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

Renato Fabbri^{1, a)}

São Carlos Institute of Physics, University of São Paulo (IFSC/USP), PO Box 369, 13560-970, São Carlos, SP, Brazil

(Dated: 22 February 2017)

CONTENTS

| SI. Measures | 1 |
|--|-----|
| A. General characteristics of activity | |
| distribution among participants | 1 |
| 1. Snapshots of 2000 messages | 2 |
| B. POS tags and wordnet synsets | 12 |
| 1. Snapshots of 2000 messages | 12 |
| C. Differentiation of the texts from Erdös | |
| sectors | 102 |
| 1. Snapshots of 2000 messages | 102 |
| D. Correlation of topological and textual | |
| metrics | 120 |
| 1. Snapshots of 2000 messages | 120 |
| E. Formation of principal components | 139 |
| 1. Snapshots of 2000 messages | 139 |
| SII. Histograms of existent and incident | |
| words | 157 |
| TTI: C I C I | , |

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

a) http://ifsc.usp.br/~fabbri/; Electronic mail: fabbri@usp.br

1. Snapshots of 2000 messages

| tag gmane id 0 gmane.comp.monitoring.zenoss.user | |
|--|-------|
| 1 0 | |
| 41 1 1 1 | |
| 1 gmane.os.netbsd.devel.cvs | |
| 2 gmane.comp.gnome.mono.devel | |
| 3 gmane.comp.gnu.octave.bugs | |
| 4 gmane.comp.encryption.gpg.user | |
| 5 gmane.comp.documentfoundation.libreoffice. | devel |
| 6 gmane.comp.search.elasticsearch.user | |
| 7 gmane.comp.python.enthought.devel | |
| 8 gmane.comp.encryption.openssl.devel | |
| 9 gmane.network.zeromq.devel | |
| gmane.comp.misc.nslu2.linux | |
| 11 gmane.comp.web.sigia | |
| 12 gmane.comp.security.firewalls.pfsense.supp | ort |
| gmane.comp.jakarta.jmeter.devel | |
| gmane.comp.genealogy.gramps.user | |
| gmane.comp.gcc.libstdc++.devel | |
| 16 gmane.linux.audio.users | |
| gmane.politics.election-methods | |

TABLE S1. Numerical tags with respective list ids used throughout tables in this supporting information document.

| | g. | p. | i. | h. |
|---|--------------|---------------------|-------------|---------------------|
| N | 217 | 130 | 76 | 11 |
| $N_{\%}$ | 100.00 | 59.91 | 35.02 | 5.07 |
| M | 1999.00 | 286.00 | 841.00 | 865.00 |
| $M_{\%}$ | 100.00 | 14.36 | 42.22 | 43.42 |
| Γ | 732.00 | 206.00 | 427.00 | 99.00 |
| $\Gamma_{\%}$ | 100.00 | 28.14 | 58.33 | 13.52 |
| $\frac{\Gamma}{M}\%$ | 36.62 | 72.03 | 50.77 | 11.45 |
| $ \mu(\gamma) $ | 2.70 | 2.63 | 2.74 | 2.67 |
| $\sigma(\gamma)$ | 0.46 | 0.48 | 0.44 | 0.47 |
| chars | 1272081 | 280093 | 683310 | 308678 |
| $chars_{\%}$ | 100.00 | 22.02 | 53.72 | 24.27 |
| spaces chars | 13.65 | 12.29 | 13.50 | 15.22 |
| $\frac{punct}{chars-spaces}$ | 7.55 | 8.86 | 7.81 | 5.74 |
| $\frac{digits}{chars-spaces}$ | 3.59 | 4.10 | 4.10 | 1.96 |
| letters | 86.73 | 84.75 | 85.99 | 90.28 |
| $\frac{chars-spaces}{vogals}$ | 34.80 | 33.91 | 34.66 | 35.86 |
| $\frac{letters}{uppercase}$ | 6.97 | 8.50 | 6.96 | 5.64 |
| tokens | 288269 | 65527 | 155407 | 67336 |
| $tokens_{\%}$ | 100.00 | 22.73 | 53.91 | 23.36 |
| $tokens_{\%} \neq tokens \neq$ | 4.04 | 8.88 | 5.19 | 7.35 |
| knownw | 32.02 | 30.51 | 31.61 | 34.45 |
| $tokens \atop knownw \neq$ | 5.12 | 12.58 | 7.38 | 11.80 |
| knownw stopw | 85.22 | 69.88 | 83.52 | 102.03 |
| knownw punct | 24.52 | 28.41 | 25.28 | 18.99 |
| $\frac{tokens}{contrac}$ | 0.58 | 0.44 | 0.51 | 0.90 |
| tokens | 3.73 | 3.66 | 3.72 | 3.81 |
| $\frac{\mu(tokens)}{\sigma(\overline{tokens})}$ | 2.84 | $\frac{3.00}{2.97}$ | 2.86 | $\frac{3.61}{2.65}$ |
| | | | | |
| $\mu(\underbrace{knownw})$ | 5.72 | 5.61 | 5.76 | 5.75 |
| $\frac{\sigma(knownw)}{\sigma(knownw)}$ | 2.32 | 2.39 | 2.33 | 2.25 |
| $\mu(knownw \neq)$ | 6.74 2.59 | 6.47 2.52 | 6.61 2.52 | 6.67 2.49 |
| $\sigma(knownw \neq)$ | 2.79 | 2.64 | 2.32 | 2.49 |
| $\frac{\mu(stopw)}{\sigma(\overline{stopw})}$ | 1.07 | 1.07 | 1.07 | 1.05 |
| sents | 8504 | 1484 | 4602 | 2420 |
| $sents_{\%}$ | 99.98 | 17.45 | 54.10 | 28.45 |
| $\mu_S(chars)$ | 148.19 | 187.31 | 147.18 | 126.02 |
| $\sigma_S(chars)$ | 438.07 | 496.47 | 487.30 | 265.00 |
| $\mu_S(tokens)$ | 33.91 | 44.17 | 33.78 | 27.83 |
| $\sigma_S(tokens)$ | 110.90 | 119.04 | 127.33 | 59.97 |
| $\mu_S(knownw)$ | 9.06 | 10.82 | 8.90 | 8.30 |
| $\sigma_S(knownw)$ | 17.47 | 21.83 | 18.13 | 12.37 |
| $\mu_S(stopw)$ | 8.01 | 8.07 | 7.74 | 8.50 |
| $\sigma_S(stopw)$ | 13.69 | 9.57 | 16.95 | 7.47 |
| $\mu_S(puncts)$ | 8.32 | 12.56 | 8.54 | 5.29 |
| $\sigma_S(puncts)$ | 46.98 | 47.01 | 55.81 | 21.36 |
| msgs | 1992 | 286 | 841 | 865 |
| $msgs_{\%}$ | 100.00 | 14.36 | 42.22 | 43.42 |
| $\mu_M(sents)$ | 5.21 | 6.08 | 6.43 | 3.74 |
| $\sigma_M(sents)$ | 6.78 | 4.03 | 9.40 | 3.26 |
| $\mu_M(tokens)$ | 145.82 | 230.45 | 186.07 | 78.71 |
| $\sigma_M(tokens)$ | 260.61 | 291.17 | 326.68 | 127.13 |
| $\mu_M(knownw)$ | 38.83 | 56.29 | 48.87 | 23.29 |
| $\sigma_M(knownw)$ | 50.54 | 58.28 | 58.67 | 31.16 |
| $\mu_M(stopw)$ | 34.29 | 41.96 | 42.42 | 23.84 |
| $\sigma_M(stopw)$ | 41.11 | 32.32 | 52.81 | 25.35 |
| $\mu_M(puncts)$ | 36.34 | 66.11 | 47.66 | 15.49 |
| $\sigma_M(puncts)$ | 103.42 | 114.84 | 135.49 | 39.61 |
| $\mu_M(chars)$ | 637.40 | 977.77 | 811.14 | 355.94 |
| $\sigma_M(chars)$ | 1054.36 | 1195.70 | 1290.46 | 566.92 |

TABLE S2. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 0

| | g. | p. | i. | h. |
|---|--------------|--------------|------------------|---------------------|
| N | 149 | 86 | 56 | 7 |
| $N_{\%}$ | 100.00 | 57.72 | 37.58 | 4.70 |
| M | 1999.00 | 937.00 | 1014.00 | 48.00 |
| $M_{\%}$ | 100.00 | 46.87 | 50.73 | 2.40 |
| Γ | 1902.00 | 934.00 | 968.00 | 0.00 |
| $\Gamma_{\%}$ | 100.00 | 49.11 | 50.89 | 0.00 |
| $\frac{\Gamma}{M}\%$ | 95.15 | 99.68 | 95.46 | 0.00 |
| $\mu(\gamma)$ | 2.02 | 2.00 | 2.04 | nan |
| $\sigma(\gamma)$ | 0.15 | 0.03 | 0.21 | nan |
| chars | 1042423 | 518072 | 502996 | 21355 |
| $chars_{\%}$ | 100.00 | 49.70 | 48.25 | 2.05 |
| spaces chars | 9.74 | 9.51 | 9.80 | 14.13 |
| $\frac{punct}{chars-spaces}$ | 10.76 | 11.48 | 10.18 | 6.79 |
| $\frac{digits}{chars-spaces}$ | 6.94 | 7.57 | 6.50 | 1.94 |
| $\frac{letters}{chars-spaces}$ | 79.25 | 77.96 | 80.19 | 89.02 |
| vogals | 29.19 | 28.28 | 29.98 | 31.91 |
| $\frac{\underset{uppercase}{letters}}{letters}$ | 6.99 | 6.94 | 6.89 | 10.10 |
| tokens | 286232 | 146472 | 134852 | 4908 |
| $tokens_{\%}$ | 100.00 | 51.17 | 47.11 | 1.71 |
| $tokens \neq$ | 3.00 | 4.01 | 3.66 | 24.08 |
| knownw | 25.76 | 25.11 | 26.21 | 32.84 |
| tokens knownw≠ | 4.51 | 6.22 | 5.92 | 42.80 |
| stopw | 42.46 | 38.92 | 43.60 | 98.33 |
| knownw | 33.18 | 34.09 | 32.56 | 23.11 |
| $\frac{tokens}{contrac}$ | 0.16 | 0.10 | 0.18 | 1.67 |
| $\mu(\overline{tokens})$ | 3.19 | 3.10 | 3.26 | 3.65 |
| $\sigma(\overline{tokens})$ | 2.53 | 2.54 | 2.52 | 2.60 |
| $\mu(\overline{knownw})$ | 4.89 | 4.69 | 5.06 | 5.50 |
| $\sigma(\overline{knownw})$ | 2.37 | 2.41 | 2.31 | 2.28 |
| $\mu(\overline{knownw} \neq)$ | 6.53 | 6.39 | 6.27 | 6.16 |
| $\sigma(\overline{knownw} \neq)$ | 2.53 | 2.50 | 2.46 | 2.42 |
| $\mu(\overline{stopw})$ | 2.83 | 2.83 | 2.83 | 2.81 |
| $\sigma(\overline{stopw})$ | 0.87 | 0.84 | 0.86 | 1.17 |
| sents | 2314 | 1105 | 1030 | 180 |
| $sents_{\%}$ | 99.96 | 47.73 | 44.49 | 7.78 |
| $\mu_S(chars)$ | 449.34 | 467.71 | 487.22 | 117.34 |
| $\sigma_S(chars)$ | 1289.93 | 1639.41 | 908.31 | 225.17 |
| $\mu_S(tokens)$ | 123.71 | 132.56 | 130.93 | 27.31 |
| $\sigma_S(tokens)$ | 486.75 | 655.37 | 263.16 | 52.82 |
| $\mu_S(knownw)$ | 23.74 | 25.15 | 25.00 | 7.82 |
| $\sigma_S(knownw)$ | 71.83 | 93.68 | 45.95 | 9.90 |
| $\mu_S(stopw)$ | 12.32 | 11.73 | 13.65 | 8.17 |
| $\sigma_S(stopw)$ | 14.62 | 15.01 | 14.97 | 7.20 |
| $\mu_S(puncts)$ | 41.05 | 45.19 | 42.64 104.08 | 6.34 |
| $\sigma_S(puncts)$ | 213.64 | 291.91 | | 19.21 |
| msgs | 1999 | 937 | 1014 | 48 |
| msgs% | 100.00 | 46.87 | 50.73 | 2.40 |
| $\mu_M(sents)$ | 2.15 1.64 | 2.18 1.86 | $2.01 \\ 1.10$ | $\frac{4.38}{3.60}$ |
| $\sigma_M(sents)$ $\mu_M(tokens)$ | 1.04 | 1.80 | 133.25 | 104.12 |
| $\begin{vmatrix} \mu_M(tokens) \\ \sigma_M(tokens) \end{vmatrix}$ | 599.27 | 842.99 | 133.25 224.11 | 126.00 |
| $\mu_M(knownw)$ | 27.49 | 29.66 | 25.39 | 29.27 |
| $\left \frac{\sigma_M(knownw)}{\sigma_M(knownw)} \right $ | 91.32 | 126.44 | 40.18 | 29.38 |
| $\mu_M(stopw)$ | 14.26 | 13.85 | 13.87 | 30.71 |
| $\sigma_M(stopw)$ | 10.16 | 8.95 | 6.91 | 38.04 |
| $\mu_M(puncts)$ | 47.74 | 53.43 | 43.54 | 25.44 |
| $\sigma_{M}(puncts)$ | 266.12 | 375.64 | 95.29 | 39.23 |
| $\mu_M(chars)$ | 521.18 | 552.70 | 495.78 | 442.52 |
| $\sigma_M(chars)$ | 1610.48 | 2227.50 | 715.84 | 541.08 |
| , , | 1 | | | |

TABLE S3. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 1

| | g. | p. | i. | h. |
|--|--------------|---------------|---------------|--------------|
| N | 315 | 187 | 113 | 15 |
| $N_{\%}$ | 100.00 | 59.37 | 35.87 | 4.76 |
| M | 1999.00 | 295.00 | 911.00 | 793.00 |
| $M_{\%}$ | 100.00 | 14.76 | 45.57 | 39.67 |
| Γ | 793.00 | 211.00 | 421.00 | 161.00 |
| $\Gamma_{\%}$ | 100.00 | 26.61 | 53.09 | 20.30 |
| $\frac{\Gamma}{M}\%$ | 39.67 | 71.53 | 46.21 | 20.30 |
| $\mu(\gamma)$ | 2.55 | 2.47 | 2.58 | 2.58 |
| $\sigma(\gamma)$ | 0.50 | 0.50 | 0.49 | 0.49 |
| chars | 1223450 | 215838 | 600989 | 406623 |
| $chars_{\%}$ | 100.00 | 17.64 | 49.12 | 33.24 |
| $\frac{spaces}{chars}$ | 15.07 | 14.29 | 14.32 | 16.60 |
| $\frac{punct}{chars-spaces}$ | 6.49 | 7.25 | 6.98 | 5.33 |
| $\frac{digits}{chars-spaces}$ | 1.78 | 1.91 | 2.05 | 1.29 |
| $\frac{letters}{chars-spaces}$ | 89.64 | 88.69 | 88.84 | 91.36 |
| vogals | 35.87 | 35.41 | 35.57 | 36.55 |
| $rac{letters}{uppercase} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$ | 5.70 | 6.17 | 6.14 | 4.80 |
| tokens | 269618 | 48330 | 134550 | 86739 |
| $tokens_{\%}$ | 100.00 | 17.93 | 49.90 | 32.17 |
| $tokens \neq$ | 5.16 | 11.53 | 7.02 | 8.28 |
| knownw | 36.03 | 35.93 | 35.83 | 36.41 |
| $\frac{tokens}{knownw \neq}$ | 6.29 | 16.65 | 9.44 | 12.60 |
| knownw stopw | 91.37 | 85.64 | 86.90 | 101.34 |
| knownw | 21.02 | 22.52 | 22.39 | 18.05 |
| $\frac{tokens}{contrac} \\ tokens$ | 0.96 | 0.77 | 0.85 | 1.23 |
| $\mu(\overline{tokens})$ | 3.77 | 3.75 | 3.75 | 3.83 |
| $\sigma(\overline{tokens})$ | 2.85 | 2.94 | 2.87 | 2.77 |
| $\mu(\overline{knownw})$ | 5.67 | 5.63 | 5.61 | 5.78 |
| $\sigma(\overline{knownw})$ | 2.37 | 2.39 | 2.38 | 2.34 |
| $\mu(\overline{knownw} \neq)$ | 7.02 | 6.67 | 6.86 | 6.95 |
| $\sigma(\overline{knownw} \neq)$ | 2.58 | 2.49 | 2.52 | 2.53 |
| $\mu(\overline{stopw})$ | 2.73 | 2.70 | 2.71 | 2.77 |
| $\sigma(\overline{stopw})$ | 1.11 | 1.10 | 1.12 | 1.10 |
| sents | 9231 | 1598 | 4584 | 3051 |
| $sents_{\%}$ | 99.98 | 17.31 | 49.65 | 33.04 |
| $\mu_S(chars)$ | 131.38 | 133.90 | 129.96 | 132.12 |
| $\sigma_S(chars)$ | 162.05 | 162.48 | 188.99 | 109.36 |
| $\mu_S(tokens)$ | 29.22 | 30.25 | 29.37 | 28.44 |
| $\sigma_S(tokens)$ | 38.87 | 40.71 | 45.50 | 24.32 |
| $\mu_S(knownw)$ | 8.97 | 9.09 | 8.82 | 9.12 |
| $\sigma_S(knownw)$ | 10.95 | 11.13 | 12.64 | 7.59 |
| $\mu_S(stopw)$ | 8.48 | 8.13 | 7.98 | 9.41 |
| $\sigma_S(stopw)$ | 7.61 6.15 | 6.73 | 7.62 | 7.95 |
| $\mu_S(puncts)$ $\sigma_S(puncts)$ | 14.66 | 6.81 15.98 | 6.58 17.53 | 5.14 7.27 |
| , , | 1999 | 295 | 911 | 793 |
| $msgs \ msgs_{\%}$ | 100.00 | 295 14.76 | 45.57 | 39.67 |
| $\mu_M(sents)$ | 5.54 | 6.35 | 5.93 | 4.79 |
| $\sigma_M(sents)$ | 5.98 | 7.37 | 5.46 | 5.89 |
| $\mu_M(tokens)$ | 136.45 | 165.34 | 149.26 | 110.99 |
| $\sigma_M(tokens)$ | 170.75 | 182.24 | 187.66 | 139.77 |
| $\mu_M(knownw)$ | 41.52 | 49.25 | 44.53 | 35.20 |
| $\sigma_M(knownw)$ | 51.77 | 55.68 | 54.11 | 46.55 |
| $\mu_M(stopw)$ | 39.27 | 44.17 | 40.26 | 36.31 |
| $\sigma_M(stopw)$ | 46.07 | 51.51 | 42.99 | 47.15 |
| $\mu_M(puncts)$ | 29.64 | 38.17 | 34.33 | 21.09 |
| $\sigma_M(puncts)$ | 52.76 | 49.39 | 66.81 | 29.24 |
| $\mu_M(chars)$ | 610.22 | 729.80 | 657.94 | 510.90 |
| $\sigma_M(chars)$ | 739.07 | 825.08 | 752.50 | 674.80 |

