8.11
change.v.02	7.76	7.24	7.09	9.31
use.v.01	7.34	7.03	8.05	6.35
think.v.03	6.53	5.57	7.11	6.25
get.v.01	5.91	5.69	7.07	4.04
necessitate.v.01	3.91	4.52	3.67	3.85
be.v.01	3.83	4.14	4.02	3.25
satisfy.v.02	3.30	2.72	3.33	3.69
total	100.00	100.00	100.00	100.00
interact.v.01	16.38	15.81	16.53	16.53
construct.v.01	13.92	12.54	12.79	17.22
evaluate.v.02	9.48	6.19	11.06	9.10
change_magnitude.v.01	8.49	6.96	8.43	9.86
travel_rapidly.v.01	7.10	8.16	7.89	4.72
put.v.01	7.03	9.02	6.05	7.29
try.v.01	6.86	7.90	6.70	6.32
please.v.01	6.80	5.58	6.63	8.12
empty.v.01	6.32	8.51	7.67	1.94
follow.v.01	6.25	8.59	3.71	9.24
state.v.01	5.76	5.15	6.45	4.93
keep.v.03	5.61	5.58	6.09	4.72
total	100.00	100.00	100.00	100.00
communicate.v.02	23.25	23.42	22.58	24.50
increase.v.01	12.78	10.66	12.33	15.52
run.v.01	10.78	12.50	11.64	7.54
hollow.v.02	9.59	13.03	11.32	3.10
think.v.01	6.91	3.55	9.14	5.10
update.v.01	6.57	6.84	4.09	11.53
save.v.02	6.04	6.05	6.38	5.32
supply.v.01	5.59	3.68	5.58	7.21
name.v.01	5.14	5.00	5.15	5.21
manipulate.v.02	5.08	0.53	5.53	7.98
write.v.01	4.49	3.29 11.45	4.57 1.70	5.32 1.66
decide.v.02  total	3.78	100.00	100.00	1.00
	-			
inform.v.01	26.68	29.54	26.16	25.52
add.v.01	18.57	16.63	16.95	23.60
core.v.01	15.07	21.66	17.36	4.90
record.v.01	9.49	10.07	9.78	8.39
operate.v.03	7.89	0.44	8.48	12.59
see.v.05	4.34	2.84	5.79	2.45
write.v.07	3.77	0.88	3.75	6.12
propose.v.01	3.01	1.53	3.59	2.97
roll_up.v.02	2.88	3.94	2.77	2.27
ask.v.01	2.88	2.19	2.36	4.55
dispose.v.01 encase.v.01	2.79	5.47	1.14	4.20
	2.62	4.81	1.87	2.45
total	100.00	100.00	100.00	100.00

TABLE S73. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 12

	g.	р.	i.	h.
besides.r.02	18.93	17.28	20.85	16.60
well.r.01	11.15	9.26	11.88	11.07
even.r.01	8.36	6.79	8.52	9.09
however.r.01	8.13	6.79	7.62	9.88
still.r.01	7.78	6.79	6.28	11.07
presently.r.02	7.32	9.88	7.62	5.14
possibly.r.01	7.20	4.32	8.97	5.93
already.r.01	7.20	6.17	8.97	4.74
truly.r.01	6.97	11.11	4.93	7.91
actually.r.01	5.81	4.32	6.73	5.14
alternatively.r.01	5.57	6.17	4.04	7.91
automatically.r.01	5.57	11.11	3.59	5.53
total	100.00	100.00	100.00	100.00

TABLE S74. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 12

	g.	p.	i.	h.
NOUN	34.48	47.45	29.74	24.21
X	0.41	0.72	0.09	0.19
ADP	11.11	9.59	11.46	12.33
DET	11.03	10.30	10.62	11.66
VERB	18.35	12.49	22.55	22.79
ADJ	5.81	5.43	5.96	6.12
ADV	6.39	3.69	6.27	8.64
PRT	3.08	2.53	3.34	3.50
PRON	5.68	4.11	6.45	6.91
NUM	0.80	0.93	0.96	0.67
CONJ	2.86	2.74	2.55	2.99
PUNC	0.00	0.00	0.00	0.00
N	65.35	78.71	58.77	50.99
ADJ	10.03	7.84	10.54	12.45
VERB	4.82	2.10	4.06	7.98
ADV	19.80	11.35	26.64	28.59
POS	26.11	21.58	28.66	33.77
POS!	93.55	91.90	92.64	95.59

TABLE S75. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 13

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	65.35	60.73	75.97	72.05
physical_entity.n.01	34.65	39.27	24.03	27.95
total	100.00	100.00	100.00	100.00
measure.n.02	20.33	22.07	31.11	15.88
object.n.01	16.08	17.04	12.01	14.95
psychological_feature.n.01	15.00	10.35	17.76	22.74
communication.n.02	12.91	10.72	12.59	16.75
matter.n.03	10.37	13.69	6.09	5.15
attribute.n.02	9.07	9.90	6.56	7.95
causal_agent.n.01	6.79	7.22	4.12	6.40
group.n.01	4.70	4.68	4.24	4.80
relation.n.01	3.34	3.00	3.66	3.89
thing.n.12	0.89	0.93	0.64	0.86
process.n.06	0.50	0.39	1.16	0.59
set.n.02	0.02	0.00	0.06	0.04
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	22.18	24.32	35.07	16.40
whole.n.02	14.23	14.15	12.66	14.59
event.n.01	10.56	8.23	13.33	14.59
substance.n.01	10.27	13.16	6.85	5.28
cognition.n.01	8.40	4.51	9.38	15.60
person.n.01	8.13	8.12	5.29	8.54
property.n.02	6.08	7.46	2.90	3.90
location.n.01	5.37	6.09	2.31	4.43
message.n.02	4.56	3.32	6.03	6.69
signal.n.01	4.06	5.38	0.67	2.02
written_communication.n.01	3.53	1.94	4.54	6.41
substance.n.07	2.63	3.32	0.97	1.56
total	100.00	100.00	100.00	100.00

TABLE S76. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 13

	g.	p.	i.	h.
like.a.01	18.14	7.70	30.61	30.00
new.a.01	16.09	12.48	16.33	20.58
first.a.01	9.36	10.02	4.08	9.04
strong.a.01	8.46	15.87	0.00	0.00
public.a.01	7.39	8.78	22.45	4.23
better.a.01	7.22	9.86	2.04	4.42
incorrect.a.01	6.57	4.47	6.12	9.23
many.a.01	6.08	7.55	2.04	4.62
solid.s.01	5.34	9.71	0.00	0.38
up-to-the-minute.s.01	5.17	8.78	4.08	0.77
small.a.01	5.17	2.47	2.04	8.85
good.a.01	5.01	2.31	10.20	7.88
total	100.00	100.00	100.00	100.00

TABLE S77. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 13

	g.	p.	i.	h.
act.v.01	15.20	17.35	12.88	14.51
think.v.03	13.75	11.88	9.13	15.02
change.v.01	11.52	9.33	11.24	12.50
travel.v.01	8.47	7.00	12.18	8.73
move.v.02	8.28	14.15	6.32	5.94
make.v.03	8.18	4.99	11.71	9.20
change.v.02	7.85	9.76	6.09	7.21
use.v.01	6.48	2.44	7.49	8.12
get.v.01	6.10	7.70	7.96	5.22
make.v.01	5.96	3.85	6.32	6.83
be.v.01	4.46	2.55	6.56	5.08
transfer.v.05	3.74	9.00	2.11	1.64
total	100.00	100.00	100.00	100.00
evaluate.v.02	24.67	24.84	16.42	25.44
interact.v.01	21.38	28.61	12.94	19.42
state.v.01	7.50	8.71	5.47	7.23
better.v.02	6.24	4.03	6.97	7.03
give.v.03	5.90	12.87	4.48	3.34
keep.v.03	5.43	2.86	6.97	6.27
construct.v.01	5.29	1.04	7.96	6.68
see.v.01	5.16	2.99	10.95	5.41
put.v.01	4.72	4.42	5.97	4.70
look.v.02	4.68	1.82	11.44	5.11
try.v.01	4.58	5.33	6.97	4.05
change_state.v.01	4.45	2.47	3.48	5.31
total	100.00	100.00	100.00	100.00
communicate.v.02	27.89	35.04	19.67	25.44
think.v.01	13.99	6.61	14.75	17.21
expect.v.01	12.51	19.83	9.02	9.56
repair.v.01	6.47	0.33	9.84	8.90
supply.v.01	5.85	11.90	7.38	3.01
increase.v.01	5.80	1.82	9.84	7.21
align.v.01	5.41	18.18	0.00	0.22
name.v.01	5.03	3.31	15.57	4.85
write.v.01	4.46	1.65	3.28	5.81
save.v.02	4.46	1.32	8.20	5.51
match.v.05	4.12	0.00	0.00	6.32
integrate.v.03	4.02	0.00	2.46	5.96
total	100.00	100.00	100.00	100.00
inform.v.01	33.16	34.71	27.66	32.74
add.v.01	9.50	1.93	23.40	12.38
record.v.01	8.18	2.20	21.28	10.32
think.v.02	7.56	17.08	2.13	3.16
balance.v.01	7.56	0.00	0.00	11.83
unify.v.01	7.39	0.00	6.38	11.14
restrain.v.01	5.45	16.25	0.00	0.41
mention.v.01		0.00	2.13	6.88
memon.v.u1	4.75	0.83	2.10	
see.v.05	4.75 4.57	6.06	6.38	3.71
see.v.05 offer.v.01			6.38 0.00	
see.v.05 offer.v.01 overlap.v.01	4.57 4.40 3.96	6.06 13.22 2.48	6.38 0.00 4.26	3.71 0.28 4.68
see.v.05 offer.v.01	4.57 4.40	6.06 13.22	6.38 0.00	3.71 0.28

TABLE S78. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 13

	g.	p.	i.	h.
truly.r.01	13.05	5.91	10.87	14.81
besides.r.02	11.42	11.83	13.04	11.23
actually.r.01	10.17	1.61	10.87	12.10
back.r.01	8.83	31.72	0.00	4.07
even.r.01	8.06	10.22	10.87	7.41
possibly.r.01	8.06	2.15	13.04	9.14
still.r.01	7.87	4.84	6.52	8.64
well.r.01	7.39	10.75	10.87	6.42
already.r.01	6.72	4.30	6.52	7.28
alternatively.r.01	6.33	3.76	8.70	6.79
right.r.01	6.24	7.53	6.52	5.93
never.r.01	5.85	5.38	2.17	6.17
total	100.00	100.00	100.00	100.00

TABLE S79. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 13

	g.	p.	i.	h.
NOUN	31.95	38.91	29.85	26.69
X	0.15	0.35	0.08	0.06
ADP	11.47	10.42	11.67	12.83
DET	11.57	10.71	11.81	12.29
VERB	21.13	18.83	21.99	22.02
ADJ	4.88	4.55	4.96	5.25
ADV	5.39	4.26	5.57	7.07
PRT	3.83	3.42	3.99	3.92
PRON	5.85	5.10	6.10	6.28
NUM	1.00	0.85	1.08	0.88
CONJ	2.78	2.60	2.88	2.71
PUNC	0.00	0.00	0.00	0.00
N	63.62	67.80	62.91	56.69
ADJ	8.56	7.77	8.65	10.08
VERB	4.51	3.43	4.64	6.60
ADV	23.31	21.00	23.79	26.63
POS	35.11	35.23	35.18	34.40
POS!	93.54	94.80	93.24	91.99

TABLE S80. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 15

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	65.82	65.11	66.56	63.43
physical_entity.n.01	34.18	34.89	33.44	36.57
total	100.00	100.00	100.00	100.00
measure.n.02	23.47	18.80	26.32	20.17
object.n.01	15.72	15.88	15.18	18.58
psychological_feature.n.01	14.73	14.80	14.63	15.17
causal_agent.n.01	11.16	11.24	11.52	8.69
communication.n.02	10.76	12.45	9.77	11.67
attribute.n.02	8.97	9.10	8.80	9.63
group.n.01	5.37	6.58	4.89	4.54
matter.n.03	5.26	6.11	4.75	5.87
relation.n.01	2.53	3.37	2.15	2.25
process.n.06	1.50	1.23	1.58	1.80
thing.n.12	0.53	0.42	0.41	1.63
set.n.02	0.00	0.01	0.00	0.00
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	22.37	18.00	24.78	20.62
whole.n.02	15.46	14.26	15.38	19.92
person.n.01	13.67	14.16	13.82	11.15
event.n.01	12.95	13.28	12.66	13.77
cognition.n.01	6.00	5.88	6.00	6.38
substance.n.01	5.20	6.45	4.43	6.25
state.n.02	4.82	5.40	4.51	4.93
message.n.02	4.72	4.72	4.68	5.05
fundamental_quantity.n.01	4.29	3.81	4.93	1.67
location.n.01	4.26	5.53	3.58	4.67
written_communication.n.01	3.29	3.83	2.95	3.79
social_group.n.01	2.96	4.67	2.29	1.80
total	100.00	100.00	100.00	100.00

TABLE S81. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 15

	g.	p.	i.	h.
capable.s.02	19.84	22.40	21.82	0.00
new.a.01	15.54	19.53	13.40	20.13
like.a.01	13.83	10.68	13.40	24.68
able.a.01	8.91	11.20	8.33	7.14
certain.a.02	7.01	4.69	7.37	10.39
good.a.01	5.87	2.60	6.70	8.44
full.a.01	5.37	6.25	5.45	2.60
net.a.01	5.05	5.47	4.88	5.19
spare.s.01	4.80	1.04	6.41	3.25
all_right.s.01	4.80	5.47	4.21	7.14
local.a.01	4.49	6.77	3.16	7.79
best.a.01	4.49	3.91	4.88	3.25
total	100.00	100.00	100.00	100.00

TABLE S82. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 15

	g.	p.	i.	h.
act.v.01	16.38	17.44	16.15	15.41
travel.v.01	12.12	11.83	12.55	10.58
move.v.02	11.58	13.28	11.75	7.54
make.v.03	9.13	7.01	9.36	12.11
change.v.01	9.01	10.74	8.09	10.08
use.v.01	8.73	8.06	8.94	9.06
think.v.03	8.17	6.40	8.71	8.98
get.v.01	7.14	7.71	7.27	5.42
change.v.02	5.60	7.06	4.83	6.52
connect.v.01	4.19	4.03	4.37	3.64
express.v.02	4.01	3.42	3.86	5.84
perceive.v.01	3.94	3.02	4.13	4.83
total	100.00	100.00	100.00	100.00
interact.v.01	19.68	21.82	18.57	21.01
evaluate.v.02	13.47	11.09	14.41	13.45
travel_rapidly.v.01	10.67	10.55	11.10	8.91
state.v.01	8.01	7.00	7.68	11.43
send.v.01	7.99	10.45	8.54	0.84
put.v.01	7.97	8.45	7.51	9.24
create_verbally.v.01	7.08	5.09	7.01	11.09
try.v.01	5.86	6.73	5.59	5.55
see.v.01	5.66	3.36	6.26	7.06
attach.v.01	5.30	4.18	5.80	5.04
handle.v.04	4.22	3.00	4.55	4.87
give.v.03	4.08	8.27	2.99	1.51
total	100.00	100.00	100.00	100.00
communicate.v.02	28.68	33.14	27.36	26.56
run.v.01	16.95	16.50	17.82	13.80
write.v.01	11.24	7.97	11.25	17.19
manipulate.v.02	6.66	4.55	7.31	7.55
think.v.01	6.24	4.41	6.68	7.55
read.v.01	5.50	3.13	6.00	7.55
convey.v.03	4.58	6.26	4.74	0.78
increase.v.01	4.30	3.84	4.23	5.47
rate.v.01	4.05	5.41	3.88	2.34
save.v.02	4.05	3.98	4.00	4.43
expect.v.01	3.95	2.28	4.28	5.47
supply.v.01	3.81	8.53	2.46	1.30
total	100.00	100.00	100.00	100.00
inform.v.01	30.71	38.28	29.24	21.62
operate.v.03	11.66	7.42	12.69	15.68
talk.v.02	8.06	5.02	9.42	7.57
record.v.01	7.13	6.70	6.94	9.19
upgrade.v.01	7.01	8.85	6.64	4.86
write.v.07	6.51	7.18	5.85	8.65
add.v.01	5.96	4.78	5.75	9.73
permit.v.01	5.58	3.83	6.34	5.41
communicate.v.01	5.52	8.13	5.15	1.62
see.v.05	4.53	4.55	4.66	3.78
replace.v.01	3.85	2.39	3.87	7.03
address.v.01	3.47	2.87	3.47	4.86
total	100.00	100.00	100.00	100.00
	•			

TABLE S83. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 15

	g.	р.	i.	h.
besides.r.02	19.73	31.72	18.36	13.11
well.r.01	11.93	13.44	11.26	13.11
back.r.01	9.69	9.14	10.19	8.20
still.r.01	9.33	8.06	8.45	14.21
actually.r.01	8.16	5.38	8.58	9.29
however.r.01	7.17	9.68	7.64	2.73
even.r.01	6.91	6.45	5.90	11.48
originally.r.01	6.28	1.08	8.98	0.55
truly.r.01	5.74	2.69	5.63	9.29
presently.r.02	5.38	6.45	5.50	3.83
never.r.01	4.84	5.38	4.69	4.92
possibly.r.01	4.84	0.54	4.83	9.29
total	100.00	100.00	100.00	100.00

TABLE S84. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 15

	g.	p.	i.	h.
NOUN	36.14	49.77	32.26	28.41
X	0.63	0.94	0.67	0.33
ADP	10.52	8.21	10.98	12.05
DET	9.62	7.84	9.88	10.90
VERB	20.13	15.75	21.13	22.88
ADJ	4.93	4.09	5.17	5.40
ADV	6.15	3.75	6.76	7.60
PRT	3.36	2.52	3.96	3.46
PRON	5.07	3.97	5.73	5.34
NUM	1.04	1.11	1.02	1.01
CONJ	2.39	2.04	2.43	2.63
PUNC	0.00	0.00	0.00	0.00
N	65.42	77.22	60.80	56.34
ADJ	8.22	5.57	9.39	10.11
VERB	4.17	2.05	4.72	6.12
ADV	22.19	15.16	25.09	27.43
POS	31.20	34.47	29.45	29.77
POS!	94.12	95.14	93.10	94.05

TABLE S85. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 16

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	70.25	72.61	69.35	67.43
physical_entity.n.01	29.75	27.39	30.65	32.57
total	100.00	100.00	100.00	100.00
measure.n.02	22.32	16.98	30.44	21.31
communication.n.02	18.13	25.32	10.71	15.20
object.n.01	17.35	16.45	17.69	18.41
psychological_feature.n.01	12.96	8.55	15.20	17.53
attribute.n.02	9.75	14.45	5.63	6.98
matter.n.03	6.61	6.65	6.59	6.57
causal_agent.n.01	4.65	3.46	5.29	5.82
group.n.01	3.94	3.82	4.87	3.01
relation.n.01	3.16	3.49	2.50	3.39
thing.n.12	0.71	0.40	0.67	1.27
process.n.06	0.44	0.43	0.41	0.49
set.n.02	0.00	0.00	0.00	0.02
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	24.09	17.56	33.94	23.02
whole.n.02	13.85	9.13	16.60	18.46
signal.n.01	9.57	20.29	1.16	1.73
event.n.01	9.05	6.41	9.54	12.93
substance.n.01	6.81	6.86	6.65	6.95
property.n.02	6.56	12.46	2.18	1.95
cognition.n.01	6.14	3.58	8.22	7.92
location.n.01	6.06	9.77	3.38	3.06
person.n.01	5.41	3.96	6.15	6.96
message.n.02	5.32	4.25	5.25	7.23
written_communication.n.01	3.57	2.71	3.48	5.13
state.n.02	3.57	3.03	3.45	4.64
total	100.00	100.00	100.00	100.00

TABLE S86. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 16

	g.	p.	i.	h.
like.a.01	12.93	12.14	13.44	12.77
new.a.01	11.23	11.43	7.66	14.89
inactive.s.10	10.58	7.14	10.00	12.77
common.a.01	10.19	0.71	12.66	11.95
local.a.01	9.86	5.00	13.59	8.18
net.a.01	9.86	20.00	5.78	9.49
chief.s.01	9.01	22.50	8.75	3.11
different.a.01	6.01	4.64	7.34	5.24
current.a.01	5.49	2.14	5.47	7.04
certain.a.02	5.03	5.36	5.31	4.58
dynamic.a.01	4.90	6.07	5.31	3.93
possible.a.01	4.90	2.86	4.69	6.06
total	100.00	100.00	100.00	100.00

TABLE S87. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 16

	g.	p.	i.	h.
act.v.01	15.58	27.48	11.12	11.62
make.v.03	11.61	7.65	13.79	12.19
move.v.02	11.05	12.13	10.72	10.61
think.v.03	10.57	7.86	11.89	11.14
use.v.01	9.54	5.55	10.92	10.99
travel.v.01	8.33	7.98	8.60	8.30
change.v.01	7.61	5.14	7.91	9.08
make.v.01	6.52	7.40	5.48	6.98
change.v.02	5.41	5.88	4.85	5.66
get.v.01	5.01	6.46	4.77	4.22
be.v.01	4.66	4.32	4.71	4.85
exist.v.01	4.11	2.14	5.25	4.34
total	100.00	100.00	100.00	100.00
interact.v.01	14.04	16.20	12.32	14.29
evaluate.v.02	13.13	7.94	14.39	15.69
put.v.01	13.05	10.80	13.84	13.87
construct.v.01	9.82	6.75	11.02	10.83
check.v.01	7.17	1.75	8.63	9.67
set_about.v.01	7.08	26.45	0.11	0.06
coexist.v.02	7.06	3.97	9.34	6.87
state.v.01	6.66	5.32	7.38	6.87
keep.v.03	6.28	3.97	8.20	5.90
associate.v.01	6.13	5.88	7.11	5.23
try.v.01	4.93	5.64	5.05	4.26
give.v.03	4.66	5.32	2.61	6.45
total	100.00	100.00	100.00	100.00
communicate.v.02	20.79	22.33	18.18	22.61
install.v.01	11.88	7.44	12.44	15.01
confront.v.02	11.31	39.98	0.17	0.10
coincide.v.01	11.27	6.00	14.75	11.61
think.v.01	7.13	3.72	8.92	7.91
increase.v.01	7.07	3.96	7.03	9.76
run.v.01	6.12	3.24	7.20	7.30
store.v.01	5.79	3.96	7.72	5.04
expect.v.01	5.08	2.52	5.49	6.78
repair.v.01	4.74	1.92	5.23	6.58
declare.v.01	4.51	2.88	5.32	4.93
write.v.01	4.31	2.04	7.55	2.36
total	100.00	100.00	100.00	100.00
inform.v.01	25.74	36.44	20.28	25.97
overlap.v.01	19.76	14.12	23.75	18.34
add.v.01	11.48	8.19	10.83	14.12
roll_up.v.02	10.06	9.32	12.36	7.79
record.v.01	7.16	4.24	8.33	7.47
Į.	4.08	7.63	3.19	3.08
communicate.v.01			C 11	3.25
	3.96	0.85	6.11	0.20
communicate.v.01		0.85 4.80	4.72	2.27
communicate.v.01 think.v.02	3.96			
communicate.v.01 think.v.02 promise.v.01	3.96 3.85	4.80	4.72	2.27
communicate.v.01 think.v.02 promise.v.01 believe.v.01	3.96 3.85 3.67	4.80 5.08	4.72 2.78	2.27 3.90
communicate.v.01 think.v.02 promise.v.01 believe.v.01 propose.v.01	3.96 3.85 3.67 3.55	4.80 5.08 1.98	4.72 2.78 3.47	2.27 3.90 4.55

TABLE S88. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 16

	g.	р.	i.	h.
besides.r.02	13.75	19.35	12.53	12.56
well.r.01	10.51	8.60	12.04	9.91
even.r.01	9.74	5.91	8.35	12.56
still.r.01	9.65	9.14	11.06	8.59
truly.r.01	8.60	6.99	11.79	6.39
already.r.01	8.40	13.44	6.63	7.93
alternatively.r.01	7.93	6.45	6.88	9.47
possibly.r.01	7.64	4.30	7.37	9.25
however.r.01	6.59	2.15	6.63	8.37
actually.r.01	6.40	3.23	7.13	7.05
first.r.01	5.54	12.90	4.42	3.52
always.r.01	5.25	7.53	5.16	4.41
total	100.00	100.00	100.00	100.00

TABLE S89. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 16

	g.	p.	i.	h.
NOUN	34.67	36.43	35.75	33.45
X	0.11	0.14	0.10	0.11
ADP	10.41	10.58	10.06	10.64
DET	9.52	8.74	9.37	9.82
VERB	21.88	21.06	22.02	21.95
ADJ	5.79	5.32	5.84	5.85
ADV	5.71	5.17	5.62	5.90
PRT	3.19	3.30	3.17	3.17
PRON	5.32	5.58	4.89	5.59
NUM	0.95	1.01	0.73	1.11
CONJ	2.46	2.68	2.45	2.42
PUNC	0.00	0.00	0.00	0.00
N	62.98	65.99	62.18	62.89
ADJ	9.31	7.99	9.55	9.43
VERB	3.71	3.45	3.70	3.79
ADV	24.00	22.57	24.57	23.89
POS	30.52	32.31	29.55	30.89
POS!	92.74	94.98	92.45	92.46

TABLE S90. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 17

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	64.41	66.92	63.85	64.22
physical_entity.n.01	35.59	33.08	36.15	35.78
total	100.00	100.00	100.00	100.00
measure.n.02	22.91	23.80	22.36	23.10
object.n.01	20.04	21.24	19.00	20.53
psychological_feature.n.01	15.92	16.62	15.04	16.41
communication.n.02	11.21	12.66	11.77	10.43
causal_agent.n.01	8.87	7.37	9.51	8.76
attribute.n.02	7.54	7.06	7.14	7.97
matter.n.03	5.52	3.01	6.93	5.08
group.n.01	4.05	4.19	4.45	3.71
relation.n.01	2.78	2.59	3.08	2.60
thing.n.12	0.73	0.62	0.54	0.89
process.n.06	0.43	0.84	0.17	0.51
set.n.02	0.00	0.00	0.00	0.01
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	24.06	25.44	22.95	24.56
whole.n.02	19.02	20.68	17.99	19.38
event.n.01	11.85	12.89	12.39	11.18
person.n.01	10.03	8.36	10.85	9.82
cognition.n.01	6.79	6.66	5.24	7.99
message.n.02	6.19	6.39	6.79	5.68
substance.n.01	6.03	2.86	7.66	5.59
location.n.01	3.84	3.23	4.03	3.84
state.n.02	3.67	4.86	3.50	3.50
written_communication.n.01	3.47	3.93	3.69	3.20
shape.n.02	2.61	1.76	2.37	2.99
collection.n.01	2.45	2.93	2.54	2.27
total	100.00	100.00	100.00	100.00

TABLE S91. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 17

	g.	p.	i.	h.
public.a.01	29.35	12.42	42.72	19.01
new.a.01	10.96	13.66	9.21	12.20
like.a.01	10.28	12.42	9.61	10.50
capable.s.02	8.48	4.35	9.88	7.94
net.a.01	7.93	1.24	1.34	16.45
virtual.s.01	5.76	6.83	4.67	6.67
able.a.01	5.33	6.21	5.74	4.68
certain.a.02	5.20	4.35	3.74	6.95
available.a.01	4.46	6.83	4.14	4.26
all_right.s.01	4.33	18.63	3.07	2.41
false.a.01	4.15	4.97	3.34	4.82
true.a.01	3.78	8.07	2.54	4.11
total	100.00	100.00	100.00	100.00

TABLE S92. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 17

	g.	p.	i.	h.
move.v.02	14.30	17.37	14.71	13.26
act.v.01	13.52	15.74	13.64	12.92
change.v.01	12.39	14.52	13.34	11.14
travel.v.01	10.86	9.63	10.74	11.23
make.v.03	9.60	8.01	9.44	10.09
use.v.01	7.38	5.43	7.22	7.96
think.v.03	7.13	8.28	5.73	7.99
change.v.02	6.78	6.24	7.11	6.63
connect.v.01	5.15	5.56	6.15	4.26
get.v.01	4.65	4.48	5.24	4.23
perceive.v.01	4.37	2.99	3.82	5.12
necessitate.v.01	3.88	1.76	2.87	5.18
total	100.00	100.00	100.00	100.00
put.v.01	16.24	24.23	16.10	14.47
interact.v.01	12.14	13.01	11.99	12.07
evaluate.v.02	11.25	11.22	8.71	13.45
try.v.01	10.14	12.76	10.66	9.07
travel_rapidly.v.01	9.25	6.12	9.20	10.03
change_magnitude.v.01	8.76	6.89	8.71	9.25
see.v.01	6.79	4.08	5.85	8.23
state.v.01	5.36	5.10	4.95	5.77
keep.v.03	5.21	4.85	6.97	3.78
send.v.01	5.15	3.57	5.85	4.92
spice.v.01	4.87	2.04	6.41	4.20
attach.v.01	4.84	6.12	4.60	4.74
total	100.00	100.00	100.00	100.00
communicate.v.02	16.88	17.25	16.50	17.11
install.v.01	15.82	22.18	17.82	12.41
run.v.01	14.31	8.45	14.52	15.70
increase.v.01	13.47	9.15	13.64	14.47
hollow.v.02	6.87	17.61	4.73	5.83
think.v.01	6.56	7.04	4.29	8.36
save.v.02	6.47	4.93	8.91	4.79
write.v.01	4.52	1.41	5.94	4.14
name.v.01	4.47	3.87	3.30	5.64
expect.v.01	4.16	3.17	3.74	4.79
repair.v.01	3.32	2.46	2.64	4.14
update.v.01	3.15	2.46	3.96	2.63
total	100.00	100.00	100.00	
inform.v.01	22.22	24.48	22.05	21.73
add.v.01	21.85	17.48	22.50	22.54
core.v.01	14.35	34.97	9.77	12.47
record.v.01	13.52	9.79	18.41	10.26
grow.v.02	6.11	0.00	5.45	8.45
overlap.v.01	3.70	1.40	3.41	
assume.v.01	3.70	3.50	2.73	4.63 3.82
operate.v.03		2.10	2.73	
	3.24			4.23
propose.v.01	3.06	4.20	2.95	2.82
configure.v.01	3.06	1.40	3.41	3.22
ask.v.01	2.87	0.00	2.50	4.02
enumerate.v.01	2.69	0.70	4.32	1.81
total	100.00	100.00	100.00	100.00

TABLE S93. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 17

	g.	р.	i.	h.
besides.r.02	19.68	18.06	22.76	17.66
still.r.01	13.60	11.11	16.04	12.25
possibly.r.01	8.25	9.72	10.07	6.55
well.r.01	8.10	6.94	4.85	10.83
yet.r.01	7.67	4.17	8.21	7.98
manually.r.01	7.24	6.94	8.21	6.55
however.r.01	7.09	8.33	8.21	5.98
already.r.01	7.09	4.17	5.22	9.12
first.r.01	6.37	11.11	4.48	6.84
probably.r.01	5.21	6.94	3.73	5.98
truly.r.01	5.07	8.33	4.10	5.13
presently.r.02	4.63	4.17	4.10	5.13
total	100.00	100.00	100.00	100.00

TABLE S94. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 17

	g.	p.	i.	h.
NOUN	26.72	42.93	28.30	23.87
X	0.21	0.16	0.39	0.16
ADP	11.91	8.94	11.60	12.44
DET	11.99	9.28	11.25	12.63
VERB	21.60	17.01	21.58	22.25
ADJ	6.31	6.38	6.25	6.33
ADV	7.49	5.14	7.32	7.89
PRT	3.86	2.56	3.70	4.10
PRON	6.08	4.30	5.87	6.41
NUM	0.84	1.01	0.81	0.82
CONJ	2.98	2.30	2.91	3.10
PUNC	0.00	0.00	0.00	0.00
N	56.19	71.60	56.95	52.63
ADJ	12.07	8.90	11.67	12.89
VERB	6.81	3.63	6.35	7.67
ADV	24.93	15.87	25.03	26.81
POS	32.94	35.75	32.14	32.70
POS!	95.54	95.28	94.63	95.93

TABLE S95. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 18

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	68.60	61.52	71.78	69.36
physical_entity.n.01	31.40	38.48	28.22	30.64
total	100.00	100.00	100.00	100.00
communication.n.02	19.74	19.42	19.64	19.88
object.n.01	19.19	24.69	16.18	18.81
measure.n.02	17.16	14.35	20.05	16.81
psychological_feature.n.01	16.05	9.58	17.45	17.36
attribute.n.02	8.43	11.56	7.82	7.77
matter.n.03	5.19	8.22	4.58	4.57
causal_agent.n.01	4.83	3.53	5.26	5.03
group.n.01	4.49	3.68	4.36	4.77
relation.n.01	2.71	2.90	2.45	2.76
thing.n.12	1.34	1.25	1.62	1.25
process.n.06	0.85	0.80	0.58	0.98
set.n.02	0.02	0.03	0.01	0.01
total	100.00	100.00	100.00	100.00
whole.n.02	17.85	24.12	14.39	17.26
definite_quantity.n.01	17.36	14.62	20.22	17.08
event.n.01	12.45	7.22	14.42	13.31
cognition.n.01	8.10	4.21	8.34	9.23
message.n.02	7.35	4.21	7.15	8.42
location.n.01	6.16	5.08	5.94	6.58
person.n.01	6.06	3.67	6.77	6.54
written_communication.n.01	5.73	2.69	6.77	6.27
substance.n.01	5.43	8.33	4.79	4.77
property.n.02	5.23	10.84	4.72	3.66
indication.n.01	4.41	2.60	4.58	4.92
signal.n.01	3.87	12.42	1.92	1.95
total	100.00	100.00	100.00	100.00

TABLE S96. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 18

	g.	p.	i.	h.
like.a.01	18.51	13.16	17.00	19.52
new.a.01	11.41	15.79	13.20	10.41
good.a.01	8.80	7.89	6.94	9.46
able.a.01	7.68	4.61	7.16	8.16
first.a.01	7.44	8.55	8.28	7.07
possible.a.01	7.44	6.58	9.84	6.80
free.a.01	6.96	9.21	5.37	7.21
net.a.01	6.86	11.84	6.26	6.53
different.a.01	6.81	3.95	6.71	7.14
certain.a.02	6.52	1.32	7.16	6.87
much.a.01	5.85	8.55	5.82	5.58
small.a.01	5.70	8.55	6.26	5.24
total	100.00	100.00	100.00	100.00

TABLE S97. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 18

	g.	p.	i.	h.
act.v.01	13.98	20.85	14.58	12.86
use.v.01	10.96	7.37	10.89	11.46
think.v.03	10.40	9.49	10.52	10.47
change.v.01	10.12	6.62	11.72	10.01
make.v.03	9.01	5.74	8.44	9.65
change.v.02	8.87	22.35	8.86	7.10
move.v.02	7.83	6.62	7.84	7.99
travel.v.01	7.34	5.62	7.93	7.36
make.v.01	6.75	4.37	5.95	7.35
express.v.02	5.14	5.12	5.30	5.09
desire.v.01	4.86	2.37	4.61	5.27
necessitate.v.01	4.73	3.50	3.37	5.39
total	100.00	100.00	100.00	100.00
interact.v.01	20.36	30.23	21.33	18.96
evaluate.v.02	16.42	17.36	17.96	15.78
state.v.01	10.75	12.86	10.95	10.46
change_magnitude.v.01	7.59	7.72	6.63	7.92
create_verbally.v.01	7.36	4.18	5.57	8.33
keep.v.03	7.05	2.57	8.07	7.17
put.v.01	6.70	2.89	4.90	7.75
interpret.v.01	6.02	7.07	5.19	6.21
attach.v.01	5.22	1.93	5.76	5.38
see.v.01	4.62	6.75	5.67	4.01
manage.v.02	4.08	3.54	4.13	4.12
label.v.01	3.82	2.89	3.84	3.91
total	100.00	100.00	100.00	100.00
communicate.v.02	26.18	23.92	29.28	25.48
think.v.01	13.38	9.14	16.27	13.15
write.v.01	10.33	3.49	8.20	12.39
increase.v.01	9.67	5.91	9.05	10.60
read.v.01	7.93	4.57	7.07	8.87
store.v.01	6.22	0.81	7.64	6.73
name.v.01	5.29	2.42	5.66	5.71
align.v.01	4.70	36.56	0.42	0.20
declare.v.01	4.51	4.30	5.09	4.33
expect.v.01	4.44	2.69	4.10	4.89
encode.v.01	3.68	5.65	3.82	3.26
tag.v.01	3.68	0.54	3.39	4.38
total	100.00	100.00	100.00	100.00
inform.v.01	28.44	46.83	23.25	27.98
add.v.01	17.67	11.11	17.09	18.72
record.v.01	7.30	3.97	8.12	7.43
write.v.02	6.62	2.38	12.89	4.88
talk.v.01	5.46	7.14	5.04	5.39
ask.v.01	5.39	8.73	5.32	4.98
mention.v.01	5.18	4.76	1.96	6.41
think.v.02	5.12	3.17	5.32	5.29
propose.v.01	4.84	3.17	6.72	4.37
code.v.01	4.77	0.79	4.76	5.29
talk.v.02	4.71	0.79	5.60	4.88
see.v.05	4.50	7.14	3.92	4.37
total	100.00	100.00	100.00	100.00

TABLE S98. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 18

	g.	p.	i.	h.
besides.r.02	18.75	13.21	19.69	18.91
possibly.r.01	12.20	16.04	12.02	11.96
already.r.01	10.87	9.43	9.46	11.38
well.r.01	10.55	10.38	9.21	10.94
even.r.01	8.84	5.66	6.14	9.86
still.r.01	8.74	10.38	7.93	8.84
truly.r.01	7.35	3.77	9.97	6.88
probably.r.01	5.91	5.66	7.67	5.43
merely.r.01	4.42	5.66	4.09	4.42
yet.r.01	4.42	8.49	4.60	4.06
back.r.01	4.05	8.49	4.86	3.48
presently.r.02	3.89	2.83	4.35	3.84
total	100.00	100.00	100.00	100.00

TABLE S99. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 18

	g.	p.	i.	h.
NOUN	23.67	37.15	24.28	20.55
X	0.07	0.12	0.13	0.04
ADP	12.04	10.92	11.90	12.34
DET	11.37	8.66	11.05	12.06
VERB	23.68	19.72	23.75	24.52
ADJ	6.00	5.72	6.12	6.02
ADV	7.52	5.24	7.19	8.12
PRT	4.04	3.17	3.73	4.32
PRON	7.88	5.48	8.07	8.34
NUM	0.73	1.02	0.64	0.70
CONJ	2.99	2.81	3.14	2.98
PUNC	0.00	0.00	0.00	0.00
N	50.77	65.99	50.31	46.59
ADJ	12.33	9.58	12.56	13.03
VERB	6.91	3.17	6.30	8.19
ADV	29.99	21.26	30.84	32.19
POS	32.18	29.89	31.25	33.25
POS!	96.08	95.32	96.11	96.29

TABLE S100. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 19

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	71.95	69.56	68.23	74.32
physical_entity.n.01	28.05	30.44	31.77	25.68
total	100.00	100.00	100.00	100.00
psychological_feature.n.01	18.81	14.81	16.29	21.38
measure.n.02	15.95	19.13	15.46	14.85
communication.n.02	14.52	18.05	13.85	13.34
object.n.01	13.56	13.46	16.71	12.42
group.n.01	10.55	6.20	11.31	12.02
attribute.n.02	8.63	8.49	8.29	8.82
causal_agent.n.01	7.67	4.50	8.82	8.52
matter.n.03	5.43	11.31	5.13	3.16
relation.n.01	3.48	2.87	3.04	3.89
process.n.06	0.84	0.56	0.38	1.13
thing.n.12	0.55	0.61	0.73	0.45
set.n.02	0.01	0.00	0.00	0.02
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	16.11	22.14	15.60	13.98
event.n.01	14.53	12.16	12.61	16.19
whole.n.02	12.30	12.29	15.79	10.96
cognition.n.01	9.33	7.47	7.43	10.79
person.n.01	9.25	5.78	10.58	10.08
message.n.02	8.84	9.76	7.89	8.85
collection.n.01	7.68	3.91	8.05	8.99
substance.n.01	5.69	12.70	5.21	3.17
state.n.02	5.43	2.81	5.49	6.42
location.n.01	3.88	4.44	3.68	3.74
social_group.n.01	3.61	2.69	3.96	3.83
written_communication.n.01	3.34	3.85	3.71	3.01
total	100.00	100.00	100.00	100.00

TABLE S101. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 19

	g.	p.	i.	h.
new.a.01	19.22	31.50	13.06	18.79
like.a.01	18.24	6.50	20.18	20.13
public.a.01	10.06	22.00	17.51	4.59
excess.s.01	9.36	1.50	12.17	10.07
good.a.01	9.29	8.50	6.53	10.51
old.a.01	5.38	4.00	3.86	6.26
many.a.01	5.17	4.50	5.04	5.37
current.a.01	5.03	3.00	5.93	5.15
certain.a.02	4.96	3.00	3.56	5.93
first.a.01	4.47	7.50	4.15	3.91
much.a.01	4.40	4.00	3.56	4.81
small.a.01	4.40	4.00	4.45	4.47
total	100.00	100.00	100.00	100.00

TABLE S102. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 19

	g.	p.	i.	h.
act.v.01	14.02	14.19	11.91	14.74
think.v.03	13.35	8.65	12.53	14.54
move.v.02	9.81	12.13	9.84	9.35
change.v.02	9.69	8.26	9.15	10.16
make.v.03	9.66	10.45	10.67	9.15
travel.v.01	8.23	9.16	8.60	7.92
make.v.01	7.55	10.84	10.12	6.00
change.v.01	6.99	7.10	8.33	6.50
use.v.01	5.64	5.42	5.99	5.56
get.v.01	5.44	5.16	4.89	5.68
desire.v.01	5.24	4.13	4.54	5.71
express.v.02	4.37	4.52	3.44	4.68
total	100.00	100.00	100.00	100.00
evaluate.v.02	23.05	17.11	21.63	24.51
interact.v.01	16.86	21.83	14.37	16.84
put.v.01	9.68	12.39	12.86	8.17
state.v.01	8.98	10.32	7.56	9.22
construct.v.01	6.98	8.55	9.08	6.03
change_magnitude.v.01	5.75	6.78	4.84	5.88
choose.v.01	5.35	5.90	3.78	5.78
modify.v.01	5.19	3.83	6.20	5.08
see.v.01	4.82	4.72	4.99	4.78
take.v.01	4.49	1.18	4.39	5.08
re-create.v.01	4.42	2.65	5.60	4.33
try.v.01	4.42	4.72	4.69	4.29
total	100.00	100.00	100.00	100.00
communicate.v.02	23.78	29.39	19.12	24.36
think.v.01	20.08	14.47	19.82	21.17
increase.v.01	8.47	10.09	6.91	8.72
update.v.01	6.83	5.26	8.06	6.69
install.v.01	6.63	11.40	11.52	4.12
accept.v.01	5.80	3.07	3.46	7.08
bend.v.01	5.80	5.26	6.45	5.68
stage.v.01	5.65	2.63	6.91	5.76
repair.v.01	4.52	4.39	6.22	3.97
write.v.01	4.31	4.39	5.30	3.97
supply.v.01	4.16	7.02	3.23	3.97
read.v.01	3.95	2.63	3.00	4.51
total	100.00	100.00	100.00	100.00
inform.v.01	24.55	35.48	27.78	21.81
add.v.01	14.18	15.32	15.15	13.72
arch.v.01	10.66	9.68	14.14	9.88
see.v.05	8.28	7.26	6.06	9.05
believe.v.01	7.33	2.42	6.06	8.50
submit.v.01	6.95	5.65	8.08	6.86
ask.v.01	5.61	2.42	5.56	6.17
mention.v.01	4.95	3.23	2.53	5.90
roll_up.v.02	4.76	7.26	9.09	3.16
propose.v.01	4.66	4.84	3.03	5.08
talk.v.02	4.28	0.81	1.52	5.62
write.v.02	3.81	5.65	1.01	4.25
total	100.00	100.00	100.00	100.00
	1 100.00	1 200.00	1 200.00	200.00

TABLE S103. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 19

	g.	р.	i.	h.
besides.r.02	18.67	23.81	18.97	17.98
well.r.01	12.51	11.90	14.36	12.08
truly.r.01	10.80	7.14	9.74	11.52
possibly.r.01	9.89	9.52	10.77	9.69
still.r.01	9.49	14.29	8.72	9.13
already.r.01	7.27	8.33	8.72	6.74
even.r.01	6.46	5.95	3.59	7.30
actually.r.01	5.85	4.76	6.67	5.76
enough.r.01	5.25	2.38	2.05	6.46
probably.r.01	5.15	7.14	5.13	4.92
presently.r.02	4.34	1.19	5.13	4.49
anyhow.r.01	4.34	3.57	6.15	3.93
total	100.00	100.00	100.00	100.00

TABLE S104. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 19

## 2. Snapshots of 2000 messages

	g.	p.	i.	h.
NOUN	26.96	28.92	27.05	26.50
X	0.11	0.12	0.05	0.16
ADP	11.76	10.72	11.31	12.36
DET	12.02	11.93	11.88	12.17
VERB	22.08	22.46	22.47	21.65
ADJ	5.77	6.31	5.91	5.54
ADV	7.14	6.47	6.82	7.56
PRT	4.03	3.60	4.23	3.95
PRON	6.45	6.05	6.66	6.34
NUM	0.61	0.53	0.64	0.60
CONJ	3.06	2.90	2.97	3.17
PUNC	0.00	0.00	0.00	0.00
N	56.00	56.85	55.67	56.11
ADJ	11.39	11.67	11.76	11.00
VERB	5.80	4.83	5.49	6.29
ADV	26.81	26.64	27.08	26.60
POS	33.33	33.49	33.24	33.37
POS!	96.05	95.81	96.11	96.05