TABLE S4. 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 | 288 | 225 | 56 | 7 |
| $N_{\%}$ | 100.00 | 78.12 | 19.44 | 2.43 |
| M | 1997.00 | 339.00 | 566.00 | 1092.00 |
| $M_{\%}$ | 100.00 | 16.98 | 28.34 | 54.68 |
| Γ | 574.00 | 262.00 | 216.00 | 96.00 |
| $\Gamma_{\%}$ | 100.00 | 45.64 | 37.63 | 16.72 |
| $\frac{\Gamma}{M}\%$ | 28.74 | 77.29 | 38.16 | 8.79 |
| $\mu(\gamma)$ | 2.83 | 2.82 | 2.85 | 2.79 |
| $\sigma(\gamma)$ | 0.38 | 0.38 | 0.36 | 0.41 |
| chars | 1448549 | 410986 | 395144 | 642419 |
| chars% | 100.00 | 28.37 | 27.28 | 44.35 |
| chars punct | 15.19 | 15.12 12.37 | 14.96 10.20 | 15.38 8.50 |
| $\frac{chars-spaces}{digits}$ | 10.07 | | | |
| chars-spaces letters | 3.77 | 6.86 | 3.15 | 2.17 |
| chars-spaces | 84.02 | 78.47 | 84.43 | 87.31 |
| $egin{array}{c} vogals \ \overline{letters} \ uppercase \end{array}$ | 33.90 | 32.90 | 33.90 | 34.47 |
| letters | 6.79 | 9.83 | 6.49 | 5.22 |
| tokens | 346234 | 104621 | 94319 | 147296 |
| tokens% | 100.00 | 30.22 | 27.24 | 42.54 |
| $tokens \neq knownw$ | 3.78 | 6.91 | 6.36 | 4.30 |
| $\frac{tokens}{tokens}$ | 34.03 | 0-10- | 33.84 | 36.29 |
| $\frac{knownw}{stopw}$ | 4.40 65.37 | 8.99 | 9.44 | 6.19 |
| $\frac{\overline{knownw}}{punct}$ | 28.10 | 50.63 33.07 | 69.80 28.18 | $\frac{71.67}{24.53}$ |
| $\frac{tokens}{contrac}$ | 0.85 | 0.43 | 1.01 | $\frac{24.55}{1.05}$ |
| tokens | 3.47 | 3.26 | 3.48 | 3.62 |
| $\sigma(\frac{tokens}{tokens})$ | 2.71 | $\frac{3.20}{2.76}$ | 2.70 | $\frac{3.62}{2.67}$ |
| $\frac{b(tokens)}{\mu(\overline{knownw})}$ | 5.45 | 5.07 | 5.54 | 5.62 |
| $\sigma(\overline{knownw})$ | 2.53 | $\frac{3.07}{2.58}$ | 2.50 | 2.50 |
| $\mu(\overline{knownw} \neq)$ | 6.82 | 6.43 | 6.71 | 6.79 |
| $\sigma(\overline{knownw} \neq)$ | 2.62 | 2.58 | 2.57 | 2.58 |
| $\mu(\overline{stopw})$ | 2.69 | 2.59 | 2.67 | 2.74 |
| $\sigma(\overline{stopw})$ | 1.10 | 1.13 | 1.11 | 1.07 |
| sents | 9254 | 1991 | 2870 | 4395 |
| $sents_{\%}$ | 99.98 | 21.51 | 31.01 | 47.48 |
| $\mu_S(chars)$ | 155.35 | 205.25 | 136.55 | 144.95 |
| $\sigma_S(chars)$ | 275.71 | 501.60 | 149.61 | 173.17 |
| $\mu_S(tokens)$ | 37.42 | 52.55 | 32.87 | 33.52 |
| $\sigma_S(tokens)$ | 79.40 | 155.20 | 38.12 | 35.76 |
| $\mu_S(knownw)$ | 10.75 | 13.49 | 9.54 | 10.29 |
| $\frac{\sigma_S(knownw)}{\mu_S(stopw)}$ | 19.09 7.30 | 35.49 6.98 | 10.16 6.75 | 11.18 7.80 |
| $ \mu_S(stopw) $ $ \sigma_S(stopw) $ | 6.15 | $\frac{6.98}{7.19}$ | 5.61 | 5.92 |
| $\mu_S(puncts)$ | 10.52 | 17.38 | 9.27 | 8.23 |
| $\sigma_S(puncts)$ | 31.75 | 62.30 | 16.12 | 12.92 |
| msgs | 1997 | 339 | 566 | 1092 |
| $msgs_{\%}$ | 100.00 | 16.98 | 28.34 | 54.68 |
| $\mu_M(sents)$ | 5.61 | 6.85 | 6.05 | 5.00 |
| $\sigma_M(sents)$ | 3.99 | 4.58 | 5.26 | 2.71 |
| $\mu_M(tokens)$ | 175.74 | 310.79 | 169.15 | 137.23 |
| $\sigma_M(tokens)$ | 243.93 | 498.43 | 180.14 | 87.75 |
| $\mu_M(knownw)$ | 49.87 | 79.31 | 48.43 | 41.48 |
| $\sigma_M(knownw)$ | 59.16 | 119.56 | 40.76 | 27.61 |
| $\mu_M(stopw)$ | 33.91 | 41.04 | 34.31 | 31.48 |
| $\sigma_M(stopw)$ | 27.58 50.21 | 33.08 103.39 | 28.91 | 24.42 34.51 |
| $\frac{\mu_M(puncts)}{\sigma_M(puncts)}$ | 96.69 | 103.39 195.00 | 48.64 81.67 | $\frac{34.51}{26.65}$ |
| $\mu_M(puncts)$ $\mu_M(chars)$ | 723.62 | 1210.82 | 696.17 | 586.61 |
| $\sigma_M(chars)$ | 888.78 | 1698.63 | 734.90 | 419.64 |
| 111 (2.00.0) | | | 1 | 0.01 |

TABLE S5. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 3

| | g. | p. | i. | h. |
|---|---------------|----------------|----------------|----------------|
| N | 428 | 258 | 147 | 23 |
| $N_{\%}$ | 100.00 | 60.28 | 34.35 | 5.37 |
| M | 1998.00 | 385.00 | 708.00 | 900.00 |
| $M_{\%}$ | 100.00 | 19.32 | 35.52 | 45.16 |
| Γ | 651.00 | 283.00 | 288.00 | 80.00 |
| $\Gamma_{\%}$ | 100.00 | 43.47 | 44.24 | 12.29 |
| $\frac{\Gamma}{M}\%$ | 32.58 | 73.51 | 40.68 | 8.89 |
| $ \mu(\gamma) $ | 2.62 | 2.57 | 2.67 | 2.60 |
| $\sigma(\gamma)$ | 0.49 | 0.50 | 0.47 | 0.49 |
| chars | 1182331 | 242865 | 424590 | 514876 |
| $chars_{\%}$ | 100.00 | 20.54 | 35.91 | 43.55 |
| spaces chars | 16.01 | 15.83 | 15.63 | 16.41 |
| $\frac{punct}{chars-spaces}$ | 7.07 | 8.41 | 7.29 | 6.24 |
| $\frac{digits}{chars-spaces}$ | 2.66 | 2.89 | 2.95 | 2.32 |
| $\frac{letters}{chars-spaces}$ | 88.25 | 86.68 | 87.65 | 89.50 |
| vogals | 34.69 | 34.02 | 34.69 | 35.00 |
| $\frac{\underset{uppercase}{letters}}{letters}$ | 6.23 | 6.62 | 5.84 | 6.36 |
| tokens | 269403 | 57054 | 97596 | 114753 |
| $tokens_{\%}$ | 100.00 | 21.18 | 36.23 | 42.60 |
| $tokens \neq$ | 5.15 | 9.96 | 8.29 | 6.75 |
| knownw tokens | 33.93 | 34.55 | 33.63 | 33.87 |
| $tokens \atop knownw \neq \atop knownw$ | 7.04 | 14.37 | 12.83 | 11.41 |
| knownw stopw knownw | 94.24 | 80.90 | 91.72 | 103.14 |
| $\overline{knownw} \ \underline{punct} \ \overline{tokens} \ contrac$ | 21.68 | 24.53 | 22.05 | 19.96 |
| $\frac{contrac}{tokens}$ | 1.03 | 0.66 | 0.99 | 1.26 |
| $\mu(\overline{tokens})$ | 3.61 | 3.51 | 3.59 | 3.68 |
| $\sigma(\overline{tokens})$ | 2.62 | 2.62 | 2.58 | 2.65 |
| $\mu(\overline{knownw})$ | 5.62 | 5.46 | 5.61 | 5.72 |
| $\sigma(\overline{knownw})$ | 2.41 | 2.43 | 2.37 | 2.43 |
| $\mu(\overline{knownw} \neq)$ | 6.94 | 6.47 | 6.72 | 6.92 |
| $\sigma(\overline{knownw} \neq)$ | 2.62 | 2.52 | 2.58 | 2.55 |
| $\mu(\overline{stopw})$ | 2.71 | 2.58 | 2.70 | 2.76 |
| $\sigma(\overline{stopw})$ | 1.12 | 1.13 | 1.12 | 1.11 |
| sents | 9772 | 1795 | 3323 | 4655 |
| $sents_{\%}$ | 99.99 | 18.37 | 34.00 | 47.63 |
| $\mu_S(chars)$ | 119.78 | 134.15 | 126.59 | 109.35 |
| $\sigma_S(chars)$ | 215.52 | 268.50 | 272.36 | 128.51 |
| $\mu_S(tokens)$ | 27.58 | 31.79 | 29.39 | 24.66 |
| $\sigma_S(tokens)$ | 56.87 | 62.47 | 78.82 | 28.82 |
| $\mu_S(knownw)$ | 8.28 | 9.78 | 8.73 | 7.38 |
| $\sigma_S(knownw)$ | 17.21 | 24.66 | 21.27 | 7.89 |
| $\mu_S(stopw)$ | 7.65 | 7.44 | 7.93 | 7.53 |
| $\sigma_S(stopw)$ | 8.03 | 8.96 | 9.55 | 6.24 |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | 5.99 23.12 | 7.81 21.98 | 6.49 34.36 | 4.93 9.49 |
| msgs | 1993 | 385 | 708 | 900 |
| $ msgs_{\%} $ | 100.00 | 19.32 | 35.52 | 45.16 |
| $\mu_M(sents)$ | 5.85 | 5.62 | 5.61 | 6.14 |
| $\sigma_M(sents)$ | 6.00 | 7.93 | 4.97 | 5.76 |
| $\mu_M(tokens)$ | 136.99 | 149.57 | 139.60 | 129.56 |
| $\sigma_M(tokens)$ | 245.13 | 423.56 | 213.09 | 143.08 |
| $\mu_M(knownw)$ | 40.65 | 45.71 | 41.09 | 38.15 |
| $\sigma_M(knownw)$ | 80.83 | 148.89 | 60.97 | 45.21 |
| $\mu_M(stopw)$ | 37.65 | 34.83 | 37.36 | 39.09 |
| $\sigma_M(stopw)$ | 42.70 | 41.36 37.35 | 40.98 | 44.49 |
| $\mu_M(puncts)$ $\sigma_M(puncts)$ | 30.74 92.35 | 170.03 | 31.80 82.91 | 27.09 32.81 |
| $\mu_M(puncts)$ $\mu_M(chars)$ | 591.33 | 629.37 | 597.84 | 569.94 |
| $\sigma_M(chars)$ $\sigma_M(chars)$ | 963.21 | 1625.29 | 801.72 | 646.34 |
| - 1/1 (5/00/10) | 0.00.21 | 1020.20 | UU1.14 | 0 10.01 |

TABLE S6. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 4

| | g. | p. | i. | h. |
|---|------------------|------------------|-----------------|-----------------------|
| N | 151 | 95 | 44 | 12 |
| $N_{\%}$ | 100.00 | 62.91 | 29.14 | 7.95 |
| M | 1984.00 | 233.00 | 690.00 | 1061.00 |
| $M_{\%}$ | 100.00 | 11.74 | 34.78 | 53.48 |
| Γ | 490.00 | 129.00 | 249.00 | 112.00 |
| $\Gamma_{\%}$ | 100.00 | 26.33 | 50.82 | 22.86 |
| $\frac{\Gamma}{M}\%$ | 24.70 | 55.36 | 36.09 | 10.56 |
| $\mu(\gamma)$ | 2.84 | 2.71 | 2.89 | 2.89 |
| $\sigma(\gamma)$ | 0.36 | 0.45 | 0.31 | 0.31 |
| chars | 786886 | 102665 | 288757 | 395464 |
| $chars_{\%}$ | 100.00 | 13.05 | 36.70 | 50.26 |
| spaces chars | 14.81 | 14.21 | 14.17 | 15.45 |
| $\frac{punct}{chars-spaces}$ | 6.96 | 7.38 | 7.75 | 6.26 |
| $\frac{digits}{chars-spaces}$ | 1.67 | 2.06 | 2.51 | 0.93 |
| $\frac{letters}{chars-spaces}$ | 89.43 | 87.89 | 87.87 | 90.99 |
| vogals letters | 35.78 | 35.33 | 35.39 | 36.17 |
| $\frac{letters}{uppercase}$ $\frac{letters}{letters}$ | 5.47 | 5.81 | 6.15 | 4.90 |
| tokens | 171661 | 22566 | 63520 | 85575 |
| $tokens_{\%}$ | 100.00 | 13.15 | 37.00 | 49.85 |
| $tokens \neq$ | 7.40 | 18.78 | 10.99 | 8.70 |
| knownw tokens | 35.49 | 33.91 | 34.82 | 36.41 |
| tokens knownw≠ | 9.72 | 28.06 | 15.71 | 14.18 |
| knownw stopw knownw | 94.03 | 85.55 | 87.63 | 100.65 |
| knownw | 21.29 | 22.86 | 22.95 | 19.64 |
| $\frac{tokens}{contrac}$ | 1.14 | 1.07 | 0.91 | 1.33 |
| $\mu(\overline{tokens})$ | 3.83 | 3.80 | 3.83 | 3.84 |
| $\sigma(\overline{tokens})$ | 2.87 | 2.85 | 2.97 | 2.80 |
| $\mu(\overline{knownw})$ | 5.63 | 5.49 | 5.60 | 5.68 |
| $\sigma(\overline{knownw})$ | 2.25 | 2.27 | 2.30 | 2.21 |
| $\mu(\overline{knownw} \neq)$ | 6.95 | 6.38 | 6.75 | 6.90 |
| $\sigma(knownw \neq)$ | 2.56 | 2.46 | 2.52 | 2.48 |
| $\mu(\overline{stopw})$ | 2.77 | 2.73 | 2.73 | 2.79 |
| $\sigma(\overline{stopw})$ | 1.13 | 1.12 | 1.13 | 1.13 |
| sents | 5686 | 785 | 1936 | 2967 |
| sents% | 99.96 | 13.80 | 34.04 | 52.16 |
| $\mu_S(chars)$ $\sigma_S(chars)$ | 137.30 204.84 | 129.59 147.80 | 148.11 297.85 | 132.18 128.63 |
| $\mu_S(tokens)$ | 30.20 | 28.75 | 32.82 | 28.85 |
| $\sigma_S(tokens)$ | 48.45 | 35.54 | 71.66 | 28.38 |
| $\mu_S(knownw)$ | 9.64 | 8.48 | 10.20 | 9.57 |
| $\sigma_S(knownw)$ | 12.34 | 9.78 | 16.86 | 8.98 |
| $\mu_S(stopw)$ | 8.98 | 7.28 | 8.79 | 9.55 |
| $\sigma_S(stopw)$ | 8.68 | 7.80 | 9.48 | 8.28 |
| $\mu_S(puncts)$ | 6.43 | 6.58 | 7.54 | 5.67 |
| $\sigma_S(puncts)$ | 19.96 | 13.50 | 31.02 | 9.24 |
| msgs | 1984 | 233 | 690 | 1061 |
| $msgs_{\%}$ | 100.00 | 11.74 | 34.78 | 53.48 |
| $\mu_M(sents)$ $\sigma_M(sents)$ | 3.80 4.11 | 4.26 5.65 | $3.74 \\ 4.34$ | $3.74 \\ 3.50$ |
| $\mu_M(tokens)$ | 87.82 | 98.19 | 93.17 | 82.06 |
| $\sigma_M(tokens)$ $\sigma_M(tokens)$ | 122.65 | 131.97 | 151.59 | 96.36 |
| $\mu_M(knownw)$ | 27.74 | 28.70 | 28.72 | 26.89 |
| $\sigma_M(knownw)$ | 37.74 | 39.22 | 43.90 | $\frac{20.69}{32.71}$ |
| $\mu_M(stopw)$ | 25.85 | 24.61 | 24.78 | 26.82 |
| $\sigma_M(stopw)$ $\sigma_M(stopw)$ | 34.09 | 35.88 | 35.98 | 32.34 |
| $\mu_M(puncts)$ | 19.42 | 23.18 | 21.98 | 16.93 |
| $\sigma_{M}(puncts)$ | 38.31 | 35.57 | 54.38 | 23.01 |
| $\mu_M(chars)$ | 395.20 | 439.13 | 417.34 | 371.15 |
| $\sigma_M(chars)$ | 547.74 | 598.64 | 667.32 | 437.48 |
| | | | | |

TABLE S7. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 5

| | g. | p. | i. | h. |
|---|-----------------|-----------------------|----------------|----------------|
| N | 450 | 317 | 121 | 12 |
| $N_{\%}$ | 100.00 | 70.44 | 26.89 | 2.67 |
| M | 2000.00 | 564.00 | 815.00 | 621.00 |
| $M_{\%}$ | 100.00 | 28.20 | 40.75 | 31.05 |
| Γ | 551.00 | 313.00 | 227.00 | 11.00 |
| $\Gamma_{\%}$ | 100.00 | 56.81 | 41.20 | 2.00 |
| $\frac{\Gamma}{M}\%$ | 27.55 | 55.50 | 27.85 | 1.77 |
| $ \mu(\gamma) $ | 2.75 | 2.67 | 2.86 | 2.55 |
| $\sigma(\gamma)$ | 0.43 | 0.47 | 0.35 | 0.50 |
| chars | 1485813 | 552986 | 554328 | 378499 |
| chars% | 100.00 | 37.22 | 37.31 | 25.47 |
| $\frac{chars}{chars}$ | 12.94 | 12.79 | 12.82 | 13.35 |
| chars-spaces | 9.54 | 10.53 | 10.15 | 7.20 |
| $\frac{digits}{chars-spaces}$ | 4.49 | 7.13 | 3.87 | 1.54 |
| $\frac{letters}{chars-spaces}$ | 83.95 | 80.09 | 83.95 | 89.65 |
| $rac{vogals}{letters} \ rac{uppercase}{}{}$ | 36.94 | 36.10 | 36.98 | 38.00 |
| letters | 4.49 | 4.60 | 4.68 | 4.07 |
| tokens | 333351 | 124792 | 126935 | 81624 |
| tokens% | 100.00 | 37.44 | 38.08 | 24.49 |
| $tokens \neq knownw$ | 4.05 | 6.60 | 5.72 | 6.33 |
| $\frac{knownw}{tokens}$ $knownw \neq$ | 0 - 1 - 1 | 30.61 | 30.54 | 33.15 |
| $\frac{knownw}{knownw}$ $stopw$ | 5.26 | 9.05 78.31 | 9.17 83.43 | 11.62 |
| knownw punct | 83.85 28.97 | $\frac{78.31}{30.76}$ | 30.21 | 92.25 24.31 |
| $tokens \\ contrac$ | 0.46 | 0.37 | 0.49 | 0.54 |
| $\mu(\overline{tokens})$ | 3.80 | 3.78 | 3.73 | 3.95 |
| $\sigma(\overline{tokens})$ | 3.20 | 3.40 | 3.09 | 3.04 |
| $\mu(\overline{knownw})$ | 5.73 | 5.65 | 5.74 | 5.83 |
| $\sigma(\overline{knownw})$ | 2.13 | 2.17 | 2.12 | 2.09 |
| $\mu(\overline{knownw} \neq)$ | 6.94 | 6.75 | 6.76 | 6.83 |
| $\sigma(\overline{knownw} \neq)$ | 2.54 | 2.49 | 2.46 | 2.44 |
| $\mu(\overline{stopw})$ | 2.90 | 2.83 | 2.91 | 2.97 |
| $\sigma(\overline{stopw})$ | 1.21 | 1.22 | 1.22 | 1.19 |
| sents | 10053 | 3271 | 3733 | 3051 |
| sents _% | 99.98 | 32.53 | 37.13 | 30.34 |
| $\mu_S(chars)$ | 146.73 | 167.92 | 147.45 | 123.02 |
| $\sigma_S(chars)$ | 422.29 | 648.07 | 296.91 | 168.58 |
| $\mu_S(tokens)$ | 33.17 93.80 | 38.16 134.99 | 34.01 80.23 | 26.76 38.84 |
| $\sigma_S(tokens)$ $\mu_S(knownw)$ | 9.30 | 10.52 | 9.25 | 8.05 |
| $\sigma_S(knownw)$ | 15.88 | 21.68 | 13.89 | 9.36 |
| $\mu_S(stopw)$ | 7.37 | 7.70 | 7.35 | 7.03 |
| $\sigma_S(stopw)$ | 6.37 | 7.34 | 6.00 | 5.62 |
| $\mu_S(puncts)$ | 9.61 | 11.75 | 10.28 | 6.51 |
| $\sigma_S(puncts)$ | 41.01 | 53.43 | 41.86 | 17.94 |
| msgs | 2000 | 564 | 815 | 621 |
| msgs% | 100.00 | 28.20 | 40.75 | 31.05 |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | 6.01 3.70 | $6.77 \\ 4.32$ | 5.57 3.31 | 5.91 3.47 |
| $\mu_M(tokens)$ | 167.45 | 222.10 | 156.52 | 132.17 |
| $\sigma_M(tokens)$ | 238.71 | 364.92 | 187.67 | 110.60 |
| $\mu_M(knownw)$ | 46.69 | 60.94 | 42.31 | 39.48 |
| $\sigma_M(knownw)$ | 47.28 | 67.27 | 37.17 | 31.83 |
| $\mu_M(stopw)$ | 37.10 | 44.71 | 33.72 | 34.62 |
| $\sigma_M(stopw)$ | 28.93 | 35.25 | 24.01 | 27.13 |
| $\mu_M(puncts)$ $\sigma_M(puncts)$ | 49.06 101.77 | 68.89 147.36 | 47.83 92.38 | 32.68 42.53 |
| $\mu_M(puncts)$ $\mu_M(chars)$ | 741.83 | 979.30 | 679.08 | 608.51 |
| $\sigma_M(chars)$ | 1065.26 | 1707.43 | 723.75 | 495.28 |
| | | | | |

TABLE S8. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 6

| | g. | p. | i. | h. |
|---|------------------|----------------------|----------------------|--|
| N | 86 | 51 | 27 | 8 |
| $N_{\%}$ | 100.00 | 59.30 | 31.40 | 9.30 |
| M | 2000.00 | 150.00 | 687.00 | 1163.00 |
| $M_{\%}$ | 100.00 | 7.50 | 34.35 | 58.15 |
| I D | 358.00 100.00 | 81.00 22.63 | 135.00 37.71 | 142.00 39.66 |
| Γ% | 17.90 | 54.00 | 19.65 | 12.21 |
| $\frac{\Gamma}{M}\%$ $\mu(\gamma)$ | 2.74 | $\frac{54.00}{2.70}$ | $\frac{19.05}{2.82}$ | $\begin{array}{ c c c c c }\hline 12.21 \\ 2.68 \end{array}$ |
| $\begin{vmatrix} \mu(\gamma) \\ \sigma(\gamma) \end{vmatrix}$ | 0.44 | 0.46 | 0.38 | 0.47 |
| chars | 1345438 | 100511 | 462737 | 782190 |
| $chars_{\%}$ | 100.00 | 7.47 | 34.39 | 58.14 |
| spaces | 15.55 | 14.19 | 15.18 | 15.94 |
| chars punct | 5.73 | 7.07 | 6.45 | 5.12 |
| chars-spaces digits | 1.10 | 1.74 | 1.87 | 0.56 |
| tetters | 91.22 | 89.10 | 89.61 | 92.45 |
| $\frac{chars-spaces}{vogals}$ | 36.58 | 35.24 | 36.07 | 37.05 |
| letters uppercase | 3.84 | 4.99 | 4.24 | 3.47 |
| tokens | 289604 | 21826 | 101066 | 166712 |
| $tokens_{\%}$ | 100.00 | 7.54 | 34.90 | 57.57 |
| $tokens \neq$ | 4.14 | 14.74 | 7.37 | 4.98 |
| knownw | 35.97 | 34.15 | 34.50 | 37.09 |
| tokens knownw≠ knownw | 6.17 | 25.37 | 12.03 | 8.34 |
| knownw stopw knownw | 104.41 | 92.92 | 100.41 | 108.05 |
| knownw punct tokens | 18.10 | 21.56 | 19.96 | 16.52 |
| $rac{tokens}{tokens}$ | 1.18 | 0.81 | 1.08 | 1.29 |
| $\mu(\overline{tokens})$ | 3.85 | 3.87 | 3.80 | 3.87 |
| $\sigma(\overline{tokens})$ | 2.77 | 3.02 | 2.85 | 2.69 |
| $\mu(\overline{knownw})$ | 5.83 | 5.76 | 5.75 | 5.89 |
| $\sigma(\overline{knownw})$ | 2.31 | 2.37 | 2.33 | 2.29 |
| $\mu(\overline{knownw \neq})$ | 7.13 | 6.65 | 6.94 | 7.11 |
| $\sigma(\overline{knownw \neq})$ | 2.57 | 2.53 | 2.54 | 2.53 |
| $\mu(\overline{stopw})$ | 2.74 | 2.71 | 2.73 | 2.75 |
| $\sigma(\overline{stopw})$ | 1.12 | 1.11 | 1.13 | 1.12 |
| sents | 11003 | 777 | 3695 | 6533 |
| sents% | 99.98 | 7.06 | 33.58 | 59.36 |
| $\mu_S(chars)$ | 120.98 120.49 | 128.24 158.17 | 123.96 148.10 | 118.39 95.14 |
| $\sigma_S(chars)$ $\mu_S(tokens)$ | 26.34 | 28.10 | 27.36 | 95.14 25.55 |
| $\sigma_S(tokens)$ | 28.76 | 39.33 | 36.52 | 21.29 |
| $\mu_S(knownw)$ | 8.45 | 8.36 | 8.36 | 8.50 |
| $\sigma_S(knownw)$ | 7.55 | 10.27 | 8.23 | 6.72 |
| $\mu_S(stopw)$ | 8.71 | 7.70 | 8.28 | 9.08 |
| $\sigma_S(stopw)$ | 7.19 | 7.88 | 6.95 | 7.21 |
| $\mu_S(puncts)$ | 4.78 | 6.06 | 5.47 | 4.24 |
| $\sigma_S(puncts)$ | 10.07 | 13.60 | 13.89 | 6.24 |
| msgs | 2000 | 150 | 687 | 1163 |
| $msgs_{\%}$ | 100.00 | 7.50 | 34.35 | 58.15 |
| $\mu_M(sents)$ | 6.39 | 6.15 | 6.28 | 6.49 |
| $\sigma_M(sents)$ | 6.83 | 3.95 | 6.67 | 7.21 |
| $\mu_M(tokens)$ $\sigma_M(tokens)$ | 146.65 164.43 | 146.92 136.71 | 148.87 178.16 | 145.29 159.15 |
| $\mu_M(lokens)$ $\mu_M(knownw)$ | 46.38 | 43.29 | 44.93 | 47.64 |
| $\sigma_M(knownw)$ | 52.84 | 40.13 | 53.14 | 54.05 |
| $\mu_M(stopw)$ | 48.09 | 39.99 | 44.65 | 51.16 |
| $\sigma_M(stopw)$ | 54.03 | 35.61 | 52.53 | 56.58 |
| $\mu_M(puncts)$ | 27.93 | 32.56 | 30.96 | 25.54 |
| $\sigma_{M}(puncts)$ | 38.91 | 40.46 | 47.72 | 32.16 |
| $\mu_M(chars)$ | 670.15 | 668.45 | 671.24 | 669.73 |
| $\sigma_M(chars)$ | 756.82 | 597.08 | 803.26 | 746.91 |
| | | | | |

TABLE S9. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 7

| | g. | p. | i. | h. |
|--|--------------|----------------|----------------|--------------|
| N | 297 | 188 | 102 | 7 |
| $N_{\%}$ | 100.00 | 63.30 | 34.34 | 2.36 |
| M | 1997.00 | 261.00 | 488.00 | 1224.00 |
| $M_{\%}$ | 100.00 | 13.23 | 24.73 | 62.04 |
| Γ | 380.00 | 203.00 | 166.00 | 11.00 |
| $\Gamma_{\%}$ | 100.00 | 53.42 | 43.68 | 2.89 |
| $\frac{\Gamma}{M}\%$ | 19.03 | 77.78 | 34.02 | 0.90 |
| $\mu(\gamma)$ | 2.44 | 2.34 | 2.57 | 2.36 |
| $\sigma(\gamma)$ | 0.50 | 0.47 | 0.49 | 0.48 |
| chars | 1875991 | 233867 | 519411 | 1122713 |
| chars% | 100.00 | 12.47 | 27.69 | 59.85 |
| chars punct | 20.78 | 20.57 | 19.39 | 21.46 |
| chars-spaces | 9.07 | 8.56 | 9.20 | 9.11 |
| $\frac{digits}{chars-spaces}$ | 4.42 | 5.20 | 3.85 | 4.53 |
| $\frac{letters}{chars-spaces}$ | 84.38 | 84.06 | 84.85 | 84.22 |
| vogals | 33.48 | 33.73 | 33.22 | 33.56 |
| $\frac{\substack{letters\\uppercase}}{\substack{letters}}$ | 8.95 | 8.23 | 10.72 | 8.26 |
| tokens | 396005 | 47782 | 112504 | 235720 |
| $tokens_{\%}$ | 100.00 | 12.07 | 28.41 | 59.52 |
| $tokens \neq$ | 3.98 | 12.13 | 7.65 | 4.38 |
| knownw tokens | 32.09 | 33.13 | 32.77 | 31.56 |
| $knownw\neq$ | 4.63 | 17.50 | 10.09 | 6.06 |
| knownw stopw knownw | 70.55 | 74.51 | 74.18 | 67.91 |
| knownw punct tokens | 25.60 | 22.46 | 25.59 | 26.25 |
| $rac{tokens}{contrac} \ tokens$ | 0.69 | 0.59 | 0.73 | 0.69 |
| $\mu(\overline{tokens})$ | 3.67 | 3.80 | 3.64 | 3.66 |
| $\sigma(\overline{tokens})$ | 3.71 | 6.82 | 2.80 | 3.15 |
| $\mu(\overline{knownw})$ | 5.61 | 5.71 | 5.66 | 5.56 |
| $\sigma(\overline{knownw})$ | 2.60 | 2.56 | 2.65 | 2.58 |
| $\mu(\overline{knownw} \neq)$ | 6.90 | 6.55 | 6.77 | 6.88 |
| $\sigma(\overline{knownw} \neq)$ | 2.66 | 2.58 | 2.66 | 2.61 |
| $\mu(\overline{stopw})$ | 2.70 | 2.73 | 2.65 | 2.71 |
| $\sigma(\overline{stopw})$ | 1.13 | 1.14 | 1.13 | 1.12 |
| sents | 11071 | 1389 | 3503 | 6181 |
| $sents_{\%}$ | 99.98 | 12.54 | 31.64 | 55.82 |
| $\mu_S(chars)$ | 168.26 | 167.17 | 147.12 | 180.44 |
| $\sigma_S(chars)$ | 262.70 | 240.36 | 179.14 | 303.36 |
| $\mu_S(tokens)$ | 35.78 | 34.41 | 32.14 | 38.14 |
| $\sigma_S(tokens)$ | 64.40 | 59.64 | 44.09 | 74.26 |
| $\mu_S(knownw)$ | 8.78 | 9.21 | 7.80 | 9.23 |
| $\sigma_S(knownw)$ | 13.75 | 9.21 | 7.40 | 16.96 |
| $\mu_S(stopw)$ | 7.12 | 7.45 | 6.77 | 7.24 |
| $\sigma_S(stopw)$ | 7.08 | 6.96 | 6.62 | 7.35 |
| $\mu_S(puncts)$ | 9.17 | 7.73 | 8.25 | 10.01 |
| $\sigma_S(puncts)$ | 18.30 | 15.41 | 17.97 | 19.01 |
| msgs | 1973 | 261 | 488 | 1224 |
| $msgs_{\%}$ | 100.00 | 13.23 | 24.73 | 62.04 |
| $\mu_M(sents)$ $\sigma_M(sents)$ | 6.60 7.72 | $6.29 \\ 9.09$ | 8.18 | 6.04 6.60 |
| $\mu_M(sents)$ $\mu_M(tokens)$ | 202.95 | 9.09 | 9.17 233.11 | 194.77 |
| $\sigma_M(tokens)$ | 370.04 | 256.72 | 571.09 | 275.92 |
| $\mu_M(knownw)$ | 49.99 | 49.69 | 56.70 | 47.38 |
| $\sigma_M(knownw)$ | 65.98 | 69.74 | 54.21 | 69.16 |
| $\mu_M(stopw)$ | 40.08 | 39.75 | 48.76 | 36.69 |
| $\sigma_M(stopw)$ | 50.55 | 54.52 | 51.58 | 48.82 |
| $\mu_M(puncts)$ | 52.78 | 42.20 | 60.69 | 51.88 |
| $\sigma_M(puncts)$ | 153.68 | 62.40 | 280.62 | 76.10 |
| $\mu_M(chars)$ | 948.87 | 894.54 | 1061.99 | 915.36 |
| $\sigma_{M}(chars)$ | 1202.57 | 1146.85 | 1439.87 | 1103.27 |
| | | | | |