TABLE S105. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 0

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	72.61	73.71	71.38	73.10
physical_entity.n.01	27.39	26.29	28.62	26.90
total	100.00	100.00	100.00	100.00
psychological_feature.n.01	21.89	24.03	21.57	21.64
communication.n.02	20.47	20.38	19.80	20.88
object.n.01	15.50	14.08	15.71	15.66
measure.n.02	12.98	13.05	13.50	12.65
attribute.n.02	7.24	6.66	6.28	7.93
causal_agent.n.01	6.50	6.23	7.21	6.14
group.n.01	6.41	6.62	6.77	6.15
matter.n.03	4.39	5.35	4.63	4.05
relation.n.01	3.60	2.97	3.46	3.81
process.n.06	0.53	0.36	0.57	0.54
thing.n.12	0.48	0.28	0.50	0.51
set.n.02	0.02	0.00	0.00	0.03
total	100.00	100.00	100.00	100.00
cognition.n.01	15.36	16.39	14.56	15.61
whole.n.02	13.18	12.36	13.64	13.07
event.n.01	13.04	15.33	13.16	12.50
definite_quantity.n.01	12.99	13.00	13.16	12.88
message.n.02	11.90	10.45	11.24	12.59
person.n.01	8.44	8.22	9.24	8.02
location.n.01	5.87	5.09	5.97	5.96
written_communication.n.01	4.78	4.14	4.20	5.26
substance.n.01	4.41	5.78	5.07	3.75
state.n.02	3.92	4.03	3.69	4.04
collection.n.01	3.49	3.34	3.35	3.60
part.n.01	2.62	1.86	2.71	2.72
total	100.00	100.00	100.00	100.00

TABLE S106. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 0

	g.	p.	i.	h.
public.a.01	29.61	26.04	31.73	28.98
like.a.01	13.21	20.71	10.95	13.16
new.a.01	11.82	8.88	15.77	9.93
different.a.01	7.62	5.92	7.05	8.31
chief.s.01	7.24	4.73	8.16	7.16
certain.a.02	5.78	5.33	5.01	6.35
first.a.01	4.70	7.10	3.90	4.73
good.a.01	4.38	7.10	3.53	4.39
able.a.01	4.38	7.69	4.64	3.58
specific.a.01	3.88	0.59	4.27	4.27
many.a.01	3.75	4.14	3.15	4.04
particular.s.01	3.62	1.78	1.86	5.08
total	100.00	100.00	100.00	100.00

TABLE S107. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 0

	g.	p.	i.	h.
make.v.03	12.80	10.22	10.86	14.68
act.v.01	12.40	16.38	12.64	11.31
think.v.03	11.93	9.96	11.14	12.90
move.v.02	11.63	14.94	13.49	9.65
change.v.01	9.78	11.27	8.32	10.39
travel.v.01	8.12	9.17	8.13	7.88
get.v.01	7.23	9.70	8.46	5.85
change.v.02	6.91	5.24	8.22	6.44
use.v.01	5.93	4.33	6.39	6.01
desire.v.01	4.70	3.41	4.46	5.15
perceive.v.01	4.37	4.19	4.51	4.32
necessitate.v.01	4.19	1.18	3.38	5.42
total	100.00	100.00	100.00	100.00
evaluate.v.02	18.66	15.22	17.74	20.04
interact.v.01	12.74	16.27	11.76	12.60
put.v.01	12.74	18.11	13.73	10.54
create_verbally.v.01	11.74	5.51	6.95	16.29
try.v.01	7.51	12.07	8.91	5.57
state.v.01	7.20	6.56	6.06	8.08
see.v.01	6.82	6.04	6.86	6.97
change_magnitude.v.01	6.14	4.20	6.95	6.03
send.v.01	4.77	3.41	8.11	2.87
look.v.02	4.70	4.99	5.17	4.34
keep.v.03	3.64	3.67	4.63	2.99
attach.v.01	3.52	3.94	3.12	3.69
total		100.00		100.00
communicate.v.02	18.72	24.21 8.33	18.91	17.42 24.09
write.v.01 think.v.01	18.24		11.80	
	11.32	7.14	11.65	12.05
install.v.01	10.35	21.83	11.65	7.11
increase.v.01	9.39	6.35	11.50	8.84
rate.v.01	6.29	5.56	8.62	5.11
expect.v.01	5.66	5.56	4.84	6.15
save.v.02	4.50	3.57	6.66	3.47
name.v.01	4.35	2.78 7.54	3.63	5.11
run.v.01	3.82	2.78	4.08 2.57	
repair.v.01 read.v.01	3.77	4.37	4.08	4.68 3.12
total	100.00	100.00	100.00	100.00
inform.v.01	25.68	31.48	19.44	29.23
add.v.01	17.19	14.81	16.92	17.88
upgrade.v.01	12.60	12.96	14.39	11.15
record.v.01	9.08	8.33	11.11	7.69
submit.v.01	6.54	4.63	9.09	5.00
assume.v.01	4.59	8.33	1.77	5.96
see.v.05	4.39	1.85	5.05	4.42
overlap.v.01	4.30	1.85	5.05	4.23
post.v.01	4.30	8.33	5.05	2.88
think.v.02	4.00	2.78	5.05	3.46
replace.v.01 talk.v.02	3.71	1.85 2.78	3.54	4.23
	3.61		3.54	3.85
total	100.00	100.00	100.00	100.00

TABLE S108. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 0

	g.	p.	i.	h.
besides.r.02	14.40	17.86	20.88	10.40
still.r.01	12.07	5.36	16.50	11.09
possibly.r.01	10.24	9.82	9.76	10.57
well.r.01	9.94	9.82	8.42	10.75
already.r.01	8.01	20.54	4.38	7.45
even.r.01	7.00	6.25	7.41	6.93
yet.r.01	6.90	6.25	6.73	7.11
however.r.01	6.59	9.82	7.74	5.37
probably.r.01	6.39	5.36	4.71	7.45
truly.r.01	6.29	7.14	4.04	7.28
actually.r.01	6.09	0.89	5.05	7.63
quite.r.01	6.09	0.89	4.38	7.97
total	100.00	100.00	100.00	100.00

TABLE S109. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 0

	g.	p.	i.	h.
NOUN	67.69	69.78	67.72	66.86
X	0.28	0.35	0.26	0.28
ADP	10.98	10.53	10.39	11.99
DET	4.79	4.26	4.78	5.00
VERB	7.63	7.53	7.70	7.57
ADJ	1.99	1.60	2.10	1.99
ADV	0.69	0.53	0.74	0.67
PRT	3.87	3.37	3.98	3.89
PRON	0.65	0.57	0.67	0.66
NUM	1.22	1.28	1.40	0.93
CONJ	0.21	0.18	0.25	0.16
PUNC	0.00	0.00	0.00	0.00
N	89.12	89.85	88.81	89.30
ADJ	2.85	2.40	2.85	3.00
VERB	0.25	0.17	0.29	0.22
ADV	7.78	7.58	8.04	7.48
POS	22.18	22.01	22.40	21.93
POS!	95.60	95.06	95.35	96.14

TABLE S110. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags . Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 2

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	64.40	63.61	62.39	65.94
physical_entity.n.01	35.60	36.39	37.61	34.06
total	100.00	100.00	100.00	100.00
communication.n.02	25.51	20.59	26.92	26.41
matter.n.03	17.08	18.59	17.92	16.00
psychological_feature.n.01	16.36	13.39	16.75	17.18
measure.n.02	11.85	14.93	8.72	12.69
causal_agent.n.01	9.52	7.80	9.96	9.85
object.n.01	8.59	9.41	9.39	7.80
attribute.n.02	7.97	10.10	7.45	7.53
relation.n.01	1.47	2.65	1.24	1.19
group.n.01	1.24	1.96	1.31	0.94
thing.n.12	0.22	0.30	0.20	0.20
process.n.06	0.20	0.30	0.13	0.21
total	100.00	100.00	100.00	100.00
message.n.02	23.95	17.88	25.54	25.06
substance.n.01	15.74	18.13	16.15	14.67
definite_quantity.n.01	11.47	14.63	8.73	12.09
event.n.01	11.00	9.95	11.31	11.17
person.n.01	10.15	8.54	10.50	10.49
whole.n.02	7.39	7.98	8.07	6.76
cognition.n.01	6.67	5.04	6.64	7.26
property.n.02	5.79	7.93	5.43	5.28
substance.n.07	2.48	2.49	2.77	2.29
state.n.02	2.24	2.38	2.11	2.28
location.n.01	1.58	2.25	1.64	1.31
signal.n.01	1.53	2.80	1.12	1.35
total	100.00	100.00	100.00	100.00

TABLE S111. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 2

	g.	p.	i.	h.
apt.s.01	20.96	21.13	30.61	16.74
net.a.01	12.63	14.08	6.12	14.98
capable.s.02	11.62	7.04	17.35	10.57
local.a.01	9.34	28.17	5.10	5.29
all_right.s.01	7.58	2.82	4.08	10.57
free.a.01	7.32	7.04	9.18	6.61
chief.s.01	6.31	9.86	9.18	3.96
best.a.01	6.06	2.82	3.06	8.37
anti.a.01	5.05	0.00	4.08	7.05
unstable.a.01	4.80	1.41	6.12	5.29
common.a.01	4.29	4.23	4.08	4.41
difficult.a.01	4.04	1.41	1.02	6.17
total	100.00	100.00	100.00	100.00

TABLE S112. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 2

	g.	p.	i.	h.
act.v.01	58.75	49.08	64.83	58.71
move.v.02	8.36	8.90	7.03	8.92
travel.v.01	6.96	8.59	7.22	6.24
think.v.03	4.38	5.52	2.85	4.84
change.v.02	4.32	4.91	4.75	3.87
get.v.01	4.10	3.68	4.56	3.98
make.v.03	3.14	3.07	0.19	4.84
change.v.01	3.03	4.29	3.23	2.47
have.v.01	2.02	1.84	0.76	2.80
remove.v.01	1.91	2.45	2.09	1.61
make.v.01	1.68	3.99	1.71	0.86
designate.v.01	1.35	3.68	0.76	0.86
total	100.00	100.00	100.00	100.00
interact.v.01	72.55	68.27	85.42	67.35
evaluate.v.02	5.11	7.21	3.39	5.40
send.v.01	3.72	3.37	3.12	4.11
put.v.01	3.43	4.33	2.34	3.73
create_verbally.v.01	3.36	3.85	0.00	4.88
keep.v.03	2.63	2.88	1.04	3.34
change_magnitude.v.01	2.04	0.96	1.56	2.57
label.v.01	1.75	5.77	1.04	1.03
destroy.v.01	1.53	0.00	0.00	2.70
state.v.01	1.31	1.92	0.26	1.67
try.v.01	1.31	1.44	1.82	1.03
give.v.03	1.24	0.00	0.00	2.19
total		100.00		
communicate.v.02	78.79	65.58	90.11	76.91
write.v.01	3.65	3.72	0.00	5.59
save.v.02	2.78	2.33	1.10	3.82
install.v.01	2.62	3.72	1.10	3.09
think.v.01	2.22	0.93	0.82	3.38
increase.v.01	2.14	0.93	1.65	2.79
name.v.01	1.91	5.58	1.10	1.18
rate.v.01	1.83	1.86	1.92	1.76
deny.v.01	1.11	4.65	1.10	0.00
convey.v.03	1.03	4.19	0.27	0.44
read.v.01	0.95	1.40	0.27	0.44
confront.v.02	0.95	5.12	0.02	0.00
total	100.00	100.00	100.00	100.00
reach.v.04	83.64	73.49	89.17	83.22
record.v.01	3.11	3.01	1.14	4.28
inform.v.01	3.02	9.64	2.85	1.32
see.v.05	2.22	1.20	0.85	3.29
upgrade.v.01	2.04	2.41	1.99	1.97
add.v.01	1.87	0.60	0.85	2.80
communicate.v.01	0.98	5.42	0.28	0.16
power.v.01	0.89	0.00	0.00	1.64
overlap.v.01	0.80	0.60	1.14	0.66
network.v.01	0.53	0.60	1.14	0.16
acknowledge.v.06	0.44	3.01	0.00	0.00
permit.v.01	0.44	0.00	0.57	0.49
total	100.00	100.00	100.00	100.00

TABLE S113. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 2

	g.	p.	i.	h.
never.r.01	11.90	16.67	25.00	7.14
back.r.01	9.52	33.33	12.50	3.57
soon.r.01	9.52	0.00	0.00	14.29
typically.r.01	9.52	0.00	12.50	10.71
right.r.01	9.52	0.00	12.50	10.71
enough.r.01	7.14	16.67	12.50	3.57
subsequently.r.01	7.14	0.00	0.00	10.71
forward.r.01	7.14	16.67	25.00	0.00
by_and_large.r.01	7.14	0.00	0.00	10.71
possibly.r.01	7.14	0.00	0.00	10.71
precisely.r.01	7.14	16.67	0.00	7.14
well.r.01	7.14	0.00	0.00	10.71
total	100.00	100.00	100.00	100.00

TABLE S114. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 2

	g.	p.	i.	h.
NOUN	29.79	30.12	29.87	29.61
X	0.12	0.12	0.21	0.05
ADP	11.19	11.39	11.29	11.04
DET	10.91	10.48	10.19	11.62
VERB	21.65	21.35	21.64	21.76
ADJ	6.91	6.78	6.37	7.36
ADV	6.55	6.01	6.73	6.59
PRT	3.76	3.69	3.70	3.84
PRON	5.91	6.34	6.52	5.30
NUM	0.52	0.58	0.53	0.49
CONJ	2.69	3.15	2.95	2.34
PUNC	0.00	0.00	0.00	0.00
N	57.64	58.44	58.70	56.54
ADJ	12.30	12.25	11.26	13.13
VERB	5.18	4.38	5.03	5.58
ADV	24.88	24.92	25.01	24.76
POS	33.82	34.27	33.13	34.22
POS!	93.24	94.19	92.79	93.27

TABLE S115. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 3

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	67.98	66.54	68.94	67.20
physical_entity.n.01	32.02	33.46	31.06	32.80
total	100.00	100.00	100.00	100.00
measure.n.02	19.35	18.06	22.53	15.62
psychological_feature.n.01	19.18	17.31	17.58	21.87
object.n.01	19.12	20.33	19.00	18.88
communication.n.02	16.42	18.50	16.52	15.62
causal_agent.n.01	7.03	7.83	6.67	7.23
attribute.n.02	6.84	6.45	6.35	7.60
matter.n.03	4.73	4.35	4.43	5.24
relation.n.01	3.14	2.99	3.10	3.25
group.n.01	3.05	3.22	2.85	3.24
thing.n.12	0.72	0.47	0.60	0.95
process.n.06	0.43	0.49	0.35	0.50
set.n.02	0.00	0.00	0.01	0.00
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	20.32	18.86	23.85	16.08
event.n.01	17.51	15.85	15.23	21.13
whole.n.02	13.89	16.34	12.16	15.38
person.n.01	8.57	9.34	8.07	9.00
message.n.02	6.86	10.20	6.48	6.23
cognition.n.01	6.48	5.30	6.57	6.76
message.n.01	5.74	5.59	6.01	5.44
location.n.01	4.81	5.16	4.25	5.45
land.n.04	4.50	2.89	6.42	2.47
substance.n.01	4.21	4.10	3.84	4.74
written_communication.n.01	3.86	3.24	3.91	4.00
state.n.02	3.25	3.12	3.22	3.32
total	100.00	100.00	100.00	100.00

TABLE S116. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 3

	g.	p.	i.	h.
net.a.01	39.38	41.98	32.52	46.15
like.a.01	11.53	9.26	14.79	8.68
new.a.01	10.07	8.33	12.24	8.24
general.a.01	7.32	16.67	8.03	3.19
high.a.01	7.05	4.01	5.58	9.78
certain.a.02	3.90	1.85	3.04	5.60
compact.a.01	3.64	4.01	3.33	3.85
good.a.01	3.59	0.93	3.33	4.84
chief.s.01	3.50	2.16	5.88	1.32
all_right.s.01	3.46	4.94	4.51	1.76
first.a.01	3.37	2.16	3.04	4.18
able.a.01	3.19	3.70	3.72	2.42
total	100.00	100.00	100.00	100.00

TABLE S117. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 3

	g.	p.	i.	h.
act.v.01	12.90	12.00	13.10	12.98
transfer.v.05	12.35	11.73	9.27	15.85
travel.v.01	11.34	14.32	12.02	9.67
move.v.02	9.37	8.15	11.16	7.84
think.v.03	9.33	8.33	8.88	10.12
get.v.01	8.65	10.03	9.38	7.45
use.v.01	7.83	7.34	7.05	8.83
change.v.01	6.55	7.16	6.26	6.66
make.v.03	6.49	4.66	7.86	5.59
perceive.v.01	6.09	8.06	5.47	6.13
be.v.01	4.60	4.74	5.00	4.13
change.v.02	4.50	3.49	4.56	4.75
total	100.00	100.00	100.00	100.00
give.v.03	22.14	21.06	17.03	27.68
interact.v.01	11.32	9.16	11.89	11.40
evaluate.v.02	10.55	10.29	11.35	9.82
see.v.01	9.85	12.86	8.88	9.92
travel_rapidly.v.01	8.83	12.54	10.38	6.12
try.v.01	7.56	8.84	7.04	7.70
put.v.01	6.77	6.59	7.67	5.92
state.v.01	5.80	5.14	6.21	5.57
look.v.02	5.03	5.47	6.02	3.90
reason.v.03	4.27	2.89	3.54	5.43
send.v.01	4.12	2.89	5.73	2.86
keep.v.03	3.76	2.25	4.27	3.70
total	100.00	100.00	100.00	100.00
support.v.02	30.94	32.14	22.96	38.91
communicate.v.02	15.71	14.84	16.60	15.02
run.v.01	13.93	21.43	16.01	9.65
think.v.01	5.49	3.30	6.21	5.37
calculate.v.01	5.26	3.02	4.49	6.69
read.v.01	4.82	1.92	7.11	3.27
expect.v.01	4.52	6.59	4.56	3.89
install.v.01	4.22	6.59	4.94	2.80
rebuild.v.01	4.05	0.55	5.39	3.66
increase.v.01	3.78	3.02	3.74	4.05
save.v.02 name.v.01	3.68	2.47	4.04 3.96	3.66
total	100.00	100.00	100.00	100.00
sponsor.v.01	52.38	53.67	43.18	59.88
inform.v.01	17.35	16.06	19.97	15.45
record.v.01	6.24	4.13	7.59	5.63
add.v.01	3.80	2.75	5.06	2.99
enumerate.v.01	3.46	8.26	4.08	1.68
assume.v.01 think.v.02	2.83	5.50 3.67	3.09 2.95	1.92 2.40
talk.v.02	2.66	1.38	3.80	2.40
unify.v.01	2.32	0.92	1.97	2.04
address.v.01	2.32	1.83	2.67	1.92
write.v.07	2.21	0.00	3.09	1.68
roll_up.v.02	1.93	1.83	2.53	1.44
total				
wiai	100.00	100.00	100.00	100.00

TABLE S118. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 3

	g.	p.	i.	h.
besides.r.02	17.44	16.94	20.15	14.65
well.r.01	16.85	12.10	12.52	22.66
still.r.01	9.77	9.68	12.70	6.64
possibly.r.01	9.44	11.29	9.62	8.79
truly.r.01	8.42	11.29	9.26	6.84
even.r.01	6.99	9.68	7.80	5.47
merely.r.01	6.66	6.45	3.09	10.55
never.r.01	5.98	4.84	6.53	5.66
however.r.01	4.80	5.65	5.08	4.30
right.r.01	4.72	5.65	3.27	6.05
far.r.01	4.63	2.42	4.17	5.66
back.r.01	4.30	4.03	5.81	2.73
total	100.00	100.00	100.00	100.00

TABLE S119. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 3

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	67.31	67.17	69.53	66.45
physical_entity.n.01	32.69	32.83	30.47	33.55
total	100.00	100.00	100.00	100.00
measure.n.02	16.63	14.04	30.38	20.30
object.n.01	16.44	16.22	14.39	18.97
psychological_feature.n.01	14.20	12.66	17.44	19.83
attribute.n.02	13.83	16.65	4.93	5.57
communication.n.02	13.75	14.04	9.58	15.22
matter.n.03	7.17	7.65	8.21	4.02
causal_agent.n.01	6.61	6.33	5.58	8.79
group.n.01	5.33	5.86	4.18	3.44
relation.n.01	3.56	3.93	3.03	2.08
thing.n.12	1.53	1.52	1.92	1.33
process.n.06	0.94	1.11	0.38	0.44
set.n.02	0.00	0.00	0.00	0.01
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	17.71	14.36	34.58	21.71
whole.n.02	13.01	12.90	9.75	15.79
property.n.02	10.26	13.49	1.75	0.98
event.n.01	9.61	9.01	10.93	11.51
person.n.01	8.14	7.93	6.55	10.26
cognition.n.01	8.05	7.06	9.57	11.62
substance.n.01	7.60	8.16	9.01	3.98
location.n.01	6.93	7.30	6.77	5.32
message.n.02	6.21	5.43	5.09	10.66
signal.n.01	5.54	7.37	0.30	0.60
state.n.02	4.19	4.32	3.22	4.20
written_communication.n.01	2.76	2.67	2.49	3.38
total	100.00	100.00	100.00	100.00

TABLE S120. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 6

	g.	p.	i.	h.
common.a.01	13.80	4.88	49.66	6.22
net.a.01	13.34	19.62	3.74	8.44
new.a.01	11.20	13.50	5.10	11.11
like.a.01	9.91	8.62	7.82	13.56
small.a.01	8.16	12.00	4.08	4.00
mobile.s.01	7.12	0.12	0.68	23.78
mathematical.a.01	7.06	0.00	0.68	23.78
glib.s.01	7.06	1.50	26.19	4.44
good.a.01	6.67	10.38	1.36	3.56
great.s.01	5.51	9.75	0.68	1.11
contrary.s.01	5.12	9.88	0.00	0.00
strong.a.01	5.05	9.75	0.00	0.00
total	100.00	100.00	100.00	100.00

TABLE S121. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\bf p.$  for periphery,  $\bf i.$  for intermediary,  $\bf h.$  for hubs). Yes. TAG: 6

	g.	p.	i.	h.
act.v.01	18.49	19.61	12.16	17.84
change.v.02	11.90	14.86	2.11	6.12
travel.v.01	11.03	11.41	10.25	10.01
express.v.02	10.69	13.74	2.91	3.42
move.v.02	9.45	10.35	6.93	7.42
think.v.03	7.51	7.36	5.73	9.13
make.v.03	6.42	4.60	10.35	11.19
change.v.01	6.34	5.87	3.62	9.72
be.v.01	5.15	5.36	5.53	4.12
include.v.01	4.58	0.96	27.84	5.01
get.v.01	4.36	4.05	4.12	5.71
use.v.01	4.08	1.82	8.44	10.31
total	100.00	100.00	100.00	100.00
interact.v.01	22.02	20.57	22.16	30.77
state.v.01	19.89	22.67	8.68	8.95
reorient.v.03	11.41	14.26	0.30	0.00
evaluate.v.02	10.39	8.88	11.68	18.84
give.v.03	5.93	5.61	3.29	9.26
cover.v.03	5.14	6.44	0.00	0.00
keep.v.03	5.00	1.53	30.84	12.40
set_about.v.01	4.73	5.89	0.00	0.16
put.v.01	4.73	3.97	7.49	7.85
see.v.01	3.86	3.40	4.49	6.28
come.v.01	3.48	4.02	1.20	1.41
label.v.01	3.42	2.75	9.88	4.08
total	100.00	100.00	100.00	100.00
communicate.v.02	31.92	29.89	33.03	42.48
align.v.01	17.50	22.24	0.45	0.00
cross.v.05	7.86	10.00	0.00	0.00
confront.v.02	7.26	9.19	0.00	0.22
think.v.01	7.16	6.20	5.88	13.05
name.v.01	5.25	4.29	14.93	5.75
answer.v.01	4.58	5.59	0.45	1.11
store.v.01	4.23	0.36	30.32	12.61
cut.v.01	3.95	4.70	0.90	1.33
increase.v.01	3.60	2.63	3.17	9.07
run.v.01	3.34	1.50	7.24	11.50
support.v.02	3.34	3.40	3.62	2.88
total	100.00	100.00	100.00	100.00
inform.v.01	31.45	36.65	28.21	17.45
talk.v.02	9.73	14.21	0.00	1.87
roll_up.v.02	8.46	0.81	33.85	16.51
telecommunicate.v.01	7.40	0.20	1.03	33.33
ask.v.01	7.26	9.44	3.59	2.80
sponsor.v.01	7.00	8.53	4.10	4.05
communicate.v.01	5.80	7.51	5.13	0.93
record.v.01	5.33	2.23	18.46	6.85
talk.v.01	5.20	7.31	0.51	1.56
add.v.01	4.60	2.34	3.08	12.46
admit.v.01	4.33	6.60	0.00	0.00
believe.v.01	3.46	4.16	2.05	2.18
total	100.00	100.00	100.00	100.00

TABLE S122. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 6

	g.	p.	i.	h.
besides.r.02	14.94	12.00	20.00	26.67
well.r.01	14.83	15.41	6.67	14.67
therefore.r.01	11.15	13.33	6.67	2.67
still.r.01	7.47	5.93	17.78	11.33
truly.r.01	7.36	6.37	11.11	10.67
right.r.01	6.90	8.15	4.44	2.00
even.r.01	6.44	6.22	0.00	9.33
indeed.r.01	6.32	8.15	0.00	0.00
always.r.01	6.21	6.81	0.00	5.33
never.r.01	6.21	6.52	4.44	5.33
however.r.01	6.21	5.48	11.11	8.00
long.r.01	5.98	5.63	17.78	4.00
total	100.00	100.00	100.00	100.00

TABLE S123. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\bf p.$  for periphery,  $\bf i.$  for intermediary,  $\bf h.$  for hubs). Yes. TAG: 6

	g.	p.	i.	h.
NOUN	50.02	36.21	51.39	58.94
X	2.18	0.72	2.57	2.85
ADP	5.01	9.49	3.74	2.99
DET	14.25	12.45	15.96	13.78
VERB	12.19	17.24	11.42	9.23
ADJ	6.34	7.16	6.22	5.85
ADV	3.01	5.87	2.15	1.77
PRT	2.38	3.73	2.14	1.61
PRON	2.32	3.94	1.74	1.72
NUM	0.87	0.88	0.97	0.74
CONJ	1.44	2.31	1.71	0.52
PUNC	0.00	0.00	0.00	0.00
N	79.24	64.91	81.82	85.24
ADJ	8.97	11.89	8.27	7.93
VERB	1.52	4.61	0.96	0.25
ADV	10.27	18.60	8.95	6.59
POS	20.06	28.23	18.49	18.45
POS!	90.69	93.19	90.02	89.93

TABLE S124. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 7

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	70.20	73.66	69.46	69.56
physical_entity.n.01	29.80	26.34	30.54	30.44
total	100.00	100.00	100.00	100.00
measure.n.02	23.38	33.05	22.93	19.43
communication.n.02	20.64	17.30	20.43	22.48
object.n.01	12.53	13.17	12.46	12.32
attribute.n.02	12.08	9.65	11.95	13.38
matter.n.03	9.30	6.34	10.17	9.54
psychological_feature.n.01	7.00	6.71	7.11	6.98
causal_agent.n.01	6.46	5.11	6.53	7.00
group.n.01	4.62	4.09	4.51	5.01
relation.n.01	2.49	2.86	2.52	2.27
thing.n.12	0.97	0.61	1.04	1.06
process.n.06	0.54	1.10	0.35	0.52
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	24.93	35.00	24.85	20.45
written_communication.n.01	18.51	13.93	18.93	20.05
whole.n.02	11.08	12.51	11.06	10.45
shape.n.02	9.74	7.14	9.61	11.09
substance.n.01	8.65	5.77	9.12	9.34
person.n.01	5.81	5.03	5.70	6.31
event.n.01	5.17	4.94	5.26	5.16
social_group.n.01	4.49	2.88	4.58	5.09
state.n.02	3.27	3.67	3.01	3.42
cognition.n.01	2.97	2.98	3.06	2.85
message.n.02	2.76	3.37	2.49	2.85
location.n.01	2.62	2.79	2.32	2.93
total	100.00	100.00	100.00	100.00

TABLE S125. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 7

	g.	p.	i.	h.
public.a.01	87.23	84.15	84.79	91.13
apt.s.01	2.44	4.92	3.65	0.18
net.a.01	2.29	2.73	3.80	0.37
all_right.s.01	1.25	0.55	0.63	2.22
ill.a.01	1.18	1.64	0.95	1.29
excess.s.01	0.89	1.09	0.48	1.29
free.a.01	0.89	1.64	1.27	0.18
available.a.01	0.81	1.64	0.32	1.11
chinese.a.01	0.81	0.00	1.74	0.00
logical.a.01	0.74	0.00	1.58	0.00
cardinal.s.01	0.74	0.55	0.00	1.66
local.a.01	0.74	1.09	0.79	0.55
total	100.00	100.00	100.00	100.00

TABLE S126. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 7

	g.	р.	i.	h.
change.v.01	23.52	12.64	26.51	27.45
move.v.02	14.31	16.67	13.76	13.33
act.v.01	10.04	13.22	8.39	9.80
make.v.03	9.90	8.62	8.39	12.55
think.v.03	8.39	5.75	4.36	14.90
change.v.02	7.84	4.02	11.07	6.67
get.v.01	6.46	10.34	7.72	2.35
travel.v.01	4.95	7.47	3.36	5.10
make.v.01	3.99	6.32	4.36	1.96
necessitate.v.01	3.71	9.77	2.35	1.18
use.v.01	3.58	4.60	3.69	2.75
express.v.02	3.30	0.57	6.04	1.96
total	100.00	100.00	100.00	100.00
damage.v.01	23.68	13.75	23.44	27.86
put.v.01	13.11	16.25	14.58	10.45
evaluate.v.02	12.47	11.25	6.25	18.91
interact.v.01	11.42	21.25	9.38	9.45
create_verbally.v.01	10.78	8.75	8.33	13.93
state.v.01	5.07	1.25	9.38	2.49
modify.v.01	4.86	1.25	7.29	3.98
keep.v.03	4.44	2.50	6.77	2.99
end.v.02	4.23	3.75	8.33	0.50
travel_rapidly.v.01	3.38	5.00	3.65	2.49
establish.v.01	3.38	5.00	1.04	4.98
send.v.01	3.17	10.00	1.56	1.99
total	100.00	100.00	100.00	100.00
mar.v.01	27.93	17.46	28.66	30.94
write.v.01	12.72	11.11	10.19	15.47
communicate.v.02	12.72	23.81	10.83	10.50
install.v.01	12.47	19.05	13.38	9.39
think.v.01	7.73	1.59	0.00	16.57
save.v.02	4.74	1.59	8.28	2.76
update.v.01	4.49	1.59	8.28	2.21
run.v.01	3.99	6.35	4.46	2.76
read.v.01	3.49	7.94	1.91	3.31
rate.v.01	3.49	4.76	3.82	2.76
name.v.01	3.24	4.76	2.55	3.31
break.v.10	2.99	0.00	7.64	0.00
total	100.00	100.00	100.00	100.00
inform.v.01	15.15	8.33	20.00	12.50
record.v.01	14.39	4.17	21.67	10.42
carry.v.04	13.64	54.17	0.00	10.42
upgrade.v.01	10.61	12.50	10.00	10.42
interrupt.v.01	9.09	0.00	20.00	0.00
adhere.v.06	7.58	4.17	1.67	16.67
communicate.v.01	7.58	4.17	6.67	10.42
enumerate.v.01	5.30	0.00	11.67	0.00
grow.v.02	4.55	4.17	3.33	6.25
promise.v.01	4.55	0.00	3.33	8.33
restrain.v.01	3.79	0.00	1.67	8.33
route.v.01	3.79	8.33	0.00	6.25
total	100.00	100.00	100.00	100.00
ισιαι	100.00	100.00	100.00	100.00

TABLE S127. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 7

	g.	p.	i.	h.
already.r.01	16.67	0.00	36.36	0.00
back.r.01	16.67	11.11	18.18	25.00
practically.r.01	12.50	33.33	0.00	0.00
forward.r.01	8.33	0.00	0.00	50.00
probably.r.01	8.33	11.11	9.09	0.00
normally.r.01	8.33	0.00	18.18	0.00
even.r.01	8.33	22.22	0.00	0.00
early_on.r.01	4.17	11.11	0.00	0.00
newly.r.01	4.17	11.11	0.00	0.00
yet.r.01	4.17	0.00	9.09	0.00
half.r.01	4.17	0.00	0.00	25.00
readily.r.01	4.17	0.00	9.09	0.00
total	100.00	100.00	100.00	100.00

TABLE S128. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 7

	g.	p.	i.	h.
NOUN	25.23	28.33	25.47	24.03
X	0.16	0.14	0.17	0.16
ADP	12.08	12.02	11.89	12.18
DET	10.86	10.97	11.19	10.67
VERB	22.54	20.94	22.98	22.89
ADJ	5.91	6.55	5.37	5.94
ADV	8.57	6.82	8.54	9.20
PRT	3.87	3.59	3.91	3.95
PRON	6.86	6.13	6.93	7.08
NUM	1.10	1.21	0.96	1.13
CONJ	2.82	3.29	2.59	2.76
PUNC	0.00	0.00	0.00	0.00
N	54.22	59.70	53.61	52.35
ADJ	11.11	11.18	10.48	11.37
VERB	7.98	5.61	7.96	8.93
ADV	26.69	23.51	27.94	27.36
POS	33.08	33.56	33.21	32.84
POS!	95.58	94.91	95.58	95.85

TABLE S129. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 8

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	67.38	68.44	66.19	67.24
physical_entity.n.01	32.62	31.56	33.81	32.76
total	100.00	100.00	100.00	100.00
measure.n.02	22.88	17.29	24.48	25.97
object.n.01	21.17	17.58	23.71	22.41
communication.n.02	13.53	17.02	10.89	12.41
psychological_feature.n.01	13.32	8.54	16.28	15.20
attribute.n.02	9.52	16.38	6.92	6.03
matter.n.03	6.26	8.51	4.22	5.70
group.n.01	5.27	6.77	5.05	4.34
causal_agent.n.01	4.14	4.33	4.91	3.62
relation.n.01	2.86	2.44	2.58	3.28
process.n.06	0.56	0.60	0.60	0.52
thing.n.12	0.49	0.54	0.37	0.51
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	23.27	14.48	25.59	27.81
whole.n.02	21.80	15.44	24.56	24.57
event.n.01	9.33	6.16	11.40	10.38
cognition.n.01	7.07	5.06	8.25	7.80
substance.n.01	6.39	9.15	4.51	5.51
message.n.02	6.23	4.15	6.29	7.53
property.n.02	5.74	13.97	2.20	2.14
signal.n.01	4.60	13.03	0.62	1.10
location.n.01	4.28	7.08	4.16	2.53
person.n.01	4.24	5.28	4.67	3.37
written_communication.n.01	3.57	3.26	4.07	3.53
state.n.02	3.48	2.93	3.68	3.73
total	100.00	100.00	100.00	100.00

TABLE S130. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 8

	g.	p.	i.	h.
like.a.01	19.42	4.18	24.00	24.70
new.a.01	15.73	6.43	20.36	18.18
public.a.01	13.64	34.08	6.55	6.97
initial.s.01	10.03	37.62	0.36	1.06
good.a.01	7.38	3.54	10.18	8.03
certain.a.02	5.70	2.57	6.91	6.67
least.a.01	5.38	3.54	2.91	7.27
last.s.01	5.30	1.93	10.55	4.70
old.a.01	4.49	0.32	6.18	5.76
much.a.01	4.33	1.29	4.73	5.61
current.a.01	4.33	1.29	4.00	5.91
different.a.01	4.25	3.22	3.27	5.15
total	100.00	100.00	100.00	100.00

TABLE S131. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 8

	g.	p.	i.	h.
act.v.01	13.51	24.81	12.55	11.14
change.v.01	11.28	6.15	13.45	11.63
think.v.03	9.88	5.82	11.25	10.31
make.v.03	9.72	8.01	7.76	10.96
move.v.02	9.54	7.79	10.09	9.74
change.v.02	9.02	16.14	8.41	7.54
travel.v.01	7.62	5.16	8.21	7.97
get.v.01	7.50	7.57	7.12	7.64
make.v.01	6.09	4.61	5.17	6.84
use.v.01	6.01	5.60	7.18	5.63
be.v.01	5.69	4.61	4.20	6.57
express.v.02	4.13	3.73	4.59	4.04
total	100.00	100.00	100.00	100.00
evaluate.v.02	16.79	8.02	18.74	18.08
interact.v.01	14.90	18.55	18.01	12.77
construct.v.01	13.52	5.51	8.35	17.54
state.v.01	9.25	8.52	10.40	8.95
put.v.01	8.52	6.77	8.49	8.95
change_magnitude.v.01	6.96	2.76	9.52	6.92
see.v.01	6.16	5.76	7.03	5.91
look.v.02	5.66	4.26	5.12	6.21
keep.v.03	4.71	5.26	5.27	4.36
better.v.02	4.68	2.01	3.66	5.73
try.v.01	4.50	3.26	5.27	4.47
set_about.v.01	4.35	29.32	0.15	0.12
total	100.00	100.00		100.00
communicate.v.02	24.48	19.35	30.71	23.81
think.v.01	12.21	3.81	14.47	14.75
increase.v.01	11.34	2.72	15.99	12.89
confront.v.02	7.40	31.88	0.25	0.23
repair.v.01	6.97	1.63	5.08	10.10
align.v.01	6.54	28.88	0.00	0.00
test.v.01	5.92	1.36	8.38	6.74
install.v.01	5.61	3.00	5.58	6.74
update.v.01	5.24	0.82	3.55	7.90
expect.v.01	4.99	1.63	4.31	6.74
run.v.01	4.93	3.81	6.35	4.76
interrupt.v.04	4.38	1.09	5.33	5.34
total	100.00	100.00	100.00	100.00
inform.v.01	27.03	40.43	26.83	24.26
add.v.01	19.43	7.45	20.73	21.28
roll_up.v.02	8.88	11.70	7.32	9.15
record.v.01	7.46	9.57	7.32	7.09
propose.v.01	6.31	3.19	3.66	8.47
address.v.01	5.41	10.64	2.85	5.72
talk.v.02	4.76	4.26	6.10	4.12
unify.v.01	4.50	2.13	2.85	5.95
hang.v.02	4.25	0.00	8.54	2.75
ask.v.01	4.25	3.19	5.28	3.89
think.v.02	3.99	1.06	2.85	5.26
see.v.05	3.73	6.38	5.69	2.06
total	100.00	100.00	100.00	100.00
	1			

TABLE S132. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 8

	g.	p.	i.	h.
upriver.r.01	14.72	7.59	10.88	16.86
besides.r.02	12.44	20.25	18.73	9.30
truly.r.01	12.13	8.86	12.39	12.33
still.r.01	8.27	3.80	6.65	9.30
well.r.01	8.19	13.92	8.46	7.56
probably.r.01	8.03	6.33	7.85	8.26
possibly.r.01	8.03	3.80	7.55	8.60
actually.r.01	6.93	3.80	6.95	7.21
even.r.01	6.14	12.66	7.85	4.88
already.r.01	6.14	7.59	6.34	5.93
back.r.01	4.57	6.33	4.83	4.30
alternatively.r.01	4.41	5.06	1.51	5.47
total	100.00	100.00	100.00	100.00

TABLE S133. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\bf p.$  for periphery,  $\bf i.$  for intermediary,  $\bf h.$  for hubs). Yes. TAG: 8

	g.	р.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	70.91	69.84	72.34	70.27
physical_entity.n.01	29.09	30.16	27.66	29.73
total	100.00	100.00	100.00	100.00
measure.n.02	20.49	23.17	21.91	13.83
communication.n.02	17.50	16.15	16.79	20.84
psychological_feature.n.01	16.34	15.23	16.12	18.46
object.n.01	16.20	15.41	15.70	18.32
group.n.01	8.13	7.61	8.51	8.34
causal_agent.n.01	7.02	8.47	6.40	5.72
attribute.n.02	6.29	5.54	7.14	6.10
matter.n.03	4.53	5.13	4.22	4.06
relation.n.01	2.14	2.11	1.84	2.69
process.n.06	0.67	0.55	0.65	0.90
thing.n.12	0.66	0.59	0.69	0.72
set.n.02	0.02	0.02	0.02	0.00
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	21.68	24.94	23.07	14.06
whole.n.02	13.86	13.27	12.72	16.76
event.n.01	12.37	12.39	11.85	13.22
message.n.02	9.14	8.53	8.76	10.78
person.n.01	8.04	10.00	7.20	6.32
cognition.n.01	7.28	6.12	7.26	9.20
collection.n.01	6.40	5.10	7.11	7.28
written_communication.n.01	5.67	4.79	5.24	7.80
location.n.01	4.96	4.75	5.44	4.48
substance.n.01	4.12	4.39	3.95	3.97
property.n.02	3.25	2.56	3.88	3.31
state.n.02	3.23	3.16	3.53	2.83
total	100.00	100.00	100.00	100.00

TABLE S134. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 9

	g.	р.	i.	h.
aeriform.s.02	42.64	45.72	47.65	25.45
like.a.01	10.23	11.28	9.62	9.41
capable.s.02	7.12	7.06	7.16	7.12
new.a.01	6.19	5.20	3.64	13.74
possible.a.01	5.80	5.82	5.05	7.38
able.a.01	5.36	5.45	4.81	6.36
different.a.01	4.24	2.11	5.40	6.11
first.a.01	4.04	3.47	4.11	5.09
net.a.01	3.85	3.47	3.05	6.36
local.a.01	3.75	7.06	1.64	1.53
certain.a.02	3.46	1.36	3.52	7.63
good.a.01	3.31	1.98	4.34	3.82
total	100.00	100.00	100.00	100.00

TABLE S135. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\bf p.$  for periphery,  $\bf i.$  for intermediary,  $\bf h.$  for hubs). Yes. TAG: 9

	g.	p.	i.	h.
act.v.01	15.33	17.48	14.35	13.91
make.v.03	12.76	11.31	12.37	15.12
move.v.02	11.58	12.47	12.10	9.77
use.v.01	11.04	10.71	11.05	11.43
travel.v.01	8.92	9.62	9.06	7.83
think.v.03	8.45	6.91	8.59	10.22
change.v.01	7.15	6.80	7.55	7.07
get.v.01	5.83	7.51	6.06	3.38
perceive.v.01	5.63	4.93	5.96	6.08
change.v.02	5.18	4.37	5.46	5.85
express.v.02	4.25	3.81	3.61	5.67
be.v.01	3.89	4.09	3.84	3.69
total	100.00	100.00	100.00	100.00
interact.v.01	16.36	17.63	14.28	17.43
re-create.v.01	13.25	12.34	13.34	14.29
evaluate.v.02	11.94	10.39	12.84	12.75
put.v.01	9.46	9.51	9.85	8.88
try.v.01	8.24	9.82	9.16	5.00
state.v.01	7.65	6.74	6.61	10.17
see.v.01	6.75	6.30	6.30	7.91
travel_rapidly.v.01	6.66	7.62	6.30	5.89
send.v.01	6.54	6.80	7.29	5.25
keep.v.03	5.64	5.86	6.23	4.60
interpret.v.01	3.79	2.33	3.74	5.73
look.v.02	3.72	4.66	4.05	2.10
total	100.00	100.00	100.00	100.00
communicate.v.02	24.20	27.37	21.18	24.24
represent.v.09	20.69	20.40	20.59	21.18
run.v.01	10.56	12.59	9.95	8.94
think.v.01	7.52	5.72	8.97	7.83
install.v.01	6.09	9.78	4.33	3.92
save.v.02	5.59	5.41	5.62	5.75
read.v.01	5.44	3.33	5.52	7.83
increase.v.01	5.12	3.54	6.11	5.75
expect.v.01	4.08	3.02	4.83	4.41
declare.v.01	3.87	3.85	4.14	3.55
salvage.v.01	3.44	2.39	5.12	2.57
write.v.01	3.40	2.60	3.65	4.04
total	100.00			100.00
capture.v.01	32.47	30.96	32.69	34.15
inform.v.01	25.26	25.91	21.79	28.83
record.v.01	8.93	8.21	9.13	9.61
add.v.01	7.22	4.90	8.17	9.00
roll_up.v.02	4.64	6.32	5.29	1.64
address.v.01	3.49	4.90	3.69	1.43
filter.v.01	3.38	2.53	3.21	4.70
promise.v.01	3.38	2.05	4.01	4.29
see.v.05	3.21	4.11	3.21	2.04
write.v.02	3.04	3.63	3.21	2.04
propose.v.01	2.58	3.63	2.40	1.43
balance.v.01	2.41	2.84	3.21	0.82
total	100.00	100.00	100.00	100.00

TABLE S136. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 9

	g.	p.	i.	h.
besides.r.02	17.98	18.15	20.60	15.06
probably.r.01	11.83	7.04	12.04	14.81
however.r.01	11.11	11.11	10.88	11.36
possibly.r.01	10.57	6.67	12.50	11.11
well.r.01	8.67	8.15	6.48	11.36
still.r.01	7.23	11.11	7.64	4.20
truly.r.01	7.05	7.78	7.41	6.17
even.r.01	6.68	8.89	6.71	5.19
alternatively.r.01	5.69	6.30	5.09	5.93
presently.r.02	4.97	5.93	2.31	7.16
already.r.01	4.25	3.70	3.70	5.19
actually.r.01	3.97	5.19	4.63	2.47
total	100.00	100.00	100.00	100.00