TABLE S10. Messages sizes in each Erdös sector (\mathbf{p} . for periphery, \mathbf{i} . for intermediary, \mathbf{h} . for hubs). TAG: 8

| | g. | p. | i. | h. |
|---|---------------|--------------|-----------------|----------------|
| N | 149 | 85 | 57 | 7 |
| $N_{\%}$ | 100.00 | 57.05 | 38.26 | 4.70 |
| M | 2000.00 | 168.00 | 684.00 | 1148.00 |
| $M_{\%}$ | 100.00 | 8.40 | 34.20 | 57.40 |
| Γ | 302.00 | 78.00 | 139.00 | 85.00 |
| $\Gamma_{\%}$ | 100.00 | 25.83 | 46.03 | 28.15 |
| $\frac{\Gamma}{M}\%$ | 15.10 | 46.43 | 20.32 | 7.40 |
| $\mu(\gamma)$ | 2.79 | 2.76 | 2.87 | 2.71 |
| $\sigma(\gamma)$ | 0.40 | 0.43 | 0.34 | 0.46 |
| chars | 994549 | 104110 | 446021 | 444418 |
| chars% | 100.00 | 10.47 | 44.85 14.83 | 44.69 15.73 |
| chars punct | 5.38 | 7.84 | 5.74 | 4.44 |
| $\frac{chars-spaces}{digits}$ | | | | |
| $\frac{chars-spaces}{letters}$ | 1.61 | 3.52 | 1.98 | 0.78 |
| chars-spaces | 91.12 | 86.73 | 90.34 | 92.97 |
| $rac{vogals}{letters} \ rac{uppercase}{}$ | 35.59 | 33.69 | 35.59 | 36.01 |
| $\frac{uppercase}{letters}$ | 5.67 | 8.36 | 5.40 | 5.34 |
| tokens | 209578 | 23051 | 94458 | 92069 |
| $tokens_{\%}$ | 100.00 | 11.00 | 45.07 | 43.93 |
| $tokens \neq$ | 6.24 | 14.73 | 9.68 | 7.78 |
| $\frac{knownw}{tokens} \\ knownw \neq$ | 37.71 | 34.02 | 36.66 | 39.71 |
| $\frac{knownw \neq}{knownw}$ $stopw$ | 8.10 | 24.85 | 13.06 | 12.80 |
| $\frac{stopw}{knownw} \ punct$ | 94.47 | 86.74 | 91.94 | 98.52 |
| $\frac{punct}{tokens} \\ contrac$ | 17.41 | 23.36 | 18.40 | 14.92 |
| $\frac{contrac}{tokens}$ | 1.14 | 0.57 | 0.98 | 1.44 |
| $\mu(\overline{tokens})$ | 3.95 | 3.83 | 3.95 | 3.99 |
| $\sigma(\overline{tokens})$ | 2.85 | 3.11 | 2.93 | 2.69 |
| $\mu(\overline{knownw})$ | 5.99 | 5.85 | 5.93 | 6.08 |
| $\sigma(\overline{knownw})$ | 2.44 | 2.45 | 2.48 | 2.40 |
| $\mu(\overline{knownw} \neq)$ | 7.23 | 6.63 | 7.05 | 7.22 |
| $\sigma(\overline{knownw} \neq)$ | 2.63 | 2.52 | 2.58 | 2.59 |
| $\mu(\overline{stopw})$ | 2.73 | 2.67 | 2.69 | 2.77 |
| $\sigma(\overline{stopw})$ | 1.12 | 1.13 | 1.14 | 1.10 |
| sents | 8201 | 732 | 3212 | 4259 |
| $sents_{\%}$ | 99.98 | 8.92 | 39.16 | 51.92 |
| $\mu_S(chars)$ | 120.12 | 141.10 | 137.75 | 103.15 |
| $\sigma_S(chars)$ | 206.93 | 212.72 | 298.65 | 82.58 |
| $\mu_S(tokens)$ | 25.56 | 31.49 | 29.42 | 21.62 |
| $\sigma_S(tokens)$ | 47.81 | 54.89 | 68.58 | 17.44 |
| $\mu_S(knownw)$ | 8.78 | 9.56 | 9.86 | 7.82 |
| $\sigma_S(knownw)$ | 13.27 | 11.44 | 19.02 | 6.48 |
| $\mu_S(stopw)$ | 8.05 | 8.04 | 8.77 | 7.51 |
| $\sigma_S(stopw)$ | 7.12 | 7.40 | 8.18 | 6.09 |
| $\mu_S(puncts)$ $\sigma_S(puncts)$ | 4.46 18.36 | 7.36 24.91 | $5.42 \\ 26.28$ | 3.23 4.21 |
| msgs | 2000 | 168 | 684 | 1148 |
| $msgs_{\%}$ | 100.00 | 8.40 | 34.20 | 57.40 |
| $\mu_M(sents)$ | 5.07 | 5.32 | 5.66 | 4.68 |
| $\sigma_M(sents)$ | 4.59 | 3.79 | 4.91 | 4.46 |
| $\mu_M(tokens)$ | 106.18 | 138.18 | 139.70 | 81.52 |
| $\sigma_M(tokens)$ | 151.13 | 170.62 | 212.79 | 84.43 |
| $\mu_M(knownw)$ | 35.98 | 41.73 | 46.33 | 28.98 |
| $\sigma_M(knownw)$ | 44.24 | 41.32 | 58.65 | 31.49 |
| $\mu_M(stopw)$ | 33.11 | 35.06 | 41.34 | 27.92 |
| $\sigma_M(stopw)$ | 35.06 | 29.35 | 42.08 | 29.88 |
| $\mu_M(puncts)$ | 19.46 | 32.83 | 26.78 | 13.14 |
| $\sigma_M(puncts)$ | 51.47 | 70.74 | 77.40 | 14.69 |
| $\mu_M(chars)$ | 495.57 | 618.57 | 650.09 | 385.50 |
| $\sigma_M(chars)$ | 664.42 | 712.76 | 916.19 | 407.51 |
| | | | | |

TABLE S11. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 9

| | g. | p. | i. | h. |
|--|---------------------|---------------------|---------------------|--|
| N | 466 | 258 | 192 | 16 |
| $N_{\%}$ | 100.00 | 55.36 | 41.20 | 3.43 |
| M | 1992.00 | 426.00 | 1040.00 | 526.00 |
| $M_{\%}$ | 100.00 | 21.39 | 52.21 | 26.41 |
| Γ | 633.00 | 264.00 | 291.00 | 78.00 |
| $\Gamma_{\%}$ | 100.00 | 41.71 | 45.97 | 12.32 |
| $\frac{\Gamma}{M}\%$ | 31.78 | 61.97 | 27.98 | 14.83 |
| $\mu(\gamma)$ | 2.57 | 2.38 | 2.71 | 2.67 |
| $\sigma(\gamma)$ | 0.50 | 0.48 | 0.45 | 0.47 |
| chars | 1148928 | 235614 | 590628 | 322686 |
| $chars_{\%}$ | 100.00 | 20.51 | 51.41 | 28.09 |
| spaces chars | 15.82 | 15.13 | 16.16 | 15.70 |
| $\frac{\frac{enur_{punct}}{punct}}{chars-spaces}$ | 6.62 | 6.14 | 6.89 | 6.49 |
| $\frac{digits}{chars-spaces}$ | 2.32 | 2.16 | 2.44 | 2.22 |
| $\frac{letters}{chars-spaces}$ | 88.98 | 89.57 | 88.53 | 89.35 |
| vogals | 35.33 | 34.07 | 35.52 | 35.94 |
| $\frac{\underset{uppercase}{letters}}{letters}$ | 6.58 | 10.12 | 5.82 | 5.33 |
| tokens | 262904 | 52905 | 136049 | 73950 |
| $tokens_{\%}$ | 100.00 | 20.12 | 51.75 | 28.13 |
| tokens ≠ | 4.64 | 9.44 | 6.38 | 7.32 |
| $ \frac{knownw}{tokens} \\ knownw \neq $ | 34.87 | 35.44 | 34.35 | 35.42 |
| $\frac{knownw \neq}{knownw}$ $stopw$ | 6.20 | 14.83 | 9.04 | 12.19 |
| $egin{array}{c} stopw \ \overline{knownw} \ punct \ \end{array}$ | 94.84 | 91.55 | 97.34 | 92.72 |
| $egin{array}{c} panet \\ tokens \\ contrac \\ \end{array}$ | 20.49 | 20.29 | 20.53 | 20.56 |
| tokens | 0.92 | 0.67 | 0.98 | 0.98 |
| $\mu(\underline{tokens})$ | 3.60 | 3.70 | 3.56 | 3.61 |
| $\sigma(\underline{tokens})$ | 2.51 | 2.67 | 2.46 | 2.49 |
| $\mu(\underline{knownw})$ | 5.56 | 5.65 | 5.49 | 5.62 |
| $\sigma(knownw)$ | 2.26 | 2.25 | 2.23 | 2.30 |
| $\mu(knownw \neq)$ | 6.78 | 6.48 | 6.61 | 6.60 |
| $\sigma(knownw \neq)$ | $\frac{2.52}{2.67}$ | 2.44 | 2.46 2.65 | 2.44 |
| $\mu(stopw)$ | 1.06 | $\frac{2.65}{1.06}$ | $\frac{2.65}{1.07}$ | $\begin{bmatrix} 2.73 \\ 1.04 \end{bmatrix}$ |
| $\sigma(stopw)$ | | | | |
| sents | 13331 99.98 | 2706 20.30 | 6960 | 3667 27.50 |
| $ sents_{\%} $ $ \mu_{S}(chars) $ | 85.06 | 85.93 | 52.20 83.75 | 86.84 |
| $\sigma_S(chars)$ $\sigma_S(chars)$ | 111.15 | 128.37 | 105.92 | 107.00 |
| $\mu_S(tokens)$ | 19.73 | 19.55 | 19.56 | 20.17 |
| $\sigma_S(tokens)$ | 25.91 | 28.24 | 24.63 | 26.17 26.47 |
| $\mu_S(knownw)$ | 5.64 | 5.27 | 5.61 | 5.96 |
| $\sigma_S(knownw)$ | 7.13 | 6.21 | 7.00 | 7.96 |
| $\mu_S(stopw)$ | 5.59 | 5.18 | 5.61 | 5.85 |
| $\sigma_S(stopw)$ | 6.33 | 5.44 | 6.51 | 6.55 |
| $\mu_S(puncts)$ | 4.05 | 3.97 | 4.03 | 4.15 |
| $\sigma_S(puncts)$ | 7.83 | 7.80 | 7.64 | 8.21 |
| msgs | 1992 | 426 | 1040 | 526 |
| $msgs_{\%}$ | 100.00 | 21.39 | 52.21 | 26.41 |
| $\mu_M(sents)$ $\sigma_M(sents)$ | 7.54 6.43 | 7.22 6.63 | $7.52 \\ 6.82$ | 7.83 5.35 |
| $\mu_M(sents)$ $\mu_M(tokens)$ | 133.28 | 125.21 | 132.18 | 141.99 |
| $\sigma_M(tokens)$ $\sigma_M(tokens)$ | 160.82 | 125.21 150.47 | 161.20 | 167.63 |
| $\mu_M(knownw)$ | 37.69 | 33.55 | 37.46 | 41.48 |
| $\sigma_M(knownw)$ | 47.48 | 47.90 | 43.70 | 53.63 |
| $\mu_M(stopw)$ | 37.51 | 33.01 | 37.65 | 40.87 |
| $\sigma_M(stopw)$ | 44.22 | 44.56 | 42.94 | 46.08 |
| $\mu_M(puncts)$ | 28.27 | 26.04 | 28.16 | 30.30 |
| $\sigma_M(puncts)$ | 47.49 | 32.22 | 54.61 | 42.38 |
| $\mu_M(chars)$ | 575.03 | 551.83 | 566.02 | 611.61 |
| $\sigma_M(chars)$ | 681.67 | 656.67 | 668.57 | 724.43 |

TABLE S12. Messages sizes in each Erdös sector (\mathbf{p} . for periphery, \mathbf{i} . for intermediary, \mathbf{h} . for hubs). TAG: 10

| | g. | p. | i. | h. |
|--|-------------------|---|-------------------|---|
| N | 407 | 269 | 120 | 18 |
| $N_{\%}$ | 100.00 | 66.09 | 29.48 | 4.42 |
| M | 1993.00 | 453.00 | 777.00 | 763.00 |
| $M_{\%}$ | 100.00 | 22.73 | 38.99 | 38.28 |
| Γ | 779.00 | 310.00 | 387.00 | 82.00 |
| Γ _% | 100.00 | 39.79 | 49.68 | 10.53 |
| $\frac{\Gamma}{M}\%$ | 39.09 | 68.43 | 49.81 2.45 | $\begin{vmatrix} 10.75 \\ 2.40 \end{vmatrix}$ |
| $\begin{array}{c} \mu(\gamma) \\ \sigma(\gamma) \end{array}$ | 2.36 0.48 | $\begin{array}{c} 2.24 \\ 0.42 \end{array}$ | 0.50 | 0.49 |
| (1) | | _ | | |
| chars | 2269319 | 605319 | 913470 | 750530 |
| chars% | 100.00 | 26.67 13.81 | 40.25 | 33.07 14.07 |
| chars punct | 6.71 | 6.24 | 6.64 | 7.17 |
| $\frac{chars-spaces}{digits}$ | | _ | | |
| chars-spaces letters | 0.74 | 0.91 | 0.98 | 0.33 |
| chars-spaces | 90.57 | 90.88 | 90.39 | 90.54 |
| $rac{vogals}{letters} \ rac{uppercase}{}$ | 35.74 | 35.89 | 35.75 | 35.59 |
| letters | 6.56 | 6.57 | 6.48 | 6.64 |
| tokens | 500672 | 129794 | 202536 | 168344 |
| $tokens_{\%}$ | 100.00 | 25.92 | 40.45 | 33.62 |
| $tokens \neq$ | 3.90 | 7.75 | 5.93 | 6.05 |
| $\frac{knownw}{tokens} \\ knownw \neq$ | 39.50 | 40.84 | 39.19 | 38.83 |
| $\frac{knownw}{knownw}$ $stopw$ | 5.97 | 11.98 | 9.93 | 11.19 |
| $\frac{stopw}{knownw}$ $punct$ | 73.56 | 69.61 | 74.72 | 75.36 |
| $\frac{tokens}{contrac}$ | 22.48 | 21.89 | 22.35 | 23.10 |
| tokens | 0.95 | 0.77 | 0.96 | 1.07 |
| $\mu(\underbrace{tokens})$ | 3.82 | 3.94 | 3.80 | 3.76 |
| $\sigma(tokens)$ | 2.73 | 2.80 | 2.69 | 2.71 |
| $\mu(\underbrace{knownw})$ | 5.90 | 6.09 | 5.88 | 5.77 |
| $\sigma(knownw)$ | 2.62 | 2.66 | 2.63 | 2.57 |
| $\mu(\underbrace{knownw \neq})$ | 7.41 | 7.27 | 7.26 | 7.25 |
| $\sigma(knownw \neq)$ | 2.61 | 2.63 | 2.58 | 2.56 |
| $\mu(stopw)$ | 2.74 1.09 | 2.73 | 2.73 1.09 | 2.75 1.10 |
| $\sigma(stopw)$ | | 1.07 | | |
| sents | 16509 | 4377 | 6501 | 5633 |
| sents% | 99.99 | 26.51 | 39.37 | 34.12 |
| $\mu_S(chars)$ | 136.34 | 137.16 | 139.37 | 132.15 |
| $\sigma_S(chars)$ $\mu_S(tokens)$ | 116.18 30.33 | 128.58 29.66 | 114.15 31.16 | 107.92 29.89 |
| $\sigma_S(tokens)$ $\sigma_S(tokens)$ | 27.19 | 28.69 | 26.87 | 29.89 |
| $\mu_S(knownw)$ | 9.86 | 9.79 | 10.04 | 9.70 |
| $\sigma_S(knownw)$ | 7.92 | 8.47 | 7.86 | 7.53 |
| $\mu_S(stopw)$ | 7.76 | 7.46 | 8.04 | 7.68 |
| $\sigma_S(stopw)$ | 6.22 | 6.18 | 6.29 | 6.15 |
| $\mu_S(puncts)$ | 6.82 | 6.49 | 6.97 | 6.91 |
| $\sigma_S(puncts)$ | 9.27 | 9.26 | 9.19 | 9.35 |
| msgs | 1993 | 453 | 777 | 763 |
| $msgs_{\%}$ | 100.00 | 22.73 | 38.99 | 38.28 |
| $\mu_M(sents)$ | 9.27 | 10.65 | 9.35 | 8.37 |
| $\sigma_M(sents)$ | 8.24 | 10.94 | 8.01 | 6.23 |
| $\mu_M(tokens)$ | 254.48 | 289.62 | 264.04 | 223.89 |
| $\sigma_M(tokens)$ | 182.77 | 219.51 | 186.82 | 146.08 |
| $\mu_M(knownw)$ | 82.30 | 95.30 | 84.65 | 72.19 |
| $\sigma_M(knownw)$ | 65.81 | 77.92 | 66.77 | 54.42 |
| $\mu_M(stopw)$ | 64.52 | 72.25 | 67.46 | 56.94 |
| $\sigma_M(stopw)$ | 61.83 | 67.12 | 65.37 | 53.47 |
| $\mu_M(puncts)$ | 58.86 | 64.90 | 60.75 | 53.34 |
| $\frac{\sigma_M(puncts)}{\mu_M(chars)}$ | 33.92 | 42.09 | 33.98 | 26.87 |
| LHM(Chars) | 1105 00 | 1000 14 | 1170 17 | |
| $\sigma_{M}(chars)$ | 1135.33 895.12 | 1333.14 1107.33 | 1172.17 903.28 | 980.37 696.69 |