TABLE S137. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 9

	g.	p.	i.	h.
NOUN	44.31	69.47	25.81	26.15
X	2.29	4.76	0.62	0.39
ADP	9.35	4.87	12.60	12.61
DET	8.22	4.19	11.27	11.06
VERB	15.09	6.37	21.77	21.19
ADJ	6.11	4.71	7.06	7.17
ADV	4.42	1.52	6.43	6.59
PRT	2.78	1.06	4.10	3.99
PRON	4.83	2.00	6.78	6.98
NUM	0.45	0.24	0.59	0.61
CONJ	2.16	0.81	2.97	3.27
PUNC	0.00	0.00	0.00	0.00
N	70.53	86.12	54.39	53.79
ADJ	10.25	6.64	14.13	14.01
VERB	3.39	0.87	5.73	6.27
ADV	15.83	6.36	25.74	25.92
POS	30.41	27.26	34.21	34.97
POS!	91.58	88.04	95.49	95.76

TABLE S138. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 10

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	74.15	73.30	74.41	74.15
physical_entity.n.01	25.85	26.70	25.59	25.85
total	100.00	100.00	100.00	100.00
communication.n.02	25.32	24.69	24.16	28.56
psychological_feature.n.01	17.56	16.73	18.06	17.01
measure.n.02	16.95	15.85	17.81	15.75
object.n.01	10.30	11.58	10.46	8.99
causal_agent.n.01	8.58	8.66	9.24	6.94
matter.n.03	6.07	5.72	5.00	8.87
attribute.n.02	5.44	6.97	5.37	4.46
group.n.01	4.97	6.25	4.76	4.49
relation.n.01	3.89	2.78	4.25	3.87
process.n.06	0.50	0.44	0.54	0.47
thing.n.12	0.40	0.31	0.35	0.57
set.n.02	0.01	0.02	0.00	0.02
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	15.54	14.39	16.48	14.16
event.n.01	14.28	14.48	13.97	14.85
message.n.02	12.87	13.31	11.82	15.05
person.n.01	11.00	11.27	11.74	9.03
cognition.n.01	8.70	7.77	9.50	7.48
whole.n.02	7.46	7.65	7.95	6.17
substance.n.01	6.42	6.48	5.57	8.41
indication.n.01	5.73	5.05	5.50	6.79
location.n.01	5.41	6.86	5.08	5.13
language.n.01	5.05	4.58	5.89	3.38
fundamental_quantity.n.01	3.89	4.41	3.86	3.60
written_communication.n.01	3.64	3.74	2.65	5.95
total	100.00	100.00	100.00	100.00

TABLE S139. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 10

	g.	p.	i.	h.
new.a.01	14.99	21.46	15.05	11.45
like.a.01	13.96	14.17	12.78	15.77
english.a.01	13.55	12.96	10.92	18.14
net.a.01	9.99	2.02	16.78	3.24
free.a.01	7.60	9.72	6.66	7.99
capable.s.02	6.23	8.10	9.19	0.43
personal.a.01	6.02	0.40	2.13	15.33
many.a.01	5.75	8.10	5.86	4.32
good.a.01	5.61	6.07	4.93	6.48
possible.a.01	5.54	4.05	7.32	3.46
japanese.a.01	5.41	0.81	2.66	12.31
public.a.01	5.34	12.15	5.73	1.08
total	100.00	100.00	100.00	100.00

TABLE S140. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 10

	g.	p.	i.	h.
act.v.01	25.76	30.65	26.60	22.05
move.v.02	10.02	8.49	8.67	13.02
change.v.01	9.43	9.14	11.13	6.71
think.v.03	9.35	9.57	10.26	7.72
make.v.01	6.61	4.52	7.80	5.60
change.v.02	6.08	7.10	5.25	7.01
use.v.01	5.84	4.73	5.28	7.32
get.v.01	5.70	3.23	5.01	8.02
travel.v.01	5.57	5.27	5.82	5.30
make.v.03	5.52	4.95	6.00	4.99
satisfy.v.02	5.09	7.96	4.47	4.79
express.v.02	5.01	4.41	3.72	7.47
total	100.00	100.00	100.00	100.00
interact.v.01	35.09	38.27	36.72	30.68
evaluate.v.02	11.63	9.65	12.71	10.84
please.v.01	8.66	12.31	7.73	8.30
state.v.01	8.52	6.82	6.43	12.94
send.v.01	7.05	8.15	4.82	10.23
help.v.01	5.25	5.32	5.65	4.55
see.v.01	5.17	4.33	5.08	5.77
modify.v.01	4.76	3.66	3.06	8.22
change_magnitude.v.01	3.78	5.82	3.84	2.62
look.v.02	3.78	1.66	5.65	1.75
put.v.01	3.24	2.16	4.10	2.36
take.v.01	3.05	1.83	4.20	1.75
total	100.00	100.00	100.00	100.00
communicate.v.02	51.85	53.79	55.31	45.15
think.v.01	8.26	4.98	9.35	8.28
update.v.01	6.43	4.50	4.12	11.25
increase.v.01	5.41	7.58	5.71	3.75
place.v.12	4.35	2.61	6.42	1.94
note.v.01	3.99	1.18	1.19	10.09
coincide.v.01	3.83	2.61	3.96	4.27
convey.v.03	3.38	1.42	4.91	1.94
expect.v.01	3.34	1.90	4.52	2.20
write.v.01	3.22	1.90	4.28	2.20
send.v.02	3.01	0.47	0.24	8.93
cross.v.05	2.93	17.06	0.00	0.00
total	100.00	100.00	100.00	100.00
inform.v.01	53.16	55.36	57.02	45.50
add.v.01	6.44	8.30	6.87	4.76
overlap.v.01	5.17	3.81	5.20	5.82
talk.v.02	4.73	7.61	5.10	2.65
communicate.v.01	4.57	2.08	6.45	2.65
ask.v.01	4.35	3.81	3.43	6.17
mail.v.01	4.07	0.69	0.31	12.17
see.v.05	3.91	4.50	4.58	2.47
fund-raise.v.01	3.74	1.73	4.27	3.88
propose.v.01	3.63	4.84	2.71	4.59
talk.v.01	3.14	3.81	1.98	4.76
permit.v.01	3.08	3.46	2.08	4.59
total	100.00	100.00	100.00	100.00
	1			

TABLE S141. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 10

	g.	p.	i.	h.
besides.r.02	18.06	35.25	17.16	12.64
still.r.01	12.77	12.23	17.16	6.74
probably.r.01	10.98	5.76	3.16	24.16
well.r.01	10.08	9.35	10.45	9.83
already.r.01	9.28	8.63	7.69	11.80
freely.r.01	6.39	1.44	7.50	6.74
yet.r.01	6.39	5.76	5.72	7.58
however.r.01	6.09	3.60	8.09	4.21
presently.r.02	5.79	2.88	8.68	2.81
soon.r.01	5.39	5.04	4.93	6.18
even.r.01	4.49	4.32	4.73	4.21
always.r.01	4.29	5.76	4.73	3.09
total	100.00	100.00	100.00	100.00

TABLE S142. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 10

	g.	p.	i.	h.
NOUN	27.50	26.31	27.88	27.27
X	0.37	0.23	0.39	0.37
ADP	13.99	13.61	14.41	13.56
DET	12.48	12.97	12.66	12.17
VERB	18.70	19.91	18.29	18.96
ADJ	8.24	7.57	8.35	8.23
ADV	6.93	6.91	6.73	7.16
PRT	2.88	3.18	2.80	2.93
PRON	5.06	5.59	4.52	5.60
NUM	0.81	0.62	0.89	0.76
CONJ	3.05	3.10	3.09	2.98
PUNC	0.00	0.00	0.00	0.00
N	56.07	54.84	56.74	55.49
ADJ	16.19	15.23	16.22	16.34
VERB	6.87	6.96	6.81	6.94
ADV	20.86	22.98	20.23	21.23
POS	36.24	36.32	36.62	35.78
POS!	95.17	95.67	94.71	95.65

TABLE S143. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 11

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	69.95	69.62	67.25	74.56
physical_entity.n.01	30.05	30.38	32.75	25.44
total	100.00	100.00	100.00	100.00
psychological_feature.n.01	18.82	18.18	16.63	22.64
communication.n.02	17.90	19.05	16.11	20.73
measure.n.02	14.71	15.91	16.13	12.09
object.n.01	13.09	12.60	14.13	11.41
causal_agent.n.01	9.36	11.55	9.58	8.62
relation.n.01	6.87	6.41	7.05	6.65
attribute.n.02	5.93	5.85	5.62	6.47
group.n.01	5.71	4.22	5.72	5.96
matter.n.03	5.22	4.82	6.30	3.46
thing.n.12	1.85	1.00	2.31	1.21
process.n.06	0.54	0.41	0.43	0.75
set.n.02	0.00	0.00	0.00	0.01
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	14.47	15.15	16.48	10.87
cognition.n.01	13.49	11.41	11.41	17.47
person.n.01	12.11	14.72	12.25	11.41
event.n.01	10.75	11.35	9.92	12.07
location.n.01	7.80	6.42	9.00	5.97
whole.n.02	7.62	8.54	7.33	7.96
part.n.01	6.90	6.24	7.21	6.49
language.n.01	6.63	6.27	6.49	6.95
message.n.02	6.62	7.48	6.32	6.99
substance.n.01	5.65	4.27	6.97	3.63
written_communication.n.01	4.69	4.74	3.53	6.68
fundamental_quantity.n.01	3.26	3.40	3.09	3.52
total	100.00	100.00	100.00	100.00

TABLE S144. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 11

	g.	p.	i.	h.
hebraic.a.02	16.73	13.04	16.97	16.91
biblical.a.01	11.92	17.87	12.62	9.81
like.a.01	10.37	9.18	8.96	12.91
historical.a.01	9.59	2.42	13.57	4.08
many.a.01	8.02	8.21	7.01	9.66
late.a.01	7.67	2.42	9.59	5.28
different.a.01	7.27	10.14	5.75	9.36
first.a.01	6.73	6.28	6.92	6.49
public.a.01	6.52	13.53	5.02	7.92
ancient.s.01	5.99	9.18	7.51	2.94
linguistic.a.01	4.68	2.42	2.81	8.15
good.a.01	4.52	5.31	3.26	6.49
total	100.00	100.00	100.00	100.00

TABLE S145. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 11

	g.	p.	i.	h.
act.v.01	22.51	27.92	22.84	21.36
think.v.03	14.72	12.27	14.49	15.33
express.v.02	9.49	10.40	9.81	8.98
travel.v.01	8.90	6.54	9.75	8.19
make.v.03	7.56	8.76	7.82	7.09
be.v.01	6.18	7.13	6.10	6.14
move.v.02	5.97	5.84	5.66	6.36
perceive.v.01	5.36	4.21	5.49	5.35
change.v.01	5.06	4.79	5.08	5.08
make.v.01	4.99	3.50	4.56	5.72
understand.v.01	4.73	4.09	3.87	5.86
know.v.01	4.53	4.56	4.52	4.54
total	100.00	100.00	100.00	100.00
interact.v.01	27.78	34.13	28.75	25.66
evaluate.v.02	16.29	11.56	15.29	18.23
state.v.01	14.22	15.96	14.10	14.13
see.v.01	6.67	4.40	6.85	6.75
create_verbally.v.01	5.67	6.24	6.48	4.57
look.v.02	5.65	6.06	5.56	5.71
interpret.v.01	5.46	4.22	4.31	7.09
associate.v.01	5.31	5.50	5.58	4.93
put.v.01	3.32	2.20	3.06	3.82
take.v.01	3.27	4.40	2.96	3.51
come.v.01	3.20	2.39	3.45	3.01
label.v.01	3.15	2.94	3.61	2.60
total	100.00	100.00	100.00	100.00
communicate.v.02	39.61	48.09	41.11	36.51
think.v.01	11.33	7.65	10.95	12.34
write.v.01	8.57	9.29	9.83	6.89
read.v.01	7.69	5.74	6.03	10.07
think_of.v.04	6.29	6.01	6.78	5.72
accept.v.01	5.43	4.37	4.91	6.23
declare.v.01	4.74	5.19	3.58	6.15
name.v.01	4.71	4.37	5.38	3.92
expect.v.01	4.37	3.83	4.07	4.82
supply.v.01	2.56	2.46	1.74	3.60
increase.v.01	2.36	0.82	2.52	2.39
note.v.01	2.33	2.19	3.11	1.37
total	100.00	100.00	100.00	100.00
inform.v.01	43.63	50.84	45.37	40.11
talk.v.02	10.21	12.61	9.06	11.39
mention.v.01	10.18	9.24	10.62	9.73
see.v.05	7.23	5.04	7.89	6.66
propose.v.01	6.28	6.72	4.19	9.06
believe.v.01	5.30	3.36	5.51	5.33
talk.v.01	4.54	2.10	5.36	3.80
ask.v.01	3.38	2.94	3.02	3.93
add.v.01	2.64	1.26	2.88	2.53
suit.v.01	2.56	0.84	2.24	3.26
assume.v.01	2.19	1.68	2.00	2.53
ignore.v.01	1.87	3.36	1.85	1.67
total	100.00	100.00	100.00	100.00
oodi	100.00	100.00	100.00	100.00

TABLE S146. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 11

	g.	p.	i.	h.
besides.r.02	15.57	23.12	13.75	16.48
even.r.01	13.82	12.50	13.29	14.53
well.r.01	11.71	6.88	13.75	10.23
truly.r.01	7.97	5.00	6.57	9.77
possibly.r.01	7.49	10.62	8.48	6.09
never.r.01	7.28	2.50	10.24	4.84
however.r.01	7.13	6.25	5.73	8.67
therefore.r.01	6.80	12.50	7.64	5.23
far.r.01	6.66	7.50	6.42	6.80
still.r.01	5.49	6.25	4.05	6.88
wholly.r.01	5.06	2.50	5.19	5.23
back.r.01	5.02	4.38	4.89	5.23
total	100.00	100.00	100.00	100.00

TABLE S147. Counts for the most incident synsets at the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 11

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	65.96	67.13	65.58	65.70
physical_entity.n.01	34.04	32.87	34.42	34.30
total	100.00	100.00	100.00	100.00
psychological_feature.n.01	25.04	26.83	24.50	24.55
object.n.01	23.29	23.61	23.03	23.51
communication.n.02	14.68	13.22	14.87	15.56
measure.n.02	11.12	13.15	10.81	10.01
causal_agent.n.01	6.53	5.55	6.86	6.72
group.n.01	6.07	5.04	6.11	6.85
attribute.n.02	6.06	5.70	6.37	5.80
matter.n.03	3.16	2.71	3.38	3.13
relation.n.01	2.99	3.19	2.93	2.92
process.n.06	0.53	0.29	0.64	0.52
thing.n.12	0.53	0.72	0.51	0.42
set.n.02	0.00	0.00	0.00	0.01
total	100.00	100.00	100.00	100.00
event.n.01	22.04	23.59	21.43	21.87
whole.n.02	16.85	16.56	16.24	18.20
definite_quantity.n.01	11.27	13.77	11.02	9.64
cognition.n.01	8.82	9.38	8.90	8.21
person.n.01	7.95	6.74	8.40	8.12
message.n.02	7.75	6.20	8.09	8.41
location.n.01	5.61	4.82	5.78	5.94
collection.n.01	5.03	3.84	5.06	5.95
land.n.04	4.86	4.90	5.60	3.46
state.n.02	3.45	3.86	3.21	3.56
written_communication.n.01	3.38	3.59	3.16	3.61
substance.n.01	3.00	2.75	3.11	3.02
total	100.00	100.00	100.00	100.00

TABLE S148. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 12

	g.	р.	i.	h.
public.a.01	27.58	16.32	25.77	40.32
new.a.01	16.09	24.13	12.67	17.32
internal.a.01	13.06	15.80	16.50	3.38
chief.s.01	10.91	15.97	11.00	6.77
like.a.01	9.34	7.81	10.26	8.53
able.a.01	4.30	5.21	3.96	4.33
capable.s.02	3.68	3.47	4.82	1.35
certain.a.02	3.31	3.65	3.03	3.65
good.a.01	3.20	2.08	3.03	4.47
true.a.01	3.03	1.74	3.09	3.92
different.a.01	2.90	1.91	3.15	3.11
first.a.01	2.59	1.91	2.72	2.84
total	100.00	100.00	100.00	100.00

TABLE S149. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 12

	g.	р.	i.	h.
make.v.03	16.17	14.94	15.36	18.50
act.v.01	14.13	13.52	14.46	14.02
change.v.01	12.79	14.90	11.91	12.76
travel.v.01	10.25	11.26	10.04	9.85
move.v.02	8.08	8.46	7.89	8.11
change.v.02	7.76	7.24	7.09	9.31
use.v.01	7.34	7.03	8.05	6.35
think.v.03	6.53	5.57	7.11	6.25
get.v.01	5.91	5.69	7.07	4.04
necessitate.v.01	3.91	4.52	3.67	3.85
be.v.01	3.83	4.14	4.02	3.25
satisfy.v.02	3.30	2.72	3.33	3.69
total	100.00	100.00	100.00	100.00
interact.v.01	16.38	15.81	16.53	16.53
construct.v.01	13.92	12.54	12.79	17.22
evaluate.v.02	9.48	6.19	11.06	9.10
change_magnitude.v.01	8.49	6.96	8.43	9.86
travel_rapidly.v.01	7.10	8.16	7.89	4.72
put.v.01	7.03	9.02	6.05	7.29
try.v.01	6.86	7.90	6.70	6.32
please.v.01	6.80	5.58	6.63	8.12
empty.v.01	6.32	8.51	7.67	1.94
follow.v.01	6.25	8.59	3.71	9.24
state.v.01	5.76	5.15	6.45	4.93
keep.v.03	5.61	5.58	6.09	4.72
total	100.00	100.00	100.00	100.00
communicate.v.02	23.25	23.42	22.58	24.50
increase.v.01	12.78	10.66	12.33	15.52
run.v.01	10.78	12.50	11.64	7.54
hollow.v.02	9.59	13.03	11.32	3.10
think.v.01	6.91	3.55	9.14	5.10
update.v.01	6.57	6.84	4.09	11.53
save.v.02	6.04	6.05	6.38	5.32
supply.v.01	5.59	3.68	5.58	7.21
name.v.01	5.14	5.00	5.15	5.21
manipulate.v.02	5.08	0.53	5.53	7.98
write.v.01 decide.v.02	4.49 3.78	3.29	4.57 1.70	5.32
				1.66
total	100.00	100.00	100.00	100.00
inform.v.01	26.68	29.54	26.16	25.52
add.v.01	18.57	16.63	16.95	23.60
core.v.01	15.07	21.66	17.36	4.90
record.v.01	9.49	10.07	9.78	8.39
operate.v.03	7.89	0.44	8.48	12.59
	4.34	2.84	5.79	2.45
see.v.05		0.00		
write.v.07	3.77	0.88	3.75	6.12
write.v.07 propose.v.01	3.77 3.01	1.53	3.59	2.97
write.v.07 propose.v.01 roll_up.v.02	3.77 3.01 2.88	1.53 3.94	3.59 2.77	2.97 2.27
write.v.07 propose.v.01 roll_up.v.02 ask.v.01	3.77 3.01 2.88 2.88	1.53 3.94 2.19	3.59 2.77 2.36	2.97 2.27 4.55
write.v.07 propose.v.01 roll_up.v.02 ask.v.01 dispose.v.01	3.77 3.01 2.88 2.88 2.79	1.53 3.94 2.19 5.47	3.59 2.77 2.36 1.14	2.97 2.27 4.55 4.20
write.v.07 propose.v.01 roll_up.v.02 ask.v.01	3.77 3.01 2.88 2.88	1.53 3.94 2.19	3.59 2.77 2.36	2.97 2.27 4.55

TABLE S150. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 12

	g.	p.	i.	h.
besides.r.02	18.93	17.28	20.85	16.60
well.r.01	11.15	9.26	11.88	11.07
even.r.01	8.36	6.79	8.52	9.09
however.r.01	8.13	6.79	7.62	9.88
still.r.01	7.78	6.79	6.28	11.07
presently.r.02	7.32	9.88	7.62	5.14
possibly.r.01	7.20	4.32	8.97	5.93
already.r.01	7.20	6.17	8.97	4.74
truly.r.01	6.97	11.11	4.93	7.91
actually.r.01	5.81	4.32	6.73	5.14
alternatively.r.01	5.57	6.17	4.04	7.91
automatically.r.01	5.57	11.11	3.59	5.53
total	100.00	100.00	100.00	100.00

TABLE S151. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 12

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	65.35	60.73	75.97	72.05
physical_entity.n.01	34.65	39.27	24.03	27.95
total	100.00	100.00	100.00	100.00
measure.n.02	20.33	22.07	31.11	15.88
object.n.01	16.08	17.04	12.01	14.95
psychological_feature.n.01	15.00	10.35	17.76	22.74
communication.n.02	12.91	10.72	12.59	16.75
matter.n.03	10.37	13.69	6.09	5.15
attribute.n.02	9.07	9.90	6.56	7.95
causal_agent.n.01	6.79	7.22	4.12	6.40
group.n.01	4.70	4.68	4.24	4.80
relation.n.01	3.34	3.00	3.66	3.89
thing.n.12	0.89	0.93	0.64	0.86
process.n.06	0.50	0.39	1.16	0.59
set.n.02	0.02	0.00	0.06	0.04
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	22.18	24.32	35.07	16.40
whole.n.02	14.23	14.15	12.66	14.59
event.n.01	10.56	8.23	13.33	14.59
substance.n.01	10.27	13.16	6.85	5.28
cognition.n.01	8.40	4.51	9.38	15.60
person.n.01	8.13	8.12	5.29	8.54
property.n.02	6.08	7.46	2.90	3.90
location.n.01	5.37	6.09	2.31	4.43
message.n.02	4.56	3.32	6.03	6.69
signal.n.01	4.06	5.38	0.67	2.02
written_communication.n.01	3.53	1.94	4.54	6.41
substance.n.07	2.63	3.32	0.97	1.56
total	100.00	100.00	100.00	100.00

TABLE S152. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 13

	g.	p.	i.	h.
like.a.01	18.14	7.70	30.61	30.00
new.a.01	16.09	12.48	16.33	20.58
first.a.01	9.36	10.02	4.08	9.04
strong.a.01	8.46	15.87	0.00	0.00
public.a.01	7.39	8.78	22.45	4.23
better.a.01	7.22	9.86	2.04	4.42
incorrect.a.01	6.57	4.47	6.12	9.23
many.a.01	6.08	7.55	2.04	4.62
solid.s.01	5.34	9.71	0.00	0.38
up-to-the-minute.s.01	5.17	8.78	4.08	0.77
small.a.01	5.17	2.47	2.04	8.85
good.a.01	5.01	2.31	10.20	7.88
total	100.00	100.00	100.00	100.00

TABLE S153. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 13

	g.	p.	i.	h.
act.v.01	15.20	17.35	12.88	14.51
think.v.03	13.75	11.88	9.13	15.02
change.v.01	11.52	9.33	11.24	12.50
travel.v.01	8.47	7.00	12.18	8.73
move.v.02	8.28	14.15	6.32	5.94
make.v.03	8.18	4.99	11.71	9.20
change.v.02	7.85	9.76	6.09	7.21
use.v.01	6.48	2.44	7.49	8.12
get.v.01	6.10	7.70	7.96	5.22
make.v.01	5.96	3.85	6.32	6.83
be.v.01	4.46	2.55	6.56	5.08
transfer.v.05	3.74	9.00	2.11	1.64
total	100.00	100.00	100.00	100.00
evaluate.v.02	24.67	24.84	16.42	25.44
interact.v.01	21.38	28.61	12.94	19.42
state.v.01	7.50	8.71	5.47	7.23
better.v.02	6.24	4.03	6.97	7.03
give.v.03	5.90	12.87	4.48	3.34
keep.v.03	5.43	2.86	6.97	6.27
construct.v.01	5.29	1.04	7.96	6.68
see.v.01	5.16	2.99	10.95	5.41
put.v.01	4.72	4.42	5.97	4.70
look.v.02	4.68	1.82	11.44	5.11
try.v.01	4.58	5.33	6.97	4.05
change_state.v.01	4.45	2.47	3.48	5.31
total	100.00	100.00	100.00	100.00
communicate.v.02	27.89	35.04	19.67	25.44
think.v.01	13.99	6.61	14.75	17.21
expect.v.01	12.51	19.83	9.02	9.56
repair.v.01	6.47	0.33	9.84	8.90
supply.v.01	5.85	11.90	7.38	3.01
increase.v.01	5.80	1.82	9.84	7.21
align.v.01	5.41	18.18	0.00	0.22
name.v.01	5.03	3.31	15.57	4.85
write.v.01	4.46	1.65	3.28	5.81
save.v.02	4.46	1.32	8.20	5.51
match.v.05	4.12	0.00	0.00	6.32
integrate.v.03	4.02	0.00	2.46	5.96
total	100.00	100.00	100.00	100.00
inform.v.01	33.16	34.71	27.66	32.74
add.v.01	9.50	1.93	23.40	12.38
record.v.01	8.18	2.20	21.28	10.32
think.v.02	7.56	17.08	2.13	3.16
balance.v.01	7.56	0.00	0.00	11.83
unify.v.01	7.39	0.00	6.38	11.14
restrain.v.01	5.45	16.25	0.00	0.41
mention.v.01	4.75	0.83	2.13	6.88
see.v.05	4.57	6.06	6.38	3.71
offer.v.01	4.40	13.22	0.00	0.28
overlap.v.01	3.96	2.48	4.26	4.68
talk.v.02	3.52	5.23	6.38	2.48
total	100.00	100.00	100.00	100.00

TABLE S154. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 13

	g.	p.	i.	h.
truly.r.01	13.05	5.91	10.87	14.81
besides.r.02	11.42	11.83	13.04	11.23
actually.r.01	10.17	1.61	10.87	12.10
back.r.01	8.83	31.72	0.00	4.07
even.r.01	8.06	10.22	10.87	7.41
possibly.r.01	8.06	2.15	13.04	9.14
still.r.01	7.87	4.84	6.52	8.64
well.r.01	7.39	10.75	10.87	6.42
already.r.01	6.72	4.30	6.52	7.28
alternatively.r.01	6.33	3.76	8.70	6.79
right.r.01	6.24	7.53	6.52	5.93
never.r.01	5.85	5.38	2.17	6.17
total	100.00	100.00	100.00	100.00

TABLE S155. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 13

	g.	p.	i.	h.
NOUN	32.59	35.12	31.90	30.25
X	0.31	0.77	0.11	0.15
ADP	11.65	10.75	11.89	12.49
DET	11.35	11.10	11.44	11.52
VERB	20.82	20.13	21.18	20.82
ADJ	5.27	4.96	5.30	5.78
ADV	5.41	5.03	5.58	5.52
PRT	3.34	3.06	3.39	3.69
PRON	5.26	5.31	5.09	5.79
NUM	0.94	0.81	1.00	1.00
CONJ	3.06	2.94	3.14	2.99
PUNC	0.00	0.00	0.00	0.00
N	64.11	65.48	63.90	62.21
ADJ	9.09	8.58	9.03	10.28
VERB	4.28	4.21	4.28	4.43
ADV	22.52	21.73	22.79	23.08
POS	35.10	33.25	36.14	35.12
POS!	94.46	93.24	95.02	94.78

TABLE S156. Percentage of synsets with each of the POS tags used by Wordnet. The last lines give the percentage of words considered from all of the tokens (POS) and from the words with synset (POS!). The tokens not considered are punctuations, unrecognized words, words without synsets, stopwords and words for which Wordnet has no synset tagged with POS tags. Values for each Erdös sectors are in the columns **p.** for periphery, **i.** for intermediary, **h.** for hubs. TAG: 15

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	65.82	65.11	66.56	63.43
physical_entity.n.01	34.18	34.89	33.44	36.57
total	100.00	100.00	100.00	100.00
measure.n.02	23.47	18.80	26.32	20.17
object.n.01	15.72	15.88	15.18	18.58
psychological_feature.n.01	14.73	14.80	14.63	15.17
causal_agent.n.01	11.16	11.24	11.52	8.69
communication.n.02	10.76	12.45	9.77	11.67
attribute.n.02	8.97	9.10	8.80	9.63
group.n.01	5.37	6.58	4.89	4.54
matter.n.03	5.26	6.11	4.75	5.87
relation.n.01	2.53	3.37	2.15	2.25
process.n.06	1.50	1.23	1.58	1.80
thing.n.12	0.53	0.42	0.41	1.63
set.n.02	0.00	0.01	0.00	0.00
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	22.37	18.00	24.78	20.62
whole.n.02	15.46	14.26	15.38	19.92
person.n.01	13.67	14.16	13.82	11.15
event.n.01	12.95	13.28	12.66	13.77
cognition.n.01	6.00	5.88	6.00	6.38
substance.n.01	5.20	6.45	4.43	6.25
state.n.02	4.82	5.40	4.51	4.93
message.n.02	4.72	4.72	4.68	5.05
fundamental_quantity.n.01	4.29	3.81	4.93	1.67
location.n.01	4.26	5.53	3.58	4.67
written_communication.n.01	3.29	3.83	2.95	3.79
social_group.n.01	2.96	4.67	2.29	1.80
total	100.00	100.00	100.00	100.00

TABLE S157. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 15

	g.	p.	i.	h.
capable.s.02	19.84	22.40	21.82	0.00
new.a.01	15.54	19.53	13.40	20.13
like.a.01	13.83	10.68	13.40	24.68
able.a.01	8.91	11.20	8.33	7.14
certain.a.02	7.01	4.69	7.37	10.39
good.a.01	5.87	2.60	6.70	8.44
full.a.01	5.37	6.25	5.45	2.60
net.a.01	5.05	5.47	4.88	5.19
spare.s.01	4.80	1.04	6.41	3.25
all_right.s.01	4.80	5.47	4.21	7.14
local.a.01	4.49	6.77	3.16	7.79
best.a.01	4.49	3.91	4.88	3.25
total	100.00	100.00	100.00	100.00

TABLE S158. Counts for the most incident synsets at the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). Yes. TAG: 15

	g.	p.	i.	h.
act.v.01	16.38	17.44	16.15	15.41
travel.v.01	12.12	11.83	12.55	10.58
move.v.02	11.58	13.28	11.75	7.54
make.v.03	9.13	7.01	9.36	12.11
change.v.01	9.01	10.74	8.09	10.08
use.v.01	8.73	8.06	8.94	9.06
think.v.03	8.17	6.40	8.71	8.98
get.v.01	7.14	7.71	7.27	5.42
change.v.02	5.60	7.06	4.83	6.52
connect.v.01	4.19	4.03	4.37	3.64
express.v.02	4.01	3.42	3.86	5.84
perceive.v.01	3.94	3.02	4.13	4.83
total	100.00	100.00	100.00	100.00
interact.v.01	19.68	21.82	18.57	21.01
evaluate.v.02	13.47	11.09	14.41	13.45
travel_rapidly.v.01	10.67	10.55	11.10	8.91
state.v.01	8.01	7.00	7.68	11.43
send.v.01	7.99	10.45	8.54	0.84
put.v.01	7.97	8.45	7.51	9.24
create_verbally.v.01	7.08	5.09	7.01	11.09
try.v.01	5.86	6.73	5.59	5.55
see.v.01	5.66	3.36	6.26	7.06
attach.v.01	5.30	4.18	5.80	5.04
handle.v.04	4.22	3.00	4.55	4.87
give.v.03	4.08	8.27	2.99	1.51
total	100.00	100.00	100.00	100.00
communicate.v.02	28.68	33.14	27.36	26.56
run.v.01	16.95	16.50	17.82	13.80
write.v.01	11.24	7.97	11.25	17.19
manipulate.v.02	6.66	4.55	7.31	7.55
think.v.01	6.24	4.41	6.68	7.55
read.v.01	5.50	3.13	6.00	7.55
convey.v.03	4.58	6.26	4.74	0.78
increase.v.01	4.30	3.84	4.23	5.47
rate.v.01	4.05	5.41	3.88	2.34
save.v.02	4.05	3.98	4.00	4.43
expect.v.01	3.95	2.28	4.28	5.47
supply.v.01	3.81	8.53	2.46	1.30
total	100.00	100.00	100.00	100.00
inform.v.01	30.71	38.28	29.24	21.62
operate.v.03	11.66	7.42	12.69	15.68
talk.v.02	8.06	5.02	9.42	7.57
record.v.01	7.13	6.70	6.94	9.19
upgrade.v.01	7.01	8.85	6.64	4.86
write.v.07	6.51	7.18	5.85	8.65
add.v.01	5.96	4.78	5.75	9.73
permit.v.01	5.58	3.83	6.34	5.41
communicate.v.01	5.52	8.13	5.15	1.62
see.v.05	4.53	4.55	4.66	3.78
replace.v.01	3.85	2.39	3.87	7.03
address.v.01	3.47	2.87	3.47	4.86
total	100.00	100.00	100.00	100.00
	1	1		

TABLE S159. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 15

	g.	p.	i.	h.
besides.r.02	19.73	31.72	18.36	13.11
well.r.01	11.93	13.44	11.26	13.11
back.r.01	9.69	9.14	10.19	8.20
still.r.01	9.33	8.06	8.45	14.21
actually.r.01	8.16	5.38	8.58	9.29
however.r.01	7.17	9.68	7.64	2.73
even.r.01	6.91	6.45	5.90	11.48
originally.r.01	6.28	1.08	8.98	0.55
truly.r.01	5.74	2.69	5.63	9.29
presently.r.02	5.38	6.45	5.50	3.83
never.r.01	4.84	5.38	4.69	4.92
possibly.r.01	4.84	0.54	4.83	9.29
total	100.00	100.00	100.00	100.00

TABLE S160. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 15

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	70.25	72.61	69.35	67.43
physical_entity.n.01	29.75	27.39	30.65	32.57
total	100.00	100.00	100.00	100.00
measure.n.02	22.32	16.98	30.44	21.31
communication.n.02	18.13	25.32	10.71	15.20
object.n.01	17.35	16.45	17.69	18.41
psychological_feature.n.01	12.96	8.55	15.20	17.53
attribute.n.02	9.75	14.45	5.63	6.98
matter.n.03	6.61	6.65	6.59	6.57
causal_agent.n.01	4.65	3.46	5.29	5.82
group.n.01	3.94	3.82	4.87	3.01
relation.n.01	3.16	3.49	2.50	3.39
thing.n.12	0.71	0.40	0.67	1.27
process.n.06	0.44	0.43	0.41	0.49
set.n.02	0.00	0.00	0.00	0.02
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	24.09	17.56	33.94	23.02
whole.n.02	13.85	9.13	16.60	18.46
signal.n.01	9.57	20.29	1.16	1.73
event.n.01	9.05	6.41	9.54	12.93
substance.n.01	6.81	6.86	6.65	6.95
property.n.02	6.56	12.46	2.18	1.95
cognition.n.01	6.14	3.58	8.22	7.92
location.n.01	6.06	9.77	3.38	3.06
person.n.01	5.41	3.96	6.15	6.96
message.n.02	5.32	4.25	5.25	7.23
written_communication.n.01	3.57	2.71	3.48	5.13
state.n.02	3.57	3.03	3.45	4.64
total	100.00	100.00	100.00	100.00

TABLE S161. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 16

	g.	р.	i.	h.
like.a.01	12.93	12.14	13.44	12.77
new.a.01	11.23	11.43	7.66	14.89
inactive.s.10	10.58	7.14	10.00	12.77
common.a.01	10.19	0.71	12.66	11.95
local.a.01	9.86	5.00	13.59	8.18
net.a.01	9.86	20.00	5.78	9.49
chief.s.01	9.01	22.50	8.75	3.11
different.a.01	6.01	4.64	7.34	5.24
current.a.01	5.49	2.14	5.47	7.04
certain.a.02	5.03	5.36	5.31	4.58
dynamic.a.01	4.90	6.07	5.31	3.93
possible.a.01	4.90	2.86	4.69	6.06
total	100.00	100.00	100.00	100.00

TABLE S162. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 16

	g.	p.	i.	h.
act.v.01	15.58	27.48	11.12	11.62
make.v.03	11.61	7.65	13.79	12.19
move.v.02	11.05	12.13	10.72	10.61
think.v.03	10.57	7.86	11.89	11.14
use.v.01	9.54	5.55	10.92	10.99
travel.v.01	8.33	7.98	8.60	8.30
change.v.01	7.61	5.14	7.91	9.08
make.v.01	6.52	7.40	5.48	6.98
change.v.02	5.41	5.88	4.85	5.66
get.v.01	5.01	6.46	4.77	4.22
be.v.01	4.66	4.32	4.71	4.85
exist.v.01	4.11	2.14	5.25	4.34
total	100.00	100.00	100.00	100.00
interact.v.01	14.04	16.20	12.32	14.29
evaluate.v.02	13.13	7.94	14.39	15.69
put.v.01	13.05	10.80	13.84	13.87
construct.v.01	9.82	6.75	11.02	10.83
check.v.01	7.17	1.75	8.63	9.67
set_about.v.01	7.08	26.45	0.11	0.06
coexist.v.02	7.06	3.97	9.34	6.87
state.v.01	6.66	5.32	7.38	6.87
keep.v.03	6.28	3.97	8.20	5.90
associate.v.01	6.13	5.88	7.11	5.23
try.v.01	4.93	5.64	5.05	4.26
give.v.03	4.66	5.32	2.61	6.45
total	100.00	100.00	100.00	100.00
communicate.v.02	20.79	22.33	18.18	22.61
install.v.01	11.88	7.44	12.44	15.01
confront.v.02	11.31	39.98	0.17	0.10
coincide.v.01	11.27	6.00	14.75	11.61
think.v.01	7.13	3.72	8.92	7.91
increase.v.01	7.07	3.96	7.03	9.76
run.v.01	6.12	3.24	7.20	7.30
store.v.01	5.79	3.96	7.72	5.04
expect.v.01	5.08	2.52	5.49	6.78
repair.v.01	4.74	1.92	5.23	6.58
declare.v.01	4.51	2.88	5.32	4.93
write.v.01	4.31	2.04	7.55	2.36
total	100.00	100.00	100.00	100.00
inform.v.01	25.74	36.44	20.28	25.97
overlap.v.01	19.76	14.12	23.75	18.34
add.v.01	11.48	8.19	10.83	14.12
roll_up.v.02	10.06	9.32	12.36	7.79
record.v.01	7.16	4.24	8.33	7.47
communicate.v.01	4.08	7.63	3.19	3.08
think.v.02	3.96	0.85	6.11	3.25
promise.v.01	3.85	4.80	4.72	2.27
believe.v.01	3.67	5.08	2.78	3.90
propose.v.01	3.55	1.98	3.47	4.55
assume.v.01	3.37	3.39	1.39	5.68
talk.v.02	3.31	3.95	2.78	3.57
total	100.00	100.00	100.00	100.00

TABLE S163. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (**p.** for periphery, **i.** for intermediary, **h.** for hubs). TAG: 16

	g.	p.	i.	h.
besides.r.02	13.75	19.35	12.53	12.56
well.r.01	10.51	8.60	12.04	9.91
even.r.01	9.74	5.91	8.35	12.56
still.r.01	9.65	9.14	11.06	8.59
truly.r.01	8.60	6.99	11.79	6.39
already.r.01	8.40	13.44	6.63	7.93
alternatively.r.01	7.93	6.45	6.88	9.47
possibly.r.01	7.64	4.30	7.37	9.25
however.r.01	6.59	2.15	6.63	8.37
actually.r.01	6.40	3.23	7.13	7.05
first.r.01	5.54	12.90	4.42	3.52
always.r.01	5.25	7.53	5.16	4.41
total	100.00	100.00	100.00	100.00

TABLE S164. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 16

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	64.41	66.92	63.85	64.22
physical_entity.n.01	35.59	33.08	36.15	35.78
total	100.00	100.00	100.00	100.00
measure.n.02	22.91	23.80	22.36	23.10
object.n.01	20.04	21.24	19.00	20.53
psychological_feature.n.01	15.92	16.62	15.04	16.41
communication.n.02	11.21	12.66	11.77	10.43
causal_agent.n.01	8.87	7.37	9.51	8.76
attribute.n.02	7.54	7.06	7.14	7.97
matter.n.03	5.52	3.01	6.93	5.08
group.n.01	4.05	4.19	4.45	3.71
relation.n.01	2.78	2.59	3.08	2.60
thing.n.12	0.73	0.62	0.54	0.89
process.n.06	0.43	0.84	0.17	0.51
set.n.02	0.00	0.00	0.00	0.01
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	24.06	25.44	22.95	24.56
whole.n.02	19.02	20.68	17.99	19.38
event.n.01	11.85	12.89	12.39	11.18
person.n.01	10.03	8.36	10.85	9.82
cognition.n.01	6.79	6.66	5.24	7.99
message.n.02	6.19	6.39	6.79	5.68
substance.n.01	6.03	2.86	7.66	5.59
location.n.01	3.84	3.23	4.03	3.84
state.n.02	3.67	4.86	3.50	3.50
written_communication.n.01	3.47	3.93	3.69	3.20
shape.n.02	2.61	1.76	2.37	2.99
collection.n.01	2.45	2.93	2.54	2.27
total	100.00	100.00	100.00	100.00

TABLE S165. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 17

	g.	р.	i.	h.
public.a.01	29.35	12.42	42.72	19.01
new.a.01	10.96	13.66	9.21	12.20
like.a.01	10.28	12.42	9.61	10.50
capable.s.02	8.48	4.35	9.88	7.94
net.a.01	7.93	1.24	1.34	16.45
virtual.s.01	5.76	6.83	4.67	6.67
able.a.01	5.33	6.21	5.74	4.68
certain.a.02	5.20	4.35	3.74	6.95
available.a.01	4.46	6.83	4.14	4.26
all_right.s.01	4.33	18.63	3.07	2.41
false.a.01	4.15	4.97	3.34	4.82
true.a.01	3.78	8.07	2.54	4.11
total	100.00	100.00	100.00	100.00

TABLE S166. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 17

	g.	p.	i.	h.
move.v.02	14.30	17.37	14.71	13.26
act.v.01	13.52	15.74	13.64	12.92
change.v.01	12.39	14.52	13.34	11.14
travel.v.01	10.86	9.63	10.74	11.23
make.v.03	9.60	8.01	9.44	10.09
use.v.01	7.38	5.43	7.22	7.96
think.v.03	7.13	8.28	5.73	7.99
change.v.02	6.78	6.24	7.11	6.63
connect.v.01	5.15	5.56	6.15	4.26
get.v.01	4.65	4.48	5.24	4.23
perceive.v.01	4.37	2.99	3.82	5.12
necessitate.v.01	3.88	1.76	2.87	5.18
total	100.00	100.00	100.00	100.00
put.v.01	16.24	24.23	16.10	14.47
interact.v.01	12.14	13.01	11.99	12.07
evaluate.v.02	11.25	11.22	8.71	13.45
try.v.01	10.14	12.76	10.66	9.07
travel_rapidly.v.01	9.25	6.12	9.20	10.03
change_magnitude.v.01	8.76	6.89	8.71	9.25
see.v.01	6.79	4.08	5.85	8.23
state.v.01	5.36	5.10	4.95	5.77
keep.v.03	5.21	4.85	6.97	3.78
send.v.01	5.15	3.57	5.85	4.92
spice.v.01	4.87	2.04	6.41	4.20
attach.v.01	4.84	6.12	4.60	4.74
total	100.00	100.00	100.00	100.00
communicate.v.02	16.88	17.25	16.50	17.11
install.v.01	15.82	22.18	17.82	12.41
run.v.01	14.31	8.45	14.52	15.70
increase.v.01	13.47	9.15	13.64	14.47
hollow.v.02	6.87	17.61	4.73	5.83
think.v.01	6.56	7.04	4.29	8.36
save.v.02	6.47	4.93	8.91	4.79
write.v.01	4.52	1.41	5.94	4.14
name.v.01	4.47	3.87	3.30	5.64
expect.v.01	4.16 3.32	3.17	3.74	4.79
repair.v.01 update.v.01	3.32	2.46	2.64 3.96	2.63
total	100.00		100.00	100.00
	1			
inform.v.01	22.22	24.48	22.05	21.73
add.v.01	21.85	17.48	22.50	22.54
core.v.01 record.v.01	14.35	34.97	9.77	12.47
grow.v.02	13.52	9.79	18.41	10.26
overlap.v.01	6.11 3.70	0.00	5.45 3.41	8.45 4.63
assume.v.01	3.33	3.50	2.73	3.82
operate.v.03	3.24	2.10	2.73	4.23
propose.v.01	3.06	4.20	2.95	2.82
configure.v.01	3.06	1.40	3.41	3.22
ask.v.01	2.87	0.00	2.50	4.02
enumerate.v.01	2.69	0.70	4.32	1.81
total	100.00	100.00	100.00	100.00
ισιαι	1100.00	100.00	100.00	100.00

TABLE S167. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 17

	g.	p.	i.	h.
besides.r.02	19.68	18.06	22.76	17.66
still.r.01	13.60	11.11	16.04	12.25
possibly.r.01	8.25	9.72	10.07	6.55
well.r.01	8.10	6.94	4.85	10.83
yet.r.01	7.67	4.17	8.21	7.98
manually.r.01	7.24	6.94	8.21	6.55
however.r.01	7.09	8.33	8.21	5.98
already.r.01	7.09	4.17	5.22	9.12
first.r.01	6.37	11.11	4.48	6.84
probably.r.01	5.21	6.94	3.73	5.98
truly.r.01	5.07	8.33	4.10	5.13
presently.r.02	4.63	4.17	4.10	5.13
total	100.00	100.00	100.00	100.00

TABLE S168. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 17

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	68.60	61.52	71.78	69.36
physical_entity.n.01	31.40	38.48	28.22	30.64
total	100.00	100.00	100.00	100.00
communication.n.02	19.74	19.42	19.64	19.88
object.n.01	19.19	24.69	16.18	18.81
measure.n.02	17.16	14.35	20.05	16.81
psychological_feature.n.01	16.05	9.58	17.45	17.36
attribute.n.02	8.43	11.56	7.82	7.77
matter.n.03	5.19	8.22	4.58	4.57
causal_agent.n.01	4.83	3.53	5.26	5.03
group.n.01	4.49	3.68	4.36	4.77
relation.n.01	2.71	2.90	2.45	2.76
thing.n.12	1.34	1.25	1.62	1.25
process.n.06	0.85	0.80	0.58	0.98
set.n.02	0.02	0.03	0.01	0.01
total	100.00	100.00	100.00	100.00
whole.n.02	17.85	24.12	14.39	17.26
definite_quantity.n.01	17.36	14.62	20.22	17.08
event.n.01	12.45	7.22	14.42	13.31
cognition.n.01	8.10	4.21	8.34	9.23
message.n.02	7.35	4.21	7.15	8.42
location.n.01	6.16	5.08	5.94	6.58
person.n.01	6.06	3.67	6.77	6.54
written_communication.n.01	5.73	2.69	6.77	6.27
substance.n.01	5.43	8.33	4.79	4.77
property.n.02	5.23	10.84	4.72	3.66
indication.n.01	4.41	2.60	4.58	4.92
signal.n.01	3.87	12.42	1.92	1.95
total	100.00	100.00	100.00	100.00

TABLE S169. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 18

	g.	p.	i.	h.
like.a.01	18.51	13.16	17.00	19.52
new.a.01	11.41	15.79	13.20	10.41
good.a.01	8.80	7.89	6.94	9.46
able.a.01	7.68	4.61	7.16	8.16
first.a.01	7.44	8.55	8.28	7.07
possible.a.01	7.44	6.58	9.84	6.80
free.a.01	6.96	9.21	5.37	7.21
net.a.01	6.86	11.84	6.26	6.53
different.a.01	6.81	3.95	6.71	7.14
certain.a.02	6.52	1.32	7.16	6.87
much.a.01	5.85	8.55	5.82	5.58
small.a.01	5.70	8.55	6.26	5.24
total	100.00	100.00	100.00	100.00

TABLE S170. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 18

	g.	p.	i.	h.
act.v.01	13.98	20.85	14.58	12.86
use.v.01	10.96	7.37	10.89	11.46
think.v.03	10.40	9.49	10.52	10.47
change.v.01	10.12	6.62	11.72	10.01
make.v.03	9.01	5.74	8.44	9.65
change.v.02	8.87	22.35	8.86	7.10
move.v.02	7.83	6.62	7.84	7.99
travel.v.01	7.34	5.62	7.93	7.36
make.v.01	6.75	4.37	5.95	7.35
express.v.02	5.14	5.12	5.30	5.09
desire.v.01	4.86	2.37	4.61	5.27
necessitate.v.01	4.73	3.50	3.37	5.39
total	100.00	100.00	100.00	100.00
interact.v.01	20.36	30.23	21.33	18.96
evaluate.v.02	16.42	17.36	17.96	15.78
state.v.01	10.75	12.86	10.95	10.46
change_magnitude.v.01	7.59	7.72	6.63	7.92
create_verbally.v.01	7.36	4.18	5.57	8.33
keep.v.03	7.05	2.57	8.07	7.17
put.v.01	6.70	2.89	4.90	7.75
interpret.v.01	6.02	7.07	5.19	6.21
attach.v.01	5.22	1.93	5.76	5.38
see.v.01	4.62	6.75	5.67	4.01
manage.v.02	4.08	3.54	4.13	4.12
label.v.01	3.82	2.89	3.84	3.91
total	100.00	100.00	100.00	100.00
communicate.v.02	26.18	23.92	29.28	25.48
think.v.01	13.38	9.14	16.27	13.15
write.v.01	10.33	3.49	8.20	12.39
increase.v.01	9.67	5.91	9.05	10.60
read.v.01	7.93	4.57	7.07	8.87
store.v.01	6.22	0.81	7.64	6.73
name.v.01	5.29	2.42	5.66	5.71
align.v.01	4.70	36.56	0.42	0.20
declare.v.01	4.51	4.30	5.09	4.33
expect.v.01	4.44	2.69	4.10	4.89
encode.v.01	3.68	5.65	3.82	3.26
tag.v.01	3.68	0.54	3.39	4.38
total	100.00	100.00	100.00	100.00
inform.v.01	28.44	46.83	23.25	27.98
add.v.01	17.67	11.11	17.09	18.72
record.v.01	7.30	3.97	8.12	7.43
write.v.02	6.62	2.38	12.89	4.88
talk.v.01	5.46	7.14	5.04	5.39
ask.v.01	5.39	8.73	5.32	4.98
mention.v.01	5.18	4.76	1.96	6.41
think.v.02	5.12	3.17	5.32	5.29
propose.v.01	4.84	3.17	6.72	4.37
code.v.01	4.77	0.79	4.76	5.29
talk.v.02	4.71	0.79	5.60	4.88
see.v.05	4.50	7.14	3.92	4.37
total	100.00	100.00	100.00	100.00

TABLE S171. Counts for the most incident synsets three step from the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). TAG: 18

	g.	p.	i.	h.
besides.r.02	18.75	13.21	19.69	18.91
possibly.r.01	12.20	16.04	12.02	11.96
already.r.01	10.87	9.43	9.46	11.38
well.r.01	10.55	10.38	9.21	10.94
even.r.01	8.84	5.66	6.14	9.86
still.r.01	8.74	10.38	7.93	8.84
truly.r.01	7.35	3.77	9.97	6.88
probably.r.01	5.91	5.66	7.67	5.43
merely.r.01	4.42	5.66	4.09	4.42
yet.r.01	4.42	8.49	4.60	4.06
back.r.01	4.05	8.49	4.86	3.48
presently.r.02	3.89	2.83	4.35	3.84
total	100.00	100.00	100.00	100.00

TABLE S172. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 18

	g.	p.	i.	h.
entity.n.01	100.00	100.00	100.00	100.00
total	100.00	100.00	100.00	100.00
abstraction.n.06	71.95	69.56	68.23	74.32
physical_entity.n.01	28.05	30.44	31.77	25.68
total	100.00	100.00	100.00	100.00
psychological_feature.n.01	18.81	14.81	16.29	21.38
measure.n.02	15.95	19.13	15.46	14.85
communication.n.02	14.52	18.05	13.85	13.34
object.n.01	13.56	13.46	16.71	12.42
group.n.01	10.55	6.20	11.31	12.02
attribute.n.02	8.63	8.49	8.29	8.82
causal_agent.n.01	7.67	4.50	8.82	8.52
matter.n.03	5.43	11.31	5.13	3.16
relation.n.01	3.48	2.87	3.04	3.89
process.n.06	0.84	0.56	0.38	1.13
thing.n.12	0.55	0.61	0.73	0.45
set.n.02	0.01	0.00	0.00	0.02
total	100.00	100.00	100.00	100.00
definite_quantity.n.01	16.11	22.14	15.60	13.98
event.n.01	14.53	12.16	12.61	16.19
whole.n.02	12.30	12.29	15.79	10.96
cognition.n.01	9.33	7.47	7.43	10.79
person.n.01	9.25	5.78	10.58	10.08
message.n.02	8.84	9.76	7.89	8.85
collection.n.01	7.68	3.91	8.05	8.99
substance.n.01	5.69	12.70	5.21	3.17
state.n.02	5.43	2.81	5.49	6.42
location.n.01	3.88	4.44	3.68	3.74
social_group.n.01	3.61	2.69	3.96	3.83
written_communication.n.01	3.34	3.85	3.71	3.01
total	100.00	100.00	100.00	100.00

TABLE S173. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 19

	g.	p.	i.	h.
new.a.01	19.22	31.50	13.06	18.79
like.a.01	18.24	6.50	20.18	20.13
public.a.01	10.06	22.00	17.51	4.59
excess.s.01	9.36	1.50	12.17	10.07
good.a.01	9.29	8.50	6.53	10.51
old.a.01	5.38	4.00	3.86	6.26
many.a.01	5.17	4.50	5.04	5.37
current.a.01	5.03	3.00	5.93	5.15
certain.a.02	4.96	3.00	3.56	5.93
first.a.01	4.47	7.50	4.15	3.91
much.a.01	4.40	4.00	3.56	4.81
small.a.01	4.40	4.00	4.45	4.47
total	100.00	100.00	100.00	100.00

TABLE S174. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 19

	g.	p.	i.	h.
act.v.01	14.02	14.19	11.91	14.74
think.v.03	13.35	8.65	12.53	14.54
move.v.02	9.81	12.13	9.84	9.35
change.v.02	9.69	8.26	9.15	10.16
make.v.03	9.66	10.45	10.67	9.15
travel.v.01	8.23	9.16	8.60	7.92
make.v.01	7.55	10.84	10.12	6.00
change.v.01	6.99	7.10	8.33	6.50
use.v.01	5.64	5.42	5.99	5.56
get.v.01	5.44	5.16	4.89	5.68
desire.v.01	5.24	4.13	4.54	5.71
express.v.02	4.37	4.52	3.44	4.68
total	100.00	100.00	100.00	100.00
evaluate.v.02	23.05	17.11	21.63	24.51
interact.v.01	16.86	21.83	14.37	16.84
put.v.01	9.68	12.39	12.86	8.17
state.v.01	8.98	10.32	7.56	9.22
construct.v.01	6.98	8.55	9.08	6.03
change_magnitude.v.01	5.75	6.78	4.84	5.88
choose.v.01	5.35	5.90	3.78	5.78
modify.v.01	5.19	3.83	6.20	5.08
see.v.01	4.82	4.72	4.99	4.78
take.v.01	4.49	1.18	4.39	5.08
re-create.v.01	4.42	2.65	5.60	4.33
try.v.01	4.42	4.72	4.69	4.29
total	100.00	100.00	100.00	100.00
communicate.v.02	23.78	29.39	19.12	24.36
think.v.01	20.08	14.47	19.82	21.17
increase.v.01	8.47	10.09	6.91	8.72
update.v.01	6.83	5.26	8.06	6.69
install.v.01	6.63	11.40	11.52	4.12
accept.v.01	5.80	3.07	3.46	7.08
bend.v.01	5.80	5.26	6.45	5.68
stage.v.01	5.65	2.63	6.91	5.76
repair.v.01	4.52	4.39	6.22	3.97
write.v.01	4.31	4.39	5.30	3.97
supply.v.01	4.16	7.02	3.23	3.97
read.v.01	3.95	2.63	3.00	4.51
total	100.00	100.00	100.00	100.00
inform.v.01	24.55	35.48	27.78	21.81
add.v.01	14.18	15.32	15.15	13.72
arch.v.01	10.66	9.68	14.14	9.88
see.v.05	8.28	7.26	6.06	9.05
believe.v.01	7.33	2.42	6.06	8.50
submit.v.01	6.95	5.65	8.08	6.86
ask.v.01	5.61	2.42	5.56	6.17
mention.v.01	4.95	3.23	2.53	5.90
roll_up.v.02	4.76	7.26	9.09	3.16
propose.v.01	4.66	4.84	3.03	5.08
talk.v.02	4.28	0.81	1.52	5.62
write.v.02	3.81	5.65	1.01	4.25
total	100.00	100.00	100.00	100.00

TABLE S175. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 19

	g.	р.	i.	h.
besides.r.02	18.67	23.81	18.97	17.98
well.r.01	12.51	11.90	14.36	12.08
truly.r.01	10.80	7.14	9.74	11.52
possibly.r.01	9.89	9.52	10.77	9.69
still.r.01	9.49	14.29	8.72	9.13
already.r.01	7.27	8.33	8.72	6.74
even.r.01	6.46	5.95	3.59	7.30
actually.r.01	5.85	4.76	6.67	5.76
enough.r.01	5.25	2.38	2.05	6.46
probably.r.01	5.15	7.14	5.13	4.92
presently.r.02	4.34	1.19	5.13	4.49
anyhow.r.01	4.34	3.57	6.15	3.93
total	100.00	100.00	100.00	100.00

TABLE S176. Counts for the most incident synsets at the semantic roots in each Erdös sector ( $\mathbf{p}$ . for periphery,  $\mathbf{i}$ . for intermediary,  $\mathbf{h}$ . for hubs). Yes. TAG: 19

## C. Differentiation of the texts from Erdös sectors

## 1. Snapshots of 1000 messages

	g.	p.	i.	h.
g.	0.000	1.978	1.133	1.594
			0.007	
p.			1.803	
			0.017	
i.			0.000	
			0.000	
h.			2.245	
	0.008	0.025	0.014	0.000

TABLE S177. KS distances on size of tokens. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.	0.000			
			0.020	
p.			2.119	
			0.037	
i.			0.000	
	0.020	0.037	0.000	0.030
h.	1.261			
	0.011	0.017	0.030	0.000

TABLE S178. KS distances on size of known words. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.	0.000	1.674	1.025	1.433
			0.032	
p.			1.196	
			0.061	
i.			0.000	
			0.000	
h.	1.433			
	0.038	0.112	0.070	0.000

TABLE S179. KS distances on size of sentences. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.				1.065
		0.055		
p.	1.194			
		0.000		
i.	1.025			
		0.042		
h.	1.065			
	0.028	0.076	0.060	0.000

TABLE S180. KS distances on use of adjectives on sentences. TAG: 0. TAG: 0

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	2.002	0.263	0.866
		0.092		
p.	2.002			
		0.000		
i.	0.263			
		0.093		
h.	0.866			
	0.023	0.113	0.028	0.000

TABLE S181. KS distances on use of substantives on sentences. TAG: 0. TAG: 0

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	1.739	0.882	1.396
		0.080		
p.	1.739			
	0.080	0.000	0.061	0.117
i.	0.882			
		0.061		
h.	1.396			
	0.037	0.117	0.064	0.000

TABLE S182. KS distances on use of punctuations on sentences. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.	0.000			
		0.057		
p.	0.592			
		0.000		
i.	1.230			
		0.094		
h.		0.908		
	0.059	0.093	0.132	0.000

TABLE S183. KS distances on use of number of characters in messages. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.			0.457	
	0.000	0.098	0.027	0.030
p.			1.062	
	0.098	0.000	0.102	0.128
i.	0.457			
	0.027	0.102	0.000	0.031
h.	0.624			
	0.030	0.128	0.031	0.000

TABLE S184. KS distances on use of verbs in each 100 tokens. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.				0.606
			0.017	
p.			5.957	
			0.053	
i.			0.000	
			0.000	
h.	0.606			
	0.003	0.040	0.015	0.000

TABLE S185. KS distances on size of tokens. TAG: 2. TAG:  $^{2}$ 

	g.	p.	i.	h.
g.			1.611	
	0.000	0.019	0.022	0.010
p.			1.941	
	0.019	0.000	0.039	0.013
i.	1.611	1.941	0.000	2.105
	0.022	0.039	0.000	0.031
h.	0.856			
	0.010	0.013	0.031	0.000

TABLE S186. KS distances on size of known words. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.				0.602
			0.022	
p.	0.775			
	0.031	0.000	0.040	0.040
i.	0.760			
	0.022	0.040	0.000	0.031
h.	0.602			
	0.015	0.040	0.031	0.000

TABLE S187. KS distances on size of sentences. TAG: 2. TAG: 2

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	0.467	0.510	0.151
		0.018		
p.	0.467			
		0.000		
i.	0.510	0.743	0.000	0.577
		0.033		
h.	0.151			
	0.004	0.015	0.018	0.000

TABLE S188. KS distances on use of adjectives on sentences. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.		1.014		
		0.040		
p.		0.000		
		0.000		
i.	0.990			
		0.046		
h.	0.770			
	0.019	0.049	0.047	0.000

TABLE S189. KS distances on use of substantives on sentences. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.	0.000	0.706	0.689	0.331
		0.028		
p.	0.706			
		0.000		
i.	0.689			
		0.043		
h.	0.331			
	0.008	0.027	0.028	0.000

TABLE S190. KS distances on use of punctuations on sentences. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.	0.000			
		0.074		
p.	0.835			
	0.074	0.000	0.078	0.099
i.	0.510			
	0.033	0.078	0.000	0.057
h.	0.534			
	0.029	0.099	0.057	0.000

TABLE S191. KS distances on use of number of characters in messages. TAG: 2. TAG: 2

	g.	р.	i.	h.
g.	0.000			
	0.000	0.086	0.039	0.019
p.	1.126			
		0.000		
i.	0.637			
	0.039	0.108	0.000	0.050
h.	0.362			
	0.019	0.104	0.050	0.000

TABLE S192. KS distances on use of verbs in each 100 tokens. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.	0.000	2.199	5.940	8.368
	0.000	0.016	0.025	0.038
p.	2.199	0.000	1.387	6.894
	0.016	0.000	0.011	0.054
i.	5.940	1.387	0.000	12.185
	0.025	0.011	0.000	0.063
h.	8.368	6.894	12.185	0.000
	0.038	0.054	0.063	0.000

TABLE S193. KS distances on size of tokens. TAG: 3. TAG:  $^{3}$ 

	g.	p.	i.	h.
g.			2.324	
			0.019	
p.			2.518	
			0.037	
i.	2.324			
			0.000	
h.	2.210			
	0.019	0.020	0.038	0.000

TABLE S194. KS distances on size of known words. TAG: 3. TAG: 3

	g.	p.	i.	h.
g.	0.000	1.437	1.888	2.391
	0.000	0.058	0.043	0.053
p.		0.000		
		0.000		
i.		0.651		
	0.043	0.028	0.000	0.097
h.	2.391			
	0.053	0.120	0.097	0.000

TABLE S195. KS distances on size of sentences. TAG: 3. TAG: 3

	g.	p.	i.	h.
g.			0.986	
			0.023	
p.	0.447			
			0.020	
i.	0.986	0.478	0.000	1.735
	1		0.000	l
h.			1.735	
	0.024	0.041	0.046	0.000

TABLE S196. KS distances on use of adjectives on sentences. TAG: 3. TAG:  $3\,$ 

	g.	p.	i.	h.
g.		1.727		
		0.069		
p.		0.000		
		0.000		
i.	1.299			
		0.047		
h.	1.795			
	0.040	0.109	0.070	0.000

TABLE S197. KS distances on use of substantives on sentences. TAG: 3. TAG:  $3\,$ 

	g.	p.	i.	h.
g.	0.000	1.727	1.179	1.841
		0.069		
p.	1.727			
		0.000		
i.	1.179			
	0.027	0.042	0.000	0.068
h.		2.695		
	0.041	0.114	0.068	0.000

TABLE S198. KS distances on use of punctuations on sentences. TAG: 3. TAG: 3

	g.	p.	i.	h.
g.		0.657		
		0.065		
p.	0.657			
		0.000		
i.	2.271			
		0.108		
h.		1.610		
	0.099	0.165	0.235	0.000

TABLE S199. KS distances on use of number of characters in messages. TAG: 3. TAG: 3

	g.	р.	i.	h.
g.	0.000			
	0.000	0.067	0.084	0.116
p.	0.919			
			0.058	
i.	2.019			
	0.084	0.058	0.000	0.199
h.	2.522			
	0.116	0.146	0.199	0.000

TABLE S200. KS distances on use of verbs in each 100 tokens. TAG: 3. TAG:  $3\,$ 

	g.	р.	i.	h.
g.	0.000	4.321	17.155	7.849
	0.000	0.014	0.115	0.044
p.	4.321	0.000	18.891	7.830
	0.014	0.000	0.129	0.045
i.	17.155	18.891	0.000	15.535
	0.115	0.129	0.000	0.129
h.	7.849	7.830	15.535	0.000
	0.044	0.045	0.129	0.000

TABLE S201. KS distances on size of tokens. TAG: 6. TAG:  $6\,$ 

	g.	p.	i.	h.
g.			7.302	
			0.095	
p.	2.922			
			0.112	
i.	7.302			
	0.095	0.112	0.000	0.100
h.	4.722			
	0.051	0.065	0.100	0.000

TABLE S202. KS distances on size of known words. TAG: 6. TAG:  $6\,$ 

	g.	p.	i.	h.
g.	0.000	1.241	1.480	1.570
	0.000	0.027	0.072	0.048
p.			1.986	
			0.099	
i.			0.000	
	0.072	0.099	0.000	0.114
h.			2.097	
	0.048	0.075	0.114	0.000

TABLE S203. KS distances on size of sentences. TAG: 6. TAG: 6

	g.	p.	i.	h.
g.	0.000	1.295	1.324	2.322
			0.065	
p.			1.533	
			0.076	
i.			0.000	
			0.000	
h.	2.322			
	0.071	0.099	0.057	0.000

TABLE S204. KS distances on use of adjectives on sentences. TAG: 6. TAG:  $6\,$ 

	g.	p.	i.	h.
g.		0.229		
		0.005		
p.	0.229			
		0.000		
i.	1.951			
		0.096		
h.	1.011			
	0.031	0.030	0.130	0.000

TABLE S205. KS distances on use of substantives on sentences. TAG: 6. TAG:  $6\,$ 

	g.	p.	i.	h.
g.	0.000	1.158	2.266	1.075
	0.000	0.025	0.111	0.033
p.		0.000		
		0.000		
i.	2.266			
	0.111	0.127	0.000	0.117
h.		1.801		
	0.033	0.058	0.117	0.000

TABLE S206. KS distances on use of punctuations on sentences. TAG: 6. TAG: 6

	g.	p.	i.	h.
g.		1.820		
		0.103		
p.		0.000		
		0.000		
i.	0.991			
		0.198		
h.	2.666			
	0.188	0.289	0.192	0.000

TABLE S207. KS distances on use of number of characters in messages. TAG: 6. TAG:  $6\,$ 

	g.	p.	i.	h.
g.	0.000			
	0.000	0.064	0.193	0.285
p.	2.010			
	0.064	0.000	0.199	0.332
i.	2.883			
	0.193	0.199	0.000	0.365
h.	5.043			
	0.285	0.332	0.365	0.000

TABLE S208. KS distances on use of verbs in each 100 tokens. TAG: 6. TAG:  $6\,$ 

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	2.697	1.050	2.602
			0.006	l
p.	2.697			
			0.022	
i.			0.000	
			0.000	
h.	2.602			
	0.017	0.038	0.023	0.000

TABLE S209. KS distances on size of tokens. TAG: 7. TAG:  $^{7}$ 

	g.	p.	i.	h.
g.	0.000			
			0.014	
p.	3.097	0.000	3.416	3.290
			0.087	
i.	0.906			
			0.000	
h.	0.858			
	0.014	0.085	0.012	0.000

TABLE S210. KS distances on size of known words. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.			1.300	
			0.040	
p.	0.781			
	0.040	0.000	0.078	0.038
i.			0.000	
			0.000	
h.			2.112	
	0.045	0.038	0.082	0.000

TABLE S211. KS distances on size of sentences. TAG: 7. TAG: 7

	g.	p.	i.	h.
$\mathbf{g}.$	0.000			
			0.028	
p.	0.930			
			0.076	
i.	0.931			
	0.028	0.076	0.000	0.052
h.	0.675			
	0.023	0.024	0.052	0.000

TABLE S212. KS distances on use of adjectives on sentences. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.		0.683		
		0.035		
p.	0.683			
		0.000		
i.	0.960			
		0.063		
h.	1.055			
	0.036	0.059	0.064	0.000

TABLE S213. KS distances on use of substantives on sentences. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.	0.000	0.874	0.992	1.222
	0.000	0.044	0.030	0.042
p.	0.874			
		0.000		
i.	0.992			
		0.074		
h.		0.831		
	0.042	0.047	0.072	0.000

TABLE S214. KS distances on use of punctuations on sentences. TAG: 7. TAG: 7

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	1.118	0.399	0.944
		0.108		
p.	1.118			
		0.000		
i.	0.399			
	1	0.094		
h.	0.944			
	0.055	0.161	0.078	0.000

TABLE S215. KS distances on use of number of characters in messages. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.	0.000			
	0.000	0.073	0.047	0.056
p.	0.811			
		0.000		
i.	0.801			
		0.115		
h.	0.877			
	0.056	0.087	0.102	0.000

TABLE S216. KS distances on use of verbs in each 100 tokens. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.	0.000	2.233	6.219	2.696
	1		0.040	l
p.	2.233			
			0.053	
i.			0.000	
			0.000	
h.	2.696			
	0.013	0.017	0.051	0.000

TABLE S217. KS distances on size of tokens. TAG: 8. TAG:  $^{8}$ 

	g.	p.	i.	h.
g.	0.000	2.487	2.300	0.947
			0.027	
p.	2.487			
			0.058	
i.	2.300	3.741	0.000	2.187
			0.000	
h.	0.947			
	0.008	0.031	0.027	0.000

TABLE S218. KS distances on size of known words. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.	0.000	1.872	0.738	1.143
			0.027	
p.			1.701	
			0.089	
i.	0.738	1.701	0.000	1.397
	0.027	0.089	0.000	0.054
h.			1.397	
	0.030	0.112	0.054	0.000

TABLE S219. KS distances on size of sentences. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.	0.000	0.895	0.857	0.302
			0.031	
p.	0.895			
			0.071	
i.	0.857			
			0.000	
h.	0.302			
	0.008	0.042	0.034	0.000

TABLE S220. KS distances on use of adjectives on sentences. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.	0.000			
		0.121		
p.	2.738			
	0.121	0.000	0.131	0.149
i.	0.722			
		0.131		
h.	1.046			
	0.028	0.149	0.027	0.000

TABLE S221. KS distances on use of substantives on sentences. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.	0.000	1.357	0.354	0.662
	0.000	0.060	0.013	0.018
p.	1.357			
		0.000		
i.	0.354			
		0.065		
h.	0.662			
	0.018	0.074	0.025	0.000

TABLE S222. KS distances on use of punctuations on sentences. TAG: 8. TAG: 8

	g.	p.	i.	h.
$\mathbf{g}$ .	0.000	1.413	1.062	0.409
		0.133		
p.	1.413			
		0.000		
i.	1.062			
		0.176		
h.	0.409			
	0.022	0.149	0.087	0.000

TABLE S223. KS distances on use of number of characters in messages. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.	0.000			
		0.374		
p.	6.120			
		0.000		
i.	1.000			
	0.118	0.472	0.000	0.059
h.	2.984			
	0.141	0.512	0.059	0.000

TABLE S224. KS distances on use of verbs in each 100 tokens. TAG: 8. TAG: 8

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	4.746	4.208	7.422
		0.023		
p.	4.746	0.000	3.428	9.456
		0.000		
i.		3.428		
		0.020		
h.	7.422			
	0.041	0.061	0.061	0.000

TABLE S225. KS distances on size of tokens. TAG: 9. TAG: 9

	g.	p.	i.	h.
g.				2.602
			0.012	
p.			1.289	
			0.014	
i.			0.000	
	0.012	0.014	0.000	0.034
h.	2.602			
	0.026	0.037	0.034	0.000

TABLE S226. KS distances on size of known words. TAG: 9. TAG: 9

	g.	p.	i.	h.
g.	0.000	2.087	1.454	4.992
	0.000	0.055	0.038	0.175
p.	2.087			
			0.058	
i.	1.454	1.847	0.000	5.267
			0.000	
h.	4.992			
	0.175	0.228	0.206	0.000

TABLE S227. KS distances on size of sentences. TAG: 9. TAG: 9

	g.	p.	i.	h.
g.			0.543	
			0.014	
p.			1.186	
			0.037	
i.	0.543			
	0.014	0.037	0.000	0.092
h.	2.482			
	0.087	0.127	0.092	0.000

TABLE S228. KS distances on use of adjectives on sentences. TAG: 9. TAG: 9

	g.	p.	i.	h.
g.		1.583		
	1	0.042		
p.		0.000		
		0.000		
i.	1.103			
		0.042		
h.	3.221			
	0.113	0.147	0.139	0.000

TABLE S229. KS distances on use of substantives on sentences. TAG: 9. TAG: 9

	g.	p.	i.	h.
g.	0.000	1.486	1.398	3.705
		0.039		
p.	1.486			
		0.000		
i.	1.398			
	0.037	0.031	0.000	0.161
h.	3.705			
	0.130	0.161	0.161	0.000

TABLE S230. KS distances on use of punctuations on sentences. TAG: 9. TAG: 9

	g.	p.	i.	h.
g.	0.000			
		0.029		
p.	0.486			
	0.029	0.000	0.064	0.068
i.	0.602			
		0.064		
h.	0.601			
	0.040	0.068	0.075	0.000

TABLE S231. KS distances on use of number of characters in messages. TAG: 9. TAG: 9

	g.	p.	i.	h.
g.	0.000			
		0.058		
p.	1.215			
		0.000		
i.	1.063			
		0.036		
h.	2.990			
	0.166	0.223	0.198	0.000

TABLE S232. KS distances on use of verbs in each 100 tokens. TAG: 9. TAG: 9

	g.	p.	i.	h.
g.	0.000			
	1		0.007	l
p.			1.840	
	0.018	0.000	0.014	0.036
i.			0.000	
	0.007	0.014	0.000	0.027
h.	3.534			
	0.021	0.036	0.027	0.000

TABLE S233. KS distances on size of tokens. TAG: 10. TAG:  $10\,$ 

	g.	p.	i.	h.
g.				2.961
	0.000	0.019	0.011	0.033
p.			0.821	
			0.011	
i.			0.000	
	0.011	0.011	0.000	0.042
h.	2.961			
	0.033	0.051	0.042	0.000

TABLE S234. KS distances on size of known words. TAG:  $10.\ \mathrm{TAG} \colon 10$ 

	g.	p.	i.	h.
g.	0.000	0.955	0.633	1.332
		0.037		
p.	0.955			
		0.000		
i.	0.633			
	0.015	0.031	0.000	0.051
h.	1.332			
	0.041	0.079	0.051	0.000

TABLE S235. KS distances on size of sentences. TAG: 10. TAG: 10

	g.	p.	i.	h.
g.			0.342	
			0.008	
p.	0.835			
			0.035	
i.	0.342			
	0.008	0.035	0.000	0.034
h.	0.898			
	0.028	0.052	0.034	0.000

TABLE S236. KS distances on use of adjectives on sentences. TAG: 10. TAG:  $10\,$ 

	g.	p.	i.	h.
g.		1.690		
		0.066		
p.	1.690			
		0.000		
i.	0.654			
		0.062		
h.	1.870			
	0.057	0.118	0.073	0.000

TABLE S237. KS distances on use of substantives on sentences. TAG: 10. TAG:  $10\,$ 

	g.	p.	i.	h.
g.	0.000	1.262	1.299	1.728
		0.049		
p.		0.000		
		0.000		
i.		1.548		
		0.063		
h.		1.330		
	0.053	0.060	0.084	0.000

TABLE S238. KS distances on use of punctuations on sentences. TAG: 10. TAG: 10

	g.	p.	i.	h.
$\mathbf{g}$ .	0.000	0.861	0.749	1.089
		0.071		
p.	0.861			
		0.000		
i.	0.749			
		0.088		
h.	1.089			
	0.068	0.110	0.108	0.000

TABLE S239. KS distances on use of number of characters in messages. TAG: 10. TAG:  $10\,$ 

	g.	р.	i.	h.
g.	0.000	1.503	1.339	2.209
	1		0.062	
p.	1.503			
	0.110	0.000	0.105	0.225
i.	1.339			
			0.000	
h.	2.209			
	0.134	0.225	0.187	0.000

TABLE S240. KS distances on use of verbs in each 100 tokens. TAG: 10. TAG:  $10\,$ 

	g.	p.	i.	h.
g.	0.000	1.769	6.669	8.703
	0.000	0.013	0.020	0.029
p.	1.769	0.000	2.527	4.858
	0.013	0.000	0.019	0.038
i.	6.669	2.527	0.000	13.184
	0.020	0.019	0.000	0.049
h.	8.703	4.858	13.184	0.000
	0.029	0.038	0.049	0.000

TABLE S241. KS distances on size of tokens. TAG: 11. TAG:

	g.	p.	i.	h.
g.				3.396
			0.015	
p.			1.396	
	0.011	0.000	0.019	0.021
i.	2.903			
	0.015	0.019	0.000	0.035
h.	3.396			
	0.020	0.021	0.035	0.000

TABLE S242. KS distances on size of known words. TAG: 11. TAG:  $11\,$ 

	g.	p.	i.	h.
g.	0.000	0.965	2.477	2.746
	0.000	0.035	0.037	0.044
p.	0.965			
	0.035	0.000	0.055	0.043
i.	2.477			
	0.037	0.055	0.000	0.081
h.	2.746			
	0.044	0.043	0.081	0.000

TABLE S243. KS distances on size of sentences. TAG: 11. TAG: 11

	g.	p.	i.	h.
$\mathbf{g}.$		1.118		
		0.040		
p.		0.000		
		0.000		
i.		1.524		
		0.056		
h.		1.170		
	0.027	0.044	0.050	0.000

TABLE S244. KS distances on use of adjectives on sentences. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.	0.000	0.502	5.588	6.438
	0.000	0.018	0.083	0.104
p.	0.502	0.000	2.627	2.509
	0.018	0.000	0.096	0.093
i.	5.588	2.627	0.000	10.302
	0.083	0.096	0.000	0.187
h.	6.438	2.509	10.302	0.000
	0.104	0.093	0.187	0.000

TABLE S245. KS distances on use of substantives on sentences. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.	0.000	1.193	4.009	5.040
	0.000	0.043	0.060	0.081
p.	1.193			
		0.000		
i.	4.009			
		0.035		
h.	5.040			
	0.081	0.114	0.141	0.000

TABLE S246. KS distances on use of punctuations on sentences. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.		1.643		
	0.000	0.173	0.190	0.088
p.		0.000		
	0.173	0.000	0.354	0.095
i.		3.098		
	0.190	0.354	0.000	0.279
h.		0.874		
	0.088	0.095	0.279	0.000

TABLE S247. KS distances on use of number of characters in messages. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.	0.000	0.835	3.957	5.647
	0.000	0.062	0.116	0.190
p.	0.835			
			0.095	
i.	3.957	1.260	0.000	8.245
			0.000	
h.	5.647			
	0.190	0.225	0.305	0.000

TABLE S248. KS distances on use of verbs in each 100 tokens. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.			1.937	
			0.007	
p.	3.427			
	0.017	0.000	0.012	0.040
i.			0.000	
	1		0.000	l
h.	5.026	6.599	5.535	0.000
	0.023	0.040	0.028	0.000

TABLE S249. KS distances on size of tokens. TAG: 12. TAG:  $^{12}$ 

	g.	p.	i.	h.
g.			1.987	
	0.000	0.012	0.013	0.028
p.			1.478	
	0.012	0.000	0.014	0.031
i.			0.000	
	0.013	0.014	0.000	0.041
h.	3.361			
	0.028	0.031	0.041	0.000

TABLE S250. KS distances on size of known words. TAG: 12. TAG: 12

	g.	p.	i.	h.
g.				1.196
			0.015	
p.	0.497			
	0.015	0.000	0.025	0.061
i.	0.715			
			0.000	
h.			1.616	
	0.030	0.061	0.045	0.000

TABLE S251. KS distances on size of sentences. TAG: 12. TAG: 12

	g.	p.	i.	h.
g.			0.759	
	0.000	0.017	0.016	0.021
p.	0.561			
			0.031	
i.	0.759			
			0.000	
h.	0.829			
	0.021	0.015	0.036	0.000

TABLE S252. KS distances on use of adjectives on sentences. TAG: 12. TAG: 12

	g.	p.	i.	h.
g.		0.968		
		0.029		
p.	0.968			
		0.000		
i.	1.222			
		0.021		
h.	2.227			
	0.056	0.081	0.081	0.000

TABLE S253. KS distances on use of substantives on sentences. TAG: 12. TAG:  $12\,$ 

	g.	p.	i.	h.
g.	0.000			
		0.031		
p.		0.000		
		0.000		
i.	0.598			
	1	0.026		
h.		1.598		
	0.030	0.056	0.035	0.000

TABLE S254. KS distances on use of punctuations on sentences. TAG: 12. TAG: 12

	g.	p.	i.	h.
g.		1.617		
	0.000	0.115	0.027	0.080
p.		0.000		
	0.115	0.000	0.132	0.198
i.	0.483			
	0.027	0.132	0.000	0.075
h.		2.247		
	0.080	0.198	0.075	0.000

TABLE S255. KS distances on use of number of characters in messages. TAG: 12. TAG: 12

	g.	p.	i.	h.
g.	0.000	1.184	0.983	2.296
	0.000	0.058	0.035	0.105
p.	1.184			
		0.000		
i.	0.983			
	0.035	0.058	0.000	0.134
h.	2.296			
	0.105	0.150	0.134	0.000

TABLE S256. KS distances on use of verbs in each 100 tokens. TAG: 12. TAG: 12

	g.	p.	i.	h.
g.	0.000	10.972	2.564	16.789
	0.000	0.038	0.026	0.070
p.	10.972	0.000	3.581	23.926
	0.038	0.000	0.037	0.108
i.	2.564	3.581	0.000	9.140
	0.026	0.037	0.000	0.096
h.	16.789	23.926	9.140	0.000
	0.070	0.108	0.096	0.000

TABLE S257. KS distances on size of tokens. TAG: 13. TAG:  $13\,$ 

	g.	p.	i.	h.
g.	0.000	13.494	1.671	11.252
	0.000	0.114	0.033	0.087
p.	13.494			21.233
	0.114	0.000	0.118	0.201
i.	1.671	5.807	0.000	4.087
	0.033	0.118	0.000	0.082
h.	11.252	21.233	4.087	0.000
	0.087	0.201	0.082	0.000

TABLE S258. KS distances on size of known words. TAG: 13. TAG: 13

	g.	р.	i.	h.
g.	0.000	6.633	2.129	5.425
	0.000	0.160	0.125	0.120
p.	6.633	0.000	4.566	10.361
	0.160	0.000	0.276	0.280
i.	2.129	4.566	0.000	1.145
	0.125	0.276	0.000	0.068
h.	5.425	10.361	1.145	0.000
	0.120	0.280	0.068	0.000

TABLE S259. KS distances on size of sentences. TAG: 13. TAG: 13

	g.	p.	i.	h.
g.			0.688	
			0.040	
p.	5.179			
			0.165	
i.	0.688	2.723	0.000	0.896
			0.000	
h.	4.236			
	0.094	0.218	0.054	0.000

TABLE S260. KS distances on use of adjectives on sentences. TAG: 13. TAG:  $13\,$ 

	g.	p.	i.	h.
g.	0.000	7.527	1.453	6.051
	0.000	0.181	0.085	0.134
p.	7.527	0.000	4.396	11.671
	0.181	0.000	0.266	0.315
i.	1.453	4.396	0.000	1.802
	0.085	0.266	0.000	0.108
h.	6.051	11.671	1.802	0.000
	0.134	0.315	0.108	0.000

TABLE S261. KS distances on use of substantives on sentences. TAG: 13. TAG: 13

	g.	p.	i.	h.
g.	0.000	1.723	2.224	1.673
	0.000	0.041	0.130	0.037
p.	1.723			
		0.000		
i.	2.224			
	0.130	0.135	0.000	0.140
h.		2.908		
	0.037	0.079	0.140	0.000

TABLE S262. KS distances on use of punctuations on sentences. TAG: 13. TAG: 13

	g.	p.	i.	h.
$\mathbf{g}.$	0.000			
		0.240		
p.	4.037			
		0.000		
i.		3.147		
		0.413		
h.	3.226			
	0.179	0.419	0.077	0.000

TABLE S263. KS distances on use of number of characters in messages. TAG: 13. TAG: 13

	g.	p.	i.	h.
g.	0.000	8.084	1.993	11.419
	0.000	0.278	0.201	0.478
p.	8.084	0.000	4.368	16.748
	0.278	0.000	0.446	0.756
i.	1.993	4.368	0.000	3.578
	0.201	0.446	0.000	0.375
h.	11.419	16.748	3.578	0.000
	0.478	0.756	0.375	0.000

TABLE S264. KS distances on use of verbs in each 100 tokens. TAG: 13. TAG: 13

	g.	p.	i.	h.
g.			1.575	
			0.006	
p.			2.445	
	0.007	0.000	0.013	0.018
i.			0.000	
	0.006	0.013	0.000	0.020
h.	2.044			
	0.015	0.018	0.020	0.000

TABLE S265. KS distances on size of tokens. TAG: 15. TA

AG:	TABL
	tences

TABLE S269.	KS distances	on use	of substantives	on sen
tences. TAG: 1	5. TAG: 15			

i.