TABLE S13. Messages sizes in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 11

| | g. | p. | i. | h. |
|--|------------------|---------------------|------------------|------------------|
| N | 174 | 105 | 62 | 7 |
| $N_{\%}$ | 100.00 | 60.34 | 35.63 | 4.02 |
| M | 2000.00 | 233.00 | 842.00 | 925.00 |
| $M_{\%}$ | 100.00 | 11.65 | 42.10 | 46.25 |
| Γ | 624.00 | 125.00 | 380.00 | 119.00 |
| $\Gamma_{\%}$ | 100.00 | 20.03 | 60.90 | 19.07 |
| $\frac{\Gamma}{M}\%$ | 31.20 | 53.65 | 45.13 | 12.86 |
| $ \mu(\gamma) $ | 2.69 | 2.65 | 2.70 | 2.69 |
| $\sigma(\gamma)$ | 0.46 | 0.48 | 0.46 | 0.46 |
| chars | 903712 | 151623 | 551842 | 200247 |
| $chars_{\%}$ | 100.00 | 16.78 | 61.06 | 22.16 |
| $\frac{spaces}{chars}_{punct}$ | 16.20 | 15.03 | 16.18 | 17.13 |
| $\frac{punct}{chars-spaces}$ | 6.66 | 7.83 | 7.07 | 4.60 |
| digits | 4.98 | 4.33 | 6.23 | 1.99 |
| $\frac{letters}{chars-spaces}$ | 86.25 | 85.69 | 84.45 | 91.71 |
| vogals | 34.48 | 33.89 | 34.04 | 36.01 |
| $\frac{\substack{letters\\uppercase}}{\substack{letters}}$ | 7.60 | 8.82 | 8.34 | 4.82 |
| tokens | 208867 | 34933 | 129563 | 44372 |
| $tokens_{\%}$ | 100.00 | 16.72 | 62.03 | 21.24 |
| $tokens \neq$ | 5.11 | 11.57 | 6.27 | 10.78 |
| knownw | 33.37 | 33.41 | 32.58 | 35.65 |
| $\frac{tokens}{knownw\neq}$ | 6.70 | 17.79 | 8.52 | 18.06 |
| knownw stopw | 92.04 | 86.16 | 85.30 | 114.36 |
| knownw | 20.98 | 22.80 | 22.44 | 15.28 |
| $\frac{tokens}{contrac}$ | 1.04 | 0.82 | 0.80 | 1.93 |
| $\mu(\overline{tokens})$ | 3.55 | 3.61 | 3.49 | 3.68 |
| $\sigma(\overline{tokens})$ | 2.63 | 2.75 | 2.67 | 2.42 |
| $\mu(\overline{knownw})$ | 5.45 | 5.51 | 5.36 | 5.62 |
| $\sigma(\overline{knownw})$ | 2.25 | 2.32 | 2.25 | 2.18 |
| $\mu(\overline{knownw} \neq)$ | 6.61 | 6.26 | 6.46 | 6.52 |
| $\sigma(\overline{knownw} \neq)$ | 2.49 | 2.40 | 2.46 | 2.41 |
| $\mu(\overline{stopw})$ | 2.69 | 2.65 | 2.68 | 2.75 |
| $\sigma(\overline{stopw})$ | 1.10 | 1.09 | 1.10 | 1.09 |
| sents | 7086 | 1057 | 4221 | 1810 |
| $ sents_{\%} $ | 99.97 | 14.91 | 59.55 | 25.54 |
| $\mu_S(chars)$ | 126.18 | 142.19 | 129.50 | 108.95 |
| $\sigma_S(chars)$ | 279.70 | 452.74 | 276.24 | 90.16 |
| $\mu_S(tokens)$ | 29.48 | 33.05 | 30.70 | 24.53 |
| $\sigma_S(tokens)$ | 74.68 | 117.29 | 75.62 | 20.72 |
| $\mu_S(knownw)$ | 8.44 | 9.19 | 8.47 | 7.92 |
| $\sigma_S(knownw)$ | 18.31 | 25.15 | 19.61 | 6.83 |
| $\mu_S(stopw)$ | 7.85 | 8.19 | 7.37 | 8.78 |
| $\sigma_S(stopw)$ | 8.41 | 8.82 | 8.76 | 7.17 |
| $\mu_S(puncts)$ | 6.19 | 7.54 | 6.89 | 3.76 |
| $\sigma_S(puncts)$ | 28.12 | 53.16 | 24.61 | 4.89 |
| msgs | 2000 | 233 | 842 | 925 |
| $msgs_{\%}$ | 100.00 | 11.65 | 42.10 | 46.25 |
| $\mu_M(sents)$ | 4.49 | 5.45 | 5.96 | 2.90 |
| $\sigma_M(sents)$ | 4.45 | 4.60 | 5.15 | 2.96 |
| $\mu_M(tokens)$ | 105.80 | 151.51 | 155.54 | 49.01 |
| $\sigma_M(tokens)$ | 192.96 | 322.20 | 219.23 | 67.83 |
| $\mu_M(knownw)$ | 29.98 | 41.85 | 42.64 | 15.47 |
| $\sigma_M(knownw)$ | 47.85 | 70.72 | 55.42 | 22.46 |
| $\mu_M(stopw)$ | 27.94 | 37.26 | 37.08 | 17.27 |
| $\sigma_M(stopw)$ | 33.42 | 41.71 | 35.66 | 24.62 |
| $\mu_M(puncts)$ | 23.01 | 35.42 | 35.76 | 8.27 |
| $\sigma_M(puncts)$ | 66.96 | 138.59 | 68.76 | 12.22 |
| $\mu_M(chars)$ | 450.33 766.57 | $649.09 \\ 1273.94$ | 653.69 852.31 | 215.15 312.40 |
| $\sigma_M(chars)$ | 100.01 | 1213.94 | 002.31 | 91Z.4U |

TABLE S14. Messages sizes in each Erdös sector (\mathbf{p} . for periphery, \mathbf{i} . for intermediary, \mathbf{h} . for hubs). TAG: 12

| | g. | p. | i. | h. |
|---|---------|----------------------|----------------------|---------------------|
| N | 72 | 42 | 25 | 5 |
| $N_{\%}$ | 100.00 | 58.33 | 34.72 | 6.94 |
| M | 2000.00 | 1062.00 | 376.00 | 562.00 |
| $M_{\%}$ | 100.00 | 53.10 | 18.80 | 28.10 |
| Γ | 1570.00 | 1053.00 | 245.00 | 272.00 |
| $\Gamma_{\%}$ | 100.00 | 67.07 | 15.61 | 17.32 |
| $\frac{\Gamma}{M}\%$ | 78.50 | 99.15 | 65.16 | 48.40 |
| $\mu(\gamma)$ | 2.09 | 2.01 | 2.36 | 2.17 |
| $\sigma(\gamma)$ | 0.29 | 0.11 | 0.48 | 0.37 |
| chars | 1521456 | 562972 | 622899 | 335585 |
| $chars_{\%}$ | 100.00 | 37.00 | 40.94 | 22.06 |
| spaces chars | 13.96 | 15.71 | 12.73 | 13.30 |
| $\frac{punct}{chars-spaces}$ | 8.19 | 6.05 | 10.52 | 7.34 |
| $\frac{digits}{chars-spaces}$ | 2.40 | 2.93 | 1.52 | 3.18 |
| $\frac{letters}{chars-spaces}$ | 87.23 | 88.68 | 86.09 | 86.97 |
| vogals | 31.04 | 21.95 | 36.60 | 35.88 |
| $\frac{letters}{uppercase}$ $letters$ | 19.09 | 42.65 | 4.81 | 6.34 |
| tokens | 334347 | 115627 | 143652 | 75069 |
| $tokens_{\%}$ | 100.00 | 34.58 | 42.96 | 22.45 |
| $tokens \neq$ | 2.79 | 4.39 | 3.41 | 6.97 |
| knownw | 34.97 | 38.47 | 32.31 | 34.66 |
| $tokens \atop knownw \neq $ | 3.96 | 5.46 | 6.21 | 11.96 |
| stopw_ | 57.80 | 64.62 | 45.85 | 67.45 |
| knownw | 30.13 | 23.62 | 37.30 | 26.46 |
| $\frac{tokens}{contrac}$ | 0.52 | 0.28 | 0.46 | 1.03 |
| $\mu(\overline{tokens})$ | 3.83 | 4.01 | 3.71 | 3.78 |
| $\sigma(\overline{tokens})$ | 3.18 | 3.01 | 3.33 | 3.12 |
| $\frac{b(\overline{knownw})}{\mu(\overline{knownw})}$ | 5.86 | 5.92 | 5.81 | 5.83 |
| $\sigma(\overline{knownw})$ | 2.25 | 2.30 | $\frac{3.01}{2.10}$ | $\frac{3.63}{2.42}$ |
| $\mu(\overline{knownw} \neq)$ | 7.17 | 6.85 | 7.06 | 7.10 |
| $\sigma(\overline{knownw} \neq)$ | 2.57 | $\frac{0.65}{2.53}$ | $\frac{7.00}{2.52}$ | $\frac{7.10}{2.50}$ |
| $\frac{\overline{\mu(\overline{stopw})}}{\overline{\mu(\overline{stopw})}}$ | 2.85 | 2.99 | 2.75 | 2.76 |
| $\sigma(\overline{stopw})$ | 1.14 | 1.17 | $\frac{2.75}{1.09}$ | $\frac{2.76}{1.13}$ |
| sents | 6338 | 2137 | 2275 | 1928 |
| sents | 99.97 | $\frac{2137}{33.71}$ | $\frac{2275}{35.88}$ | 30.41 |
| $\mu_S(chars)$ | 238.75 | 262.16 | 272.59 | 172.63 |
| $\sigma_S(chars)$ | 2229.92 | 412.15 | 3660.19 | 586.32 |
| $\mu_S(tokens)$ | 52.76 | 54.12 | 63.15 | 38.94 |
| $\sigma_S(tokens)$ | 539.48 | 98.89 | 884.93 | 146.78 |
| $\mu_S(knownw)$ | 13.50 | 9.69 | 18.62 | 11.67 |
| $\sigma_S(knownw)$ | 152.64 | 20.72 | 251.64 | 36.72 |
| $\mu_S(stopw)$ | 7.14 | 5.21 | 8.25 | 7.97 |
| $\sigma_S(stopw)$ | 8.56 | 7.43 | 10.55 | 6.48 |
| $\mu_S(puncts)$ | 15.90 | 12.79 | 23.56 | 10.31 |
| $\sigma_S(puncts)$ | 259.97 | 40.54 | 428.29 | 61.56 |
| msgs | 2000 | 1062 | 376 | 562 |
| $ msgs_{\%} $ | 100.00 | 53.10 | 18.80 | 28.10 |
| $\mu_M(sents)$ | 4.15 | 3.01 | 7.01 | 4.42 |
| $\sigma_M(sents)$ | 6.63 | 6.44 | 6.79 | 6.25 |
| $\mu_M(tokens)$ | 168.74 | 109.95 | 384.17 | 135.69 |
| $\sigma_M(tokens)$ | 489.63 | 290.17 | 940.99 | 250.92 |
| $\mu_M(knownw)$ | 42.86 | 19.62 | 112.70 | 40.06 |
| $\sigma_M(knownw)$ | 136.20 | 72.83 | 264.96 | 68.77 |
| $\mu_M(stopw)$ | 22.70 | 10.51 | 50.06 | 27.45 |
| $\sigma_M(stopw)$ | 49.08 | 33.81 | 58.04 | 57.93 |
| $\mu_M(puncts)$ | 51.27 | 26.02 | 144.28 | 36.73 |
| $\sigma_M(puncts)$ | 221.97 | 98.64 | 461.94 | 83.53 |
| $\mu_M(chars)$ | 759.47 | 529.72 | 1653.97 | 595.19 |
| $\sigma_M(chars)$ | 2134.32 | 1414.53 | 3936.55 | 1183.32 |
| | | | | |

TABLE S15. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 13

| | g. | p. | i. | h. |
|--|----------------|--------------|--------------|---------------|
| N | 224 | 124 | 90 | 10 |
| $N_{\%}$ | 100.00 | 55.36 | 40.18 | 4.46 |
| M | 2000.00 | 197.00 | 853.00 | 950.00 |
| $M_{\%}$ | 100.00 | 9.85 | 42.65 | 47.50 |
| Γ | 582.00 | 109.00 | 282.00 | 191.00 |
| $\Gamma_{\%}$ | 100.00 | 18.73 | 48.45 | 32.82 |
| $\frac{\Gamma}{M}\%$ | 29.10 | 55.33 | 33.06 | 20.11 |
| $\mu(\gamma)$ | 2.67 | 2.75 | 2.72 | 2.54 |
| $\sigma(\gamma)$ | 0.47 | 0.43 | 0.45 | 0.50 |
| chars | 1451142 | 143121 | 711061 | 596960 |
| chars% | 100.00 | 9.86 | 49.00 | 41.14 |
| chars punct | 15.80 | 15.76 | 15.80 | 15.80 |
| chars-spaces | 5.19 | 5.69 | 5.12 | 5.15 |
| $\frac{digits}{chars-spaces}$ | 1.57 | 1.62 | 1.39 | 1.77 |
| $\frac{letters}{chars-spaces}$ | 91.34 | 90.70 | 91.62 | 91.16 |
| $rac{vogals}{letters} \ rac{uppercase}{}$ | 35.99 | 35.45 | 35.93 | 36.18 |
| $\frac{uppercase}{letters}$ | 6.15 | 6.70 | 6.38 | 5.73 |
| tokens | 313700 | 31482 | 153108 | 129111 |
| $tokens_{\%}$ | 100.00 | 10.04 | 48.81 | 41.16 |
| $tokens \neq$ | 4.17 | 12.71 | 6.03 | 5.70 |
| $\frac{knownw}{tokens} \atop knownw \neq$ | 39.67 | 39.02 | 40.24 | 39.16 |
| $\frac{knownw \neq}{knownw}$ $stopw$ | 5.62 | 19.41 | 8.51 | 8.97 |
| $\frac{stopw}{knownw}$ $punct$ | 87.55 | 85.04 | 86.35 | 89.63 |
| $\frac{punct}{tokens}$ | 17.72 | 18.78 | 17.37 | 17.88 |
| tokens | 0.84 | 0.86 | 0.85 | 0.81 |
| $\mu(\underbrace{tokens})$ | 3.82 | 3.75 | 3.84 | 3.82 |
| $\frac{\sigma(tokens)}{\sigma(tokens)}$ | 2.60 | 2.59 | 2.63 | 2.57 |
| $\mu(\underbrace{knownw})$ | 5.76 | 5.67 | 5.74 | 5.80 |
| $\frac{\sigma(knownw)}{\sigma(knownw)}$ | 2.31 | 2.26 | 2.29 | 2.35 |
| $\mu(knownw \neq)$ | 7.05 | 6.47 2.39 | 6.94 2.52 | 6.96 |
| $\sigma(knownw \neq)$ | 2.55 2.75 | 2.39 | 2.52 | 2.50 |
| $\frac{\mu(\overline{stopw})}{\sigma(\overline{stopw})}$ | 1.08 | 1.09 | 1.10 | 1.07 |
| sents | 14294 | 1370 | 6829 | 6097 |
| $sents_{\%}$ | 99.99 | 9.58 | 47.77 | 42.65 |
| $\mu_S(chars)$ | 100.37 | 103.30 | 102.91 | 96.82 |
| $\sigma_S(chars)$ | 90.48 | 93.83 | 103.20 | 72.51 |
| $\mu_S(tokens)$ | 21.95 | 22.98 | 22.42 | 21.18 |
| $\sigma_S(tokens)$ | 20.77 | 21.78 | 24.28 | 15.60 |
| $\mu_S(knownw)$ | 6.95 | 6.99 | 7.14 | 6.73 |
| $\sigma_S(knownw)$ | 6.11 | 6.30 | 6.75 | 5.26 |
| $\mu_S(stopw)$ | 6.65 | 6.57 | 6.76 | 6.54 |
| $\sigma_S(stopw)$ | 5.49 | 5.54 | 5.83 | 5.06 |
| $\mu_S(puncts)$ | 3.89 | 4.32 | 3.90 | 3.79 |
| $\sigma_S(puncts)$ | 6.90 | 7.03 | 8.65 | 4.06 |
| msgs | 2000 | 197 | 853 | 950 |
| msgs% | 100.00 8.14 | 9.85 7.94 | 42.65 | 47.50 7.42 |
| $\mu_M(sents)$ $\sigma_M(sents)$ | 6.79 | 4.68 | 8.98 7.99 | 5.84 |
| $\mu_M(tokens)$ | 158.69 | 161.59 | 181.52 | 137.59 |
| $\sigma_M(tokens)$ | 143.32 | 100.29 | 175.22 | 112.59 |
| $\mu_M(knownw)$ | 49.78 | 48.65 | 57.15 | 43.40 |
| $\sigma_M(knownw)$ | 49.65 | 31.90 | 60.12 | 40.54 |
| $\mu_M(stopw)$ | 47.74 | 45.89 | 54.41 | 42.13 |
| $\sigma_M(stopw)$ | 47.36 | 32.39 | 56.39 | 39.71 |
| $\mu_M(puncts)$ | 29.12 | 31.40 | 32.72 | 25.41 |
| $\sigma_M(puncts)$ | 30.87 | 25.40 | 39.86 | 20.48 |
| $\mu_M(chars)$ | 723.74 | 724.53 | 831.44 | 626.87 |
| $\sigma_M(chars)$ | 664.84 | 449.72 | 815.45 | 521.30 |

TABLE S16. Messages sizes in each Erdös sector (\mathbf{p} . for periphery, \mathbf{i} . for intermediary, \mathbf{h} . for hubs). TAG: 14

| | g. | p. | i. | h. |
|--|------------------|---------------------|---------------------|------------------|
| N | 182 | 114 | 61 | 7 |
| $N_{\%}$ | 100.00 | 62.64 | 33.52 | 3.85 |
| M | 2000.00 | 202.00 | 573.00 | 1225.00 |
| $M_{\%}$ | 100.00 | 10.10 | 28.65 | 61.25 |
| Γ | 353.00 | 99.00 | 105.00 | 149.00 |
| $\Gamma_{\%}$ | 100.00 | 28.05 | 29.75 | 42.21 |
| $\frac{\Gamma}{M}\%$ | 17.65 | 49.01 | 18.32 | 12.16 |
| $ \widetilde{\mu}(\gamma) $ | 2.73 | 2.61 | 2.83 | 2.73 |
| $\sigma(\gamma)$ | 0.45 | 0.49 | 0.38 | 0.44 |
| chars | 950050 | 126207 | 323573 | 500270 |
| $chars_{\%}$ | 100.00 | 13.28 | 34.06 | 52.66 |
| spaces chars | 14.70 | 12.63 | 14.83 | 15.13 |
| $\frac{punct}{chars-spaces}$ | 7.68 | 10.86 | 7.74 | 6.81 |
| $\frac{digits}{chars-spaces}$ | 1.92 | 3.43 | 1.87 | 1.56 |
| $\frac{letters}{chars-spaces}$ | 88.47 | 83.79 | 88.41 | 89.72 |
| vogals | 35.99 | 34.48 | 35.78 | 36.50 |
| $\frac{letters}{uppercase} \\ \hline letters$ | 4.02 | 4.98 | 4.39 | 3.54 |
| tokens | 211609 | 32282 | 70431 | 108898 |
| $tokens_{\%}$ | 100.00 | 15.26 | 33.28 | 51.46 |
| $tokens \neq$ | 5.64 | 12.33 | 9.33 | 7.06 |
| knownw | 34.38 | 30.42 | 35.03 | 35.14 |
| $tokens \atop knownw \neq$ | 8.35 | 23.31 | 15.08 | 11.70 |
| knownw stopw | 94.44 | 73.56 | 90.31 | 102.46 |
| knownw punct | 22.55 | 30.08 | 22.57 | 20.30 |
| tokens contrac | 1.15 | 0.67 | 1.16 | 1.28 |
| tokens | 3.76 | 3.35 | 3.84 | 3.82 |
| $\begin{vmatrix} \mu(tokens) \\ \sigma(\overline{tokens}) \end{vmatrix}$ | 2.91 | 2.81 | 2.98 | 2.88 |
| <u> </u> | | 5.39 | | |
| $\mu(knownw)$ | 5.81 2.47 | $\frac{5.59}{2.56}$ | 5.86 2.51 | 5.89 2.41 |
| $\sigma(knownw)$ | 7.19 | 6.71 | 7.02 | 7.10 |
| $\begin{vmatrix} \mu(knownw \neq) \\ \sigma(\overline{knownw} \neq) \end{vmatrix}$ | 2.61 | $\frac{0.71}{2.53}$ | $\frac{7.02}{2.54}$ | 2.60 |
| $\mu(\overline{stopw})$ | 2.76 | 2.70 | 2.78 | 2.76 |
| $\sigma(\overline{stopw})$ | 1.14 | 1.13 | 1.13 | 1.14 |
| sents | 7529 | 885 | 2693 | 3953 |
| $ sents_{\%} $ | 99.97 | 11.75 | 35.76 | 52.49 |
| $\mu_S(chars)$ | 124.94 | 141.39 | 118.70 | 125.44 |
| $\sigma_S(chars)$ | 141.68 | 188.95 | 142.23 | 127.89 |
| $\mu_S(tokens)$ | 28.12 | 36.48 | 26.16 | 27.57 |
| $\sigma_S(tokens)$ | 38.15 | 70.59 | 34.21 | 28.96 |
| $\mu_S(knownw)$ | 8.81 | 9.82 | 8.33 | 8.92 |
| $\sigma_S(knownw)$ | 9.33 | 14.00 | 8.39 | 8.58 |
| $\mu_S(stopw)$ | 8.05 | 7.04 | 7.31 | 8.77 |
| $\sigma_S(stopw)$ | 7.62 | 6.49 | 6.63 | 8.37 |
| $\mu_S(puncts)$ | 6.35 | 10.98 | 5.91 | 5.62 |
| $\sigma_S(puncts)$ | 15.94 | 34.21 | 14.03 | 9.04 |
| msgs | 2000 | 202 | 573 | 1225 |
| $msgs_{\%}$ | 100.00 | 10.10 | 28.65 | 61.25 |
| $\mu_M(sents)$ | 4.69 | 5.34 | 5.64 | 4.14 |
| $\sigma_M(sents)$ | 4.98 | 4.84 | 6.28 | 4.17 |
| $\mu_M(tokens)$ | 107.26 | 161.17 | 124.67 | 90.22 |
| $\sigma_M(tokens)$ | 215.38 | 579.92 | 142.99 | 99.01 |
| $\mu_M(knownw)$ | 33.15 | 43.02 | 39.14 | 28.72 |
| $\sigma_M(knownw)$ | 47.48 | 105.55 | 42.89 | 30.51 |
| $\mu_M(stopw)$ | 30.39 | 30.98 | 34.48 | 28.39 |
| $\sigma_M(stopw)$ | 32.33 | 30.20 | 37.03 | 30.05 |
| $\mu_M(puncts)$ | 25.10 95.36 | 49.15 | 29.20 | 19.22 |
| $\sigma_M(puncts)$ | i us 36 | 281.02 | 44.89 | 27.28 |
| | | | | 400 55 |
| $\mu_M(chars) \ \sigma_M(chars)$ | 473.31 671.23 | 623.24 1417.57 | 562.76 641.79 | 406.75 446.87 |

TABLE S17. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 15

| | g. | p. | i. | h. |
|---|-----------------|---------------------|---------------------|--|
| N | 308 | 162 | 123 | 23 |
| $N_{\%}$ | 100.00 | 52.60 | 39.94 | 7.47 |
| M | 2000.00 | 245.00 | 885.00 | 869.00 |
| $M_{\%}$ | 100.00 | 12.26 | 44.27 | 43.47 |
| Γ | 369.00 | 90.00 | 215.00 | 64.00 |
| $\Gamma_{\%}$ | 100.00 | 24.39 | 58.27 | 17.34 |
| $\frac{\Gamma}{M}\%$ | 18.45 | 36.73 | 24.29 | 7.36 |
| $ \mu(\gamma) $ | 2.63 | 2.47 | 2.67 | 2.73 |
| $\sigma(\gamma)$ | 0.48 | 0.50 | 0.47 | 0.44 |
| chars | 1237298 | 181181 | 549391 | 506726 |
| chars% | 100.00 17.09 | 14.64 18.81 | 44.40 16.88 | 40.95 |
| chars punct | 5.30 | 5.54 | 5.93 | 4.54 |
| chars-spaces digits | | | | |
| chars-spaces letters | 2.40 | 3.43 | 2.93 | 1.46 |
| chars-spaces | 90.21 | 88.60 | 89.03 | 92.05 |
| $rac{vogals}{letters} \ rac{uppercase}{}$ | 35.88 | 34.89 | 35.71 | 36.40 |
| letters | 5.48 | 7.54 | 5.40 | 4.87 |
| tokens | 266438 | 36070 | 120956 | 109413 |
| tokens% | 100.00 | 13.54 | 45.40 | 41.06 |
| $tokens \neq knownw$ | 6.35 | 15.07 | 8.80 | 8.77 |
| $tokens \atop knownw \neq$ | 35.82 | 34.73 | 34.82 | 37.28 |
| $\frac{knownw}{knownw}$ $stopw$ | 8.67 | 24.31 | 13.05 | 14.21 |
| knownw punct | 100.63 | 87.48 | 98.19 | |
| $tokens \\ contrac$ | 17.30 1.40 | $18.76 \\ 0.81$ | 18.82 1.27 | 15.13 1.73 |
| tokens | | 3.98 | 3.70 | 3.78 |
| $\mu(tokens)$ | 3.77 | | $\frac{3.70}{2.67}$ | 2.51 |
| $\frac{\sigma(tokens)}{\mu(\overline{knownw})}$ | 2.67 5.67 | 3.14 5.75 | 5.55 | 5.76 |
| $\sigma(\overline{knownw})$ | 2.29 | $\frac{3.73}{2.43}$ | $\frac{3.33}{2.26}$ | $\begin{bmatrix} 3.70 \\ 2.27 \end{bmatrix}$ |
| $\mu(\overline{knownw} \neq)$ | 6.98 | 6.64 | 6.72 | 6.89 |
| $\sigma(\overline{knownw} \neq)$ | 2.58 | 2.54 | 2.51 | 2.54 |
| $\mu(\overline{stopw})$ | 2.72 | 2.73 | 2.70 | 2.74 |
| $\sigma(\overline{stopw})$ | 1.13 | 1.12 | 1.13 | 1.13 |
| sents | 10757 | 1252 | 4529 | 4978 |
| $ sents_{\%} $ | 99.98 | 11.64 | 42.09 | 46.27 |
| $\mu_S(chars)$ | 113.88 | 143.37 | 120.21 | 100.65 |
| $\sigma_S(chars)$ | 318.65 | 750.47 | 276.21 | 88.88 |
| $\mu_S(tokens)$ | 24.78 | 28.83 | 26.72 | 21.98 |
| $\sigma_S(tokens)$ | 40.56 | 77.72 | 42.08 | 20.23 |
| $\mu_S(knownw)$ | 7.81 | 8.37 | 8.26 | 7.25 |
| $\sigma_S(knownw)$ | 8.18 | 9.38 | 9.30 | 6.56 |
| $\mu_S(stopw)$ | 7.78 | 7.61 | 7.92 | 7.70 |
| $\frac{\sigma_S(stopw)}{\mu_S(puncts)}$ | 6.88 4.29 | 6.94 5.42 | 7.36 5.04 | 6.39 3.33 |
| $\sigma_S(puncts)$ $\sigma_S(puncts)$ | 9.92 | 13.08 | 12.13 | 5.82 |
| msgs | 1999 | 245 | 885 | 869 |
| $ msgs_{\%} $ | 100.00 | 12.26 | 44.27 | 43.47 |
| $\mu_M(sents)$ | 6.32 | 6.05 | 6.07 | 6.65 |
| $\sigma_M(sents)$ | 6.90 | 8.48 | 5.99 | 7.24 |
| $\mu_M(tokens)$ | 135.39 | 148.69 | 138.71 | 128.26 |
| $\sigma_M(tokens)$ | 174.43 | 241.02 | 165.04 | 160.50 |
| $\mu_M(knownw)$ | 41.97 | 42.74 | 42.26 | 41.45 |
| $\sigma_M(knownw)$ | 52.44 | 61.75 | 47.61 | 54.25 |
| $\mu_M(stopw)$ | 42.06 | 39.09 | 40.68 | 44.30 |
| $\sigma_M(stopw)$ | 51.89 | 58.55 | 44.59 | 56.50 |
| $\begin{vmatrix} \mu_M(puncts) \\ \sigma_M(puncts) \end{vmatrix}$ | 24.93 35.23 | 28.83 40.80 | 27.48 38.45 | 29.26 |
| $\mu_M(chars)$ | 616.33 | 737.60 | 618.29 | 580.14 |
| $\sigma_M(chars)$ $\sigma_M(chars)$ | 997.61 | 1864.58 | 862.74 | 738.72 |
| 272 () | | | | |

TABLE S18. Messages sizes in each Erdös sector (\mathbf{p} . for periphery, \mathbf{i} . for intermediary, \mathbf{h} . for hubs). TAG: 16

| | g. | p. | i. | h. |
|---|----------------|----------------|----------------|---------------|
| N | 89 | 51 | 27 | 11 |
| $N_{\%}$ | 100.00 | 57.30 | 30.34 | 12.36 |
| M | 1991.00 | 153.00 | 419.00 | 1419.00 |
| $M_{\%}$ | 100.00 | 7.68 | 21.04 | 71.27 |
| Γ | 713.00 | 104.00 | 134.00 | 475.00 |
| $\Gamma_{\%}$ | 100.00 | 14.59 | 18.79 | 66.62 |
| $\frac{\Gamma}{M}\%$ | 35.81 | 67.97 | 31.98 | 33.47 |
| $\mu(\gamma)$ | 2.39 | 2.38 | 2.43 | 2.39 |
| $\sigma(\gamma)$ | 0.49 | 0.48 | 0.49 | 0.49 |
| chars | 4023053 | 234243 | 516275 | 3272535 |
| chars% | 100.00 | 5.82 | 12.83 | 81.34 |
| $\frac{chars}{chars}_{punct}$ | 15.57 | 15.23 | 15.53 | 15.60 |
| chars-spaces | 3.97 | 3.90 | 4.14 | 3.95 |
| $\frac{digits}{chars-spaces}$ | 0.46 | 1.08 | 0.72 | 0.37 |
| $\frac{letters}{chars-spaces}$ | 93.65 | 93.21 | 93.13 | 93.76 |
| $\frac{vogals}{letters}$ | 37.85 | 37.79 | 37.67 | 37.88 |
| $rac{letters}{uppercase} \ \hline letters$ | 3.00 | 3.66 | 3.34 | 2.89 |
| tokens | 821988 | 46837 | 106094 | 669059 |
| $tokens_{\%}$ | 100.00 | 5.70 | 12.91 | 81.40 |
| $tokens \neq$ | 2.30 | 11.74 | 7.36 | 2.34 |
| knownw tokens | 41.38 | 42.86 | 41.98 | 41.18 |
| $\frac{knownw}{knownw}$ | 3.68 | 19.97 | 12.44 | 4.00 |
| $\frac{stopw}{knownw}\\ punct$ | 98.39 | 87.77 | 90.82 | 100.38 |
| $egin{array}{c} panet \\ tokens \\ contrac \end{array}$ | 14.83 | 14.57 | 14.92 | 14.84 |
| tokens | 0.91 | 0.89 | 1.15 | 0.88 |
| $\mu(\underline{tokens})$ | 4.05 | 4.16 | 4.03 | 4.05 |
| $\sigma(tokens)$ | 2.71 | 2.78 | 2.71 | 2.71 |
| $\mu(\underbrace{knownw})$ | 6.27 | 6.31 | 6.09 | 6.29 |
| $\sigma(knownw)$ | 2.47 | 2.53 | 2.50 | 2.46 |
| $\mu(\underbrace{knownw \neq})$ | 7.71 | 7.24 | 7.39 | 7.72 |
| $\sigma(knownw \neq)$ | 2.68 | 2.60 | 2.62 | 2.65 |
| $\begin{vmatrix} \mu(\overline{stopw}) \\ \sigma(\overline{stopw}) \end{vmatrix}$ | 2.81 1.12 | 2.81 1.10 | 2.78 1.12 | 2.82 1.12 |
| / | 36731 | 1733 | 4345 | 30655 |
| $\left egin{array}{c} sents \\ sents_{\%} \end{array} \right $ | 99.99 | 4.72 | 11.83 | 83.45 |
| $\mu_S(chars)$ | 108.46 | 133.93 | 117.59 | 105.72 |
| $\sigma_S(chars)$ | 80.03 | 120.85 | 85.18 | 75.92 |
| $\mu_S(tokens)$ | 22.38 | 27.03 | 24.42 | 21.83 |
| $\sigma_S(tokens)$ | 16.14 | 23.80 | 17.94 | 15.24 |
| $\mu_S(knownw)$ | 8.35 | 10.06 | 9.10 | 8.15 |
| $\sigma_S(knownw)$ | 6.52 | 9.53 | 6.98 | 6.22 |
| $\mu_S(stopw)$ | 8.13 | 9.21 | 8.30 | 8.04 |
| $\sigma_S(stopw)$ | 6.50 | 8.49 | 6.50 | 6.36 |
| $\mu_S(puncts)$ | 3.32 | 3.94 | 3.64 | 3.24 |
| $\sigma_S(puncts)$ | 3.10 | 4.97 | 3.66 | 2.87 |
| msgs | 1991 | 153 | 419 | 1419 |
| msgs% | 100.00 | 7.68 | 21.04 | 71.27 |
| $\mu_M(sents)$ $\sigma_M(sents)$ | 19.38 28.12 | 12.29 17.44 | 11.33 11.25 | 22.52 31.70 |
| $\mu_M(sents)$ $\mu_M(tokens)$ | 417.39 | 309.61 | 256.89 | 476.40 |
| $\sigma_M(tokens)$ | 580.98 | 462.79 | 242.61 | 648.68 |
| $\mu_M(knownw)$ | 154.52 | 114.57 | 94.87 | 176.44 |
| $\sigma_M(knownw)$ | 214.88 | 184.84 | 91.32 | 238.61 |
| $\mu_M(stopw)$ | 150.36 | 104.49 | 86.37 | 174.20 |
| $\sigma_M(stopw)$ | 223.30 | 160.00 | 88.50 | 250.77 |
| $\mu_M(puncts)$ | 65.02 | 47.35 | 40.69 | 74.11 |
| $\sigma_M(puncts)$ | 90.89 | 63.17 | 36.98 | 102.30 |
| $\mu_M(chars)$ | 2015.37 | 1527.66 | 1228.34 | 2300.35 |
| $\sigma_M(chars)$ | 2824.01 | 2415.92 | 1170.49 | 3141.04 |

TABLE S19. Messages sizes in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 17

B. POS tags and wordnet synsets

1. Snapshots of 2000 messages

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 31.61 | 36.21 | 32.40 | 26.77 |
| X | 0.11 | 0.17 | 0.11 | 0.06 |
| ADP | 11.71 | 11.06 | 11.97 | 11.68 |
| DET | 11.02 | 9.31 | 10.68 | 12.91 |
| VERB | 22.15 | 21.17 | 21.71 | 23.70 |
| ADJ | 5.14 | 5.64 | 5.06 | 4.94 |
| ADV | 5.44 | 4.93 | 5.38 | 5.95 |
| PRT | 3.64 | 3.09 | 3.67 | 3.97 |
| PRON | 5.76 | 4.96 | 5.36 | 7.12 |
| NUM | 0.64 | 0.68 | 0.70 | 0.48 |
| CONJ | 2.78 | 2.78 | 2.96 | 2.43 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 62.55 | 65.22 | 63.58 | 57.91 |
| ADJ | 8.34 | 8.28 | 7.95 | 9.25 |
| VERB | 3.57 | 2.84 | 3.50 | 4.38 |
| ADV | 25.54 | 23.66 | 24.97 | 28.45 |
| POS | 33.14 | 32.05 | 32.85 | 34.85 |
| POS! | 93.70 | 92.87 | 93.66 | 94.54 |