 $\mathbf{g}.$ 

p. 0.000 | 1.684 | 0.979 | 1.295 0.000 | 0.045 | 0.019 | 0.048 1.684 0.000 2.029 1.863 0.045 | 0.000 | 0.057 | 0.078 0.979 2.029 0.000 1.160 0.019 | 0.057 | 0.000 | 0.044 1.295 | 1.863 | 1.160 | 0.000 0.048 | 0.078 | 0.044 | 0.000

h.

	g.	p.	i.	h.
g.	0.000	1.741	0.839	1.463
			0.006	
p.			2.173	
			0.021	
i.	0.000			
	0.006	0.021	0.000	0.021
h.	1.463	1.700	1.614	0.000
	0.019	0.025	0.021	0.000

TABLE S266. KS distances on size of known words. TAG: 15. TAG: 15

	g.	p.	i.	h.
g.			0.548	
			0.011	
p.	0.934			
			0.032	
i.	0.548			
	0.011	0.032	0.000	0.051
h.			1.339	
	0.049	0.067	0.051	0.000

TABLE S267. KS distances on size of sentences. TAG: 15. TAG: 15

Į		g.	p.	i.	h.
	g.		1.519		
İ			0.040		
Ì	p.		0.000		
İ			0.000		
ſ	i.		1.765		
İ		0.009	0.050	0.000	0.032
ĺ	h.		1.866		
ĺ		0.038	0.078	0.032	0.000

TABLE S268. KS distances on use of adjectives on sentences. TAG: 15. TAG: 15

	g.	p.	i.	h.
g.	0.000	0.319	0.545	1.424
	0.000	0.008	0.011	0.052
p.	0.319			
		0.000		
i.	0.545			
		0.012		
h.		1.260		
	0.052	0.053	0.063	0.000

TABLE S270. KS distances on use of punctuations on sentences. TAG: 15. TAG: 15

	g.	p.	i.	h.
g.				2.234
		0.183		
p.	2.318			
	0.183	0.000	0.191	0.370
i.	0.436			
	0.022	0.191	0.000	0.191
h.	2.234			
	0.187	0.370	0.191	0.000

TABLE S271. KS distances on use of number of characters in messages. TAG: 15. TAG: 15

	g.	р.	i.	h.
g.	0.000			
			0.043	
p.	2.541			
			0.163	
i.	1.187			
			0.000	
h.	2.041			
	0.146	0.258	0.128	0.000

TABLE S272. KS distances on use of verbs in each 100 tokens. TAG: 15. TAG: 15

	g.	p.	i.	h.
g.	0.000	7.742	7.371	6.226
	0.000	0.032	0.030	0.027
p.	7.742	0.000	9.360	11.342
	0.032	0.000	0.047	0.059
i.	7.371		0.000	9.254
	0.030	0.047	0.000	0.047
h.	6.226	11.342	9.254	0.000
	0.027	0.059	0.047	0.000

TABLE S273. KS distances on size of tokens. TAG: 16. TAG:  $16\,$ 

	g.	р.	i.	h.
$\mathbf{g}.$	0.000	8.844	8.460	8.311
	0.000	0.070	0.064	0.066
p.	8.844	0.000	12.214	13.619
	0.070	0.000	0.116	0.133
i.	8.460	12.214	0.000	9.665
	0.064	0.116	0.000	0.092
h.	8.311	13.619	9.665	0.000
	0.066	0.133	0.092	0.000

TABLE S274. KS distances on size of known words. TAG: 16. TAG: 16

	g.	p.	i.	h.
g.	0.000	0.945	0.842	1.285
			0.021	
p.	0.945			
			0.017	
i.	0.842			
			0.000	
h.	1.285			
	0.030	0.057	0.055	0.000

TABLE S275. KS distances on size of sentences. TAG: 16. TAG: 16

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	0.667	0.740	0.816
		0.020		
p.	0.667			
		0.000		
i.	0.740			
		0.038		
h.	0.816			
	0.019	0.033	0.032	0.000

TABLE S276. KS distances on use of adjectives on sentences. TAG: 16. TAG: 16

	g.	p.	i.	h.
g.		1.180		
		0.035		
p.		0.000		
		0.000		
i.	0.633			
		0.028		
h.	1.380			
	0.032	0.067	0.047	0.000

TABLE S277. KS distances on use of substantives on sentences. TAG: 16. TAG:  $16\,$ 

	g.	p.	i.	h.
g.	0.000	2.078	1.191	1.261
	0.000	0.061	0.029	0.029
p.	2.078			
		0.000		
i.	1.191			
	0.029	0.070	0.000	0.058
h.	1.261			
	0.029	0.086	0.058	0.000

TABLE S278. KS distances on use of punctuations on sentences. TAG: 16. TAG: 16

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	2.389	1.361	2.327
		0.215		
p.	2.389			
	0.215	0.000	0.222	0.348
i.		2.256		
		0.222		
h.	2.327			
	0.133	0.348	0.215	0.000

TABLE S279. KS distances on use of number of characters in messages. TAG: 16. TAG:  $16\,$ 

	g.	р.	i.	h.
g.	0.000	5.346	1.450	3.824
	0.000	0.224	0.059	0.163
p.	5.346			
	0.224	0.000	0.281	0.382
i.	1.450			
			0.000	
h.	3.824	7.352	2.382	0.000
	0.163	0.382	0.121	0.000

TABLE S280. KS distances on use of verbs in each 100 tokens. TAG: 16. TAG: 16

	g.	p.	i.	h.
g.	0.000	2.051	0.932	0.810
			0.005	
p.	2.051			
			0.021	
i.	0.932			
	0.005	0.021	0.000	0.007
h.	0.810			
	0.004	0.017	0.007	0.000

TABLE S281. KS distances on size of tokens. TAG: 17. TAG:  $^{17}$ 

	g.	p.	i.	h.
g.			0.939	
			0.009	
p.	2.837			
			0.044	
i.	0.939	2.526	0.000	1.567
	0.009	0.044	0.000	0.017
h.			1.567	
	0.011	0.057	0.017	0.000

TABLE S282. KS distances on size of known words. TAG: 17. TAG: 17

	g.	p.	i.	h.
g.	0.000	1.057	0.882	0.514
			0.030	
p.	1.057			
			0.083	
i.	0.882			
	0.030	0.083	0.000	0.044
h.	0.514			
	0.015	0.053	0.044	0.000

TABLE S283. KS distances on size of sentences. TAG: 17. TAG: 17

	g.	p.	i.	h.
g.	0.000	1.030	0.546	0.603
			0.018	
p.			0.823	
			0.045	
i.	0.546	0.823	0.000	0.668
			0.000	
h.	0.603			
	0.018	0.069	0.025	0.000

TABLE S284. KS distances on use of adjectives on sentences. TAG: 17. TAG: 17

	g.	p.	i.	h.
g.	0.000			
		0.030		
p.	0.597			
		0.000		
i.	1.065			
		0.058		
h.	0.740			
	0.022	0.023	0.057	0.000

TABLE S285. KS distances on use of substantives on sentences. TAG: 17. TAG: 17

	g.	p.	i.	h.
g.	0.000	0.456	1.112	0.748
		0.023		
p.	0.456			
		0.000		
i.	1.112			
		0.053		
h.	0.748			
	0.022	0.021	0.059	0.000

TABLE S286. KS distances on use of punctuations on sentences. TAG: 17. TAG: 17

	g.	p.	i.	h.
$\mathbf{g}.$	0.000			
		0.108		
p.	1.068			
		0.000		
i.	0.847			
	0.055	0.080	0.000	0.098
h.	0.833			
	0.044	0.133	0.098	0.000

TABLE S287. KS distances on use of number of characters in messages. TAG: 17. TAG: 17

	g.	p.	i.	h.
g.	0.000	0.642	1.057	1.131
	0.000	0.052	0.051	0.051
p.	0.642			
		0.000		
i.	1.057			
		0.066		
h.	1.131			
	0.051	0.077	0.090	0.000

TABLE S288. KS distances on use of verbs in each 100 tokens. TAG: 17. TAG: 17

	g.	р.	i.	h.
g.	0.000	13.242	2.202	5.531
	0.000	0.089	0.011	0.020
p.	13.242	0.000	11.492	15.308
	0.089	0.000	0.089	0.106
i.	2.202	11.492	0.000	5.799
	0.011	0.089	0.000	0.031
h.	5.531	15.308	5.799	0.000
	0.020	0.106	0.031	0.000

TABLE S289. KS distances on size of tokens. TAG: 18. TAG:  $^{18}$ 

	g.	p.	i.	h.
g.	0.000	10.102	1.424	4.120
	0.000	0.126	0.013	0.026
p.	10.102	0.000	7.959	11.886
	0.126	0.000	0.115	0.152
i.	1.424	7.959	0.000	3.893
	0.013	0.115	0.000	0.038
h.	4.120	11.886	3.893	0.000
	0.026	0.152	0.038	0.000

TABLE S290. KS distances on size of known words. TAG: 18. TAG:  $18\,$ 

	g.	p.	i.	h.
g.	0.000	1.578	0.843	0.766
	0.000	0.076	0.023	0.014
p.			1.129	
			0.060	
i.	0.843			
			0.000	
h.	0.766			
	0.014	0.091	0.037	0.000

TABLE S291. KS distances on size of sentences. TAG: 18. TAG: 18

	g.	p.	i.	h.
g.			1.049	
	0.000	0.081	0.029	0.010
p.			1.487	
			0.079	
i.			0.000	
			0.000	
h.	0.544			
	0.010	0.091	0.037	0.000

TABLE S292. KS distances on use of adjectives on sentences. TAG: 18. TAG: 18

	g.	p.	i.	h.
g.	0.000			
		0.108		
p.	2.229			
		0.000		
i.	1.150			
		0.084		
h.	1.014	2.573	1.788	0.000
	0.019	0.126	0.051	0.000

TABLE S293. KS distances on use of substantives on sentences. TAG: 18. TAG:  $18\,$ 

	g.	p.	i.	h.
g.	0.000	0.867	1.658	0.813
	0.000	0.042	0.045	0.015
p.	0.867			
		0.000		
i.		0.939		
		0.050		
h.	0.813			
	0.015	0.054	0.061	0.000

TABLE S294. KS distances on use of punctuations on sentences. TAG: 18. TAG: 18

	g.	p.	i.	h.
g.	0.000	0.887	1.207	0.540
	0.000	0.097	0.084	0.027
p.	0.887			
	0.097	0.000	0.138	0.099
i.		1.136		
	0.084	0.138	0.000	0.111
h.	0.540			
	0.027	0.099	0.111	0.000

TABLE S295. KS distances on use of number of characters in messages. TAG: 18. TAG: 18

	g.	р.	i.	h.
g.	0.000			
	0.000	0.381	0.060	0.098
p.	5.698			
			0.356	
i.	1.183	4.586	0.000	2.792
			0.000	
h.	2.742			
	0.098	0.477	0.148	0.000

TABLE S296. KS distances on use of verbs in each 100 tokens. TAG: 18. TAG: 18

	g.	p.	i.	h.
g.	0.000	11.817	2.029	6.828
	0.000	0.087	0.014	0.033
p.	11.817	0.000	7.927	15.452
	0.087	0.000	0.073	0.120
i.	2.029	7.927	0.000	6.391
	0.014	0.073	0.000	0.047
h.	6.828	15.452	6.391	0.000
	0.033	0.120	0.047	0.000

TABLE S297. KS distances on size of tokens. TAG: 19. TAG:  $^{10}$ 

	g.	p.	i.	h.
g.			1.332	
			0.017	
p.	6.568			
			0.090	
i.	1.332			
	0.017	0.090	0.000	0.037
h.	2.953			
	0.025	0.120	0.037	0.000

TABLE S298. KS distances on size of known words. TAG: 19. TAG: 19

	g.	p.	i.	h.
g.	0.000	2.568	1.948	1.692
	0.000	0.124	0.072	0.040
p.	2.568			
			0.072	
i.			0.000	
			0.000	
h.			3.095	
	0.040	0.164	0.119	0.000

TABLE S299. KS distances on size of sentences. TAG: 19. TAG: 19

	g.	p.	i.	h.
g.	0.000	1.186	0.936	0.801
			0.035	
p.	1.186			
			0.037	
i.	0.936			
			0.000	
h.	0.801			
	0.019	0.076	0.054	0.000

TABLE S300. KS distances on use of adjectives on sentences. TAG: 19. TAG: 19

	g.	p.	i.	h.
g.		3.580		
		0.173		
p.	3.580			
		0.000		
i.	2.985			
		0.089		
h.	2.451			
	0.058	0.229	0.177	0.000

TABLE S301. KS distances on use of substantives on sentences. TAG: 19. TAG: 19

	g.	p.	i.	h.
g.	0.000	2.740	2.748	1.994
		0.132		
p.	2.740			
		0.000		
i.	2.748			
		0.080		
h.		3.638		
	0.047	0.179	0.148	0.000

TABLE S302. KS distances on use of punctuations on sentences. TAG: 19. TAG: 19

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	1.160	1.093	0.566
		0.112		
p.	1.160			
		0.000		
i.		1.511		
		0.164		
h.	0.566			
	0.030	0.117	0.093	0.000

TABLE S303. KS distances on use of number of characters in messages. TAG: 19. TAG: 19

	g.	p.	i.	h.
g.	0.000	5.621	1.870	3.597
	0.000	0.415	0.130	0.173
p.	5.621			
			0.386	
i.	1.870			
	0.130	0.386	0.000	0.299
h.	3.597			
	0.173	0.555	0.299	0.000

TABLE S304. KS distances on use of verbs in each 100 tokens. TAG: 19. TAG: 19

## 2. Snapshots of 2000 messages

	g.	p.	i.	h.
g.	0.000	2.932	3.332	4.145
			0.012	
p.	2.932			
			0.011	
i.			0.000	
			0.000	
h.				
	0.015	0.032	0.027	0.000

TABLE S305. KS distances on size of tokens. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.	0.000	2.429	0.976	0.725
			0.006	
p.			2.780	
			0.035	
i.	0.976			
			0.000	
h.	0.725			
	0.005	0.033	0.008	0.000

TABLE S306. KS distances on size of known words. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.		1.347		
		0.047		
p.		0.000		
		0.000		
i.		0.533		
	0.028	0.020	0.000	0.065
h.		2.462		
	0.038	0.092	0.065	0.000

TABLE S307. KS distances on size of sentences. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.				0.656
			0.011	
p.	0.417			
	0.015	0.000	0.012	0.023
i.	0.550			
	0.011	0.012	0.000	0.024
h.	0.656			
	0.013	0.023	0.024	0.000

TABLE S308. KS distances on use of adjectives on sentences. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.	0.000	0.373	1.260	1.348
		0.013		
p.	0.373	0.000	0.966	1.565
		0.000		
i.	1.260			
		0.036		
h.	1.348			
	0.026	0.058	0.050	0.000

TABLE S309. KS distances on use of substantives on sentences. TAG: 0. TAG: 0

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	0.239	0.273	0.371
		0.008		
p.	0.239			
		0.000		
i.	0.273			
		0.006		
h.	0.371			
	0.007	0.062	0.013	0.000

TABLE S310. KS distances on use of punctuations on sentences. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.		0.611		
		0.047		
p.	0.611			
		0.000		
i.	0.555			
		0.050		
h.	0.596			
	0.023	0.058	0.046	0.000

TABLE S311. KS distances on use of number of characters in messages. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.	0.000			
		0.074		
p.	1.108			
		0.000		
i.	0.847			
		0.063		
h.	0.967			
	0.034	0.108	0.052	0.000

TABLE S312. KS distances on use of verbs in each 100 tokens. TAG: 0. TAG: 0

	g.	p.	i.	h.
g.	0.000	0.873	0.900	1.467
			0.003	
p.	0.873			
			0.005	
i.	0.900			
			0.000	
h.			2.020	
	0.006	0.010	0.009	0.000

TABLE S313. KS distances on size of tokens. TAG: 2. TAG:  $^{2}$ 

	g.	p.	i.	h.
g.		1.865		
		0.025		
p.		0.000		
		0.000		
i.	0.946			
		0.024		
h.	1.732			
	0.015	0.036	0.023	0.000

TABLE S314. KS distances on size of known words. TAG: 2. TAG: 2

	$\parallel \mathbf{g}.$	p.	i.	h.
g.	0.000	0.571	0.303	0.579
		0.016		
p.	0.571			
		0.000		
i.	0.303			
		0.016		
h.	0.579			
	0.011	0.020	0.016	0.000

TABLE S315. KS distances on size of sentences. TAG: 2. TAG: 2

	g.	p.	i.	h.
$\mathbf{g}.$		0.279		
		0.008		
p.	0.279			
		0.000		
i.	0.297			
		0.013		
h.	0.203			
	0.004	0.006	0.009	0.000

TABLE S316. KS distances on use of adjectives on sentences. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.				0.817
		0.016		
p.	0.560			
		0.000		
i.	0.548			
		0.019		
h.	0.817			
	0.015	0.031	0.023	0.000

TABLE S317. KS distances on use of substantives on sentences. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.	0.000	0.809	0.210	0.445
		0.023		
p.	0.809			
		0.000		
i.	0.210			
	0.004	0.024	0.000	0.010
h.	0.445			
	0.008	0.030	0.010	0.000

TABLE S318. KS distances on use of punctuations on sentences. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.	0.000			
			0.027	
p.	0.576			
			0.047	
i.	0.683			
	1		0.000	
h.	0.727			
	0.031	0.047	0.056	0.000

TABLE S319. KS distances on use of number of characters in messages. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.	0.000			
		0.031		
p.	0.515			
		0.000		
i.	0.359			
		0.041		
h.	0.517			
	0.020	0.044	0.029	0.000

TABLE S320. KS distances on use of verbs in each 100 tokens. TAG: 2. TAG: 2

	g.	p.	i.	h.
g.	0.000			
			0.018	
p.			2.479	
			0.013	
i.	5.096			
			0.000	
h.	4.945			
	0.016	0.027	0.034	0.000

TABLE S321. KS distances on size of tokens. TAG: 3. TAG:  $^{2}$ 

	g.	p.	i.	h.
g.				1.880
			0.012	
p.	0.941			
			0.010	
i.	1.775			
			0.000	
h.			3.064	
	0.011	0.019	0.023	0.000

TABLE S322. KS distances on size of known words. TAG: 3. TAG: 3

	g.	p.	i.	h.
g.	0.000	1.378	2.016	2.063
		0.034		
p.		0.000		
		0.000		
i.	2.016			
		0.015		
h.	2.063			
	0.032	0.064	0.068	0.000

TABLE S323. KS distances on size of sentences. TAG: 3. TAG: 3

	g.	p.	i.	h.
$\mathbf{g}.$		0.490		
		0.012		
p.	0.490			
		0.000		
i.	0.533			
		0.009		
h.	0.625			
	0.010	0.022	0.019	0.000

TABLE S324. KS distances on use of adjectives on sentences. TAG: 3. TAG:  $3\,$ 

	g.	p.	i.	h.
g.		1.270		
		0.031		
p.		0.000		
		0.000		
i.	1.151			
		0.016		
h.	1.538			
	0.024	0.055	0.045	0.000

TABLE S325. KS distances on use of substantives on sentences. TAG: 3. TAG:  $3\,$ 

	g.	p.	i.	h.
g.	0.000	1.481	0.966	1.282
	0.000	0.036	0.017	0.020
p.		0.000		
		0.000		
i.	0.966			
	1	0.012		
h.		2.157		
	0.020	0.056	0.034	0.000

TABLE S326. KS distances on use of punctuations on sentences. TAG: 3. TAG: 3

	g.	p.	i.	h.
g.	0.000	2.285	2.184	2.423
		0.147		
p.	2.285			
		0.000		
i.	2.184	0.824	0.000	3.811
	1	0.060		
h.	2.423			
	0.091	0.234	0.190	0.000

TABLE S327. KS distances on use of number of characters in messages. TAG: 3. TAG: 3

	g.	p.	i.	h.
g.	0.000	0.730	1.309	1.246
		0.036		
p.	0.730			
		0.000		
i.	1.309	0.786	0.000	2.103
	1	0.043		
h.	1.246			
	0.040	0.065	0.084	0.000

TABLE S328. KS distances on use of verbs in each 100 tokens. TAG: 3. TAG:  $3\,$ 

	g.	p.	i.	h.
g.	0.000	7.014	2.230	2.120
			0.011	
p.	7.014			
			0.060	
i.	2.230			
	0.011	0.060	0.000	0.009
h.	2.120			
	0.011	0.062	0.009	0.000

TABLE S329. KS distances on size of tokens. TAG: 7. TAG:  $^{7}$ 

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	14.412	3.286	7.305
	0.000	0.219	0.041	0.091
p.	14.412	0.000	15.004	17.894
	0.219	0.000	0.259	0.310
i.	3.286	15.004	0.000	4.742
	0.041	0.259	0.000	0.071
h.	7.305	17.894	4.742	0.000
	0.091	0.310	0.071	0.000

TABLE S330. KS distances on size of known words. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.	0.000	1.643	0.421	1.224
	0.000	0.057	0.010	0.032
p.		0.000		
	0.057	0.000	0.058	0.087
i.	0.421			
		0.058		
h.	1.224			
	0.032	0.087	0.042	0.000

TABLE S331. KS distances on size of sentences. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.		3.707		
		0.128		
p.	3.707			
		0.000		
i.		4.344		
		0.165		
h.	0.819			
	0.021	0.149	0.016	0.000

TABLE S332. KS distances on use of adjectives on sentences. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.	0.000			
	0.000	0.224	0.035	0.077
p.	6.510			
		0.000		
i.	1.396			
		0.264		
h.	2.981			
	0.077	0.295	0.062	0.000

TABLE S333. KS distances on use of substantives on sentences. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.	0.000	3.412	0.617	1.635
		0.118		
p.	3.412			
		0.000		
i.	0.617			
		0.133		
h.	1.635			
	0.042	0.158	0.041	0.000

TABLE S334. KS distances on use of punctuations on sentences. TAG: 7. TAG: 7

	g.	p.	i.	h.
g.	0.000			
	1	0.050		
p.	0.583			
	0.050	0.000	0.035	0.103
i.	0.967			
		0.035		
h.	1.279			
	0.067	0.103	0.122	0.000

TABLE S335. KS distances on use of number of characters in messages. TAG: 7. TAG: 7

	g.	р.	i.	h.
g.	0.000	4.399	0.995	1.793
	0.000	0.321	0.050	0.091
p.	4.399			
	0.321	0.000	0.361	0.406
i.	0.995			
			0.000	
h.	1.793			
	0.091	0.406	0.047	0.000

TABLE S336. KS distances on use of verbs in each 100 tokens. TAG: 7. TAG: 7

	g.	p.	i.	h.
$\mathbf{g}.$			1.351	
			0.010	
p.			1.276	
			0.012	
i.			0.000	
			0.000	
h.	1.316			
	0.007	0.018	0.015	0.000

TABLE S337. KS distances on size of tokens. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.			0.545	
			0.007	
p.			1.854	
			0.033	
i.	0.545			
			0.000	
h.	0.807			
	0.008	0.035	0.011	0.000

TABLE S338. KS distances on size of known words. TAG: 8. TAG: 8

	$\parallel \mathbf{g}.$	p.	i.	h.
g.	0.000	0.433	1.222	0.868
	0.000	0.019	0.050	0.025
p.	0.433			
			0.069	
i.			0.000	
	0.050	0.069	0.000	0.075
h.	0.868			
	0.025	0.039	0.075	0.000

TABLE S339. KS distances on size of sentences. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.				0.295
	0.000	0.027	0.010	0.009
p.	0.609			
			0.026	
i.	0.257			
	0.010	0.026	0.000	0.019
h.	0.295			
	0.009	0.035	0.019	0.000

TABLE S340. KS distances on use of adjectives on sentences. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.				0.607
		0.025		
p.	0.579			
		0.000		
i.	0.718			
		0.024		
h.	0.607			
	0.018	0.043	0.045	0.000

TABLE S341. KS distances on use of substantives on sentences. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.	0.000	1.270	0.480	0.936
		0.055		
p.	1.270			
		0.000		
i.	0.480			
		0.036		
h.	0.936			
	0.027	0.083	0.047	0.000

TABLE S342. KS distances on use of punctuations on sentences. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.	0.000			
		0.106		
p.	1.183			
	0.106	0.000	0.128	0.133
i.	0.368			
	0.027	0.128	0.000	0.043
h.	0.531			
	0.030	0.133	0.043	0.000

TABLE S343. KS distances on use of number of characters in messages. TAG: 8. TAG: 8

	g.	p.	i.	h.
g.	0.000	2.048	0.836	0.891
	0.000	0.161	0.061	0.049
p.	2.048			
		0.000		
i.	0.836			
	0.061	0.213	0.000	0.032
h.	0.891			
	0.049	0.191	0.032	0.000

TABLE S344. KS distances on use of verbs in each 100 tokens. TAG: 8. TAG: 8

	g.	р.	i.	h.
g.	0.000	16.790	12.817	18.100
	0.000	0.058	0.068	0.084
p.	16.790	0.000	22.418	28.463
	0.058	0.000	0.126	0.142
i.	12.817	22.418	0.000	2.758
	0.068	0.126	0.000	0.018
h.	18.100	28.463	2.758	0.000
	0.084	0.142	0.018	0.000

TABLE S345. KS distances on size of tokens. TAG: 10. TAG:  $^{10}$ 

	g.	p.	i.	h.
g.	0.000	21.345	13.029	16.589
	0.000	0.157	0.125	0.140
p.	21.345	0.000	26.606	30.980
	0.157	0.000	0.283	0.296
i.	13.029	26.606	0.000	2.907
	0.125	0.283	0.000	0.033
h.	16.589	30.980	2.907	0.000
	0.140	0.296	0.033	0.000

TABLE S346. KS distances on size of known words. TAG:  $10.\ \mathrm{TAG} \colon 10$ 

	g.	p.	i.	h.
$\mathbf{g}.$	0.000			
			0.015	
p.			2.569	
			0.097	
i.	0.515			
	0.015	0.097	0.000	0.035
h.	1.494			
	0.038	0.119	0.035	0.000

TABLE S347. KS distances on size of sentences. TAG: 10. TAG: 10

	g.	p.	i.	h.
$\mathbf{g}.$			0.744	
			0.022	
p.			2.142	
			0.081	
i.	0.744	2.142	0.000	0.625
			0.000	
h.	0.778			
	0.020	0.079	0.021	0.000

TABLE S348. KS distances on use of adjectives on sentences. TAG: 10. TAG:  $10\,$ 

	g.	p.	i.	h.
g.		3.401		
		0.105		
p.	3.401			
		0.000		
i.	1.167			
		0.139		
h.	1.526			
	0.039	0.144	0.019	0.000

TABLE S349. KS distances on use of substantives on sentences. TAG: 10. TAG:  $10\,$ 

	g.	p.	i.	h.
g.	0.000	1.609	0.476	0.782
		0.050		
p.		0.000		
		0.000		
i.	0.476			
	1	0.064		
h.	0.782			
	0.020	0.069	0.035	0.000

TABLE S350. KS distances on use of punctuations on sentences. TAG: 10. TAG: 10

	g.	p.	i.	h.
g.				0.702
		0.052		
p.	0.496			
		0.000		
i.	0.506	0.271	0.000	2.780
	0.034	0.031	0.000	0.215
h.	0.702			
	0.045	0.097	0.215	0.000

TABLE S351. KS distances on use of number of characters in messages. TAG: 10. TAG:  $10\,$ 

	g.	p.	i.	h.
g.	0.000	10.613	9.239	10.631
	0.000	0.365	0.492	0.495
p.	10.613	0.000	15.251	17.211
	0.365	0.000	0.857	0.858
i.	9.239	15.251	0.000	0.901
	0.492	0.857	0.000	0.058
h.	10.631	17.211	0.901	0.000
	0.495	0.858	0.058	0.000

TABLE S352. KS distances on use of verbs in each 100 tokens. TAG: 10. TAG:  $10\,$ 

	g.	p.	i.	h.
$\mathbf{g}.$	0.000	1.377	1.775	2.362
			0.007	
p.			1.052	
			0.009	
i.			0.000	
	0.007	0.009	0.000	0.017
h.	2.362			
	0.010	0.019	0.017	0.000

TABLE S353. KS distances on size of tokens. TAG: 11. TAG:  $^{11}$ 

	g.	p.	i.	h.
g.		1.352		
		0.020		
p.		0.000		
		0.000		
i.	1.271			
		0.022		
h.	1.064			
	0.008	0.025	0.017	0.000

TABLE S354. KS distances on size of known words. TAG: 11. TAG:  $11\,$ 

	g.	p.	i.	h.
g.	0.000	0.817	1.156	1.377
		0.035		
p.	0.817			
		0.000		
i.		0.835		
	0.023	0.037	0.000	0.050
h.		1.421		
	0.029	0.063	0.050	0.000

TABLE S355. KS distances on size of sentences. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.			0.743	
			0.015	
p.	0.817			
			0.047	
i.	0.743			
	0.015	0.047	0.000	0.027
h.	0.607			
	0.013	0.027	0.027	0.000

TABLE S356. KS distances on use of adjectives on sentences. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.		0.704		
		0.030		
p.	0.704			
		0.000		
i.	2.115			
		0.072		
h.	2.050			
	0.042	0.025	0.085	0.000

TABLE S357. KS distances on use of substantives on sentences. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.	0.000	0.645	1.631	1.843
		0.028		
p.	0.645			
	0.028	0.000	0.027	0.065
i.		0.604		
	0.032	0.027	0.000	0.071
h.	1.843			
	0.038	0.065	0.071	0.000

TABLE S358. KS distances on use of punctuations on sentences. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.	0.000			
		0.152		
p.	1.278			
		0.000		
i.	1.623			
	0.119	0.264	0.000	0.183
h.	0.987			
	0.069	0.138	0.183	0.000

TABLE S359. KS distances on use of number of characters in messages. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.	0.000			
	0.000	0.116	0.032	0.019
p.	1.392			
	0.116	0.000	0.137	0.102
i.	0.816			
	0.032	0.137	0.000	0.049
h.	0.467			
	0.019	0.102	0.049	0.000

TABLE S360. KS distances on use of verbs in each 100 tokens. TAG: 11. TAG: 11

	g.	p.	i.	h.
g.			1.997	
			0.010	
p.	3.291			
			0.029	
i.			0.000	
			0.000	
h.	1.435			
	0.012	0.026	0.015	0.000

TABLE S361. KS distances on size of tokens. TAG: 15. TAG:  $^{15}$ 

	g.	p.	i.	h.
g.				1.795
			0.030	
p.	6.086			
			0.097	
i.			0.000	
			0.000	
h.			1.607	
	0.026	0.094	0.024	0.000

TABLE S362. KS distances on size of known words. TAG: 15. TAG: 15

	g.	p.	i.	h.
g.	0.000	1.108	0.735	0.403
			0.019	
p.			1.500	
			0.054	
i.	0.735			
	0.019	0.054	0.000	0.028
h.	0.403			
	0.018	0.047	0.028	0.000

TABLE S363. KS distances on size of sentences. TAG: 15. TAG: 15

	g.	p.	i.	h.
$\mathbf{g}.$			0.422	
			0.011	
p.	0.741			
			0.029	
i.	0.422			
	0.011	0.029	0.000	0.050
h.	0.882			
	0.039	0.054	0.050	0.000

TABLE S364. KS distances on use of adjectives on sentences. TAG: 15. TAG: 15

	g.	p.	i.	h.
g.	0.000			
	0.000	0.046	0.024	0.045
p.		0.000		
		0.000		
i.	0.930			
		0.070		
h.	0.997			
	0.045	0.077	0.047	0.000

TABLE S365. KS distances on use of substantives on sentences. TAG: 15. TAG: 15

	g.	p.	i.	h.
g.	0.000	1.034	0.571	0.489
	0.000	0.034	0.015	0.022
p.		0.000		
		0.000		
i.	0.571			
		0.049		
h.	0.489			
	0.022	0.046	0.024	0.000

TABLE S366. KS distances on use of punctuations on sentences. TAG: 15. TAG: 15

	g.	p.	i.	h.
g.		1.551		
		0.163		
p.	1.551			
	0.163	0.000	0.174	0.325
i.	0.301	1.557	0.000	1.314
	0.022	0.174	0.000	0.156
h.	1.463	2.329	1.314	0.000
	0.164	0.325	0.156	0.000

TABLE S367. KS distances on use of number of characters in messages. TAG: 15. TAG:  $15\,$ 

	g.	p.	i.	h.
g.	0.000	1.856	1.304	1.022
	0.000	0.111	0.063	0.082
p.	1.856			
	0.111	0.000	0.174	0.181
i.	1.304			
	0.063	0.174	0.000	0.051
h.	1.022			
	0.082	0.181	0.051	0.000

TABLE S368. KS distances on use of verbs in each 100 tokens. TAG: 15. TAG: 15

- D. Correlation of topological and textual metrics
- 1. Snapshots of 1000 messages

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.07	0.04	-0.02	0.03	-0.00	0.06	0.04	0.13
(p.)	1.02	0.24	0.14	-0.03	0.01	-0.09	-0.06	-0.05	0.00
(i.)	1.02	-0.24	-0.21	-0.20	-0.14	-0.17	-0.10	-0.11	-0.16
(h.)	1.14	-0.86	-0.14	-0.04	0.31	0.20	0.27	0.10	-0.01
d	0.07	1.01	0.96	0.08	0.10	0.09	0.13	0.09	0.24
	0.24	1.02	0.82	-0.17	0.01	-0.27	-0.04	-0.23	-0.05
	-0.24	1.02	0.96	0.21	0.05	0.23	0.04	0.13	0.09
	-0.86	1.14	0.77	0.52	0.07	0.08	-0.07	0.15	0.31
s	0.04	0.96	1.01	0.07	0.10	0.09	0.13	0.09	0.23
	0.14	0.82	1.02	-0.16	-0.01	-0.21	-0.03	-0.18	-0.04
	-0.21	0.96	1.02	0.14	0.06	0.15	0.05	0.08	0.11
	-0.14	0.77	1.14	0.50	0.18	0.49	0.22	0.50	0.40
$\mu_S(p)$	-0.02	0.08	0.07	1.01	0.63	0.78	0.49	0.63	0.45
	-0.03	-0.17	-0.16	1.02	0.64	0.75	0.62	0.61	0.54
	-0.20	0.21	0.14	1.02	0.62	0.87	0.40	0.69	0.33
	-0.04	0.52	0.50	1.14	0.89	0.01	0.39	-0.01	0.56
$\sigma_S(p)$	0.03	0.10	0.10	0.63	1.01	0.28	0.75	0.11	0.59
	0.01	0.01	-0.01	0.64	1.02	0.21	0.74	0.09	0.57
	-0.14	0.05	0.06	0.62	1.02	0.36	0.81	0.10	0.62
	0.31	0.07	0.18	0.89	1.14	0.36	0.80	0.28	0.76
$\mu_S(kw)$	-0.00	0.09	0.09	0.78	0.28	1.01	0.44	0.92	0.46
	-0.09	-0.27	-0.21	0.75	0.21	1.02	0.45	0.95	0.44
	-0.17	0.23	0.15	0.87	0.36	1.02	0.42	0.90	0.44
	0.20	0.08	0.49	0.01	0.36	1.14	0.95	1.13	0.92
$\sigma_S(kw)$	0.06	0.13	0.13	0.49	0.75	0.44	1.01	0.26	0.85
	-0.06	-0.04	-0.03	0.62	0.74	0.45	1.02	0.31	0.93
	-0.10	0.04	0.05	0.40	0.81	0.42	1.02	0.17	0.82
	0.27	-0.07	0.22	0.39	0.80	0.95	1.14	0.91	1.05
$\mu_S(sw)$	0.04	0.09	0.09	0.63	0.11	0.92	0.26	1.01	0.38
	-0.05	-0.23	-0.18	0.61	0.09	0.95	0.31	1.02	0.39
	-0.11	0.13	0.08	0.69	0.10	0.90	0.17	1.02	0.32
	0.10	0.15	0.50	-0.01	0.28	1.13	0.91	1.14	0.92
$\sigma_S(sw)$	0.13	0.24	0.23	0.45	0.59	0.46	0.85	0.38	1.01
	0.00	-0.05	-0.04	0.54	0.57	0.44	0.93	0.39	1.02
	-0.16	0.09	0.11	0.33	0.62	0.44	0.82	0.32	1.02
	-0.01	0.31	0.40	0.56	0.76	0.92	1.05	0.92	1.14

TABLE S369. Pierson correlation coefficient for the topological and textual measures. TAG: 0

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.12	0.11	0.02	0.03	0.09	0.10	-0.03	0.01
(p.)	1.01	0.31	0.23	-0.01	0.01	0.06	0.09	-0.09	-0.07
(i.)	1.02	-0.22	-0.19	0.27	0.28	0.22	0.18	0.17	0.18
(h.)	1.05	-0.33	-0.28	0.26	0.04	0.25	0.03	0.34	0.21
d	0.12	1.01	0.99	-0.06	-0.04	-0.06	-0.01	0.03	0.11
	0.31	1.01	0.92	-0.20	-0.20	-0.16	-0.16	0.08	0.07
	-0.22	1.02	0.93	-0.27	-0.25	-0.19	-0.15	-0.00	0.01
	-0.33	1.05	1.01	-0.28	-0.19	-0.16	0.05	-0.14	0.01
s	0.11	0.99	1.01	-0.06	-0.03	-0.06	-0.01	0.02	0.10
	0.23	0.92	1.01	-0.17	-0.18	-0.13	-0.15	0.13	0.13
	-0.19	0.93	1.02	-0.25	-0.19	-0.16	-0.08	-0.04	-0.04
	-0.28	1.01	1.05	-0.32	-0.23	-0.25	-0.02	-0.16	0.00
$\mu_S(p)$	0.02	-0.06	-0.06	1.01	0.98	0.83	0.81	0.10	0.16
	-0.01	-0.20	-0.17	1.01	1.00	0.84	0.84	0.04	0.15
	0.27	-0.27	-0.25	1.02	0.91	0.93	0.80	0.45	0.22
	0.26	-0.28	-0.32	1.05	0.83	0.69	0.55	0.44	0.33
$\sigma_S(p)$	0.03	-0.04	-0.03	0.98	1.01	0.78	0.83	0.05	0.13
	0.01	-0.20	-0.18	1.00	1.01	0.82	0.85	0.01	0.12
	0.28	-0.25	-0.19	0.91	1.02	0.82	0.91	0.37	0.22
	0.04	-0.19	-0.23	0.83	1.05	0.52	0.65	0.24	0.23
$\mu_S(kw)$	0.09	-0.06	-0.06	0.83	0.78	1.01	0.92	0.42	0.41
	0.06	-0.16	-0.13	0.84	0.82	1.01	0.95	0.36	0.40
	0.22	-0.19	-0.16	0.93	0.82	1.02	0.88	0.61	0.37
	0.25	-0.16	-0.25	0.69	0.52	1.05	0.86	0.85	0.73
$\sigma_S(kw)$	0.10	-0.01	-0.01	0.81	0.83	0.92	1.01	0.31	0.41
	0.09	-0.16	-0.15	0.84	0.85	0.95	1.01	0.26	0.41
	0.18	-0.15	-0.08	0.80	0.91	0.88	1.02	0.48	0.34
	0.03	0.05	-0.02	0.55	0.65	0.86	1.05	0.55	0.57
$\mu_S(sw)$	-0.03	0.03	0.02	0.10	0.05	0.42	0.31	1.01	0.84
	-0.09	0.08	0.13	0.04	0.01	0.36	0.26	1.01	0.84
	0.17	-0.00	-0.04	0.45	0.37	0.61	0.48	1.02	0.85
	0.34	-0.14	-0.16	0.44	0.24	0.85	0.55	1.05	0.97
$\sigma_S(sw)$	0.01	0.11	0.10	0.16	0.13	0.41	0.41	0.84	1.01
	-0.07	0.07	0.13	0.15	0.12	0.40	0.41	0.84	1.01
	0.18	0.01	-0.04	0.22	0.22	0.37	0.34	0.85	1.02
	0.21	0.01	0.00	0.33	0.23	0.73	0.57	0.97	1.05

TABLE S370. Pierson correlation coefficient for the topological and textual measures. TAG: 2

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	-0.06	-0.07	0.20	0.26	0.27	0.35	0.34	0.35
(p.)	1.02	0.65	0.46	0.11	0.26	0.33	0.38	0.45	0.43
(i.)	1.03	-0.77	-0.39	0.20	0.13	-0.07	0.07	-0.21	-0.22
(h.)	1.17	-0.87	-0.85	-0.03	-0.11	0.07	-0.28	0.18	-0.17
d	-0.06	1.01	0.98	-0.02	0.02	0.01	0.06	0.06	0.13
	0.65	1.02	0.68	0.18	0.21	0.41	0.39	0.49	0.46
	-0.77	1.03	0.54	-0.22	-0.12	-0.00	-0.05	0.09	0.08
	-0.87	1.17	1.16	-0.37	-0.39	-0.44	-0.24	-0.39	0.16
s	-0.07	0.98	1.01	-0.01	0.04	-0.02	0.07	0.00	0.10
	0.46	0.68	1.02	0.21	0.35	0.34	0.44	0.31	0.32
	-0.39	0.54	1.03	0.05	0.36	0.05	0.38	-0.02	0.15
	-0.85	1.16	1.17	-0.32	-0.35	-0.46	-0.22	-0.47	0.09
$\mu_S(p)$	0.20	-0.02	-0.01	1.01	0.86	0.63	0.75	0.19	0.37
	0.11	0.18	0.21	1.02	0.82	0.66	0.68	0.35	0.49
	0.20	-0.22	0.05	1.03	0.88	0.64	0.79	-0.05	0.23
	-0.03	-0.37	-0.32	1.17	1.09	0.89	1.00	0.34	0.50
$\sigma_S(p)$	0.26	0.02	0.04	0.86	1.01	0.52	0.92	0.15	0.39
	0.26	0.21	0.35	0.82	1.02	0.60	0.91	0.31	0.55
	0.13	-0.12	0.36	0.88	1.03	0.51	0.97	-0.11	0.23
	-0.11	-0.39	-0.35	1.09	1.17	0.97	1.13	0.54	0.47
$\mu_S(kw)$	0.27	0.01	-0.02	0.63	0.52	1.01	0.70	0.77	0.75
	0.33	0.41	0.34	0.66	0.60	1.02	0.75	0.81	0.73
	-0.07	-0.00	0.05	0.64	0.51	1.03	0.67	0.70	0.80
	0.07	-0.44	-0.46	0.89	0.97	1.17	1.02	0.96	0.81
$\sigma_S(kw)$	0.35	0.06	0.07	0.75	0.92	0.70	1.01	0.39	0.64
	0.38	0.39	0.44	0.68	0.91	0.75	1.02	0.53	0.77
	0.07	-0.05	0.38	0.79	0.97	0.67	1.03	0.12	0.46
	-0.28	-0.24	-0.22	1.00	1.13	1.02	1.17	0.68	0.59
$\mu_S(sw)$	0.34	0.06	0.00	0.19	0.15	0.77	0.39	1.01	0.84
	0.45	0.49	0.31	0.35	0.31	0.81	0.53	1.02	0.83
	-0.21	0.09	-0.02	-0.05	-0.11	0.70	0.12	1.03	0.89
	0.18	-0.39	-0.47	0.34	0.54	0.96	0.68	1.17	0.82
$\sigma_S(sw)$	0.35	0.13	0.10	0.37	0.39	0.75	0.64	0.84	1.01
	0.43	0.46	0.32	0.49	0.55	0.73	0.77	0.83	1.02
	-0.22	0.08	0.15	0.23	0.23	0.80	0.46	0.89	1.03
	-0.17	0.16	0.09	0.50	0.47	0.81	0.59	0.82	1.17

TABLE S371. Pierson correlation coefficient for the topological and textual measures. TAG: 3

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.00	0.20	0.19	-0.02	0.00	-0.02	-0.01	-0.00	0.02
(p.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(i.)	1.02	0.53	0.27	-0.03	-0.05	-0.13	-0.11	-0.18	-0.10
(h.)	1.09	-0.41	-0.36	0.51	0.69	0.62	0.50	0.78	0.74
d	0.20	1.00	0.99	-0.02	-0.01	-0.02	-0.01	-0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.53	1.02	0.78	0.00	0.10	-0.10	0.04	-0.16	-0.01
	-0.41	1.09	1.08	-0.21	-0.17	-0.17	-0.15	-0.14	-0.26
s	0.19	0.99	1.00	-0.02	-0.00	-0.02	-0.01	0.00	0.02
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.27	0.78	1.02	0.05	0.21	0.01	0.17	0.09	0.32
	-0.36	1.08	1.09	-0.16	-0.11	-0.16	-0.11	-0.13	-0.21
$\mu_S(p)$	-0.02	-0.02	-0.02	1.00	0.87	0.91	0.75	0.09	0.08
	0.00	0.00	0.00	1.00	0.87	0.91	0.75	0.09	0.08
	-0.03	0.00	0.05	1.02	0.96	0.94	0.95	0.38	0.47
	0.51	-0.21	-0.16	1.09	0.97	0.98	0.99	0.54	0.61
$\sigma_S(p)$	0.00	-0.01	-0.00	0.87	1.00	0.85	0.92	0.07	0.18
	0.00	0.00	0.00	0.87	1.00	0.85	0.92	0.07	0.17
	-0.05	0.10	0.21	0.96	1.02	0.87	1.00	0.38	0.55
	0.69	-0.17	-0.11	0.97	1.09	0.85	1.00	0.66	0.80
$\mu_S(kw)$	-0.02	-0.02	-0.02	0.91	0.85	1.00	0.85	0.36	0.20
	0.00	0.00	0.00	0.91	0.85	1.00	0.86	0.36	0.21
	-0.13	-0.10	0.01	0.94	0.87	1.02	0.93	0.65	0.52
	0.62	-0.17	-0.16	0.98	0.85	1.09	0.87	0.77	0.65
$\sigma_S(kw)$	-0.01	-0.01	-0.01	0.75	0.92	0.85	1.00	0.14	0.33
	0.00	0.00	0.00	0.75	0.92	0.86	1.00	0.13	0.32
	-0.11	0.04	0.17	0.95	1.00	0.93	1.02	0.47	0.61
	0.50	-0.15	-0.11	0.99	1.00	0.87	1.09	0.46	0.54
$\mu_S(sw)$	-0.00	-0.00	0.00	0.09	0.07	0.36	0.14	1.00	0.43
	0.00	0.00	0.00	0.09	0.07	0.36	0.13	1.00	0.43
	-0.18	-0.16	0.09	0.38	0.38	0.65	0.47	1.02	0.61
	0.78	-0.14	-0.13	0.54	0.66	0.77	0.46	1.09	0.99
$\sigma_S(sw)$	0.02	0.01	0.02	0.08	0.18	0.20	0.33	0.43	1.00
	0.00	0.00	0.00	0.08	0.17	0.21	0.32	0.43	1.00
	-0.10	-0.01	0.32	0.47	0.55	0.52	0.61	0.61	1.02
	0.74	-0.26	-0.21	0.61	0.80	0.65	0.54	0.99	1.09

TABLE S372. Pierson correlation coefficient for the topological and textual measures. TAG: 6

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.14	0.13	0.00	0.07	-0.06	0.05	0.01	0.07
(p.)	1.01	0.29	0.28	-0.04	0.02	-0.09	0.02	-0.03	0.02
(i.)	1.01	0.19	0.15	0.12	0.19	-0.03	0.10	0.07	0.12
(h.)	1.06	-0.40	-0.22	0.04	-0.16	-0.03	-0.23	0.02	-0.06
d	0.14	1.01	0.98	0.08	0.16	0.10	0.26	0.18	0.33
	0.29	1.01	0.92	0.05	0.10	-0.16	-0.05	-0.13	-0.08
	0.19	1.01	0.90	0.16	0.27	0.06	0.36	0.16	0.27
	-0.40	1.06	0.94	0.14	0.16	0.13	0.14	0.20	0.20
s	0.13	0.98	1.01	0.06	0.14	0.10	0.25	0.17	0.32
	0.28	0.92	1.01	0.04	0.07	-0.13	-0.03	-0.10	-0.04
	0.15	0.90	1.01	0.06	0.19	0.02	0.33	0.11	0.24
	-0.22	0.94	1.06	0.13	0.12	0.08	0.12	0.12	0.11
$\mu_S(p)$	0.00	0.08	0.06	1.01	0.79	0.76	0.61	0.35	0.36
	-0.04	0.05	0.04	1.01	0.87	0.73	0.60	0.30	0.37
	0.12	0.16	0.06	1.01	0.65	0.78	0.63	0.27	0.18
	0.04	0.14	0.13	1.06	0.89	1.03	0.78	0.95	0.88
$\sigma_S(p)$	0.07	0.16	0.14	0.79	1.01	0.49	0.79	0.24	0.53
	0.02	0.10	0.07	0.87	1.01	0.54	0.78	0.22	0.55
	0.19	0.27	0.19	0.65	1.01	0.35	0.81	0.16	0.41
	-0.16	0.16	0.12	0.89	1.06	0.87	1.02	0.75	0.91
$\mu_S(kw)$	-0.06	0.10	0.10	0.76	0.49	1.01	0.64	0.66	0.46
	-0.09	-0.16	-0.13	0.73	0.54	1.01	0.63	0.64	0.45
	-0.03	0.06	0.02	0.78	0.35	1.01	0.62	0.55	0.27
	-0.03	0.13	0.08	1.03	0.87	1.06	0.80	0.99	0.92
$\sigma_S(kw)$	0.05	0.26	0.25	0.61	0.79	0.64	1.01	0.39	0.70
	0.02	-0.05	-0.03	0.60	0.78	0.63	1.01	0.33	0.73
	0.10	0.36	0.33	0.63	0.81	0.62	1.01	0.35	0.46
	-0.23	0.14	0.12	0.78	1.02	0.80	1.06	0.69	0.92
$\mu_S(sw)$	0.01	0.18	0.17	0.35	0.24	0.66	0.39	1.01	0.71
	-0.03	-0.13	-0.10	0.30	0.22	0.64	0.33	1.01	0.66
	0.07	0.16	0.11	0.27	0.16	0.55	0.35	1.01	0.72
	0.02	0.20	0.12	0.95	0.75	0.99	0.69	1.06	0.95
$\sigma_S(sw)$	0.07	0.33	0.32	0.36	0.53	0.46	0.70	0.71	1.01
	0.02	-0.08	-0.04	0.37	0.55	0.45	0.73	0.66	1.01
	0.12	0.27	0.24	0.18	0.41	0.27	0.46	0.72	1.01
	-0.06	0.20	0.11	0.88	0.91	0.92	0.92	0.95	1.06

TABLE S373. Pierson correlation coefficient for the topological and textual measures. TAG: 7