TABLE S20. 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. | 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 | 65.98 | 65.24 | 65.57 | 67.74 |
| physical_entity.n.01 | 34.02 | 34.76 | 34.43 | 32.26 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| psychological_feature.n.01 | 19.72 | 16.92 | 19.53 | 22.97 |
| measure.n.02 | 17.49 | 19.45 | 18.06 | 14.16 |
| object.n.01 | 15.78 | 15.36 | 15.77 | 16.23 |
| causal_agent.n.01 | 14.48 | 15.42 | 14.82 | 12.74 |
| communication.n.02 | 12.49 | 11.85 | 12.08 | 14.12 |
| group.n.01 | 7.89 | 9.53 | 7.67 | 6.78 |
| attribute.n.02 | 5.84 | 5.18 | 5.84 | 6.53 |
| matter.n.03 | 2.89 | 3.43 | 2.90 | 2.32 |
| relation.n.01 | 2.55 | 2.31 | 2.38 | 3.19 |
| process.n.06 | 0.44 | 0.23 | 0.48 | 0.56 |
| thing.n.12 | 0.42 | 0.31 | 0.47 | 0.42 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| definite_quantity.n.01 | 18.09 | 20.32 | 19.02 | 13.58 |
| person.n.01 | 17.21 | 18.26 | 17.50 | 15.45 |
| event.n.01 | 14.62 | 12.61 | 14.86 | 16.11 |
| whole.n.02 | 14.22 | 14.06 | 13.55 | 15.96 |
| cognition.n.01 | 9.37 | 7.66 | 9.08 | 11.81 |
| message.n.02 | 5.54 | 5.52 | 5.19 | 6.41 |
| state.n.02 | 4.12 | 3.76 | 4.33 | 4.00 |
| arrangement.n.02 | 3.97 | 5.31 | 3.84 | 2.91 |
| written_communication.n.01 | 3.65 | 2.64 | 3.37 | 5.32 |
| location.n.01 | 3.31 | 3.51 | 3.37 | 2.98 |
| indication.n.01 | 3.09 | 3.49 | 3.00 | 2.89 |
| substance.n.01 | 2.81 | 2.85 | 2.90 | 2.57 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S21. 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. | р. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 6.45 | 6.59 | 6.40 | 6.44 |
| $\sigma(mindepth)$ | 1.80 | 1.85 | 1.81 | 1.73 |
| $\mu(max depth)$ | 6.94 | 7.11 | 6.90 | 6.87 |
| $\sigma(max depth)$ | 2.10 | 2.14 | 2.11 | 2.00 |
| $\mu(holonyms)$ | 0.10 | 0.11 | 0.10 | 0.08 |
| $\sigma(holonyms)$ | 0.34 | 0.35 | 0.35 | 0.29 |
| $\mu(meronyms)$ | 0.30 | 0.26 | 0.32 | 0.28 |
| $\sigma(meronyms)$ | 1.93 | 1.34 | 2.30 | 1.41 |
| $\mu(domains)$ | 0.06 | 0.04 | 0.06 | 0.06 |
| $\sigma(domains)$ | 0.23 | 0.21 | 0.24 | 0.25 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.79 | 2.85 | 2.82 | 2.66 |
| $\sigma(lemmas)$ | 2.50 | 2.60 | 2.52 | 2.34 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 8.77 | 7.74 | 9.24 | 8.67 |
| $\sigma(hyponyms)$ | 27.50 | 26.93 | 28.64 | 25.17 |
| $\mu(hypernyms)$ | 1.03 | 1.03 | 1.03 | 1.02 |
| $\sigma(hypernyms)$ | 0.17 | 0.18 | 0.17 | 0.14 |

TABLE S22. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 0

| | g. | p. | i. | h. |
|-------------------|--------|--------|--------|--------|
| local.a.01 | 29.76 | 43.13 | 33.29 | 4.22 |
| last.s.01 | 12.93 | 12.15 | 12.29 | 15.54 |
| like.a.01 | 11.23 | 5.71 | 9.96 | 21.27 |
| recent.s.01 | 10.40 | 9.84 | 10.20 | 11.61 |
| new.a.01 | 8.32 | 4.98 | 7.52 | 14.48 |
| certain.a.02 | 6.01 | 2.31 | 5.07 | 12.97 |
| net.a.01 | 4.40 | 5.59 | 2.92 | 6.64 |
| able.a.01 | 4.36 | 2.79 | 4.00 | 7.24 |
| incorrect.a.01 | 3.83 | 3.77 | 3.82 | 3.92 |
| confidential.s.01 | 3.48 | 3.65 | 4.77 | 0.00 |
| all_right.s.01 | 2.75 | 3.52 | 2.63 | 2.11 |
| privileged.a.01 | 2.53 | 2.55 | 3.52 | 0.00 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S23. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.04 | 0.04 | 0.04 | 0.05 |
| $\sigma(domains)$ | 0.19 | 0.18 | 0.18 | 0.21 |
| $\mu(similar)$ | 4.23 | 3.43 | 4.01 | 5.28 |
| $\sigma(similar)$ | 5.83 | 5.57 | 5.70 | 6.10 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.56 | 1.54 | 1.56 | 1.60 |
| $\sigma(lemmas)$ | 1.22 | 1.21 | 1.23 | 1.20 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S24. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 0

| move.v.02 | | g. | p. | i. | h. |
|--|-----------------------|--------|--------|--------|--------|
| act.v.01 12.38 13.42 12.09 12.11 change.v.01 8.51 6.92 8.11 10.53 get.v.01 8.35 8.39 8.83 7.39 change.v.02 7.31 6.69 7.09 8.20 think.v.03 7.21 5.75 7.45 7.87 make.v.03 6.96 6.07 8.20 5.26 use.v.01 6.44 4.70 6.44 7.82 have.v.01 6.13 9.40 5.78 4.24 designate.v.01 4.15 4.31 3.89 4.52 be.v.01 3.68 3.17 4.20 3.07 total 100.00 100.00 100.00 100.00 put.v.01 18.19 21.92 18.20 14.82 be.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 | move.v.02 | 16.42 | 20.44 | 15.77 | 14.52 |
| change.v.01 8.51 6.92 8.11 10.53 get.v.01 8.35 8.39 8.83 7.39 change.v.02 7.31 6.69 7.09 8.20 think.v.03 7.21 5.75 7.45 7.87 make.v.03 6.96 6.07 8.20 5.26 use.v.01 6.44 4.70 6.44 7.82 have.v.01 6.13 9.40 5.78 4.24 designate.v.01 4.15 4.31 3.89 4.52 be.v.01 3.68 3.17 4.20 3.07 total 100.00 100.00 100.00 100.00 put.v.01 18.19 21.92 18.20 14.82 interact.v.01 10.59 9.08 10.15 19.83 travel-rapidly.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 | travel.v.01 | 12.47 | 10.74 | 12.14 | 14.46 |
| get.v.01 | act.v.01 | 12.38 | 13.42 | 12.09 | 12.11 |
| change.v.02 7.31 6.69 7.09 8.20 think.v.03 7.21 5.75 7.45 7.87 make.v.03 6.96 6.07 8.20 5.26 use.v.01 6.44 4.70 6.44 7.82 have.v.01 6.13 9.40 5.78 4.24 designate.v.01 4.15 4.31 3.89 4.52 bev.v01 3.68 3.17 4.20 3.07 total 100.00 100.00 100.00 100.00 100.00 put.v.01 18.19 21.92 18.20 14.88 interact.v.01 10.76 10.22 11.51 9.83 travel_rapidly.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 6.84 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 labl.v.01 6.88 6.47 | change.v.01 | 8.51 | 6.92 | 8.11 | 10.53 |
| change.v.02 7.31 6.69 7.09 8.20 think.v.03 7.21 5.75 7.45 7.87 make.v.03 6.96 6.07 8.20 5.26 use.v.01 6.44 4.70 6.44 7.82 have.v.01 6.13 9.40 5.78 4.24 designate.v.01 4.15 4.31 3.89 4.52 bev.v01 3.68 3.17 4.20 3.07 total 100.00 100.00 100.00 100.00 100.00 put.v.01 18.19 21.92 18.20 14.88 interact.v.01 10.76 10.22 11.51 9.83 travel_rapidly.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 6.84 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 labl.v.01 6.88 6.47 | get.v.01 | 8.35 | 8.39 | 8.83 | 7.39 |
| make.v.03 6.96 6.07 8.20 5.26 use.v.01 6.44 4.70 6.44 7.82 have.v.01 6.13 9.40 5.78 4.24 designate.v.01 4.15 4.31 3.89 4.52 be.v.01 3.68 3.17 4.20 3.07 total 100.00 100.00 100.00 100.00 put.v.01 18.19 21.92 18.20 14.88 interact.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 change.magnitude.v.01 7.56 6.42 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 seev.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 </td <td></td> <td>7.31</td> <td>6.69</td> <td>7.09</td> <td>8.20</td> | | 7.31 | 6.69 | 7.09 | 8.20 |
| use.v.01 | think.v.03 | 7.21 | 5.75 | 7.45 | 7.87 |
| have.v.01 | make.v.03 | 6.96 | 6.07 | 8.20 | 5.26 |
| designate.v.01 4.15 4.31 3.89 4.52 be.v.01 3.68 3.17 4.20 3.07 total 100.00 100.00 100.00 100.00 put.v.01 18.19 21.92 18.20 14.88 interact.v.01 10.76 10.22 11.51 9.83 travel_rapidly.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 change_magnitude.v.01 7.56 6.42 7.04 9.57 try.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 <th< td=""><td>use.v.01</td><td>6.44</td><td>4.70</td><td>6.44</td><td></td></th<> | use.v.01 | 6.44 | 4.70 | 6.44 | |
| be.v.01 3.68 3.17 4.20 3.07 total 100.00 100.00 100.00 100.00 put.v.01 18.19 21.92 18.20 14.88 interact.v.01 10.76 10.22 11.51 9.83 travel_rapidly.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 change_magnitude.v.01 7.56 6.42 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100 | | | | | |
| total 100.00 100.00 100.00 100.00 100.00 put.v.01 18.19 21.92 18.20 14.88 interact.v.01 10.76 10.22 11.51 9.83 travel_rapidly.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 change_magnitude.v.01 7.56 6.42 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 4.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 | | | _ | | _ |
| put.v.01 18.19 21.92 18.20 14.88 interact.v.01 10.76 10.22 11.51 9.83 travel.rapidly.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 change_magnitude.v.01 7.56 6.42 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 rum.v.01 14.489 12.36 14.55 | be.v.01 | 3.68 | 3.17 | 4.20 | 3.07 |
| interact.v.01 10.76 10.22 11.51 9.83 travel_rapidly.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 change_magnitude.v.01 7.56 6.42 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 <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 |
| interact.v.01 10.76 10.22 11.51 9.83 travel_rapidly.v.01 10.59 9.08 10.15 12.74 keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 change_magnitude.v.01 7.56 6.42 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 <td>put.v.01</td> <td>18.19</td> <td>21.92</td> <td>18.20</td> <td>14.88</td> | put.v.01 | 18.19 | 21.92 | 18.20 | 14.88 |
| keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 change_magnitude.v.01 7.56 6.42 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 < | interact.v.01 | 10.76 | 10.22 | 11.51 | 9.83 |
| keep.v.03 10.20 14.22 9.90 7.22 evaluate.v.02 9.52 6.86 9.88 11.18 change_magnitude.v.01 7.56 6.42 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 < | travel_rapidly.v.01 | 10.59 | 9.08 | 10.15 | 12.74 |
| change_magnitude.v.01 7.56 6.42 7.04 9.57 try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4. | | 10.20 | 14.22 | 9.90 | 7.22 |
| try.v.01 7.08 7.60 6.83 7.09 label.v.01 6.88 6.47 6.65 7.70 send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 | | 9.52 | 6.86 | 9.88 | _ |
| Babel.v.01 | change_magnitude.v.01 | 7.56 | 6.42 | 7.04 | 9.57 |
| send.v.01 6.03 5.97 5.36 7.35 see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 2.90 1.09 2.10 6.01 | · · | 7.08 | 7.60 | 6.83 | 7.09 |
| see.v.01 4.71 3.46 4.17 6.83 construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 | label.v.01 | 6.88 | 6.47 | 6.65 | 7.70 |
| construct.v.01 4.29 5.23 5.02 2.09 state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 <td>send.v.01</td> <td>6.03</td> <td>5.97</td> <td>5.36</td> <td>7.35</td> | send.v.01 | 6.03 | 5.97 | 5.36 | 7.35 |
| state.v.01 4.19 2.57 5.29 3.52 total 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 | | 4.71 | 3.46 | 4.17 | 6.83 |
| total 100.00 100.00 100.00 100.00 100.00 install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.4 | | _ | | | 1 |
| install.v.01 20.00 25.27 20.76 13.90 run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13. | state.v.01 | 4.19 | 2.57 | 5.29 | 3.52 |
| run.v.01 14.89 12.36 14.55 17.79 communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 </td <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 |
| communicate.v.02 14.54 13.65 16.06 12.51 increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll.up.v.02 9.26 11.13 7.86 10.48 | | 20.00 | 25.27 | 20.76 | 13.90 |
| increase.v.01 10.56 8.76 9.98 13.24 save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll_up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 | run.v.01 | 14.89 | 12.36 | 14.55 | |
| save.v.02 9.88 14.33 10.11 5.46 name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll.up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 3.56 3.95 3.79 2.62 <td>communicate.v.02</td> <td>14.54</td> <td>13.65</td> <td>16.06</td> <td></td> | communicate.v.02 | 14.54 | 13.65 | 16.06 | |
| name.v.01 9.64 8.83 9.46 10.69 store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll.up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 | increase.v.01 | 10.56 | | | 13.24 |
| store.v.01 4.49 5.23 4.07 4.61 think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll.up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 | save.v.02 | 9.88 | | - | |
| think.v.01 3.91 3.12 3.28 5.77 update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll_up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 | * * * * * | 9.64 | | 9.46 | 10.69 |
| update.v.01 3.39 3.06 3.71 3.10 load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll.up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 | | 1 | | | - |
| load.v.01 3.07 3.26 2.10 4.68 repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll.up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 | | | - | | |
| repair.v.01 2.90 1.09 2.10 6.01 read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll.up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | |
| read.v.01 2.73 1.02 3.81 2.25 total 100.00 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll.up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| total 100.00 100.00 100.00 100.00 100.00 inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll_up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| inform.v.01 24.54 22.55 26.42 22.34 record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll_up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| record.v.01 21.69 30.89 20.87 13.87 add.v.01 19.98 16.11 17.34 30.05 roll_up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | 100.00 | 100.00 | 100.00 | 100.00 |
| add.v.01 19.98 16.11 17.34 30.05 roll_up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| roll_up.v.02 9.26 11.13 7.86 10.48 write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| write.v.07 4.88 3.66 6.84 1.69 upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | 1 | | | |
| upgrade.v.01 4.59 1.32 4.54 8.17 configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| configure.v.01 3.56 3.95 3.79 2.62 promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| promise.v.01 2.56 0.59 4.00 1.39 grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| grow.v.02 2.39 2.20 2.57 2.16 address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| address.v.01 2.39 2.78 2.17 2.47 object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| object.v.01 2.17 2.49 1.69 2.93 mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| mention.v.01 1.99 2.34 1.90 1.85 | | | | | |
| | | | | | |
| total 100.00 100.00 100.00 100.00 | | | | | |
| | total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S25. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.42 | 1.56 | 1.42 | 1.31 |
| $\sigma(mindepth)$ | 1.48 | 1.59 | 1.49 | 1.36 |
| $\mu(max depth)$ | 1.42 | 1.56 | 1.42 | 1.31 |
| $\sigma(max depth)$ | 1.48 | 1.59 | 1.49 | 1.37 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.03 | 0.05 | 0.03 | 0.02 |
| $\sigma(domains)$ | 0.17 | 0.21 | 0.17 | 0.14 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.48 | 0.45 | 0.48 | 0.50 |
| $\sigma(verbgroups)$ | 0.63 | 0.63 | 0.62 | 0.64 |
| $\mu(lemmas)$ | 3.15 | 3.13 | 3.14 | 3.18 |
| $\sigma(lemmas)$ | 2.17 | 2.09 | 2.16 | 2.23 |
| $\mu(entailments)$ | 0.03 | 0.02 | 0.02 | 0.03 |
| $\sigma(entailments)$ | 0.17 | 0.16 | 0.16 | 0.19 |
| $\mu(hyponyms)$ | 15.60 | 13.49 | 15.17 | 17.98 |
| $\sigma(hyponyms)$ | 40.28 | 35.38 | 39.38 | 45.00 |
| $\mu(hypernyms)$ | 0.69 | 0.73 | 0.69 | 0.66 |
| $\sigma(hypernyms)$ | 0.46 | 0.45 | 0.46 | 0.48 |

TABLE S26. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 0

| | g. | p. | i. | h. |
|------------------|--------|--------|--------|--------|
| besides.r.02 | 20.85 | 18.10 | 21.39 | 21.36 |
| still.r.01 | 13.32 | 10.86 | 14.71 | 12.14 |
| however.r.01 | 9.78 | 9.50 | 11.76 | 6.31 |
| well.r.01 | 9.78 | 8.60 | 8.29 | 13.11 |
| possibly.r.01 | 7.39 | 8.14 | 5.88 | 9.71 |
| immediately.r.01 | 6.30 | 8.14 | 8.82 | 0.73 |
| back.r.01 | 6.23 | 5.43 | 5.88 | 7.28 |
| truly.r.01 | 5.94 | 5.43 | 5.61 | 6.80 |
| already.r.01 | 5.94 | 9.50 | 5.21 | 5.34 |
| even.r.01 | 5.79 | 9.50 | 5.08 | 5.10 |
| right.r.01 | 4.34 | 0.90 | 4.14 | 6.55 |
| presently.r.02 | 4.34 | 5.88 | 3.21 | 5.58 |
| 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

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.09 | 0.10 | 0.08 | 0.09 |
| $\sigma(domains)$ | 0.28 | 0.30 | 0.27 | 0.29 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.25 | 3.23 | 3.34 | 3.11 |
| $\sigma(lemmas)$ | 2.45 | 2.44 | 2.58 | 2.20 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S28. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 0

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 48.64 | 49.54 | 48.90 | 30.06 |
| X | 0.17 | 0.20 | 0.13 | 0.16 |
| ADP | 9.09 | 8.60 | 9.35 | 12.64 |
| DET | 6.06 | 5.97 | 5.93 | 9.48 |
| VERB | 16.44 | 16.11 | 16.43 | 21.99 |
| ADJ | 7.39 | 7.10 | 7.84 | 5.07 |
| ADV | 3.64 | 3.22 | 3.81 | 7.63 |
| PRT | 2.79 | 2.67 | 2.89 | 3.25 |
| PRON | 2.78 | 2.38 | 2.92 | 6.98 |
| NUM | 2.30 | 3.57 | 1.15 | 0.25 |
| CONJ | 0.70 | 0.63 | 0.65 | 2.50 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 76.44 | 78.34 | 75.08 | 54.84 |
| ADJ | 8.96 | 8.06 | 9.91 | 10.60 |
| VERB | 0.92 | 0.68 | 0.97 | 6.90 |
| ADV | 13.69 | 12.93 | 14.05 | 27.67 |
| POS | 29.76 | 30.23 | 29.29 | 28.61 |
| POS! | 94.98 | 94.93 | 95.01 | 95.84 |