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.17	0.09	-0.06	-0.03	-0.03	-0.06	0.24	0.09
(p.)	1.01	0.30	0.29	-0.05	-0.06	-0.01	-0.06	0.25	-0.03
(i.)	1.02	-0.02	0.03	0.36	0.21	0.11	-0.01	0.07	-0.15
(h.)	1.13	-0.77	-0.71	-0.54	-0.42	-0.20	-0.13	0.01	0.08
d	0.17	1.01	0.96	-0.07	-0.03	-0.02	-0.00	0.15	0.26
	0.30	1.01	0.96	-0.22	-0.21	-0.15	-0.19	0.15	-0.14
	-0.02	1.02	0.91	-0.07	0.02	0.16	0.20	0.23	0.32
	-0.77	1.12	1.07	-0.08	-0.19	-0.13	-0.40	-0.05	-0.07
s	0.09	0.96	1.01	-0.04	-0.01	-0.01	0.01	0.11	0.21
	0.29	0.96	1.01	-0.20	-0.19	-0.14	-0.17	0.12	-0.13
	0.03	0.91	1.02	-0.09	-0.01	0.13	0.15	0.25	0.29
	-0.71	1.07	1.13	0.07	0.03	-0.06	-0.20	-0.13	-0.10
$\mu_S(p)$	-0.06	-0.07	-0.04	1.01	0.95	0.96	0.93	0.14	0.27
	-0.05	-0.22	-0.20	1.01	0.97	0.97	0.95	0.18	0.39
	0.36	-0.07	-0.09	1.02	0.94	0.36	0.58	-0.03	0.05
	-0.54	-0.08	0.07	1.12	0.96	0.70	0.96	0.11	0.42
$\sigma_S(p)$	-0.03	-0.03	-0.01	0.95	1.01	0.90	0.97	0.11	0.33
	-0.06	-0.21	-0.19	0.97	1.01	0.93	0.99	0.14	0.45
	0.21	0.02	-0.01	0.94	1.02	0.33	0.62	-0.06	0.05
	-0.42	-0.19	0.03	0.96	1.12	0.54	1.01	-0.14	0.01
$\mu_S(kw)$	-0.03	-0.02	-0.01	0.96	0.90	1.01	0.93	0.37	0.43
	-0.01	-0.15	-0.14	0.97	0.93	1.01	0.95	0.38	0.50
	0.11	0.16	0.13	0.36	0.33	1.02	0.70	0.82	0.79
	-0.20	-0.13	-0.06	0.70	0.54	1.12	0.82	0.88	0.85
$\sigma_S(kw)$	-0.06	-0.00	0.01	0.93	0.97	0.93	1.01	0.20	0.50
	-0.06	-0.19	-0.17	0.95	0.99	0.95	1.01	0.21	0.58
	-0.01	0.20	0.15	0.58	0.62	0.70	1.02	0.36	0.66
	-0.13	-0.40	-0.20	0.96	1.01	0.82	1.12	0.20	0.43
$\mu_S(sw)$	0.24	0.15	0.11	0.14	0.11	0.37	0.20	1.01	0.50
	0.25	0.15	0.12	0.18	0.14	0.38	0.21	1.01	0.37
	0.07	0.23	0.25	-0.03	-0.06	0.82	0.36	1.02	0.83
	0.01	-0.05	-0.13	0.11	-0.14	0.88	0.20	1.12	0.86
$\sigma_S(sw)$	0.09	0.26	0.21	0.27	0.33	0.43	0.50	0.50	1.01
	-0.03	-0.14	-0.13	0.39	0.45	0.50	0.58	0.37	1.01
	-0.15	0.32	0.29	0.05	0.05	0.79	0.66	0.83	1.02
	0.08	-0.07	-0.10	0.42	0.01	0.85	0.43	0.86	1.12

TABLE S374. Pierson correlation coefficient for the topological and textual measures. TAG: 8

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.00	0.05	0.04	-0.04	0.00	-0.02	0.01	-0.00	0.00
(p.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(i.)	1.01	-0.11	-0.18	-0.19	-0.11	-0.23	-0.17	-0.17	-0.15
(h.)	1.17	-0.78	-0.78	0.11	0.15	-0.07	0.05	-0.53	-0.37
d	0.05	1.00	1.00	0.07	0.06	0.18	0.20	0.25	0.28
	0.00	1.00	0.93	0.06	0.08	0.06	0.06	0.07	0.06
	-0.11	1.01	0.91	0.01	0.02	0.01	0.06	0.07	0.10
	-0.78	1.17	1.17	-0.05	-0.04	0.17	0.14	0.65	0.58
s	0.04	1.00	1.00	0.09	0.07	0.19	0.22	0.25	0.29
	0.00	0.93	1.00	0.12	0.17	0.15	0.14	0.15	0.18
	-0.18	0.91	1.01	0.11	0.12	0.09	0.22	0.08	0.12
	-0.78	1.17	1.17	-0.00	0.01	0.21	0.19	0.68	0.62
$\mu_S(p)$	-0.04	0.07	0.09	1.00	0.86	0.61	0.68	0.25	0.35
	0.00	0.06	0.12	1.00	0.84	0.55	0.57	0.12	0.20
	-0.19	0.01	0.11	1.01	0.93	0.65	0.82	0.43	0.53
	0.11	-0.05	-0.00	1.17	1.16	1.12	1.13	0.77	0.88
$\sigma_S(p)$	0.00	0.06	0.07	0.86	1.00	0.40	0.71	0.15	0.41
	0.00	0.08	0.17	0.84	1.00	0.37	0.59	0.05	0.28
	-0.11	0.02	0.12	0.93	1.01	0.39	0.83	0.21	0.57
	0.15	-0.04	0.01	1.16	1.17	1.10	1.12	0.71	0.85
$\mu_S(kw)$	-0.02	0.18	0.19	0.61	0.40	1.00	0.65	0.78	0.51
	0.00	0.06	0.15	0.55	0.37	1.00	0.65	0.72	0.48
	-0.23	0.01	0.09	0.65	0.39	1.01	0.54	0.87	0.40
	-0.07	0.17	0.21	1.12	1.10	1.17	1.16	0.97	1.05
$\sigma_S(kw)$	0.01	0.20	0.22	0.68	0.71	0.65	1.00	0.42	0.76
	0.00	0.06	0.14	0.57	0.59	0.65	1.00	0.36	0.73
	-0.17	0.06	0.22	0.82	0.83	0.54	1.01	0.35	0.75
	0.05	0.14	0.19	1.13	1.12	1.16	1.17	0.91	1.02
$\mu_S(sw)$	-0.00	0.25	0.25	0.25	0.15	0.78	0.42	1.00	0.61
	0.00	0.07	0.15	0.12	0.05	0.72	0.36	1.00	0.57
	-0.17	0.07	0.08	0.43	0.21	0.87	0.35	1.01	0.53
	-0.53	0.65	0.68	0.77	0.71	0.97	0.91	1.17	1.14
$\sigma_S(sw)$	0.00	0.28	0.29	0.35	0.41	0.51	0.76	0.61	1.00
	0.00	0.06	0.18	0.20	0.28	0.48	0.73	0.57	1.00
	-0.15	0.10	0.12	0.53	0.57	0.40	0.75	0.53	1.01
	-0.37	0.58	0.62	0.88	0.85	1.05	1.02	1.14	1.17

TABLE S375. Pierson correlation coefficient for the topological and textual measures. TAG: 9

	- 00	d		11 (m)	<b>7</b> (n)	$\mu_S(kw)$	$\sigma_S(kw)$	11 (0011)	( au)
	cc		8	$\mu_S(p)$	$\sigma_S(p)$			$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.00	0.08	0.05	-0.03	0.01	-0.02	0.03	0.10	0.12
(p.)	1.01	0.45	0.41	-0.07	-0.09	-0.04	-0.02	0.05	0.08
(i.)	1.01	-0.07	-0.06	0.07	0.02	0.04	-0.01	0.06	0.05
(h.)	1.11	-0.31	-0.37	-0.10	-0.09	-0.43	-0.14	-0.27	-0.06
d	0.08	1.00	0.98	-0.01	0.13	0.02	0.15	0.15	0.21
	0.45	1.01	0.98	-0.04	-0.02	-0.04	-0.04	0.04	0.03
	-0.07	1.01	0.92	-0.15	0.06	0.10	0.21	0.16	0.21
	-0.31	1.11	1.04	-0.04	-0.08	0.22	0.46	0.52	0.64
s	0.05	0.98	1.00	-0.01	0.16	0.02	0.14	0.14	0.20
	0.41	0.98	1.01	-0.04	-0.02	-0.04	-0.04	0.05	0.04
	-0.06	0.92	1.01	-0.12	0.21	0.08	0.21	0.15	0.22
	-0.37	1.04	1.11	-0.08	-0.15	0.12	0.39	0.37	0.54
$\mu_S(p)$	-0.03	-0.01	-0.01	1.00	0.61	0.93	0.63	0.32	0.17
	-0.07	-0.04	-0.04	1.01	0.75	0.96	0.72	0.35	0.19
	0.07	-0.15	-0.12	1.01	0.55	0.51	0.27	0.33	0.16
	-0.10	-0.04	-0.08	1.11	0.82	0.12	0.55	-0.17	-0.06
$\sigma_S(p)$	0.01	0.13	0.16	0.61	1.00	0.52	0.65	0.23	0.35
	-0.09	-0.02	-0.02	0.75	1.01	0.69	0.76	0.23	0.38
	0.02	0.06	0.21	0.55	1.01	0.30	0.47	0.18	0.23
	-0.09	-0.08	-0.15	0.82	1.11	0.40	0.72	0.12	0.12
$\mu_S(kw)$	-0.02	0.02	0.02	0.93	0.52	1.00	0.76	0.52	0.36
	-0.04	-0.04	-0.04	0.96	0.69	1.01	0.82	0.51	0.36
	0.04	0.10	0.08	0.51	0.30	1.01	0.64	0.89	0.61
	-0.43	0.22	0.12	0.12	0.40	1.11	0.84	1.00	0.73
$\sigma_S(kw)$	0.03	0.15	0.14	0.63	0.65	0.76	1.00	0.53	0.74
	-0.02	-0.04	-0.04	0.72	0.76	0.82	1.01	0.48	0.71
	-0.01	0.21	0.21	0.27	0.47	0.64	1.01	0.59	0.84
	-0.14	0.46	0.39	0.55	0.72	0.84	1.11	0.77	0.80
$\mu_S(sw)$	0.10	0.15	0.14	0.32	0.23	0.52	0.53	1.00	0.68
	0.05	0.04	0.05	0.35	0.23	0.51	0.48	1.01	0.64
	0.06	0.16	0.15	0.33	0.18	0.89	0.59	1.01	0.73
	-0.27	0.52	0.37	-0.17	0.12	1.00	0.77	1.11	0.92
$\sigma_S(sw)$	0.12	0.21	0.20	0.17	0.35	0.36	0.74	0.68	1.00
	0.08	0.03	0.04	0.19	0.38	0.36	0.71	0.64	1.01
	0.05	0.21	0.22	0.16	0.23	0.61	0.84	0.73	1.01
	-0.06	0.64	0.54	-0.06	0.12	0.73	0.80	0.92	1.11
	-			1				1	

TABLE S376. Pierson correlation coefficient for the topological and textual measures. TAG: 10

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.16	0.05	0.16	0.34	0.21	0.24	0.09	0.18
(p.)	1.02	0.51	0.60	0.21	0.33	0.10	0.03	-0.04	0.02
(i.)	1.05	-0.29	-0.10	-0.12	0.03	0.20	0.06	0.01	-0.02
(h.)	1.20	-1.05	-0.95	0.86	0.75	0.38	-0.12	-0.90	-0.95
d	0.16	1.01	0.95	-0.04	0.18	0.17	0.28	0.20	0.25
	0.51	1.02	0.86	0.09	0.40	0.29	0.23	0.17	0.23
	-0.29	1.05	0.45	0.30	0.17	-0.00	-0.01	0.14	0.26
	-1.05	1.20	1.15	-0.92	-0.87	-0.27	-0.19	0.81	0.59
s	0.05	0.95	1.01	-0.10	0.04	0.12	0.20	0.17	0.19
	0.60	0.86	1.02	0.02	0.26	0.25	0.23	0.19	0.22
	-0.10	0.45	1.05	0.02	0.01	0.18	0.26	0.27	0.32
	-0.95	1.15	1.20	-0.94	-0.88	-0.26	-0.31	0.78	0.46
$\mu_S(p)$	0.16	-0.04	-0.10	1.01	0.58	0.42	0.15	-0.01	0.20
	0.21	0.09	0.02	1.02	0.58	0.49	0.17	0.02	0.24
	-0.12	0.30	0.02	1.05	0.75	-0.33	-0.22	-0.35	-0.03
	0.86	-0.92	-0.94	1.20	1.16	0.93	0.73	-0.32	-0.24
$\sigma_S(p)$	0.34	0.18	0.04	0.58	1.01	0.40	0.48	0.17	0.36
	0.33	0.40	0.26	0.58	1.02	0.44	0.49	0.21	0.43
	0.03	0.17	0.01	0.75	1.05	-0.09	-0.02	-0.28	-0.13
	0.75	-0.87	-0.88	1.16	1.20	0.96	0.81	-0.26	-0.14
$\mu_S(kw)$	0.21	0.17	0.12	0.42	0.40	1.01	0.69	0.78	0.68
	0.10	0.29	0.25	0.49	0.44	1.02	0.67	0.77	0.69
	0.20	-0.00	0.18	-0.33	-0.09	1.05	0.68	0.92	0.55
	0.38	-0.27	-0.26	0.93	0.96	1.20	0.83	0.26	0.08
$\sigma_S(kw)$	0.24	0.28	0.20	0.15	0.48	0.69	1.01	0.67	0.86
	0.03	0.23	0.23	0.17	0.49	0.67	1.02	0.66	0.87
	0.06	-0.01	0.26	-0.22	-0.02	0.68	1.05	0.69	0.71
	-0.12	-0.19	-0.31	0.73	0.81	0.83	1.20	0.60	0.77
$\mu_S(sw)$	0.09	0.20	0.17	-0.01	0.17	0.78	0.67	1.01	0.74
	-0.04	0.17	0.19	0.02	0.21	0.77	0.66	1.02	0.72
	0.01	0.14	0.27	-0.35	-0.28	0.92	0.69	1.05	0.80
	-0.90	0.81	0.78	-0.32	-0.26	0.26	0.60	1.20	1.04
$\sigma_S(sw)$	0.18	0.25	0.19	0.20	0.36	0.68	0.86	0.74	1.01
	0.02	0.23	0.22	0.24	0.43	0.69	0.87	0.72	1.02
	-0.02	0.26	0.32	-0.03	-0.13	0.55	0.71	0.80	1.05
	-0.95	0.59	0.46	-0.24	-0.14	0.08	0.77	1.04	1.20

TABLE S377. Pierson correlation coefficient for the topological and textual measures. TAG: 11

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.00	0.12	0.13	0.00	0.01	0.00	0.02	-0.03	0.06
(p.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(i.)	1.01	0.02	0.05	0.07	0.03	0.03	0.04	-0.07	0.08
(h.)	1.14	-0.27	-0.13	0.00	0.00	0.11	-0.04	0.04	-0.02
d	0.12	1.00	0.97	-0.04	-0.01	-0.04	0.00	-0.04	0.07
	0.00	1.01	1.01	-0.08	-0.09	-0.07	-0.08	-0.03	0.04
	0.02	1.01	0.91	0.02	-0.01	-0.00	-0.02	-0.08	0.02
	-0.27	1.14	0.95	0.39	0.51	0.45	0.47	0.39	0.16
s	0.13	0.97	1.00	-0.02	0.02	-0.02	0.03	-0.06	0.07
	0.00	1.01	1.01	-0.08	-0.09	-0.07	-0.08	-0.03	0.04
	0.05	0.91	1.01	0.15	0.11	0.08	0.10	-0.15	0.02
	-0.13	0.95	1.14	0.26	0.46	0.47	0.45	0.62	0.21
$\mu_S(p)$	0.00	-0.04	-0.02	1.00	0.93	0.94	0.91	0.39	0.64
	0.00	-0.08	-0.08	1.01	0.95	0.95	0.95	0.43	0.68
	0.07	0.02	0.15	1.01	0.89	0.90	0.85	0.24	0.51
	0.00	0.39	0.26	1.14	1.08	0.88	1.08	0.22	0.99
$\sigma_S(p)$	0.01	-0.01	0.02	0.93	1.00	0.82	0.97	0.26	0.67
	0.00	-0.09	-0.09	0.95	1.01	0.85	0.98	0.34	0.68
	0.03	-0.01	0.11	0.89	1.01	0.70	0.98	0.02	0.62
	0.00	0.51	0.46	1.08	1.14	0.97	1.14	0.50	1.05
$\mu_S(kw)$	0.00	-0.04	-0.02	0.94	0.82	1.00	0.85	0.61	0.69
	0.00	-0.07	-0.07	0.95	0.85	1.01	0.90	0.63	0.72
	0.03	-0.00	0.08	0.90	0.70	1.01	0.72	0.58	0.56
	0.11	0.45	0.47	0.88	0.97	1.14	1.01	0.84	0.99
$\sigma_S(kw)$	0.02	0.00	0.03	0.91	0.97	0.85	1.00	0.31	0.76
	0.00	-0.08	-0.08	0.95	0.98	0.90	1.01	0.41	0.79
	0.04	-0.02	0.10	0.85	0.98	0.72	1.01	0.05	0.71
	-0.04	0.47	0.45	1.08	1.14	1.01	1.14	0.54	1.08
$\mu_S(sw)$	-0.03	-0.04	-0.06	0.39	0.26	0.61	0.31	1.00	0.47
	0.00	-0.03	-0.03	0.43	0.34	0.63	0.41	1.01	0.52
	-0.07	-0.08	-0.15	0.24	0.02	0.58	0.05	1.01	0.31
	0.04	0.39	0.62	0.22	0.50	0.84	0.54	1.14	0.58
$\sigma_S(sw)$	0.06	0.07	0.07	0.64	0.67	0.69	0.76	0.47	1.00
	0.00	0.04	0.04	0.68	0.68	0.72	0.79	0.52	1.01
	0.08	0.02	0.02	0.51	0.62	0.56	0.71	0.31	1.01
	-0.02	0.16	0.21	0.99	1.05	0.99	1.08	0.58	1.14

TABLE S378. Pierson correlation coefficient for the topological and textual measures. TAG: 12

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.00	0.28	0.18	-0.02	0.02	-0.00	0.05	0.09	0.13
(p.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(i.)	1.05	0.74	0.20	0.09	-0.06	-0.04	-0.18	0.08	-0.34
(h.)	1.10	-0.78	-0.74	-0.06	-0.11	0.15	-0.04	0.50	0.39
d	0.28	1.00	0.94	-0.02	0.01	-0.00	0.04	0.06	0.11
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.74	1.05	0.57	-0.04	-0.11	-0.07	-0.11	0.05	-0.03
	-0.78	1.10	1.01	-0.30	-0.24	-0.36	-0.31	-0.20	-0.38
s	0.18	0.94	1.00	-0.02	0.01	-0.00	0.03	0.04	0.08
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.20	0.57	1.05	-0.17	-0.11	-0.09	-0.06	0.12	0.37
	-0.74	1.01	1.10	-0.31	-0.13	-0.44	-0.29	-0.25	-0.43
$\mu_S(p)$	-0.02	-0.02	-0.02	1.00	0.27	0.87	0.22	0.09	-0.04
	0.00	0.00	0.00	1.00	0.27	0.87	0.22	0.10	-0.03
	0.09	-0.04	-0.17	1.05	0.91	0.82	0.82	-0.18	0.06
	-0.06	-0.30	-0.31	1.10	0.87	0.93	0.95	-0.00	0.48
$\sigma_S(p)$	0.02	0.01	0.01	0.27	1.00	0.25	0.90	0.06	0.21
	0.00	0.00	0.00	0.27	1.00	0.25	0.90	0.06	0.20
	-0.06	-0.11	-0.11	0.91	1.05	0.82	0.99	-0.12	0.29
	-0.11	-0.24	-0.13	0.87	1.10	0.57	1.00	-0.06	0.33
$\mu_S(kw)$	-0.00	-0.00	-0.00	0.87	0.25	1.00	0.30	0.18	0.03
	0.00	0.00	0.00	0.87	0.25	1.00	0.30	0.18	0.02
	-0.04	-0.07	-0.09	0.82	0.82	1.05	0.85	0.31	0.40
	0.15	-0.36	-0.44	0.93	0.57	1.10	0.81	0.48	0.82
$\sigma_S(kw)$	0.05	0.04	0.03	0.22	0.90	0.30	1.00	0.15	0.35
	0.00	0.00	0.00	0.22	0.90	0.30	1.00	0.14	0.33
	-0.18	-0.11	-0.06	0.82	0.99	0.85	1.05	-0.02	0.48
	-0.04	-0.31	-0.29	0.95	1.00	0.81	1.10	0.15	0.60
$\mu_S(sw)$	0.09	0.06	0.04	0.09	0.06	0.18	0.15	1.00	0.51
	0.00	0.00	0.00	0.10	0.06	0.18	0.14	1.00	0.50
	0.08	0.05	0.12	-0.18	-0.12	0.31	-0.02	1.05	0.50
	0.50	-0.20	-0.25	-0.00	-0.06	0.48	0.15	1.10	0.94
$\sigma_S(sw)$	0.13	0.11	0.08	-0.04	0.21	0.03	0.35	0.51	1.00
	0.00	0.00	0.00	-0.03	0.20	0.02	0.33	0.50	1.00
	-0.34	-0.03	0.37	0.06	0.29	0.40	0.48	0.50	1.05
	0.39	-0.38	-0.43	0.48	0.33	0.82	0.60	0.94	1.10

TABLE S379. Pierson correlation coefficient for the topological and textual measures. TAG: 13

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.00	0.18	0.18	-0.03	-0.02	-0.02	0.01	0.02	0.09
(p.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(i.)	1.01	0.21	0.23	-0.04	-0.01	-0.02	0.02	-0.00	0.12
(h.)	1.13	-0.26	-0.22	-0.50	-0.39	-0.33	-0.37	-0.36	-0.43
d	0.18	1.00	1.00	-0.03	0.02	-0.01	0.09	0.16	0.27
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.21	1.01	0.98	0.08	0.23	0.07	0.19	0.10	0.30
	-0.26	1.12	1.11	0.32	0.13	-0.05	-0.02	-0.11	-0.02
s	0.18	1.00	1.00	-0.03	0.02	-0.01	0.09	0.15	0.26
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.23	0.98	1.01	0.08	0.23	0.07	0.20	0.09	0.30
	-0.22	1.11	1.12	0.29	0.08	-0.06	-0.04	-0.13	-0.04
$\mu_S(p)$	-0.03	-0.03	-0.03	1.00	0.44	0.97	0.41	0.33	0.02
	0.00	0.00	0.00	1.01	0.40	0.99	0.39	0.46	-0.02
	-0.04	0.08	0.08	1.01	0.88	0.86	0.86	0.23	0.25
	-0.50	0.32	0.29	1.13	1.04	1.00	0.99	1.00	1.00
$\sigma_S(p)$	-0.02	0.02	0.02	0.44	1.00	0.41	0.91	0.08	0.27
	0.00	0.00	0.00	0.40	1.01	0.36	0.96	0.03	0.23
	-0.01	0.23	0.23	0.88	1.01	0.74	0.91	0.17	0.46
(1)	-0.39	0.13	0.08	1.04	1.12	0.89	0.88	0.90	0.88
$\mu_S(kw)$	-0.02	-0.01	-0.01	0.97	0.41	1.00	0.44	0.48	0.12
	0.00	0.00	0.00	0.99	0.36	1.01	0.37	0.55	0.03
	-0.02	0.07	0.07	0.86	0.74	1.01	0.85	0.59	0.39
(1)	-0.33	-0.05	-0.06	1.00	0.89	1.12	1.11	1.12	1.11
$\sigma_S(kw)$	$\begin{vmatrix} 0.01 \\ 0.00 \end{vmatrix}$	0.09	$0.09 \\ 0.00$	$0.41 \\ 0.39$	$0.91 \\ 0.96$	$0.44 \\ 0.37$	$1.00 \\ 1.01$	0.24 0.13	$0.51 \\ 0.41$
	$0.00 \\ 0.02$	0.00	0.00	0.39 <b>0.86</b>	0.90 $0.91$	0.85	1.01	0.13	0.41 $0.57$
	-0.02	-0.02	-0.04	0.99	0.81	1.11	$\begin{array}{c} 1.01 \\ 1.13 \end{array}$	1.10	1.12
$\mu_S(sw)$	0.02	0.16	0.15	0.33	0.08	0.48	0.24	1.00	0.58
$\mu_S(sw)$	0.00	0.00	0.00	0.46	0.03	0.55	0.13	1.01	0.58
	-0.00	0.10	0.09	0.23	0.17	0.59	0.29	1.01	0.48
	-0.36	-0.11	-0.13	1.00	0.90	1.12	1.10	1.12	1.10
$\sigma_S(sw)$	0.09	0.27	0.26	0.02	0.27	0.12	0.51	0.58	1.00
	0.00	0.00	0.00	-0.02	0.23	0.03	0.41	0.58	1.01
	0.12	0.30	0.30	0.25	0.46	0.39	0.57	0.48	1.01
	-0.43	-0.02	-0.04	1.00	0.88	1.11	1.12	1.10	1.12

TABLE S380. Pierson correlation coefficient for the topological and textual measures. TAG: 15

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.00	0.20	0.18	-0.08	-0.04	-0.08	-0.05	-0.01	0.04
(p.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(i.)	1.01	0.36	0.34	-0.02	0.00	-0.04	-0.02	-0.05	0.05
(h.)	1.07	-0.32	-0.07	-0.39	-0.40	0.17	-0.20	0.38	-0.03
d	0.20	1.00	0.93	-0.10	-0.05	-0.10	-0.05	0.01	0.06
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.36	1.01	0.76	-0.10	-0.07	-0.10	-0.09	0.07	0.09
	-0.32	1.07	0.93	0.06	0.54	0.44	0.45	0.37	0.18
s	0.18	0.93	1.00	-0.08	-0.03	-0.07	-0.04	0.02	0.06
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.34	0.76	1.01	-0.03	0.01	-0.03	-0.02	0.11	0.10
	-0.07	0.93	1.07	-0.09	0.40	0.43	0.32	0.53	0.26
$\mu_S(p)$	-0.08	-0.10	-0.08	1.00	0.43	0.85	0.38	0.32	-0.06
	0.00	0.00	0.00	1.01	0.36	0.84	0.30	0.36	-0.10
	-0.02	-0.10	-0.03	1.01	0.99	1.00	0.97	0.09	0.19
	-0.39	0.06	-0.09	1.07	0.78	0.34	0.55	-0.03	0.45
$\sigma_S(p)$	-0.04	-0.05	-0.03	0.43	1.00	0.54	0.98	-0.04	0.16
	0.00	0.00	0.00	0.36	1.01	0.47	0.99	-0.07	0.15
	0.00	-0.07	0.01	0.99	1.01	0.97	0.99	0.08	0.22
	-0.40	0.54	0.40	0.78	1.07	0.61	0.91	0.29	0.68
$\mu_S(kw)$	-0.08	-0.10	-0.07	0.85	0.54	1.00	0.51	0.43	0.04
	0.00	0.00	0.00	0.84	0.47	1.01	0.45	0.47	0.00
	-0.04	-0.10	-0.03	1.00	0.97	1.01	0.98	0.20	0.27
	0.17	0.44	0.43	0.34	0.61	1.07	0.77	0.92	0.65
$\sigma_S(kw)$	-0.05	-0.05	-0.04	0.38	0.98	0.51	1.00	-0.03	0.22
	0.00	0.00	0.00	0.30	0.99	0.45	1.01	-0.05	0.20
	-0.02	-0.09	-0.02	0.97	0.99	0.98	1.01	0.11	0.35
	-0.20	0.45	0.32	0.55	0.91	0.77	1.07	0.48	0.77
$\mu_S(sw)$	-0.01	0.01	0.02	0.32	-0.04	0.43	-0.03	1.00	0.38
	0.00	0.00	0.00	0.36	-0.07	0.47	-0.05	1.01	0.37
	-0.05	0.07	0.11	0.09	0.08	0.20	0.11	1.01	0.45
	0.38	0.37	0.53	-0.03	0.29	0.92	0.48	1.07	0.67
$\sigma_S(sw)$	0.04	0.06	0.06	-0.06	0.16	0.04	0.22	0.38	1.00
	0.00	0.00	0.00	-0.10	0.15	0.00	0.20	0.37	1.01
	0.05	0.09	0.10	0.19	0.22	0.27	0.35	0.45	1.01
	-0.03	0.18	0.26	0.45	0.68	0.65	0.77	0.67	1.07

TABLE S381. Pierson correlation coefficient for the topological and textual measures. TAG: 16

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		cc	d	s	$\mu_{\alpha}(n)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					$\mu_S(p)$	,				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	1		l	l	ı	1			l .
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1								l
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		1					1			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	(h.)									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	d	1		l		I	1			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		1					1		!	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1				!	I		!	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	s	-0.07				0.19	0.15		0.21	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1			l	l	I		l	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		-0.35			l	ı	I		l	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		-0.48	0.94	1.06	-0.04	-0.01	-0.02	0.02	-0.03	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\mu_S(p)$	-0.11	0.09	0.08	1.01	0.88	0.83	0.89	0.15	0.34
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		-0.16	-0.07	-0.03	1.02	0.95	0.89	0.92	0.24	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				1		l	1			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		0.14	-0.05	-0.04	1.06	0.98	0.62			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\sigma_S(p)$	-0.06	0.20	0.19	0.88	1.01	0.63		0.05	0.30
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		1		1			1		l	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		-0.12	0.18	0.22	0.99	1.02	0.78	0.92	-0.06	0.20
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							0.35			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\mu_S(kw)$	-0.07	0.18	0.15		0.63	1.01	0.77	0.60	0.56
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		-0.11	-0.04	-0.00	0.89	0.77	1.02	0.81	0.58	0.46
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1			l		1		l	l .
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		-0.24	0.09	-0.02	0.62	0.35	1.06	0.51	0.78	0.84
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\sigma_S(kw)$	-0.08		l	0.89	0.93	0.77		l	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		1				l	l			
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		1			l		1			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$										
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\mu_S(sw)$	1		1	l	1	I		l	l .
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		-0.06	0.03	0.06	0.24	0.15	0.58	0.20	1.02	0.43
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1			0.00	-0.06	0.51		l	
-0.08   0.10   0.15   0.42   0.46   0.46   <b>0.60</b>   0.43   <b>1.02</b>   -0.43   0.34   0.44   0.27   0.20   0.58   0.46   <b>0.63</b>   <b>1.02</b>			0.13	-0.03	-0.05	-0.28	0.78	-0.14	1.06	0.91
-0.43   0.34   0.44   0.27   0.20   0.58   0.46   <b>0.63</b>   <b>1.02</b>	$\sigma_S(sw)$	-0.08	0.39	0.33	0.34	0.30	0.56	0.52	0.63	1.01
		-0.08	0.10	0.15	0.42	0.46	0.46	0.60	0.43	1.02
-0.23   0.13   -0.03   0.24   0.00   <b>0.84</b>   0.15   <b>0.91</b>   <b>1.06</b>		-0.43	0.34	0.44	l		1	0.46	l	
		-0.23	0.13	-0.03	0.24	0.00	0.84	0.15	0.91	1.06

TABLE S382. Pierson correlation coefficient for the topological and textual measures. TAG: 17

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.15	0.05	-0.24	-0.04	-0.19	-0.03	0.18	0.26
(p.)	1.01	0.47	0.35	-0.15	-0.07	-0.08	-0.02	0.36	0.19
(i.)	1.04	-0.24	-0.19	0.05	0.06	-0.01	-0.01	-0.13	-0.15
(h.)	1.17	-0.85	-0.67	-0.78	-0.73	-0.85	-0.87	-0.84	-0.92
d	0.15	1.01	0.96	-0.18	-0.01	-0.16	-0.01	-0.01	0.21
	0.47	1.01	0.93	-0.45	-0.19	-0.38	-0.12	0.07	0.28
	-0.24	1.04	0.90	0.15	0.19	0.07	0.20	-0.03	0.09
	-0.85	1.17	1.11	0.45	0.57	0.27	0.47	0.28	0.47
s	0.05	0.96	1.01	-0.12	-0.01	-0.11	-0.01	-0.02	0.14
	0.35	0.93	1.01	-0.40	-0.16	-0.34	-0.11	0.05	0.24
	-0.19	0.90	1.04	-0.01	0.05	-0.08	0.10	-0.16	0.01
	-0.67	1.11	1.17	0.18	0.30	0.04	0.19	0.09	0.22
$\mu_S(p)$	-0.24	-0.18	-0.12	1.01	0.50	0.99	0.47	0.50	-0.14
	-0.15	-0.45	-0.40	1.01	0.52	0.99	0.49	0.53	-0.08
	0.05	0.15	-0.01	1.04	1.02	0.72	0.69	-0.04	-0.08
	-0.78	0.45	0.18	1.17	1.12	0.97	1.14	0.89	1.13
$\sigma_S(p)$	-0.04	-0.01	-0.01	0.50	1.01	0.45	0.98	0.16	0.26
	-0.07	-0.19	-0.16	0.52	1.01	0.47	1.00	0.18	0.32
	0.06	0.19	0.05	1.02	1.04	0.71	0.78	-0.11	-0.07
	-0.73	0.57	0.30	1.12	1.17	0.81	1.06	0.72	1.02
$\mu_S(kw)$	-0.19	-0.16	-0.11	0.99	0.45	1.01	0.44	0.62	-0.08
	-0.08	-0.38	-0.34	0.99	0.47	1.01	0.45	0.65	-0.02
	-0.01	0.07	-0.08	0.72	0.71	1.04	0.76	0.58	0.28
	-0.85	0.27	0.04	0.97	0.81	1.17	1.06	1.15	1.08
$\sigma_S(kw)$	-0.03	-0.01	-0.01	0.47	0.98	0.44	1.01	0.22	0.40
	-0.02	-0.12	-0.11	0.49	1.00	0.45	1.01	0.22	0.44
	-0.01	0.20	0.10	0.69	0.78	0.76	1.04	0.16	0.45
	-0.87	0.47	0.19	1.14	1.06	1.06	1.17	1.00	1.15
$\mu_S(sw)$	0.18	-0.01	-0.02	0.50	0.16	0.62	0.22	1.01	0.34
	0.36	0.07	0.05	0.53	0.18	0.65	0.22	1.01	0.35
	-0.13	-0.03	-0.16	-0.04	-0.11	0.58	0.16	1.04	0.53
	-0.84	0.28	0.09	0.89	0.72	1.15	1.00	1.17	1.03
$\sigma_S(sw)$	0.26	0.21	0.14	-0.14	0.26	-0.08	0.40	0.34	1.01
	0.19	0.28	0.24	-0.08	0.32	-0.02	0.44	0.35	1.01
	-0.15	0.09	0.01	-0.08	-0.07	0.28	0.45	0.53	1.04
	-0.92	0.47	0.22	1.13	1.02	1.08	1.15	1.03	1.17

TABLE S383. Pierson correlation coefficient for the topological and textual measures. TAG: 18

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.13	0.08	-0.17	-0.13	-0.11	-0.08	0.15	0.08
(p.)	1.02	0.30	0.21	-0.08	-0.07	-0.06	-0.06	0.04	0.01
(i.)	1.02	-0.31	-0.17	-0.30	-0.29	-0.32	-0.32	0.06	-0.08
(h.)	1.08	-0.35	-0.25	-0.38	-0.41	-0.42	-0.37	-0.45	-0.43
d	0.13	1.01	0.97	-0.15	-0.10	-0.10	0.00	0.12	0.20
	0.30	1.02	0.90	-0.32	-0.30	-0.25	-0.30	0.10	-0.18
	-0.31	1.02	0.95	0.01	0.13	-0.07	0.22	-0.08	0.03
	-0.35	1.08	0.78	-0.42	-0.38	-0.40	-0.45	-0.29	-0.42
s	0.08	0.97	1.01	-0.12	-0.08	-0.08	-0.00	0.10	0.18
	0.21	0.90	1.02	-0.24	-0.27	-0.20	-0.27	0.05	-0.15
	-0.17	0.95	1.02	0.01	0.21	-0.10	0.23	-0.09	0.07
	-0.25	0.78	1.08	-0.52	-0.44	-0.28	-0.48	-0.14	-0.38
$\mu_S(p)$	-0.17	-0.15	-0.12	1.01	0.93	0.77	0.80	0.24	0.42
	-0.08	-0.32	-0.24	1.02	0.95	0.79	0.85	0.39	0.70
	-0.30	0.01	0.01	1.02	0.82	0.62	0.52	-0.13	-0.07
	-0.38	-0.42	-0.52	1.08	1.04	0.98	1.03	0.91	0.99
$\sigma_S(p)$	-0.13	-0.10	-0.08	0.93	1.01	0.58	0.74	0.29	0.54
	-0.07	-0.30	-0.27	0.95	1.02	0.59	0.77	0.42	0.82
	-0.29	0.13	0.21	0.82	1.02	0.49	0.73	-0.16	0.08
	-0.41	-0.38	-0.44	1.04	1.08	0.92	0.98	0.83	0.90
$\mu_S(kw)$	-0.11	-0.10	-0.08	0.77	0.58	1.01	0.88	0.42	0.37
	-0.06	-0.25	-0.20	0.79	0.59	1.02	0.90	0.46	0.43
	-0.32	-0.07	-0.10	0.62	0.49	1.02	0.70	0.53	0.44
	-0.42	-0.40	-0.28	0.98	0.92	1.08	1.02	1.06	1.06
$\sigma_S(kw)$	-0.08	0.00	-0.00	0.80	0.74	0.88	1.01	0.37	0.61
	-0.06	-0.30	-0.27	0.85	0.77	0.90	1.02	0.40	0.69
	-0.32	0.22	0.23	0.52	0.73	0.70	1.02	0.27	0.59
	-0.37	-0.45	-0.48	1.03	0.98	1.02	1.08	0.97	1.04
$\mu_S(sw)$	0.15	0.12	0.10	0.24	0.29	0.42	0.37	1.01	0.67
	0.04	0.10	0.05	0.39	0.42	0.46	0.40	1.02	0.57
	0.06	-0.08	-0.09	-0.13	-0.16	0.53	0.27	1.02	0.67
	-0.45	-0.29	-0.14	0.91	0.83	1.06	0.97	1.08	1.03
$\sigma_S(sw)$	0.08	0.20	0.18	0.42	0.54	0.37	0.61	0.67	1.01
	0.01	-0.18	-0.15	0.70	0.82	0.43	0.69	0.57	1.02
	-0.08	0.03	0.07	-0.07	0.08	0.44	0.59	0.67	1.02
	-0.43	-0.42	-0.38	0.99	0.90	1.06	1.04	1.03	1.08

TABLE S384. Pierson correlation coefficient for the topological and textual measures. TAG: 19

## 2. Snapshots of 2000 messages

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.05	0.01	-0.03	-0.04	-0.04	-0.01	-0.03	0.00
(p.)	1.01	0.51	0.53	0.02	-0.04	-0.07	0.00	-0.11	-0.05
(i.)	1.02	-0.28	-0.20	-0.22	-0.22	-0.23	-0.22	-0.16	-0.21
(h.)	1.11	-0.50	-0.06	0.35	0.48	-0.31	0.12	-0.40	-0.28
d	0.05	1.01	0.93	-0.02	-0.01	0.09	0.04	0.18	0.12
	0.51	1.01	0.85	0.06	0.00	0.03	0.12	0.07	0.07
	-0.28	1.02	0.93	-0.16	-0.16	-0.02	-0.11	0.11	-0.08
	-0.50	1.11	0.96	0.07	-0.15	0.43	0.17	0.37	0.29
s	0.01	0.93	1.01	-0.01	-0.02	0.09	0.03	0.15	0.10
	0.53	0.85	1.01	0.02	0.02	-0.01	0.11	0.01	0.05
	-0.20	0.93	1.02	-0.17	-0.17	-0.04	-0.13	0.04	-0.10
	-0.06	0.96	1.11	0.45	0.16	0.62	0.43	0.50	0.50
$\mu_S(p)$	-0.03	-0.02	-0.01	1.01	0.91	0.68	0.80	0.34	0.68
	0.02	0.06	0.02	1.01	0.66	0.50	0.24	0.30	0.16
	-0.22	-0.16	-0.17	1.02	0.97	0.84	0.89	0.43	0.81
	0.35	0.07	0.45	1.11	0.83	0.60	0.65	0.46	0.65
$\sigma_S(p)$	-0.04	-0.01	-0.02	0.91	1.01	0.60	0.95	0.26	0.80
	-0.04	0.00	0.02	0.66	1.01	0.19	0.47	0.06	0.23
	-0.22	-0.16	-0.17	0.97	1.02	0.83	0.98	0.41	0.90
	0.48	-0.15	0.16	0.83	1.11	0.14	0.85	-0.10	0.20
$\mu_S(kw)$	-0.04	0.09	0.09	0.68	0.60	1.01	0.67	0.85	0.73
	-0.07	0.03	-0.01	0.50	0.19	1.01	0.43	0.88	0.42
	-0.23	-0.02	-0.04	0.84	0.83	1.02	0.88	0.84	0.94
	-0.31	0.43	0.62	0.60	0.14	1.11	0.61	1.07	1.09
$\sigma_S(kw)$	-0.01	0.04	0.03	0.80	0.95	0.67	1.01	0.39	0.93
	0.00	0.12	0.11	0.24	0.47	0.43	1.01	0.45	0.85
	-0.22	-0.11	-0.13	0.89	0.98	0.88	1.02	0.52	0.98
	0.12	0.17	0.43	0.65	0.85	0.61	1.11	0.36	0.62
$\mu_S(sw)$	-0.03	0.18	0.15	0.34	0.26	0.85	0.39	1.01	0.61
	-0.11	0.07	0.01	0.30	0.06	0.88	0.45	1.01	0.63
	-0.16	0.11	0.04	0.43	0.41	0.84	0.52	1.02	0.69
	-0.40	0.37	0.50	0.46	-0.10	1.07	0.36	1.11	1.06
$\sigma_S(sw)$	0.00	0.12	0.10	0.68	0.80	0.73	0.93	0.61	1.01
	-0.05	0.07	0.05	0.16	0.23	0.42	0.85	0.63	1.01
	-0.21	-0.08	-0.10	0.81	0.90	0.94	0.98	0.69	1.02
	-0.28	0.29	0.50	0.65	0.20	1.09	0.62	1.06	1.11

TABLE S385. Pierson correlation coefficient for the topological and textual measures. TAG: 0

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.00	0.13	0.11	-0.05	0.01	-0.05	-0.01	-0.05	-0.05
(p.)	1.01	0.31	0.30	-0.13	-0.12	-0.15	-0.13	-0.15	-0.12
(i.)	1.01	-0.09	-0.04	-0.05	-0.04	-0.06	-0.07	-0.10	-0.09
(h.)	1.05	-0.50	-0.37	0.48	0.63	0.24	0.53	-0.19	-0.24
d	0.13	1.00	0.98	0.05	0.18	0.02	0.13	0.08	0.11
	0.31	1.01	0.97	-0.01	0.03	-0.02	0.08	-0.04	-0.02
	-0.09	1.01	0.96	-0.03	0.10	-0.07	0.05	-0.06	0.04
	-0.50	1.05	1.00	-0.25	-0.23	-0.43	-0.39	-0.21	0.08
s	0.11	0.98	1.00	0.04	0.17	-0.00	0.11	0.06	0.09
	0.30	0.97	1.01	-0.02	0.02	-0.01	0.07	-0.04	-0.02
	-0.04	0.96	1.01	-0.04	0.12	-0.09	0.03	-0.08	0.01
	-0.37	1.00	1.05	-0.24	-0.19	-0.44	-0.31	-0.24	0.10
$\mu_S(p)$	-0.05	0.05	0.04	1.00	0.72	0.78	0.69	0.64	0.50
	-0.13	-0.01	-0.02	1.01	0.66	0.50	0.37	0.28	0.19
	-0.05	-0.03	-0.04	1.01	0.84	0.95	0.88	0.89	0.80
	0.48	-0.25	-0.24	1.05	0.70	0.70	0.73	0.19	0.15
$\sigma_S(p)$	0.01	0.18	0.17	0.72	1.00	0.56	0.74	0.49	0.48
	-0.12	0.03	0.02	0.66	1.01	0.38	0.64	0.39	0.43
	-0.04	0.10	0.12	0.84	1.01	0.72	0.80	0.64	0.65
	0.63	-0.23	-0.19	0.70	1.05	0.34	0.85	-0.20	-0.16
$\mu_S(kw)$	-0.05	0.02	-0.00	0.78	0.56	1.00	0.82	0.80	0.58
	-0.15	-0.02	-0.01	0.50	0.38	1.01	0.62	0.56	0.27
	-0.06	-0.07	-0.09	0.95	0.72	1.01	0.93	0.93	0.83
	0.24	-0.43	-0.44	0.70	0.34	1.05	0.68	0.61	0.37
$\sigma_S(kw)$	-0.01	0.13	0.11	0.69	0.74	0.82	1.00	0.73	0.71
	-0.13	0.08	0.07	0.37	0.64	0.62	1.01	0.57	0.62
	-0.07	0.05	0.03	0.88	0.80	0.93	1.01	0.82	0.83
	0.53	-0.39	-0.31	0.73	0.85	0.68	1.05	0.07	0.09
$\mu_S(sw)$	-0.05	0.08	0.06	0.64	0.49	0.80	0.73	1.00	0.85
	-0.15	-0.04	-0.04	0.28	0.39	0.56	0.57	1.01	0.82
	-0.10	-0.06	-0.08	0.89	0.64	0.93	0.82	1.01	0.91
	-0.19	-0.21	-0.24	0.19	-0.20	0.61	0.07	1.05	0.89
$\sigma_S(sw)$	-0.05	0.11	0.09	0.50	0.48	0.58	0.71	0.85	1.00
	-0.12	-0.02	-0.02	0.19	0.43	0.27	0.62	0.82	1.01
	-0.09	0.04	0.01	0.80	0.65	0.83	0.83	0.91	1.01
	-0.24	0.08	0.10	0.15	-0.16	0.37	0.09	0.89	1.05

TABLE S386. Pierson correlation coefficient for the topological and textual measures. TAG: 2

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	-0.04	-0.06	-0.09	-0.04	-0.06	0.03	-0.01	0.14
(p.)	1.01	0.76	0.50	-0.11	0.01	-0.08	0.07	-0.03	0.15
(i.)	1.02	-0.60	-0.39	-0.12	-0.36	-0.01	-0.20	-0.02	0.01
(h.)	1.20	-1.09	-1.10	0.36	0.41	0.48	0.07	0.36	-0.32
d	-0.04	1.01	1.00	-0.01	0.08	-0.01	0.10	-0.01	0.09
	0.76	1.01	0.65	-0.16	0.05	-0.12	0.13	-0.01	0.25
	-0.60	1.02	0.70	0.14	0.46	0.02	0.27	-0.00	-0.06
	-1.09	1.20	1.20	-0.44	-0.49	-0.26	-0.24	-0.02	0.20
s	-0.06	1.00	1.01	-0.01	0.06	-0.01	0.08	-0.01	0.08
	0.50	0.65	1.01	-0.10	0.07	-0.08	0.12	-0.01	0.23
	-0.39	0.70	1.02	0.18	0.46	0.07	0.26	0.02	0.01
	-1.10	1.20	1.20	-0.45	-0.50	-0.28	-0.25	-0.03	0.20
$\mu_S(p)$	-0.09	-0.01	-0.01	1.01	0.65	0.80	0.67	0.42	0.46
	-0.11	-0.16	-0.10	1.01	0.63	0.74	0.54	0.26	0.25
	-0.12	0.14	0.18	1.02	0.78	0.95	0.95	0.84	0.84
	0.36	-0.44	-0.45	1.20	1.12	0.80	0.96	-0.34	0.51
$\sigma_S(p)$	-0.04	0.08	0.06	0.65	1.01	0.36	0.89	0.19	0.42
	0.01	0.05	0.07	0.63	1.01	0.28	0.86	0.08	0.37
	-0.36	0.46	0.46	0.78	1.02	0.56	0.89	0.42	0.42
	0.41	-0.49	-0.50	1.12	1.20	0.76	1.11	-0.35	0.71
$\mu_S(kw)$	-0.06	-0.01	-0.01	0.80	0.36	1.01	0.51	0.81	0.53
	-0.08	-0.12	-0.08	0.74	0.28	1.01	0.36	0.76	0.30
	-0.01	0.02	0.07	0.95	0.56	1.02	0.84	0.97	0.95
	0.48	-0.26	-0.28	0.80	0.76	1.20	0.58	0.61	0.56
$ \sigma_S(kw) $	0.03	0.10	0.08	0.67	0.89	0.51	1.01	0.39	0.72
	0.07	0.13	0.12	0.54	0.86	0.36	1.01	0.28	0.71
	-0.20	0.27	0.26	0.95	0.89	0.84	1.02	0.72	0.75
	0.07	-0.24	-0.25	0.96	1.11	0.58	1.20	-0.45	0.97
$\mu_S(sw)$	-0.01	-0.01	-0.01	0.42	0.19	0.81	0.39	1.01	0.61
	-0.03	-0.01	-0.01	0.26	0.08	0.76	0.28	1.01	0.46
	-0.02	-0.00	0.02	0.84	0.42	0.97	0.72	1.02	0.97
	0.36	-0.02	-0.03	-0.34	-0.35	0.61	-0.45	1.20	-0.04
$\sigma_S(sw)$	0.14	0.09	0.08	0.46	0.42	0.53	0.72	0.61	1.01
	0.15	0.25	0.23	0.25	0.37	0.30	0.71	0.46	1.01
	0.01	-0.06	0.01	0.84	0.42	0.95	0.75	0.97	1.02
	-0.32	0.20	0.20	0.51	0.71	0.56	0.97	-0.04	1.20

TABLE S387. Pierson correlation coefficient for the topological and textual measures. TAG: 3

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.06	0.03	-0.01	0.08	-0.10	0.07	-0.14	-0.09
(p.)	1.01	0.39	0.26	-0.01	0.05	-0.12	-0.00	-0.15	-0.14
(i.)	1.01	-0.03	-0.06	-0.10	0.05	-0.12	0.08	-0.16	-0.10
(h.)	1.06	-0.38	-0.21	0.03	-0.25	-0.19	-0.21	-0.06	-0.09
d	0.06	1.00	0.97	0.08	0.31	0.07	0.23	0.04	0.18
	0.39	1.01	0.83	0.11	0.19	-0.12	0.11	-0.28	-0.16
	-0.03	1.01	0.91	-0.09	0.19	-0.02	0.04	0.14	0.18
	-0.38	1.06	0.98	-0.22	0.06	-0.15	0.06	0.30	0.18
s	0.03	0.97	1.00	0.06	0.29	0.06	0.21	0.07	0.20
	0.26	0.83	1.01	0.11	0.19	-0.08	0.14	-0.17	-0.03
	-0.06	0.91	1.01	-0.07	0.18	0.01	0.06	0.24	0.31
	-0.21	0.98	1.06	-0.18	0.16	-0.18	0.10	0.39	0.28
$\mu_S(p)$	-0.01	0.08	0.06	1.00	0.55	0.74	0.40	0.18	0.04
	-0.01	0.11	0.11	1.01	0.53	0.58	0.26	0.08	-0.03
	-0.10	-0.09	-0.07	1.01	0.55	0.87	0.44	0.41	0.03
	0.03	-0.22	-0.18	1.06	0.69	0.40	0.22	-0.07	-0.08
$\sigma_S(p)$	0.08	0.31	0.29	0.55	1.00	0.38	0.72	0.09	0.26
	0.05	0.19	0.19	0.53	1.01	0.19	0.68	0.00	0.23
	0.05	0.19	0.18	0.55	1.01	0.53	0.74	0.28	0.24
	-0.25	0.06	0.16	0.69	1.06	0.01	0.41	-0.20	-0.20
$\mu_S(kw)$	-0.10	0.07	0.06	0.74	0.38	1.00	0.59	0.64	0.39
	-0.12	-0.12	-0.08	0.58	0.19	1.01	0.48	0.74	0.46
	-0.12	-0.02	0.01	0.87	0.53	1.01	0.68	0.63	0.29
	-0.19	-0.15	-0.18	0.40	0.01	1.06	0.66	0.59	0.67
$\sigma_S(kw)$	0.07	0.23	0.21	0.40	0.72	0.59	1.01	0.35	0.51
	-0.00	0.11	0.14	0.26	0.68	0.48	1.01	0.39	0.60
	0.08	0.04	0.06	0.44	0.74	0.68	1.01	0.48	0.45
	-0.21	0.06	0.10	0.22	0.41	0.66	1.06	0.30	0.36
$\mu_S(sw)$	-0.14	0.04	0.07	0.18	0.09	0.64	0.35	1.00	0.81
	-0.15	-0.28	-0.17	0.08	0.00	0.74	0.39	1.01	0.84
	-0.16	0.14	0.24	0.41	0.28	0.63	0.48	1.01	0.82
	-0.06	0.30	0.39	-0.07	-0.20	0.59	0.30	1.06	0.93
$\sigma_S(sw)$	-0.09	0.18	0.20	0.04	0.26	0.39	0.51	0.81	1.00
	-0.14	-0.16	-0.03	-0.03	0.23	0.46	0.60	0.84	1.01
	-0.10	0.18	0.31	0.03	0.24	0.29	0.45	0.82	1.01
	-0.09	0.18	0.28	-0.08	-0.20	0.67	0.36	0.93	1.06

TABLE S388. Pierson correlation coefficient for the topological and textual measures. TAG: 7

	- 00	d		11 (m)	<b>7</b> (n)	11 (lan)	- (lan)	11( 0011)	( oau)
	cc		s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.28	0.24	-0.05	0.13	0.04	0.24	0.09	0.26
(p.)	1.01	0.18	0.11	-0.05	0.01	-0.05	-0.00	-0.05	-0.01
(i.)	1.03	0.07	0.05	0.16	0.10	0.35	0.31	0.46	0.39
(h.)	1.05	-0.50	-0.43	-0.21	-0.14	-0.09	-0.05	0.00	-0.02
d	0.28	1.01	0.98	-0.01	0.19	0.03	0.29	0.05	0.28
	0.18	1.01	0.90	-0.19	-0.01	-0.12	0.02	-0.14	0.02
	0.07	1.03	0.90	0.21	0.21	0.20	0.31	0.16	0.25
	-0.50	1.05	1.01	0.18	0.03	-0.09	-0.02	-0.17	-0.05
s	0.24	0.98	1.01	-0.00	0.18	0.03	0.27	0.04	0.25
	0.11	0.90	1.01	-0.11	0.05	-0.09	0.07	-0.11	0.07
	0.05	0.90	1.03	0.21	0.21	0.21	0.35	0.18	0.29
	-0.43	1.01	1.05	0.13	0.04	-0.13	-0.00	-0.19	-0.07
$\mu_S(p)$	-0.05	-0.01	-0.00	1.01	0.39	0.70	0.19	0.55	0.02
	-0.05	-0.19	-0.11	1.01	0.36	0.72	0.16	0.60	0.01
	0.16	0.21	0.21	1.03	0.84	0.54	0.68	0.23	0.24
	-0.21	0.18	0.13	1.05	0.77	0.65	0.65	0.25	0.40
$\sigma_S(p)$	0.13	0.19	0.18	0.39	1.01	0.08	0.80	0.01	0.53
	0.01	-0.01	0.05	0.36	1.01	0.04	0.83	-0.02	0.62
	0.10	0.21	0.21	0.84	1.03	0.24	0.69	0.05	0.21
	-0.14	0.03	0.04	0.77	1.05	0.37	0.86	0.05	0.20
$\mu_S(kw)$	0.04	0.03	0.03	0.70	0.08	1.01	0.15	0.95	0.11
	-0.05	-0.12	-0.09	0.72	0.04	1.01	0.08	0.96	0.05
	0.35	0.20	0.21	0.54	0.24	1.03	0.60	0.86	0.47
	-0.09	-0.09	-0.13	0.65	0.37	1.05	0.66	0.89	0.91
$\sigma_S(kw)$	0.24	0.29	0.27	0.19	0.80	0.15	1.01	0.14	0.86
	-0.00	0.02	0.07	0.16	0.83	0.08	1.01	0.07	0.90
	0.31	0.31	0.35	0.68	0.69	0.60	1.03	0.41	0.73
	-0.05	-0.02	-0.00	0.65	0.86	0.66	1.05	0.40	0.51
$\mu_S(sw)$	0.09	0.05	0.04	0.55	0.01	0.95	0.14	1.01	0.19
	-0.05	-0.14	-0.11	0.60	-0.02	0.96	0.07	1.01	0.10
	0.46	0.16	0.18	0.23	0.05	0.86	0.41	1.03	0.60
	0.00	-0.17	-0.19	0.25	0.05	0.89	0.40	1.05	0.95
$\sigma_S(sw)$	0.26	0.28	0.25	0.02	0.53	0.11	0.86	0.19	1.01
	-0.01	0.02	0.07	0.01	0.62	0.05	0.90	0.10	1.01
	0.39	0.25	0.29	0.24	0.21	0.47	0.73	0.60	1.03
	-0.02	-0.05	-0.07	0.40	0.20	0.91	0.51	0.95	1.05

TABLE S389. Pierson correlation coefficient for the topological and textual measures. TAG: 8

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.01	0.11	0.11	-0.04	-0.05	-0.01	-0.04	0.17	0.19
(p.)	1.01	0.24	0.29	-0.04	-0.02	-0.03	-0.02	0.10	0.11
(i.)	1.02	-0.16	0.01	0.14	-0.16	0.11	-0.22	0.08	-0.00
(h.)	1.14	-0.57	-0.48	-0.22	-0.06	0.69	0.72	0.59	0.71
d	0.11	1.01	0.99	-0.06	-0.03	-0.04	-0.02	0.10	0.23
	0.24	1.01	0.99	-0.03	0.00	-0.10	0.00	-0.14	-0.06
	-0.16	1.02	0.87	-0.14	-0.01	-0.12	0.10	-0.01	0.31
	-0.57	1.14	1.13	-0.44	-0.29	-0.54	-0.45	-0.69	-0.48
s	0.11	0.99	1.01	-0.05	-0.03	-0.03	-0.02	0.09	0.20
	0.29	0.99	1.01	-0.04	-0.00	-0.09	-0.00	-0.08	-0.04
	0.01	0.87	1.02	-0.14	-0.02	-0.14	0.01	-0.01	0.20
	-0.48	1.13	1.14	-0.46	-0.33	-0.44	-0.35	-0.61	-0.39
$\mu_S(p)$	-0.04	-0.06	-0.05	1.01	0.99	0.96	0.98	-0.09	-0.08
	-0.04	-0.03	-0.04	1.01	1.00	0.98	1.00	-0.10	-0.05
	0.14	-0.14	-0.14	1.02	0.44	0.75	0.35	0.19	-0.16
	-0.22	-0.44	-0.46	1.14	0.55	0.58	0.48	0.73	0.57
$\sigma_S(p)$	-0.05	-0.03	-0.03	0.99	1.01	0.93	1.00	-0.12	-0.03
	-0.02	0.00	-0.00	1.00	1.01	0.95	1.01	-0.13	-0.01
	-0.16	-0.01	-0.02	0.44	1.02	0.22	0.69	0.01	-0.00
	-0.06	-0.29	-0.33	0.55	1.14	0.07	0.53	0.27	0.51
$\mu_S(kw)$	-0.01	-0.04	-0.03	0.96	0.93	1.01	0.93	0.10	0.03
	-0.03	-0.10	-0.09	0.98	0.95	1.01	0.95	0.05	0.01
	0.11	-0.12	-0.14	0.75	0.22	1.02	0.55	0.71	0.29
	0.69	-0.54	-0.44	0.58	0.07	1.14	0.97	1.08	1.00
$\sigma_S(kw)$	-0.04	-0.02	-0.02	0.98	1.00	0.93	1.01	-0.09	0.03
	-0.02	0.00	-0.00	1.00	1.01	0.95	1.01	-0.11	0.03
	-0.22	0.10	0.01	0.35	0.69	0.55	1.02	0.43	0.56
	0.72	-0.45	-0.35	0.48	0.53	0.97	1.14	0.94	1.13
$\mu_S(sw)$	0.17	0.10	0.09	-0.09	-0.12	0.10	-0.09	1.01	0.53
	0.10	-0.14	-0.08	-0.10	-0.13	0.05	-0.11	1.01	0.45
	0.08	-0.01	-0.01	0.19	0.01	0.71	0.43	1.02	0.63
	0.59	-0.69	-0.61	0.73	0.27	1.08	0.94	1.14	0.98
$\sigma_S(sw)$	0.19	0.23	0.20	-0.08	-0.03	0.03	0.03	0.53	1.01
	0.11	-0.06	-0.04	-0.05	-0.01	0.01	0.03	0.45	1.01
	-0.00	0.31	0.20	-0.16	-0.00	0.29	0.56	0.63	1.02
	0.71	-0.48	-0.39	0.57	0.51	1.00	1.13	0.98	1.14

TABLE S390. Pierson correlation coefficient for the topological and textual measures. TAG: 10

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.02	0.12	0.05	0.20	0.16	0.44	0.37	0.42	0.47
(p.)	1.03	0.76	0.77	0.26	0.18	0.48	0.39	0.45	0.49
(i.)	1.05	-0.20	-0.11	-0.33	-0.02	0.04	0.12	0.19	0.24
(h.)	1.20	-1.07	-0.25	0.07	0.18	0.23	0.38	0.09	0.39
d	0.12	1.02	0.91	0.02	0.19	0.13	0.16	0.10	0.12
	0.76	1.02	0.98	0.25	0.26	0.35	0.36	0.32	0.45
	-0.20	1.05	0.85	0.06	0.05	0.33	0.09	0.14	0.03
	-1.07	1.20	0.65	-0.49	-0.61	-0.34	-0.37	0.04	-0.14
s	0.05	0.91	1.02	-0.02	0.12	0.09	0.13	0.06	0.09
	0.77	0.98	1.02	0.18	0.21	0.30	0.37	0.29	0.44
	-0.11	0.85	1.05	-0.03	-0.05	0.33	0.26	0.15	0.15
	-0.25	0.65	1.20	-0.42	-0.48	-0.31	-0.08	-0.13	0.06
$\mu_S(p)$	0.20	0.02	-0.02	1.02	0.79	0.54	0.47	0.29	0.41
	0.26	0.25	0.18	1.03	0.85	0.60	0.55	0.35	0.48
	-0.33	0.06	-0.03	1.05	0.73	0.28	0.02	0.03	0.15
	0.07	-0.49	-0.42	1.20	1.19	0.47	0.42	-0.25	-0.34
$\sigma_S(p)$	0.16	0.19	0.12	0.79	1.02	0.41	0.57	0.18	0.39
	0.18	0.26	0.21	0.85	1.03	0.47	0.68	0.20	0.44
	-0.02	0.05	-0.05	0.73	1.05	0.40	0.40	0.23	0.47
	0.18	-0.61	-0.48	1.19	1.20	0.40	0.35	-0.33	-0.39
$\mu_S(kw)$	0.44	0.13	0.09	0.54	0.41	1.02	0.75	0.92	0.82
	0.48	0.35	0.30	0.60	0.47	1.03	0.76	0.94	0.84
	0.04	0.33	0.33	0.28	0.40	1.05	0.77	0.84	0.71
	0.23	-0.34	-0.31	0.47	0.40	1.20	1.10	0.96	0.88
$\sigma_S(kw)$	0.37	0.16	0.13	0.47	0.57	0.75	1.02	0.60	0.87
	0.39	0.36	0.37	0.55	0.68	0.76	1.02	0.61	0.89
	0.12	0.09	0.26	0.02	0.40	0.77	1.05	0.58	0.75
	0.38	-0.37	-0.08	0.42	0.35	1.10	1.20	0.91	0.95
$\mu_S(sw)$	0.42	0.10	0.06	0.29	0.18	0.92	0.60	1.02	0.81
	0.45	0.32	0.29	0.35	0.20	0.94	0.61	1.02	0.81
	0.19	0.14	0.15	0.03	0.23	0.84	0.58	1.05	0.90
	0.09	0.04	-0.13	-0.25	-0.33	0.96	0.91	1.20	1.13
$\sigma_S(sw)$	0.47	0.12	0.09	0.41	0.39	0.82	0.87	0.81	1.02
	0.49	0.45	0.44	0.48	0.44	0.84	0.89	0.81	1.02
	0.24	0.03	0.15	0.15	0.47	0.71	0.75	0.90	1.05
	0.39	-0.14	0.06	-0.34	-0.39	0.88	0.95	1.13	1.20

TABLE S391. Pierson correlation coefficient for the topological and textual measures. TAG: 11

	cc	d	s	$\mu_S(p)$	$\sigma_S(p)$	$\mu_S(kw)$	$\sigma_S(kw)$	$\mu_S(sw)$	$\sigma_S(sw)$
cc	1.00	0.19	0.19	0.06	0.08	-0.05	-0.00	-0.07	-0.06
(p.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(i.)	1.01	0.28	0.25	0.06	0.11	-0.06	0.01	-0.10	-0.09
(h.)	1.11	-0.26	-0.18	0.13	-0.14	-0.21	-0.25	-0.24	-0.25
d	0.19	1.00	1.00	0.09	0.29	0.13	0.37	0.15	0.32
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.28	1.01	0.97	0.02	0.20	0.03	0.12	0.08	0.11
	-0.26	1.11	1.09	0.86	1.06	1.00	1.07	0.94	1.03
s	0.19	1.00	1.00	0.08	0.29	0.13	0.38	0.15	0.33
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.25	0.97	1.01	0.02	0.23	0.03	0.16	0.08	0.17
	-0.18	1.09	1.11	0.85	1.07	1.01	1.07	0.95	1.04
$\mu_S(p)$	0.06	0.09	0.08	1.00	0.65	0.57	0.50	0.13	0.15
	0.00	0.00	0.00	1.01	0.75	0.36	0.53	-0.01	0.12
	0.06	0.02	0.02	1.01	0.62	0.67	0.53	0.19	0.14
	0.13	0.86	0.85	1.11	0.93	0.91	0.80	0.81	0.83
$\sigma_S(p)$	0.08	0.29	0.29	0.65	1.00	0.38	0.66	0.09	0.32
	0.00	0.00	0.00	0.75	1.01	0.42	0.70	0.08	0.24
	0.11	0.20	0.23	0.62	1.01	0.31	0.57	-0.00	0.19
	-0.14	1.06	1.07	0.93	1.11	1.04	1.08	1.00	1.08
$\mu_S(kw)$	-0.05	0.13	0.13	0.57	0.38	1.00	0.66	0.62	0.45
	0.00	0.00	0.00	0.36	0.42	1.01	0.69	0.56	0.44
	-0.06	0.03	0.03	0.67	0.31	1.01	0.66	0.64	0.42
	-0.21	1.00	1.01	0.91	1.04	1.11	1.04	1.10	1.07
$\sigma_S(kw)$	-0.00	0.37	0.38	0.50	0.66	0.66	1.00	0.38	0.74
	0.00	0.00	0.00	0.53	0.70	0.69	1.01	0.43	0.68
	0.01	0.12	0.16	0.53	0.57	0.66	1.01	0.28	0.69
	-0.25	1.07	1.07	0.80	1.08	1.04	1.11	1.03	1.10
$\mu_S(sw)$	-0.07	0.15	0.15	0.13	0.09	0.62	0.38	1.00	0.63
	0.00	0.00	0.00	-0.01	0.08	0.56	0.43	1.01	0.74
	-0.10	0.08	0.08	0.19	-0.00	0.64	0.28	1.01	0.53
	-0.24	0.94	0.95	0.81	1.00	1.10	1.03	1.11	1.06
$\sigma_S(sw)$	-0.06	0.32	0.33	0.15	0.32	0.45	0.74	0.63	1.00
	0.00	0.00	0.00	0.12	0.24	0.44	0.68	0.74	1.01
	-0.09	0.11	0.17	0.14	0.19	0.42	0.69	0.53	1.01
	-0.25	1.03	1.04	0.83	1.08	1.07	1.10	1.06	1.11

TABLE S392. Pierson correlation coefficient for the topological and textual measures. TAG: 15

## E. Formation of principal components

## 1. Snapshots of 1000 messages

	PC1	PC2	PC3	PC4	PC5
cc	1.51	4.22	3.79	60.58	-8.05
(p.)	-1.87	-9.12	-7.87	57.49	2.39
(i.)	5.36	-9.14	3.43	-61.05	-2.48
(h.)	1.76	-22.11	10.33	-28.35	5.24
d	5.85	31.95	-5.60	-3.15	-3.06
	-5.48	-22.79	-10.69	-9.22	-2.45
	-6.19	28.39	-6.30	-10.40	-0.85
	4.93	26.62	-4.50	1.04	-7.03
s	5.76	31.94	-5.62	-5.16	-2.25
	-4.94	-21.79	-11.89	-17.98	-0.34
	-5.46	27.88	-8.68	-12.71	0.57
	9.33	15.53	-5.61	-33.57	-4.18
$\mu_S(p)$	15.47	-8.94	-4.94	-6.31	-22.64
	16.37	-1.31	-3.41	2.14	-24.04
	-15.40	-0.35	9.85	0.74	-23.09
	8.92	12.72	23.77	-4.03	20.83
$\sigma_S(p)$	13.22	-1.81	17.64	-8.85	-19.66
	12.19	-11.61	13.99	3.92	-24.10
	-13.13	-10.60	-12.76	-1.07	-23.30
	12.11	-1.73	22.81	5.36	-29.45
$\mu_S(kw)$	15.11	-9.18	-15.88	1.87	2.21
	15.32	6.77	-15.95	-3.82	-0.69
	-15.67	1.09	13.94	-2.91	2.80
	15.15	-6.98	-14.49	-3.10	-8.36
$\sigma_S(kw)$	15.04	-0.81	15.76	-1.79	12.26
	15.49	-10.21	10.00	-2.19	14.06
	-13.35	-11.96	-14.22	-5.27	6.01
	16.09	-8.98	1.66	10.92	-1.57
$\mu_S(sw)$	12.85	-8.34	-20.03	7.33	7.90
	13.42	7.51	-19.35	-2.50	4.85
	-12.23	1.97	19.62	-2.83	14.35
	14.85	-5.22	-16.49	-0.94	3.51
$\sigma_S(sw)$	15.19	2.82	10.73	4.98	21.97
	14.93	-8.90	6.86	0.75	27.08
	-13.22	-8.61	-11.19	-3.02	26.55
	16.88	-0.10	0.35	12.70	19.84
λ	41.88	21.15	15.77	11.16	6.23
	42.39	21.99	14.07	10.32	6.21
	41.56	21.72	16.79	9.87	6.63
	47.87	24.55	17.41	8.46	0.96

TABLE S393. PCA formation TAG: 0

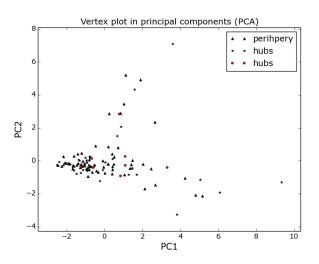


FIG. S1. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-1.58	-6.03	-5.74	-64.52	-3.98
(p.)	-0.45	-8.46	-15.92	-41.59	4.49
(i.)	-6.15	6.47	-6.78	-55.96	0.95
(h.)	6.05	-10.29	-16.04	34.91	-9.71
d	0.85	-30.37	-10.23	7.37	1.09
	-5.80	-22.48	-12.85	11.09	-2.30
	5.88	-28.73	6.62	-8.92	4.68
	-5.58	26.90	2.72	10.23	0.81
s	0.89	-30.24	-10.41	8.51	1.17
	-5.12	-23.01	-10.95	15.56	-0.23
	5.39	-28.26	9.37	-10.78	-2.33
	-6.40	26.10	0.99	12.68	3.32
$\mu_S(p)$	-18.90	4.86	-10.53	5.89	-15.89
	18.19	2.82	-8.58	8.28	13.52
	-15.70	1.45	9.54	0.36	16.40
	13.54	-3.64	14.50	12.60	17.34
$\sigma_S(p)$	-18.50	4.49	-12.01	6.42	-18.85
	18.03	3.41	-9.40	7.74	14.74
	-15.38	0.71	11.45	-2.66	-13.70
	11.61	-1.14	22.89	6.61	7.81
$\mu_S(kw)$	-20.01	0.63	0.00	-2.24	23.17
	18.83	-3.54	-1.54	-1.49	-23.75
	-16.10	-3.89	5.34	5.06	15.08
	16.19	4.76	-1.78	-4.06	-10.68
$\sigma_S(kw)$	-19.87	-0.26	-2.76	-2.00	17.69
	18.86	-2.67	-3.10	-2.76	-10.89
	-15.34	-4.82	8.77	3.89	-20.05
	13.56	10.29	8.93	-4.97	-27.59
$\mu_S(sw)$	-9.12	-10.44	25.41	-1.29	1.48
	6.35	-16.92	19.72	-5.77	-8.38
	-11.45	-12.95	-18.44	7.54	12.86
	14.24	6.07	-16.61	-5.84	9.96
$\sigma_S(sw)$	-10.28	-12.68	22.91	-1.75	-16.68
	8.38	-16.70	17.93	-5.72	21.69
	-8.62	-12.71	-23.69	4.84	-13.94
	12.84	10.81	-15.54	-8.11	12.78
λ	42.39	23.06	18.27	10.81	2.48
	43.34	24.13	17.91	9.11	2.12
	47.79	21.31	14.55	9.68	2.92
	45.64	22.96	14.83	8.60	4.17

TABLE S394. PCA formation TAG:  $2\,$ 

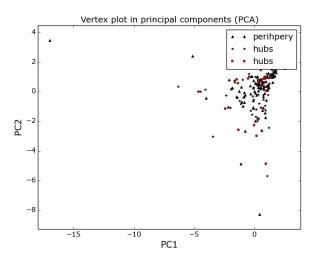


FIG. S2. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-8.27	5.55	-7.05	53.12	6.80
(p.)	8.58	17.53	-2.87	-33.69	6.40
(i.)	-0.65	19.27	-8.59	-19.76	25.88
(h.)	2.22	-23.23	-6.48	21.72	-21.46
d	-1.44	-40.14	0.83	3.14	3.10
	9.45	19.34	-5.42	7.18	12.30
	-0.24	-18.41	13.11	9.92	25.70
	-8.30	22.07	-4.31	5.16	-10.92
s	-1.13	-40.04	2.84	3.83	2.07
	8.66	14.36	-18.45	23.03	-9.30
	6.18	-9.59	17.81	-27.39	1.91
	-8.37	21.83	-0.58	7.99	-15.66
$\mu_S(p)$	-14.14	4.27	16.67	-5.76	21.42
	10.49	-16.49	-7.76	2.19	22.79
	16.07	10.72	4.51	16.23	7.50
	13.68	4.34	16.34	17.94	6.83
$\sigma_S(p)$	-14.53	2.22	18.76	3.03	-9.93
	11.63	-14.05	-14.18	-8.99	-5.13
	16.72	9.01	10.63	0.14	-7.41
	14.72	4.98	14.04	-0.93	-8.71
$\mu_S(kw)$	-16.26	2.22	-7.13	-14.95	18.15
	13.07	-4.89	10.48	9.99	10.90
	18.02	-3.75	-8.82	8.00	13.55
	15.86	2.95	-5.59	-1.72	-4.32
$\sigma_S(kw)$	-16.75	0.29	9.61	1.69	-18.11
	13.54	-7.85	-5.87	-5.72	-15.98
	18.56	4.94	6.98	-3.99	-6.70
	14.71	8.73	8.41	-9.13	-8.14
$\mu_S(sw)$	-12.46	-1.21	-22.51	-8.32	3.39
	11.64	4.88	21.72	6.88	1.07
	9.10	-13.38	-17.52	-6.70	2.50
	12.29	-0.33	-22.79	-16.14	-8.45
$\sigma_S(sw)$	-15.02	-4.06	-14.59	-6.14	-17.03
	12.93	-0.61	13.26	-2.33	-16.12
	14.47	-10.93	-12.02	-7.86	-8.85
	9.85	11.55	-21.46	19.26	15.51
λ	45.86	22.16	16.24	9.20	3.31
	54.83	17.98	10.87	5.79	4.18
	40.74	26.19	20.32	6.45	2.82
	52.53	28.56	12.49	4.31	1.69

TABLE S395. PCA formation TAG:  $3\,$ 

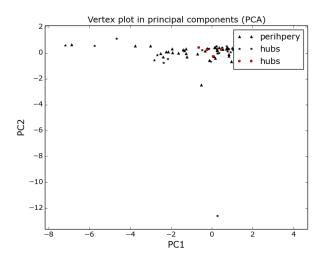


FIG. S3. First two principal components.

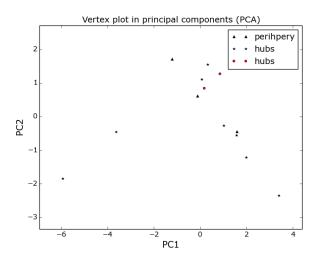


FIG. S4. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	0.41	14.67	0.86	-66.53	2.95
(p.)	0.00	0.00	0.00	0.00	0.00
(i.)	2.22	22.81	11.67	-34.59	9.26
(h.)	11.69	-6.64	12.91	-30.67	16.09
d	0.63	40.08	-1.79	11.62	0.26
	0.00	0.00	0.00	0.00	0.00
	-0.13	31.73	0.98	6.59	-12.55
	-5.26	31.69	5.13	-1.53	3.55
s	0.57	39.97	-1.60	12.80	0.02
	0.00	0.00	0.00	0.00	0.00
	-3.48	28.22	-13.52	14.88	-3.29
	-4.64	32.09	4.93	-5.84	-0.51
$\mu_S(p)$	-20.52	-0.16	-11.41	-0.05	6.85
	20.94	11.59	-6.77	-31.95	-6.55
	-17.05	-0.47	12.98	1.26	-0.61
	13.39	6.31	-13.97	6.17	2.23
$\sigma_S(p)$	-21.35	0.67	-9.48	-1.62	-5.80
	21.74	9.94	5.80	11.35	-36.85
	-17.35	3.25	9.15	7.33	4.47
	14.04	6.97	-5.91	-10.84	-17.57
$\mu_S(kw)$	-21.74	0.07	-0.14	1.26	12.29
	22.15	-0.17	-12.54	-6.43	28.75
	-17.45	-4.53	4.61	-5.52	-13.10
	13.57	6.01	-5.38	14.87	25.18
$\sigma_S(kw)$	-21.09	0.75	-2.61	-0.78	-11.54
	21.48	2.83	11.74	28.39	17.09
	-17.91	0.87	6.18	5.71	3.24
	12.70	7.78	-15.84	-7.16	-5.97
$\mu_S(sw)$	-6.40	1.18	37.00	3.73	29.25
	6.41	-38.71	-30.57	8.33	-10.52
	-11.56	-5.78	-21.19	-20.11	-22.54
	12.09	2.51	19.83	13.94	5.84
$\sigma_S(sw)$	-7.30	2.45	35.10	-1.62	-31.04
	7.28	-36.77	32.58	-13.55	0.23
	-12.85	2.35	-19.72	-4.01	30.94
	12.63	0.01	16.11	8.98	-23.05
λ	41.01	22.92	15.02	10.33	7.20
	61.55	22.63	10.74	3.62	1.38
	49.87	23.35	11.72	7.55	4.77
	58.00	21.48	12.13	3.94	3.37

TABLE S396. PCA formation TAG: 6

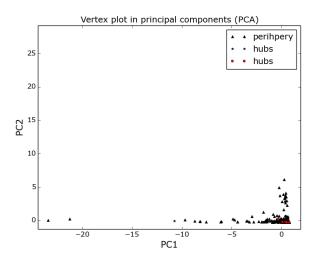


FIG. S5. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	1.38	8.28	22.03	-34.85	-7.34
(p.)	0.98	15.54	16.25	-34.28	13.46
(i.)	-3.87	-8.30	-5.30	-44.16	12.46
(h.)	1.91	-18.70	-36.15	-14.89	-3.13
d	7.60	27.64	0.37	8.18	-4.69
	2.11	30.21	0.78	11.04	-1.24
	-9.32	-25.08	-2.10	9.60	5.73
	-4.07	32.50	-8.12	2.44	-8.63
s	7.33	27.81	0.05	8.72	-4.73
	1.78	29.82	2.83	12.75	-2.18
	-8.12	-26.21	-1.60	11.90	5.19
	-3.21	31.22	-14.92	-8.38	8.76
$\mu_S(p)$	13.77	-11.55	11.02	8.91	-14.83
	-16.41	5.34	-16.52	0.53	13.90
	-13.47	12.33	-14.92	2.18	9.86
	-15.34	-4.40	-6.84	6.82	20.15
$\sigma_S(p)$	14.09	-7.08	17.62	7.56	9.66
	-16.75	7.72	-15.43	-7.59	-5.07
	-13.82	2.61	-14.78	-8.16	-19.20
	-15.13	-1.69	8.20	-16.27	8.52
$\mu_S(kw)$	14.18	-9.84	-7.39	0.81	-19.80
	-16.74	-3.52	1.15	8.14	20.08
	-12.88	15.65	0.02	10.72	17.16
	-15.52	-4.82	-3.65	11.67	10.94
$\sigma_S(kw)$	15.46	-3.20	7.02	2.83	13.61
	-17.26	2.47	-3.57	-9.48	-14.51
	-15.93	2.47	-8.56	3.04	-9.37
	-14.49	-0.82	12.87	-19.88	-3.61
$\mu_S(sw)$	11.97	-1.65	-23.81	-16.63	-5.39
	-12.54	-5.06	26.59	14.58	8.37
	-10.90	5.38	28.40	-1.98	7.23
	-14.84	-3.27	-9.24	17.85	-10.99
$\sigma_S(sw)$	14.22	2.96	-10.70	-11.49	19.94
	-15.45	-0.34	16.89	-1.60	-21.18
	-11.71	-1.97	24.33	-8.26	-13.81
	-15.49	-2.58	-0.00	-1.80	-25.28
λ	44.66	21.17	11.69	10.50	7.04
	42.35	23.55	11.78	9.40	7.50
	40.83	20.08	13.95	10.84	8.19
	58.59	22.09	10.55	5.10	2.34

TABLE S397. PCA formation TAG:  $7\,$ 

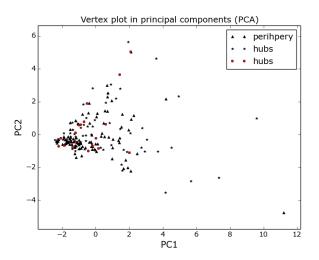


FIG. S6. First two principal components.

cc         -0.20         -9.71         -19.54         41.62         7.90           (p.)         1.63         16.69         12.74         -37.49         -15.6           (i.)         -2.24         8.87         7.94         -44.48         -13.6           (h.)         4.83         -23.47         -0.15         -27.15         9.93           d         0.75         -27.42         11.35         2.73         -2.1           5.98         26.52         -10.39         8.57         -0.3           -7.93         -13.38         21.48         3.05         0.6           4.36         24.13         -10.02         -6.90         1.3	64 62 3 6 7
(i.)	62 6 7
(h.)   4.83   -23.47   -0.15   -27.15   9.90 d   0.75   -27.42   11.35   2.73   -2.1   5.98   26.52   -10.39   8.57   -0.3   -7.93   -13.38   21.48   3.05   0.60	3 6 7
d     0.75     -27.42     11.35     2.73     -2.1       5.98     26.52     -10.39     8.57     -0.3       -7.93     -13.38     21.48     3.05     0.6	6 7
5.98   26.52   -10.39   8.57   -0.3   -7.93   -13.38   21.48   3.05   0.66	7
-7.93   -13.38   21.48   3.05   0.6	- 1
	- 1
1 4 96   94 19   10 09   6 00   1 96	5
4.30   24.13   -10.02   -0.90   1.3	2
s 0.89 -26.38 14.47 1.19 -5.4	0
5.73   26.30   -11.62   8.84   -2.2	4
-7.37   -13.64   21.83   -0.55   3.13	3
2.09   24.62   -6.10   -18.94   10.3	1
$\mu_S(p)$   19.63   5.18   5.98   7.77   -6.3	0
-17.37   1.97   -8.11   -7.20   6.20	3
-9.53   19.84   7.10   1.17   9.96	õ
-16.85   7.36   8.31   -1.06   -17.5	54
$\sigma_S(p)$   19.67   4.06   6.39   8.31   1.55	2
-17.48   1.91   -8.51   -5.14   -0.5	1
-9.72   18.52   9.18   9.96   12.2	8
-14.54   6.33   16.45   -0.56   10.5	6
$\mu_S(kw)$   20.28   1.80   -0.69   0.71   -9.7	2
-17.57   5.49   -2.01   -1.71   9.13	3
-17.18   -0.36   -9.88   -6.54   7.69	2
-17.63   -1.31   -9.89   3.27   12.3	4
$\sigma_S(kw)$   20.33   1.98   3.45   1.05   6.43	2
-17.79   3.07   -5.28   -0.39   -4.8	8
-16.16   6.50   -0.87   14.96   -26.5	20
-17.73   -1.50   9.46   -10.04   7.4	)
$\mu_S(sw)$   7.13   -11.19   -24.93   -15.27   -27.6	38
-5.37   14.40   25.76   8.24   28.0	1
-13.95   -9.90   -11.89   -15.56   16.8	5
-9.64   -5.94   -21.79   15.54   11.2	1
$\sigma_S(sw)$   11.12   -12.27   -13.19   -21.35   32.9	0
-11.08   3.65   15.58   22.41   -32.9	)4
-15.92   -8.99   -9.83   3.73   -9.6	9
-12.33   -5.33   -17.83   -16.55   -19.4	10
λ   45.44   24.25   13.71   9.56   5.41	3
48.29   23.42   11.75   9.00   6.00	3
39.25   25.48   17.02   11.10   3.20	0
41.85   29.10   21.15   4.17   3.06	3

TABLE S398. PCA formation TAG:  $8\,$ 

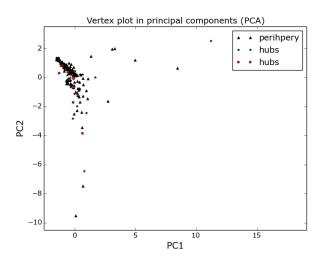


FIG. S7. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-0.04	-2.94	-3.69	-74.48	-2.31
(p.)	0.00	0.00	0.00	0.00	0.00
(i.)	5.19	-7.40	10.74	-54.00	4.03
(h.)	-3.66	18.05	-41.36	9.58	-5.69
d	-7.68	-27.48	-8.86	4.81	-3.26
	-4.95	36.43	1.34	0.88	4.98
	-2.85	36.17	0.48	-8.62	0.49
	5.90	-19.94	-19.27	-8.23	-2.43
s	-7.95	-27.19	-9.00	5.61	-3.18
	-7.17	35.09	0.53	-0.59	-2.63
	-4.74	35.50	2.05	-3.60	4.46
	6.43	-19.58	-18.87	-9.05	-2.62
$\mu_S(p)$	-13.76	13.08	-13.05	4.00	-15.66
	-14.29	-5.95	22.50	12.23	-1.53
	-16.30	-5.71	8.13	2.84	18.56
	13.34	10.01	3.80	-12.43	-27.71
$\sigma_S(p)$	-12.91	13.35	-17.55	0.87	0.38
	-13.80	-3.95	24.15	-2.54	-20.35
	-14.88	-4.87	18.51	3.40	9.50
	13.08	10.17	-0.27	-19.10	9.94
$\mu_S(kw)$	-14.91	3.44	12.93	-1.15	-20.38
	-16.42	-6.00	-9.04	21.47	18.23
	-13.89	-4.45	-20.21	-6.80	15.70
	14.63	5.68	3.78	1.63	-1.25
$\sigma_S(kw)$	-16.14	6.37	-3.32	-2.45	15.15
	-17.19	-6.79	0.92	-17.97	22.22
	-16.24	-2.00	11.54	0.65	-5.95
	14.37	6.84	-5.00	-1.25	19.63
$\mu_S(sw)$	-12.36	-4.49	23.01	-3.52	-9.20
	-11.98	-2.25	-25.65	17.04	-19.21
	-11.98	-2.46	-25.65	-14.64	-4.15
	13.94	-6.29	5.78	22.10	-16.22
$\sigma_S(sw)$	-14.24	-1.66	8.58	-3.12	30.49
	-14.20	-3.54	-15.87	-27.28	-10.86
	-13.93	-1.45	2.69	-5.46	-37.15
	14.65	-3.45	-1.87	16.63	14.50
λ	43.66	21.33	12.82	11.07	6.89
	43.64	23.03	18.03	8.54	3.51
	44.89	20.96	13.78	10.01	6.77
	61.53	31.19	4.83	2.34	0.11

TABLE S399. PCA formation TAG:  $9\,$ 

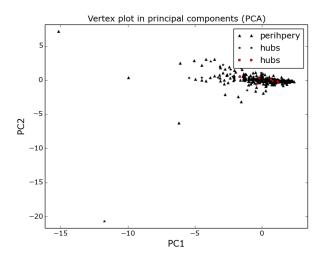


FIG. S8. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-1.28	-5.10	-17.03	-44.05	1.65
(p.)	-1.06	-21.97	-3.69	46.92	1.51
(i.)	-0.91	5.97	-2.17	72.32	3.21
(h.)	-6.47	2.23	-9.51	-42.46	-2.68
d	-5.17	-30.00	7.45	-1.34	4.15
	-1.13	-32.03	5.93	-13.90	-0.16
	-6.25	-30.14	4.37	7.21	-7.12
	11.99	-13.86	15.03	-7.58	-6.67
s	-5.14	-29.87	8.35	-0.76	2.98
	-1.07	-31.76	5.57	-16.38	-0.23
	-6.71	-29.56	8.91	7.51	-4.07
	10.51	-15.09	17.56	-5.07	-4.93
$\mu_S(p)$	-14.60	11.67	13.54	-10.56	11.38
	17.39	1.65	16.12	4.92	-11.47
	-9.50	16.75	21.16	1.55	-14.25
	3.33	21.22	15.90	-3.29	30.52
$\sigma_S(p)$	-13.61	2.88	9.90	-9.27	-25.45
	16.49	0.94	11.73	-1.70	18.63
	-10.12	4.50	28.60	-0.82	12.79
	6.36	22.74	6.39	-2.31	-34.26
$\mu_S(kw)$	-16.38	9.98	6.61	-3.90	15.52
	18.68	0.43	8.59	4.41	-13.32
	-16.81	7.89	-5.52	-2.03	-14.44
	14.66	5.90	-13.66	13.62	2.92
$\sigma_S(kw)$	-17.48	2.64	-2.58	3.30	-10.27
	18.97	-0.67	-2.39	0.79	12.61
	-16.78	0.22	-2.91	-6.64	18.30
	15.77	10.58	0.67	-9.28	1.01
$\mu_S(sw)$	-13.01	-1.98	-16.08	12.95	17.00
	12.43	-5.10	-21.31	-5.85	-25.16
	-16.57	3.70	-12.97	0.28	-12.49
	15.63	-3.59	-13.86	2.99	-2.85
$\sigma_S(sw)$	-13.33	-5.88	-18.46	13.89	-11.60
	12.77	-5.45	-24.68	-5.14	16.91
	-16.35	-1.28	-13.39	-1.64	13.32
	15.29	-4.78	-7.43	-13.41	14.16
λ	41.95	22.34	13.30	10.30	7.05
	43.38	25.28	13.17	7.81	6.58
	40.09	21.59	13.13	10.97	7.83
	45.00	24.10	14.73	11.07	2.44

TABLE S400. PCA formation TAG: 10

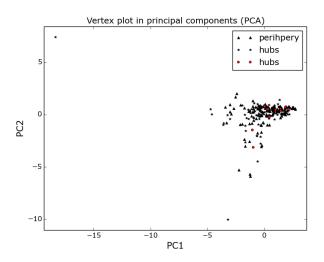
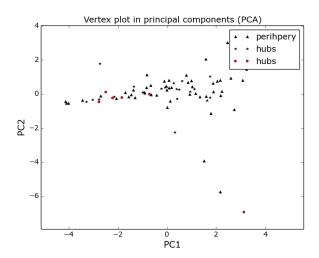


FIG. S9. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	6.30	3.08	14.14	-45.36	9.79
(p.)	-5.99	-19.82	3.28	-6.21	35.98
(i.)	1.52	-10.23	-22.16	-31.44	11.54
(h.)	14.03	-7.39	7.97	-22.17	-5.91
d	8.16	-27.97	9.43	4.07	0.69
	-9.84	-18.09	-8.74	2.21	-21.95
	2.66	21.53	13.47	-8.95	22.83
	-14.38	3.44	13.28	17.11	-23.47
s	6.55	-29.86	6.92	8.13	3.81
	-9.31	-18.73	-12.81	-2.74	-8.24
	7.90	14.25	11.66	-28.66	-20.95
	-14.08	1.77	18.72	-2.36	17.99
$\mu_S(p)$	6.46	16.87	17.83	24.25	13.09
	-7.53	-0.73	30.61	-11.72	-7.05
	-8.61	21.92	-12.54	6.43	2.56
	14.12	8.51	3.33	-1.89	-20.74
$\sigma_S(p)$	10.66	10.61	17.66	4.79	-18.81
	-11.81	-4.29	18.70	19.29	-3.27
	-6.42	18.84	-21.12	3.73	-6.68
	13.47	10.13	2.25	13.45	24.32
$\mu_S(kw)$	15.60	7.32	-4.36	6.44	18.41
	-14.64	7.28	2.69	-19.43	-5.48
	18.20	-2.10	-9.30	1.70	5.30
	8.01	15.05	24.13	4.44	0.44
$\sigma_S(kw)$	16.14	2.01	-5.55	-4.69	-16.47
	-14.19	9.37	-5.24	15.82	7.79
	17.23	2.38	-8.42	6.91	-16.67
	4.39	20.57	-9.08	6.08	-5.10
$\mu_S(sw)$	14.24	-0.02	-15.74	-1.74	10.06
	-12.34	11.59	-13.25	-13.59	4.06
	20.15	0.42	-0.19	5.82	8.40
	-9.51	16.30	3.32	-31.30	0.73
$\sigma_S(sw)$	15.89	2.25	-8.38	-0.53	-8.87
	-14.34	10.10	-4.68	9.00	6.18
	17.30	8.34	-1.14	6.36	5.07
	-8.00	16.83	-17.93	-1.20	1.30
λ	41.78	20.60	15.54	9.51	5.77
	43.49	22.83	14.53	6.28	5.34
	37.30	21.71	14.29	9.28	6.27
	56.87	33.33	7.92	1.46	0.42

TABLE S401. PCA formation TAG: 11



 ${\rm FIG.~S10.}$  First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-0.41	-10.01	59.43	-10.51	-3.39
(p.)	0.00	0.00	0.00	0.00	0.00
(i.)	1.26	3.67	-13.83	-55.31	3.46
(h.)	-0.45	11.30	34.45	21.42	0.01
d	0.17	-39.18	-8.70	-1.04	-1.66
	2.00	-44.07	-1.60	-2.81	-0.48
	0.59	37.67	8.96	-0.94	-5.35
	8.36	-22.74	-5.11	14.08	22.98
s	-0.17	-39.23	-7.90	0.28	-3.26
	2.00	-44.07	-1.60	-2.81	-0.48
	2.61	38.18	4.70	0.46	2.76
	8.43	-23.48	6.32	7.30	-27.62
$\mu_S(p)$	-18.42	1.28	1.13	7.88	-16.24
	-17.59	-0.60	-10.64	-14.75	11.77
	18.77	1.11	-1.88	1.44	20.94
	13.73	9.54	-11.00	11.24	3.66
$\sigma_S(p)$	-17.97	-0.60	3.37	15.27	-4.59
	-17.11	-0.06	-17.00	-5.68	-27.94
	18.50	1.21	-12.05	8.92	2.92
	15.16	4.76	-4.81	5.56	-5.15
$\mu_S(kw)$	-18.40	1.65	-2.67	-5.84	-15.54
	-17.62	-1.20	4.32	-14.92	28.23
	17.96	-3.39	12.32	-5.06	15.95
	14.68	2.62	8.88	-6.82	19.88
$\sigma_S(kw)$	-18.46	-1.05	3.28	11.81	4.39
	-17.81	-1.06	-11.80	3.23	-10.00
	18.76	0.36	-11.10	7.76	-4.42
	15.29	5.29	-5.10	2.18	-6.20
$\mu_S(sw)$	-10.26	3.48	-12.70	-40.11	-8.21
	-10.78	-2.28	45.22	-11.25	-14.26
	6.55	-11.95	33.44	-14.67	-0.37
	9.75	-9.04	21.79	-23.42	3.23
$\sigma_S(sw)$	-15.74	-3.51	0.82	-7.26	42.73
	-15.09	-6.66	7.83	44.55	6.85
	14.99	-2.46	1.72	-5.44	-43.82
	14.15	11.22	-2.53	-7.98	-11.29
$\lambda$	50.05	22.38	10.82	9.98	4.57
	58.47	24.99	10.21	4.64	1.30
	45.33	21.60	13.10	10.87	6.46
	58.85	18.54	11.88	8.21	1.78

TABLE S402. PCA formation TAG: 12

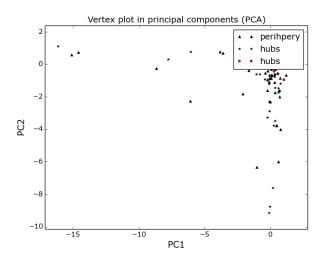


FIG. S11. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	3.34	12.56	1.32	4.32	-56.78
(p.)	0.00	0.00	0.00	0.00	0.00
(i.)	-3.79	-22.15	16.61	-15.20	5.17
(h.)	6.66	-18.34	-4.76	13.90	-28.07
d	4.53	27.01	-7.86	-3.52	7.92
	0.00	0.00	0.00	0.00	0.00
	-3.98	-27.88	8.22	3.19	13.22
	-10.37	12.52	16.79	-1.04	-10.66
s	4.15	26.25	-8.50	-4.33	14.72
	0.00	0.00	0.00	0.00	0.00
	-2.78	-22.66	-8.69	23.10	-22.04
	-10.47	12.97	14.37	10.93	-14.05
$\mu_S(p)$	14.99	-9.01	-18.71	7.40	-1.60
	-18.05	22.62	8.54	7.86	28.26
	18.63	-1.57	12.63	-1.08	-10.22
	12.98	11.98	-5.03	-11.53	-13.95
$\sigma_S(p)$	18.08	-3.90	7.71	-18.18	-1.18
	-20.80	-8.19	-20.57	-9.82	18.44
	20.36	-1.00	6.19	4.40	3.37
	10.81	13.68	-7.20	23.33	1.77
$\mu_S(kw)$	16.18	-8.11	-16.85	9.43	-0.92
	-19.19	20.31	10.66	4.35	-28.65
	19.40	-4.80	-2.04	-11.08	-11.48
	14.40	4.45	6.86	-20.68	-11.00
$\sigma_S(kw)$	19.12	-2.31	9.96	-14.74	-0.37
	-21.70	-11.12	-16.84	-3.74	-18.65
	20.62	-1.44	0.09	6.15	9.57
	13.50	11.53	-2.12	10.34	6.55
$\mu_S(sw)$	9.20	4.15	10.91	24.44	9.74
	-9.71	-14.37	27.63	-35.69	2.93
	1.24	-10.63	-20.95	-27.90	-6.82
	7.77	-10.31	24.64	7.79	3.91
$\sigma_S(sw)$	10.41	6.69	18.18	13.63	6.77
	-10.55	-23.38	15.77	38.54	3.07
	9.19	-7.88	-24.57	7.91	18.11
	13.05	-4.23	18.22	0.47	10.04
$\lambda$	28.36	23.12	16.90	13.82	9.81
	42.13	25.76	20.86	7.52	2.55
	40.76	22.19	18.79	10.45	3.29
	48.30	26.62	15.70	4.83	2.73

TABLE S403. PCA formation TAG: 13

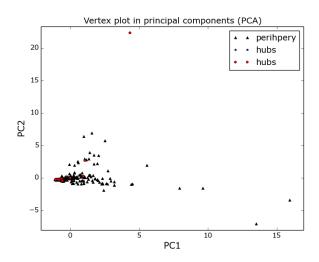
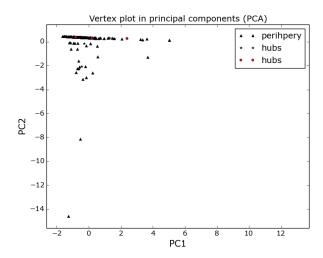


FIG. S12. First two principal components.



 ${\rm FIG.~S13.~First~two~principal~components.}$ 

	PC1	PC2	PC3	PC4	PC5
cc	-1.06	-8.59	-1.17	5.08	68.03
(p.)	0.00	0.00	0.00	0.00	0.00
(i.)	-1.14	-12.48	2.29	58.43	4.38
(h.)	6.93	-10.07	56.15	2.02	0.72
d	-5.40	-24.78	-4.47	9.73	-12.42
	0.00	0.00	0.00	0.00	0.00
	-6.51	-26.62	-5.08	-13.11	6.08
	-1.23	31.89	8.52	-2.98	1.32
s	-5.38	-24.73	-4.42	10.06	-12.24
	0.00	0.00	0.00	0.00	0.00
	-6.52	-26.72	-5.18	-12.35	5.46
	-0.82	31.68	10.97	-6.49	-0.16
$\mu_S(p)$	-15.48	10.49	-15.66	9.29	0.74
	-19.83	15.09	14.02	-15.71	14.09
	-15.70	9.25	-12.54	2.80	8.88
	-15.24	7.08	2.78	11.51	-13.29
$\sigma_S(p)$	-15.33	5.64	17.89	11.41	-1.20
	-17.53	-21.58	10.26	14.77	30.35
	-16.38	3.78	-12.99	1.00	-6.76
	-13.98	1.85	3.75	35.25	9.55
$\mu_S(kw)$	-16.49	9.13	-16.54	4.07	1.05
	-19.98	16.90	10.56	-8.49	-12.20
	-16.24	8.79	4.25	1.67	14.09
	-15.43	-4.44	7.43	-10.09	-14.77
$\sigma_S(kw)$	-17.08	2.49	17.99	3.50	-0.02
	-18.61	-21.47	3.07	2.33	-34.23
	-17.18	4.58	-5.95	3.63	-7.96
	-15.42	-3.64	5.10	-12.03	25.28
$\mu_S(sw)$	-12.24	-4.04	-11.34	-24.37	1.14
	-14.11	16.17	-25.98	31.70	-0.88
	-8.84	1.10	32.79	-6.46	16.31
	-15.41	-5.97	4.14	-7.37	-20.42
$\sigma_S(sw)$	-11.53	-10.11	10.53	-22.49	3.16
	-9.95	-8.78	-36.11	-26.99	8.25
	-11.47	-6.67	18.93	0.54	-30.08
	-15.54	-3.37	1.16	-12.26	14.50
λ	35.30	24.34	13.88	12.46	10.44
	50.35	24.49	21.90	2.62	0.46
	45.72	22.57	12.38	10.06	6.71
	63.22	23.96	8.69	3.63	0.37

TABLE S404. PCA formation TAG: 15

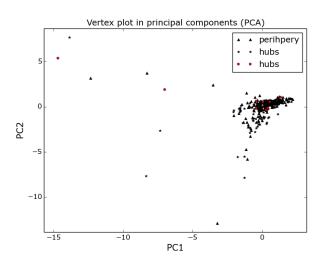
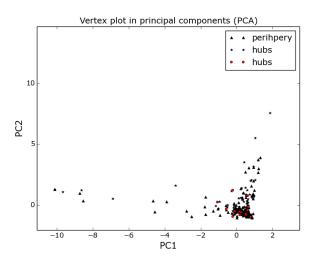


FIG. S14. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	3.14	11.18	1.23	3.30	62.65
(p.)	0.00	0.00	0.00	0.00	0.00
(i.)	0.89	19.71	12.07	-43.29	-11.85
(h.)	-2.75	20.44	15.25	-22.13	-20.16
d	5.14	30.92	1.84	-5.73	-10.11
	0.00	0.00	0.00	0.00	0.00
	2.53	29.79	5.61	15.22	4.67
	10.64	4.20	-23.04	-6.15	0.44
s	4.52	31.02	1.47	-6.02	-11.20
	0.00	0.00	0.00	0.00	0.00
	0.84	29.81	5.12	17.71	1.18
	9.94	11.27	-20.27	-2.75	-13.29
$\mu_S(p)$	-17.88	1.01	-8.91	-17.81	4.76
	20.02	14.05	-18.28	23.54	-30.54
	-20.88	-0.76	6.58	2.12	-3.91
	8.59	-19.59	8.11	-19.71	0.01
$\sigma_S(p)$	-19.03	5.05	17.23	7.29	-0.45
	21.54	-20.19	4.15	-8.15	-7.13
	-20.85	0.59	6.51	1.58	-1.14
	14.52	-11.90	-0.84	-7.52	-9.26
$\mu_S(kw)$	-19.90	2.67	-9.15	-11.95	3.62
	22.70	12.76	-10.96	3.81	42.06
	-21.08	-0.05	2.09	2.29	-5.20
	14.19	8.55	7.86	-8.37	23.75
$\sigma_S(kw)$	-18.64	5.05	16.91	10.20	-1.57
	21.08	-20.45	7.19	-10.45	-4.27
	-21.08	0.40	2.67	-0.55	5.11
	14.80	-5.64	5.15	2.23	-2.71
$\mu_S(sw)$	-7.32	5.05	-31.14	4.91	0.01
	9.60	28.67	16.00	-29.72	-12.32
	-4.33	8.70	-32.01	2.58	-33.22
	11.51	18.05	7.14	7.02	12.46
$\sigma_S(sw)$	-4.44	8.05	-12.13	32.78	-5.63
	5.07	3.88	43.43	24.33	3.68
	-7.51	10.19	-27.35	-14.67	33.72
	13.07	-0.37	12.35	24.12	-17.92
$\lambda$	33.10	22.11	15.54	12.92	10.27
	46.50	25.23	20.38	5.37	2.24
	45.00	22.71	14.53	8.44	6.07
	48.17	21.07	16.96	5.07	3.80

TABLE S405. PCA formation TAG: 16



 ${\rm FIG.~S15.}$  First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-2.26	0.63	-3.14	77.71	1.06
(p.)	3.87	19.31	2.94	-45.07	8.46
(i.)	6.42	-13.69	-2.79	-44.73	-10.93
(h.)	1.15	-14.54	9.38	-43.91	3.30
d	8.04	-22.80	11.36	5.01	-3.59
	0.02	33.94	3.56	4.69	-4.26
	-7.15	18.52	14.09	-12.60	5.15
	-1.46	12.41	-19.60	-13.36	-7.75
s	7.55	-22.52	13.14	2.82	-6.34
	-1.14	31.57	1.87	20.41	-8.00
	-8.51	17.86	9.14	-21.09	2.51
	-0.17	9.66	-21.54	-18.35	10.34
$\mu_S(p)$	15.05	12.68	5.19	0.10	-8.11
	-18.60	-3.36	9.97	-5.41	-7.30
	-15.37	-9.77	7.18	1.36	4.73
	-21.10	-6.77	-3.14	0.40	7.56
$\sigma_S(p)$	14.52	10.23	11.95	5.39	3.06
	-18.23	-0.26	14.25	0.40	-1.26
	-14.70	-10.32	9.50	-0.46	4.93
	-18.52	-10.12	-7.38	3.35	-9.52
$\mu_S(kw)$	15.64	4.87	-9.68	0.87	-18.04
	-18.08	-1.03	-6.47	-9.90	-14.59
	-15.79	-5.77	-9.30	-4.34	8.91
	-18.37	9.23	7.90	-0.68	24.36
$\sigma_S(kw)$	16.22	7.89	5.84	4.06	9.97
	-18.77	0.86	9.77	0.58	6.30
	-15.95	-7.98	2.12	2.42	-11.82
	-20.34	-7.37	-6.32	4.25	-6.51
$\mu_S(sw)$	8.59	-9.66	-25.11	-1.02	-15.80
	-8.65	3.30	-36.28	-5.04	-13.33
	-5.13	4.93	-29.14	-8.98	20.77
	-6.74	16.47	13.15	-3.40	4.63
$\sigma_S(sw)$	12.13	-8.72	-14.59	-3.02	34.04
	-12.64	6.37	-14.89	8.50	36.51
	-10.99	11.18	-16.75	4.01	-30.24
	-12.15	13.44	11.58	-12.29	-26.02
λ	45.49	21.44	14.18	10.98	4.53
	45.57	22.32	12.18	9.40	6.77
	46.47	22.43	16.91	8.26	2.92
	37.24	30.48	22.76	5.82	1.65

TABLE S406. PCA formation TAG: 17

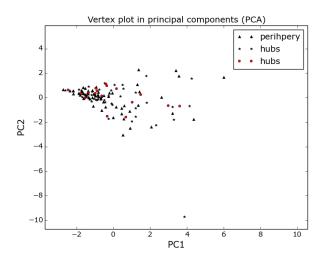


FIG. S16. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	2.94	9.38	15.24	18.55	35.11
(p.)	-4.04	-15.20	-11.84	8.74	-33.35
(i.)	0.68	-11.18	-12.20	-47.94	-4.82
(h.)	-11.74	10.14	-15.19	-39.16	3.09
d	4.67	23.73	-12.64	-0.49	2.75
	-11.22	-17.79	-1.40	-13.28	4.55
	-5.89	30.88	5.01	-8.13	-6.99
	7.59	-25.58	-1.84	-5.71	-12.94
s	4.00	22.51	-15.59	-2.07	1.35
	-10.51	-16.83	-0.67	-18.10	9.64
	-2.31	32.20	3.41	-11.16	-4.13
	4.73	-28.69	2.36	-18.10	13.90
$\mu_S(p)$	-19.02	-4.54	-11.41	4.06	5.79
	17.55	0.36	-9.95	-9.41	2.87
	-19.57	-1.01	-12.08	7.03	-2.78
	12.87	5.38	-14.98	0.16	14.78
$\sigma_S(p)$	-16.81	7.33	7.15	-17.67	9.64
	14.37	-8.15	16.79	-6.68	-9.99
	-19.97	0.86	-12.50	4.78	1.79
	12.08	0.82	-24.27	-0.83	-18.48
$\mu_S(kw)$	-19.01	-3.71	-10.92	8.95	2.64
	17.06	-1.67	-12.94	-7.41	5.46
	-19.71	-8.25	5.70	0.47	-14.50
	12.38	10.10	13.99	-9.94	-7.26
$\sigma_S(kw)$	-16.93	8.60	9.36	-15.86	3.40
	13.88	-10.29	17.09	-3.78	-7.42
	-19.84	-0.41	2.35	-5.53	17.19
	13.30	5.51	-6.10	0.62	-2.04
$\mu_S(sw)$	-12.70	4.22	-0.01	26.81	-11.86
	9.18	-12.98	-19.15	9.26	8.87
	-5.86	-11.42	23.23	-2.95	-23.59
	11.90	8.76	19.90	-21.72	-5.93
$\sigma_S(sw)$	-3.93	15.99	17.68	5.54	-27.45
	2.19	-16.72	10.17	23.34	17.85
	-6.17	-3.78	23.53	-12.01	24.20
	13.41	5.02	-1.38	3.76	21.58
λ	36.01	23.87	15.65	13.88	7.57
	39.60	26.52	15.65	8.38	7.10
	37.57	21.89	19.82	9.56	7.25
	70.22	21.32	6.53	1.33	0.38

TABLE S407. PCA formation TAG: 18

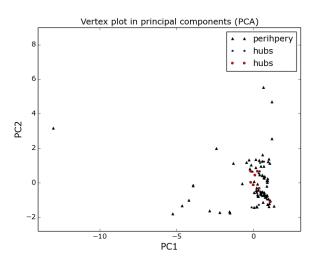


FIG. S17. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	2.00	8.67	26.24	-30.91	-0.66
(p.)	-2.06	-14.42	-56.50	0.46	3.19
(i.)	9.62	-7.63	-1.26	-47.10	-6.71
(h.)	-5.44	-26.53	26.08	21.47	1.88
d	0.98	28.77	-10.30	-3.87	1.34
	-7.44	-26.56	9.98	5.01	-3.57
	-5.37	21.17	-14.98	0.30	-7.80
	-6.47	28.32	-4.38	26.05	18.10
s	0.85	28.29	-12.14	-3.11	1.56
	-6.71	-25.94	15.84	8.35	-8.12
	-5.36	20.85	-14.94	-10.68	-4.97
	-6.30	27.83	22.50	-3.32	-20.13
$\mu_S(p)$	-18.08	-5.82	-8.15	-10.23	-6.95
	15.94	-2.49	0.24	8.04	-9.48
	-14.15	2.57	17.43	-5.09	-11.60
	13.83	-0.51	-5.61	13.01	-4.80
$\sigma_S(p)$	-17.48	-3.22	-5.32	-6.78	-23.09
	15.48	-2.72	-1.59	-4.27	-17.24
	-15.52	5.91	12.62	-15.13	6.85
	13.16	0.93	-8.48	16.20	-25.59
$\mu_S(kw)$	-17.07	-2.98	-2.86	-4.75	29.25
	13.97	-3.22	2.52	20.16	18.03
	-16.25	-10.73	1.52	6.23	-15.20
	13.80	4.50	10.79	-3.68	2.37
$\sigma_S(kw)$	-18.66	0.44	-3.25	-5.62	9.57
	15.66	-2.53	-1.32	13.05	2.73
	-18.00	-1.65	-2.46	-9.20	13.12
	14.01	-0.16	0.94	5.13	5.08
$\mu_S(sw)$	-10.88	10.26	20.14	20.98	9.62
	9.07	-14.59	10.33	-22.20	24.77
	-5.96	-17.16	-17.10	2.25	-16.34
	13.09	8.40	15.45	-6.37	8.44
$\sigma_S(sw)$	-14.02	11.54	11.61	13.76	-17.97
	13.68	-7.51	-1.68	-18.46	-12.86
	-9.77	-12.34	-17.68	-4.03	17.41
	13.91	2.81	5.77	-4.77	13.61
λ	43.79	23.94	12.97	8.55	6.16
	49.70	21.17	9.82	8.10	6.85
	36.93	23.62	19.60	9.02	5.77
	67.24	20.35	6.08	3.77	1.92

TABLE S408. PCA formation TAG: 19

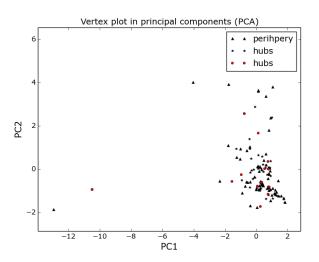


FIG. S18. First two principal components.

## 2. Snapshots of 2000 messages

	PC1	PC2	PC3	PC4	PC5
cc	-0.60	-2.33	-20.29	-40.20	2.23
(p.)	0.47	25.46	-2.29	-2.36	-44.98
(i.)	4.48	-15.41	36.04	-20.17	-1.41
(h.)	3.16	-19.11	-4.16	-28.58	18.48
d	2.23	-34.65	-5.28	4.28	0.18
	-3.54	30.33	1.86	-2.36	19.55
	2.02	33.02	3.35	-6.85	-0.03
	-8.60	12.81	-25.82	2.65	-3.55
s	2.02	-34.45	-5.23	6.75	3.67
	-2.76	30.80	1.14	-0.27	17.79
	2.48	32.10	5.24	-11.48	-1.15
	-12.08	4.19	-24.11	-11.28	4.51
$\mu_S(p)$	16.01	6.38	-8.18	6.12	30.19
	-12.82	-1.04	-25.76	-14.14	-1.44
	-15.35	-2.70	-7.61	-10.52	-31.72
	-11.91	-14.43	0.24	-8.59	-29.84
$\sigma_S(p)$	16.59	7.00	-12.80	9.49	2.86
	-11.21	-1.67	-30.58	8.78	4.32
	-15.85	-2.81	-8.16	-12.39	-2.26
	-6.20	-21.63	-5.84	14.03	-9.29
$\mu_S(kw)$	16.03	-2.26	14.47	-9.60	15.18
	-17.35	-4.36	6.84	-19.82	-2.81
	-16.08	3.88	8.99	6.42	-10.48
	-16.09	4.40	9.29	-3.25	6.41
$\sigma_S(kw)$	17.33	4.11	-8.89	4.86	-16.50
	-17.43	1.05	2.20	21.08	-3.62
	-16.17	-0.70	-3.06	-8.42	20.93
	-11.85	-12.44	-2.80	20.90	23.96
$\mu_S(sw)$	11.95	-8.29	24.13	-16.81	-1.55
	-17.32	-4.01	16.82	-13.55	1.05
	-11.33	8.15	23.43	23.36	-6.42
	-14.38	8.52	14.09	-8.69	1.44
$ \sigma_S(sw) $	17.23	-0.53	-0.73	-1.88	-27.63
	-17.10	-1.29	12.49	17.65	-4.44
	-16.25	1.23	4.12	-0.40	25.61
	-15.74	2.47	13.64	-2.01	2.52
$\lambda$	49.32	21.94	11.69	10.90	3.98
	35.56	25.11	14.90	11.48	6.39
	56.11	22.97	9.75	7.86	2.11
	48.28	26.23	13.97	7.40	3.65

TABLE S409. PCA formation TAG: 0

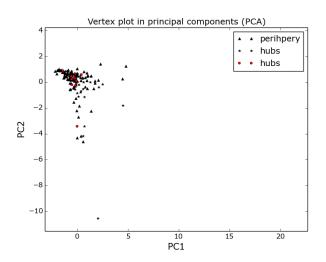


FIG. S19. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	0.70	9.32	-65.09	-5.00	0.72
(p.)	5.11	18.25	-2.89	-53.38	4.99
(i.)	-1.64	5.37	-73.09	-4.28	-0.85
(h.)	-11.98	13.91	1.11	-31.09	-14.89
d	-3.41	35.61	8.04	-0.82	3.49
	0.69	36.01	0.40	13.23	-0.75
	-0.02	-39.26	-2.49	-5.15	3.21
	12.39	-0.76	-23.52	2.31	-5.22
s	-3.06	35.66	8.97	-0.59	3.62
	0.82	35.83	-0.14	14.62	0.05
	-0.29	-39.22	-6.57	-1.56	2.12
	11.60	0.57	-24.51	-5.54	-4.42
$\mu_S(p)$	-15.25	-4.07	-2.77	18.77	12.66
	-13.04	0.49	27.51	-5.85	-4.69
	17.03	1.34	-3.64	7.43	13.94
	-14.46	-0.49	-13.23	7.48	-18.43
$\sigma_S(p)$	-14.16	2.75	-4.58	24.93	-24.53
	-15.76	2.91	15.48	-6.88	-25.61
	14.65	-5.58	-6.15	34.13	-17.62
	-13.13	12.62	-13.67	-3.53	16.13
$\mu_S(kw)$	-16.10	-6.26	-1.91	1.34	24.93
	-15.06	0.49	7.78	0.97	39.53
	17.12	3.20	-1.07	-4.64	22.54
	-14.07	-13.35	-3.00	18.00	-12.00
$\sigma_S(kw)$	-16.69	-1.05	-2.92	2.50	-5.55
	-17.50	4.95	-2.94	-0.54	0.81
	16.70	-2.00	-1.99	4.30	6.43
	-15.51	3.27	-11.07	6.11	17.62
$\mu_S(sw)$	-16.03	-3.64	1.89	-20.14	5.91
	-16.64	-0.48	-19.11	-1.63	7.59
	16.55	3.02	2.90	-18.66	1.82
	-4.89	-28.23	2.22	-7.43	-1.42
$\sigma_S(sw)$	-14.60	-1.64	3.82	-25.92	-18.60
	-15.38	0.57	-23.75	-2.92	-15.99
	16.00	-1.01	2.09	-19.85	-31.48
	-1.98	-26.80	-7.66	-18.51	9.87
λ	48.93	22.27	10.77	8.25	4.63
	38.70	23.63	12.58	8.93	7.65
	56.89	22.16	11.01	4.99	2.10
	42.87	25.01	17.50	5.73	4.19

TABLE S410. PCA formation TAG:  $2\,$ 

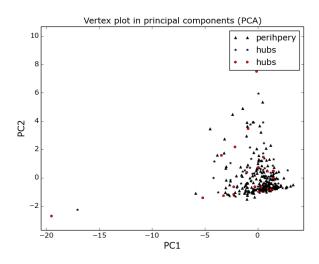


FIG. S20. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-0.26	3.25	0.70	52.94	15.79
(p.)	1.31	22.61	-4.43	-12.00	-29.98
(i.)	3.45	18.25	32.55	9.75	-17.30
(h.)	10.34	-17.50	-3.13	0.08	22.13
d	1.97	-38.82	-3.32	1.73	2.62
	2.10	24.79	-3.54	-5.03	-8.23
	-4.13	-22.26	-2.54	8.43	-39.99
	-11.38	15.62	-7.80	-9.91	12.24
s	1.81	-38.80	-3.95	0.30	2.94
	2.45	21.55	-2.68	-3.09	45.06
	-4.52	-19.71	14.86	20.92	27.10
	-11.48	15.57	-7.53	-9.64	11.39
$\mu_S(p)$	16.92	3.70	4.39	-11.57	21.73
	16.30	-8.16	4.81	-20.55	3.81
	-15.82	2.32	4.30	-5.25	2.23
	15.18	5.91	3.16	-21.23	-17.64
$\sigma_S(p)$	14.86	-2.26	24.79	-2.64	0.94
	15.96	0.42	22.12	-3.91	0.20
	-12.67	-10.42	14.98	-17.76	2.50
	16.15	6.70	3.83	-4.88	16.78
$\mu_S(kw)$	16.75	5.52	-16.57	-7.59	15.34
	15.71	-8.31	-18.45	-13.50	2.75
	-15.38	7.35	-3.08	5.36	-1.33
	12.05	2.19	-25.33	-12.90	-2.71
$\sigma_S(kw)$	17.67	-1.88	16.02	4.98	-9.32
`	18.49	3.14	14.21	9.46	-4.75
	-15.42	-1.85	8.12	-11.29	-2.41
	13.88	12.30	5.30	9.48	8.64
$\mu_S(sw)$	14.08	5.03	-25.22	1.34	-6.75
	12.71	-3.63	-26.98	7.73	-1.64
	-14.30	8.57	-11.09	11.37	-4.49
	-1.48	-7.96	-34.86	5.89	-1.97
$\sigma_S(sw)$	15.69	-0.73	-5.04	16.92	-24.56
	14.97	7.38	-2.79	24.74	-3.57
	-14.30	9.27	-8.50	9.89	2.63
	8.05	16.27	-9.06	26.00	-6.49
λ	42.48	22.36	12.77	11.93	6.44
	36.78	27.09	14.33	9.29	5.62
	55.73	25.91	7.25	6.28	2.91
	47.40	29.92	16.59	5.26	0.82

TABLE S411. PCA formation TAG:  $3\,$ 

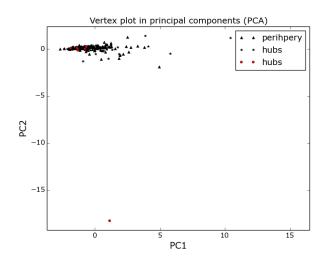


FIG. S21. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	0.72	6.83	9.90	-38.74	-14.85
(p.)	-4.21	-12.20	-9.06	8.30	-49.22
(i.)	2.08	-1.97	-18.43	29.43	-18.21
(h.)	7.77	-2.53	11.55	-35.42	16.98
d	-8.50	25.79	-5.26	5.76	-5.30
	-3.98	-22.08	-9.17	5.33	12.50
	-4.31	26.53	-10.40	-7.60	-3.35
	-10.88	18.95	-11.42	-2.87	-0.65
s	-8.44	25.49	-6.49	6.49	-5.54
	-1.95	-20.85	-11.19	4.67	22.45
	-5.40	27.18	-6.59	-5.88	-4.41
	-11.78	17.85	-11.04	-12.64	3.16
$\mu_S(p)$	-12.02	-5.91	18.23	12.99	-12.56
	9.82	-9.77	22.78	13.89	0.81
	-13.69	-13.15	-6.70	-15.11	-14.56
	-1.30	-18.82	-11.98	-15.98	-21.73
$\sigma_S(p)$	-13.68	5.03	14.36	-2.99	17.11
	10.67	-14.04	13.12	-17.98	-7.50
	-14.32	-2.32	-15.80	0.85	18.37
	-1.71	-10.73	-21.97	-7.68	1.73
$\mu_S(kw)$	-15.47	-11.71	4.04	7.28	-13.83
	17.92	0.68	4.07	18.49	1.38
	-16.83	-9.83	-0.95	-8.19	-10.79
	-15.24	-16.25	5.96	6.49	-3.70
$\sigma_S(kw)$	-15.80	-1.18	5.55	-10.05	15.26
	16.50	-8.92	-1.72	-15.34	-4.87
	-15.87	-4.66	-6.28	10.72	15.57
	-13.42	-12.19	-5.80	6.14	36.14
$\mu_S(sw)$	-12.47	-12.37	-17.54	-3.97	-9.05
	17.63	8.04	-12.74	9.15	-0.22
	-15.43	4.15	16.56	5.84	-11.15
	-19.01	1.81	9.47	-8.74	-9.25
$\sigma_S(sw)$	-12.89	-5.69	-18.65	-11.73	6.49
	17.32	3.42	-16.16	-6.85	1.03
	-12.06	10.22	18.28	16.39	3.58
	-18.90	-0.87	10.79	-4.04	-6.65
$\lambda$	38.08	21.23	16.11	11.00	8.06
	34.26	25.92	14.08	10.44	8.86
	39.61	22.70	13.68	11.64	7.05
	32.28	24.54	20.54	10.03	6.74

TABLE S412. PCA formation TAG:  $7\,$ 

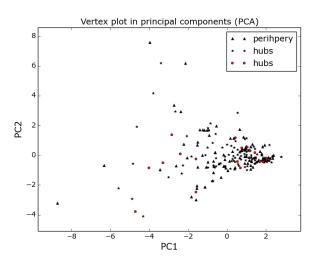


FIG. S22. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-7.04	-5.99	-4.83	-34.62	21.37
(p.)	2.04	3.29	7.10	-71.83	-1.38
(i.)	-7.82	-12.95	-4.61	29.12	25.04
(h.)	2.35	-16.95	-5.64	-49.09	6.65
d	-10.93	-11.90	-19.35	8.02	-0.55
	5.56	10.90	23.82	7.89	0.23
	-8.46	17.99	-16.53	-0.22	6.53
	0.85	24.43	8.39	-14.80	1.04
s	-10.56	-11.65	-19.63	10.19	-1.02
	3.89	11.25	23.70	13.72	2.90
	-8.73	17.84	-16.54	-0.69	3.16
	1.41	24.00	7.51	-20.07	-4.21
$\mu_S(p)$	-9.00	16.81	0.15	13.57	19.50
	-15.73	-8.21	6.68	-2.08	26.10
	-12.22	5.83	17.70	-6.88	9.89
	-15.00	8.59	-10.20	1.32	35.57
$\sigma_S(p)$	-13.44	-3.36	15.35	12.40	15.84
	-14.08	13.11	-5.08	-2.80	20.80
	-10.41	10.56	19.65	5.35	3.40
	-12.80	7.22	-20.14	0.30	-9.34
$\mu_S(kw)$	-9.58	20.02	-7.08	-3.28	-4.96
	-15.71	-11.86	12.05	0.28	-7.31
	-13.36	-10.63	-1.55	-22.48	6.74
	-18.91	-3.17	7.14	1.68	8.62
$\sigma_S(kw)$	-15.89	-5.51	14.16	0.05	-5.56
	-14.98	15.22	-5.21	0.09	-4.93
	-15.06	1.52	7.37	7.25	-14.65
	-16.59	3.11	-11.51	-7.07	-26.18
$\mu_S(sw)$	-9.37	18.52	-7.97	-9.10	-11.74
	-15.00	-11.65	10.96	0.04	-16.31
	-11.63	-15.53	-9.48	-14.42	3.01
	-15.25	-8.11	15.94	0.03	-5.92
$\sigma_S(sw)$	-14.19	-6.23	11.48	-8.78	-19.46
	-13.01	14.51	-5.40	1.26	-20.03
	-12.31	-7.16	-6.56	13.58	-27.58
	-16.84	-4.42	13.54	-5.64	-2.47
λ	35.46	25.86	17.44	10.35	7.52
	31.65	27.01	19.55	10.65	7.39
	43.69	18.64	16.78	8.23	7.31
	41.96	26.92	16.55	7.62	4.29

TABLE S413. PCA formation TAG:  $8\,$ 

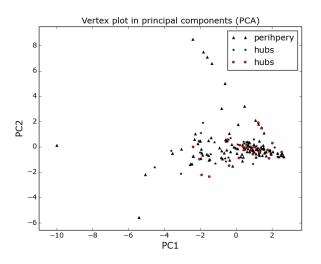


FIG. S23. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-1.36	-9.18	-12.16	60.26	-1.19
(p.)	1.27	14.46	-18.04	-49.60	1.76
(i.)	-0.38	5.43	15.44	-21.95	-26.26
(h.)	-9.50	22.70	7.58	12.86	20.70
d	-2.02	-27.07	15.37	-1.93	-2.34
	1.46	33.31	-1.12	13.67	-1.06
	0.14	-25.81	-5.89	-9.88	5.65
	10.83	5.33	-22.31	-0.33	4.28
s	-1.91	-26.77	16.06	-1.50	-4.45
	1.55	33.33	-3.83	11.90	-3.90
	-1.17	-24.36	-4.19	-15.39	1.55
	9.84	8.32	-23.72	-0.84	0.30
$\mu_S(p)$	23.12	-0.68	0.89	1.68	-2.89
	-23.38	1.06	0.27	-0.50	-2.43
	14.77	11.81	-7.60	-18.68	10.31
	-8.93	-22.45	-6.79	-17.44	24.91
$\sigma_S(p)$	23.05	-1.25	1.56	1.18	4.11
	-23.32	2.28	-0.04	0.00	2.73
	12.63	3.01	-22.27	0.66	-16.57
	-6.15	-21.99	-7.11	27.74	-6.12
$\mu_S(kw)$	22.32	-3.08	-4.43	-2.10	-9.27
	-22.80	-1.36	-4.53	0.08	-8.10
	20.69	5.78	6.11	-8.09	13.04
	-13.38	8.85	-6.29	-13.71	-5.94
$\sigma_S(kw)$	23.00	-2.22	0.27	0.18	6.15
	-23.28	2.19	-1.56	0.71	4.48
	20.11	-4.47	-9.11	9.07	-10.05
	-13.43	5.12	-11.62	9.41	-6.19
$\mu_S(sw)$	-2.04	-12.82	-26.76	-17.08	-32.74
	2.38	-7.51	-35.03	9.83	-37.88
	17.24	-3.76	16.98	4.16	6.42
	-14.11	1.20	-3.36	-12.03	-21.68
$\sigma_S(sw)$	-1.19	-16.93	-22.50	-14.09	36.88
	0.58	-4.49	-35.59	13.71	37.67
	12.86	-15.57	12.40	12.13	-10.15
	-13.82	4.03	-11.22	5.64	9.87
λ	43.21	24.34	15.97	10.02	5.41
	43.57	23.64	16.52	9.03	6.37
	32.88	23.72	16.22	13.02	8.11
	57.94	16.47	15.33	8.90	0.78

TABLE S414. PCA formation TAG: 10

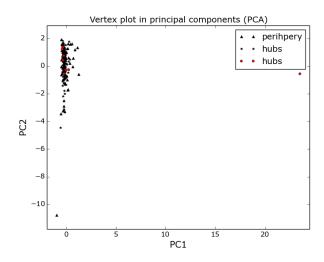


FIG. S24. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-9.30	-1.59	-12.70	-47.85	0.69
(p.)	-10.37	-15.09	0.47	-13.08	35.48
(i.)	2.09	-12.66	-20.11	34.26	4.69
(h.)	9.25	-5.21	25.56	14.04	2.27
d	-4.33	37.49	-0.60	-1.55	-2.82
	-10.11	-18.23	-7.83	1.08	-18.02
	6.17	29.21	1.06	9.30	7.18
	-10.42	12.57	-18.93	-1.82	-6.66
s	-3.42	37.90	-1.48	2.92	-1.56
	-9.70	-19.32	-7.01	5.66	-12.06
	7.19	28.19	-4.38	8.85	-5.69
	-6.77	10.48	-4.49	42.52	10.89
$\mu_S(p)$	-11.18	-5.70	24.97	-5.45	-17.45
	-9.86	11.98	-18.05	-18.40	-4.37
	5.85	-2.60	30.70	6.53	10.27
	7.05	-17.19	-15.10	7.47	-0.45
$\sigma_S(p)$	-10.77	1.92	27.71	-5.24	5.25
	-9.30	11.76	-23.28	2.85	0.86
	10.89	-8.55	22.33	16.63	-8.60
	6.76	-18.64	-11.37	6.89	-3.06
$\mu_S(kw)$	-16.00	-4.59	-6.59	8.95	-14.63
	-13.08	7.61	12.01	-10.89	-4.47
	17.96	1.97	-0.90	-6.78	4.25
	16.75	3.01	-10.08	-2.03	34.50
$\sigma_S(kw)$	-15.21	-1.56	1.11	7.72	27.25
	-12.70	7.89	0.07	23.64	12.12
	15.96	-3.25	-5.79	-5.42	-32.00
	16.71	4.01	-7.02	11.58	-30.59
$\mu_S(sw)$	-14.08	-5.12	-16.45	12.67	-17.02
	-11.52	4.04	21.31	-10.41	-11.96
	16.51	-4.88	-9.58	-10.29	23.11
	12.98	14.34	-3.58	-11.47	3.59
$\sigma_S(sw)$	-15.70	-4.14	-8.39	7.64	13.31
	-13.36	4.08	9.97	13.99	0.66
	17.38	-8.69	-5.14	-1.94	4.21
	13.31	14.55	3.88	2.16	-7.97
λ	47.11	20.65	14.72	7.96	4.98
	55.25	20.49	13.20	5.24	3.03
	39.92	20.31	18.58	8.43	5.72
	42.23	31.89	16.38	8.95	0.54
	12.20	91.00	10.00	0.55	0.01

TABLE S415. PCA formation TAG: 11

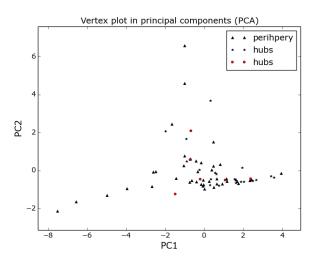


FIG. S25. First two principal components.

	PC1	PC2	PC3	PC4	PC5
cc	-1.25	-12.09	-12.09	-44.89	-6.56
(p.)	0.00	0.00	0.00	0.00	0.00
(i.)	-1.04	-14.60	-9.78	-29.83	19.40
(h.)	2.49	-59.01	16.74	-1.68	-1.90
d	-10.70	-23.27	2.73	7.18	7.98
	0.00	0.00	0.00	0.00	0.00
	-6.35	-26.79	5.79	2.70	-8.11
	-12.33	3.14	1.71	19.55	-12.29
s	-10.77	-23.27	2.78	7.07	7.44
	0.00	0.00	0.00	0.00	0.00
	-6.92	-26.43	6.23	5.32	-6.59
	-12.36	-0.74	8.38	17.10	-15.21
$\mu_S(p)$	-10.75	10.21	-21.57	0.64	11.78
	-13.84	-25.47	2.88	-30.34	-21.61
	-14.11	5.41	-17.76	-5.55	-12.18
	-10.52	-22.84	-39.25	1.81	4.01
$\sigma_S(p)$	-12.57	2.22	-19.64	9.77	-9.87
	-16.43	-22.09	9.13	3.84	32.85
	-12.71	-3.74	-19.57	11.72	1.34
	-12.62	-4.17	1.35	6.72	16.09
$\mu_S(kw)$	-13.55	13.27	1.73	-9.04	15.76
	-18.05	4.66	-45.10	8.15	-7.07
	-16.56	9.31	1.99	-11.91	-10.62
	-12.46	-0.37	-3.73	-16.95	-13.39
$\sigma_S(kw)$	-16.32	4.16	-1.96	4.62	-12.85
	-21.03	-2.56	7.80	26.18	-6.47
	-17.43	3.52	-2.76	8.78	13.45
	-12.56	3.64	14.24	3.68	10.74
$\mu_S(sw)$	-10.48	8.73	21.37	-15.50	8.90
	-14.08	25.71	-3.96	-28.15	18.05
	-11.37	6.67	20.23	-15.11	-8.41
	-12.07	3.00	5.58	-26.37	-8.52
$\sigma_S(sw)$	-13.62	2.78	16.12	-1.28	-18.87
	-16.57	19.50	31.14	3.34	-13.96
	-13.51	3.54	15.89	9.07	19.90
	-12.58	3.11	9.00	-6.13	17.84
λ	41.44	19.85	15.03	9.84	6.79
	54.55	25.82	8.69	5.64	3.82
	36.45	22.91	15.21	9.43	8.50
	81.46	12.04	2.92	2.78	0.56

TABLE S416. PCA formation TAG: 15

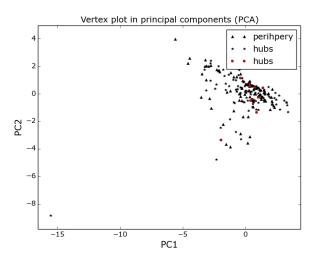


FIG. S26. First two principal components.