TABLE S29. 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: 1

| | 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 | 85.20 | 86.06 | 84.81 | 61.48 |
| physical_entity.n.01 | 14.80 | 13.94 | 15.19 | 38.52 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| measure.n.02 | 39.61 | 42.07 | 37.45 | 11.67 |
| communication.n.02 | 21.07 | 20.28 | 22.25 | 11.54 |
| attribute.n.02 | 12.10 | 12.64 | 11.43 | 13.88 |
| psychological_feature.n.01 | 6.75 | 5.88 | 7.47 | 18.42 |
| object.n.01 | 6.34 | 5.27 | 7.24 | 20.23 |
| matter.n.03 | 4.76 | 4.86 | 4.54 | 9.08 |
| relation.n.01 | 3.81 | 3.33 | 4.43 | 2.20 |
| causal_agent.n.01 | 2.69 | 2.43 | 2.87 | 7.13 |
| group.n.01 | 1.85 | 1.86 | 1.79 | 3.76 |
| thing.n.12 | 0.75 | 1.14 | 0.26 | 1.82 |
| process.n.06 | 0.27 | 0.25 | 0.28 | 0.26 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| definite_quantity.n.01 | 38.29 | 41.66 | 34.72 | 13.30 |
| message.n.02 | 14.38 | 13.76 | 15.19 | 9.74 |
| whole.n.02 | 6.35 | 5.02 | 7.57 | 27.55 |
| shape.n.02 | 5.92 | 7.36 | 4.10 | 12.83 |
| indication.n.01 | 4.84 | 4.83 | 4.87 | 4.28 |
| cognition.n.01 | 4.71 | 4.09 | 5.31 | 12.83 |
| substance.n.01 | 4.65 | 4.62 | 4.66 | 5.70 |
| written_communication.n.01 | 4.64 | 4.27 | 5.12 | 2.85 |
| fundamental_quantity.n.01 | 4.64 | 4.08 | 5.34 | 2.38 |
| state.n.02 | 4.37 | 3.83 | 5.00 | 5.70 |
| part.n.01 | 3.70 | 3.31 | 4.20 | 1.66 |
| time_unit.n.01 | 3.50 | 3.18 | 3.91 | 1.19 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S30. 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: 1

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.51 | 6.49 | 6.54 | 6.59 |
| $\sigma(mindepth)$ | 1.36 | 1.22 | 1.49 | 1.77 |
| $\mu(max depth)$ | 6.77 | 6.73 | 6.80 | 6.99 |
| $\sigma(max depth)$ | 1.57 | 1.45 | 1.70 | 2.02 |
| $\mu(holonyms)$ | 0.13 | 0.13 | 0.14 | 0.15 |
| $\sigma(holonyms)$ | 0.45 | 0.44 | 0.46 | 0.50 |
| $\mu(meronyms)$ | 0.38 | 0.44 | 0.30 | 0.49 |
| $\sigma(meronyms)$ | 1.94 | 2.18 | 1.60 | 2.16 |
| $\mu(domains)$ | 0.02 | 0.03 | 0.02 | 0.06 |
| $\sigma(domains)$ | 0.16 | 0.16 | 0.14 | 0.24 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.52 | 3.65 | 3.39 | 2.59 |
| $\sigma(lemmas)$ | 3.09 | 3.22 | 2.94 | 2.63 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 4.09 | 3.69 | 4.42 | 9.08 |
| $\sigma(hyponyms)$ | 11.51 | 10.31 | 11.93 | 29.99 |
| $\mu(hypernyms)$ | 1.06 | 1.06 | 1.06 | 1.08 |
| $\sigma(hypernyms)$ | 0.24 | 0.24 | 0.24 | 0.32 |

TABLE S31. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 1

| | g. | p. | i. | h. |
|---------------|--------|--------|--------|--------|
| relevant.a.01 | 29.72 | 30.23 | 29.43 | 4.00 |
| public.a.01 | 29.70 | 30.23 | 29.43 | 0.00 |
| capable.s.02 | 29.69 | 30.20 | 29.43 | 0.00 |
| common.a.01 | 4.85 | 4.02 | 5.67 | 0.00 |
| new.a.01 | 1.45 | 2.09 | 0.70 | 20.00 |
| disused.s.01 | 1.13 | 0.46 | 1.78 | 0.00 |
| chief.s.01 | 0.80 | 0.62 | 0.92 | 8.00 |
| net.a.01 | 0.77 | 0.56 | 0.98 | 0.00 |
| certain.a.02 | 0.50 | 0.42 | 0.49 | 12.00 |
| like.a.01 | 0.47 | 0.33 | 0.25 | 48.00 |
| small.a.01 | 0.47 | 0.36 | 0.55 | 4.00 |
| correct.a.01 | 0.44 | 0.49 | 0.37 | 4.00 |
| 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: 1

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| (' 1 11) | | | 0.00 | 0.00 |
| $\mu(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.01 | 0.01 | 0.01 | 0.07 |
| $\sigma(domains)$ | 0.10 | 0.08 | 0.11 | 0.25 |
| $\mu(similar)$ | 3.79 | 3.88 | 3.66 | 4.93 |
| $\sigma(similar)$ | 4.04 | 3.78 | 4.21 | 5.07 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.69 | 1.67 | 1.71 | 1.77 |
| $\sigma(lemmas)$ | 1.08 | 1.07 | 1.09 | 1.19 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S33. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 1

| | g. | p. | i. | h. |
|-----------------------|--------|--------|--------|--------|
| act.v.01 | 23.24 | 22.01 | 24.50 | 24.16 |
| express.v.02 | 21.22 | 21.26 | 21.70 | 8.43 |
| satisfy.v.02 | 20.08 | 19.57 | 21.39 | 0.56 |
| change.v.02 | 6.09 | 6.87 | 5.27 | 6.18 |
| be.v.01 | 4.74 | 5.81 | 3.36 | 11.24 |
| include.v.01 | 4.65 | 6.32 | 3.07 | 0.00 |
| move.v.02 | 4.19 | 3.16 | 4.96 | 12.36 |
| change.v.01 | 3.66 | 3.67 | 3.51 | 7.30 |
| join.v.01 | 3.65 | 3.31 | 4.11 | 1.12 |
| use.v.01 | 3.41 | 3.10 | 3.18 | 17.42 |
| make.v.03 | 2.84 | 2.19 | 3.20 | 11.24 |
| sit.v.01 | 2.22 | 2.74 | 1.76 | 0.00 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| | | | | |
| state.v.01 | 26.01 | 26.13 | 26.27 | 13.16 |
| perpetrate.v.01 | 25.00 | 24.29 | 26.24 | 8.77 |
| please.v.01 | 24.63 | 24.09 | 25.92 | 0.88 |
| change_magnitude.v.01 | 5.17 | 5.83 | 4.47 | 5.26 |
| unite.v.01 | 4.40 | 4.04 | 4.85 | 1.75 |
| rest.v.01 | 4.10 | 5.73 | 2.37 | 5.26 |
| put.v.01 | 2.97 | 2.75 | 2.86 | 14.04 |
| interact.v.01 | 2.36 | 1.97 | 2.29 | 17.54 |
| modify.v.01 | 1.56 | 1.92 | 1.21 | 0.88 |
| evaluate.v.02 | 1.47 | 0.99 | 1.40 | 20.18 |
| keep.v.03 | 1.22 | 1.06 | 1.13 | 9.65 |
| better.v.02 | 1.12 | 1.19 | 1.00 | 2.63 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| note.v.01 | 53.35 | 52.96 | 55.47 | 3.45 |
| increase.v.01 | 10.73 | 11.73 | 9.65 | 10.34 |
| marry.v.01 | 9.23 | 8.27 | 10.47 | 3.45 |
| stand.v.01 | 8.62 | 11.79 | 5.12 | 10.34 |
| communicate.v.02 | 4.41 | 3.63 | 4.48 | 27.59 |
| update.v.01 | 3.01 | 3.73 | 2.27 | 1.72 |
| install.v.01 | 2.74 | 2.35 | 2.85 | 12.07 |
| convey.v.03 | 2.08 | 0.32 | 4.07 | 0.00 |
| repair.v.01 | 1.83 | 1.87 | 1.69 | 5.17 |
| supply.v.01 | 1.40 | 1.23 | 1.45 | 5.17 |
| save.v.02 | 1.34 | 1.07 | 1.10 | 17.24 |
| name.v.01 | 1.26 | 1.07 | 1.40 | 3.45 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| add.v.01 | 47.84 | 58.06 | 41.46 | 15.38 |
| inform.v.01 | 12.98 | 12.90 | 13.57 | 7.69 |
| communicate.v.01 | 9.27 | 1.34 | 17.59 | 0.00 |
| record.v.01 | 6.06 | 5.38 | 4.77 | 25.64 |
| roll_up.v.02 | 4.82 | 4.84 | 5.28 | 0.00 |
| interrupt.v.01 | 4.33 | 5.65 | 3.52 | 0.00 |
| replace.v.01 | 3.46 | 1.34 | 5.28 | 5.13 |
| upgrade.v.01 | 3.09 | 3.49 | 2.76 | 2.56 |
| mention.v.01 | 2.22 | 1.88 | 1.01 | 17.95 |
| permit.v.01 | 2.22 | 1.61 | 1.76 | 12.82 |
| propose.v.01 | 1.98 | 0.81 | 2.01 | 12.82 |
| map.v.01 | 1.73 | 2.69 | 1.01 | 0.00 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| | | | | |

TABLE S34. 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: 1

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.36 | 1.35 | 1.38 | 1.42 |
| $\sigma(mindepth)$ | 1.05 | 1.00 | 1.04 | 1.63 |
| $\mu(max depth)$ | 1.37 | 1.35 | 1.38 | 1.42 |
| $\sigma(max depth)$ | 1.05 | 1.01 | 1.04 | 1.63 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.01 | 0.01 | 0.01 | 0.03 |
| $\sigma(domains)$ | 0.10 | 0.10 | 0.09 | 0.18 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.44 | 0.44 | 0.44 | 0.45 |
| $\sigma(verbgroups)$ | 0.57 | 0.58 | 0.56 | 0.60 |
| $\mu(lemmas)$ | 3.11 | 3.02 | 3.18 | 3.37 |
| $\sigma(lemmas)$ | 1.69 | 1.63 | 1.73 | 1.93 |
| $\mu(entailments)$ | 0.09 | 0.12 | 0.06 | 0.05 |
| $\sigma(entailments)$ | 0.29 | 0.32 | 0.24 | 0.23 |
| $\mu(hyponyms)$ | 8.98 | 8.63 | 8.77 | 17.32 |
| $\sigma(hyponyms)$ | 26.41 | 26.39 | 25.67 | 34.38 |
| $\mu(hypernyms)$ | 0.82 | 0.81 | 0.83 | 0.64 |
| $\sigma(hypernyms)$ | 0.39 | 0.39 | 0.37 | 0.48 |

TABLE S35. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 1

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| alternatively.r.01 | 20.18 | 18.18 | 24.71 | 0.00 |
| besides.r.02 | 15.96 | 21.21 | 12.64 | 11.54 |
| back.r.01 | 9.04 | 7.58 | 9.77 | 11.54 |
| actually.r.01 | 7.83 | 7.58 | 5.75 | 23.08 |
| even.r.01 | 7.53 | 3.79 | 9.77 | 11.54 |
| correctly.r.01 | 6.33 | 8.33 | 5.75 | 0.00 |
| yet.r.01 | 6.02 | 7.58 | 4.02 | 11.54 |
| well.r.01 | 6.02 | 3.79 | 6.90 | 11.54 |
| rather.r.01 | 5.42 | 1.52 | 7.47 | 11.54 |
| properly.r.01 | 5.42 | 8.33 | 3.45 | 3.85 |
| still.r.01 | 5.12 | 6.06 | 5.17 | 0.00 |
| always.r.01 | 5.12 | 6.06 | 4.60 | 3.85 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S36. 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: 1

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.07 | 0.07 | 0.06 | 0.12 |
| $\sigma(domains)$ | 0.26 | 0.25 | 0.24 | 0.33 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.85 | 3.00 | 2.70 | 3.01 |
| $\sigma(lemmas)$ | 1.87 | 1.89 | 1.71 | 2.33 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S37. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 1

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 28.30 | 30.07 | 29.64 | 25.52 |
| X | 0.11 | 0.07 | 0.15 | 0.07 |
| ADP | 11.50 | 11.76 | 11.12 | 11.90 |
| DET | 11.14 | 10.43 | 10.70 | 12.13 |
| VERB | 23.10 | 22.54 | 22.80 | 23.82 |
| ADJ | 5.50 | 5.50 | 5.52 | 5.47 |
| ADV | 6.61 | 5.99 | 6.37 | 7.25 |
| PRT | 3.68 | 3.61 | 3.71 | 3.68 |
| PRON | 6.45 | 6.15 | 6.43 | 6.64 |
| NUM | 0.69 | 0.85 | 0.74 | 0.53 |
| CONJ | 2.91 | 3.04 | 2.82 | 2.98 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 57.12 | 58.45 | 58.39 | 54.41 |
| ADJ | 10.13 | 9.87 | 10.02 | 10.45 |
| VERB | 5.39 | 4.63 | 4.97 | 6.48 |
| ADV | 27.35 | 27.05 | 26.62 | 28.66 |
| POS | 34.75 | 34.84 | 34.71 | 34.77 |
| POS! | 96.36 | 95.60 | 96.68 | 96.29 |

TABLE S38. 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 | 69.43 | 68.96 | 68.61 | 71.07 |
| physical_entity.n.01 | 30.57 | 31.04 | 31.39 | 28.93 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| psychological_feature.n.01 | 19.73 | 18.58 | 18.80 | 21.96 |
| object.n.01 | 19.16 | 19.52 | 19.42 | 18.50 |
| communication.n.02 | 14.55 | 13.93 | 14.78 | 14.56 |
| measure.n.02 | 14.13 | 15.60 | 14.54 | 12.56 |
| attribute.n.02 | 10.93 | 11.41 | 10.42 | 11.48 |
| causal_agent.n.01 | 5.78 | 5.56 | 5.92 | 5.67 |
| group.n.01 | 5.31 | 4.54 | 5.54 | 5.39 |
| relation.n.01 | 4.75 | 4.86 | 4.50 | 5.09 |
| matter.n.03 | 4.41 | 4.77 | 4.81 | 3.53 |
| thing.n.12 | 0.65 | 0.57 | 0.75 | 0.52 |
| process.n.06 | 0.58 | 0.62 | 0.49 | 0.71 |
| set.n.02 | 0.02 | 0.04 | 0.01 | 0.04 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| whole.n.02 | 17.82 | 18.23 | 17.76 | 17.67 |
| definite_quantity.n.01 | 13.84 | 15.79 | 14.20 | 12.02 |
| event.n.01 | 12.88 | 12.92 | 12.29 | 13.86 |
| cognition.n.01 | 11.05 | 9.36 | 10.52 | 12.96 |
| state.n.02 | 10.10 | 10.68 | 9.90 | 10.07 |
| message.n.02 | 7.79 | 7.11 | 8.43 | 7.13 |
| person.n.01 | 6.83 | 6.50 | 6.90 | 6.91 |
| written_communication.n.01 | 5.49 | 5.03 | 5.29 | 6.10 |
| substance.n.01 | 4.50 | 5.29 | 4.70 | 3.68 |
| collection.n.01 | 3.80 | 3.00 | 4.16 | 3.69 |
| location.n.01 | 3.69 | 3.72 | 3.75 | 3.57 |
| indication.n.01 | 2.22 | 2.37 | 2.10 | 2.33 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S39. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.77 | 6.88 | 6.78 | 6.68 |
| $\sigma(min depth)$ | 2.09 | 2.10 | 2.11 | 2.06 |
| $\mu(max depth)$ | 7.03 | 7.13 | 7.05 | 6.93 |
| $\sigma(max depth)$ | 2.19 | 2.19 | 2.19 | 2.17 |
| $\mu(holonyms)$ | 0.11 | 0.12 | 0.11 | 0.10 |
| $\sigma(holonyms)$ | 0.50 | 0.46 | 0.41 | 0.63 |
| $\mu(meronyms)$ | 0.40 | 0.45 | 0.43 | 0.33 |
| $\sigma(meronyms)$ | 2.36 | 2.70 | 2.25 | 2.34 |
| $\mu(domains)$ | 0.06 | 0.06 | 0.06 | 0.06 |
| $\sigma(domains)$ | 0.25 | 0.24 | 0.25 | 0.25 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.94 | 3.05 | 2.98 | 2.82 |
| $\sigma(lemmas)$ | 2.54 | 2.67 | 2.53 | 2.48 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 8.20 | 8.40 | 8.09 | 8.27 |
| $\sigma(hyponyms)$ | 27.98 | 28.34 | 27.64 | 28.32 |
| $\mu(hypernyms)$ | 1.03 | 1.03 | 1.03 | 1.03 |
| $\sigma(hypernyms)$ | 0.20 | 0.19 | 0.21 | 0.21 |

TABLE S40. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 2

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| like.a.01 | 17.40 | 20.05 | 16.02 | 18.38 |
| new.a.01 | 13.22 | 12.71 | 11.00 | 17.34 |
| net.a.01 | 12.30 | 13.20 | 14.15 | 8.60 |
| public.a.01 | 10.87 | 7.58 | 15.04 | 5.35 |
| certain.a.02 | 6.65 | 7.33 | 5.16 | 8.87 |
| good.a.01 | 6.61 | 6.36 | 6.74 | 6.52 |
| small.a.01 | 6.17 | 4.89 | 6.06 | 7.04 |
| simple.a.01 | 5.73 | 5.38 | 5.99 | 5.48 |
| able.a.01 | 5.73 | 7.82 | 5.54 | 4.95 |
| possible.a.01 | 5.29 | 5.38 | 4.94 | 5.87 |
| different.a.01 | 5.25 | 4.16 | 3.74 | 8.47 |
| inactive.s.10 | 4.78 | 5.13 | 5.61 | 3.13 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S41. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.06 | 0.05 | 0.06 | 0.05 |
| $\sigma(domains)$ | 0.23 | 0.22 | 0.23 | 0.23 |
| $\mu(similar)$ | 5.74 | 5.66 | 5.45 | 6.21 |
| $\sigma(similar)$ | 6.75 | 7.02 | 6.36 | 7.14 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.72 | 1.78 | 1.73 | 1.68 |
| $\sigma(lemmas)$ | 1.38 | 1.56 | 1.39 | 1.27 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S42. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 2

| | g. | p. | i. | h. |
|-----------------------|--------|--------|--------|--------|
| act.v.01 | 13.10 | 11.10 | 13.70 | 13.32 |
| move.v.02 | 10.98 | 13.40 | 11.37 | 9.10 |
| use.v.01 | 10.94 | 9.47 | 11.12 | 11.46 |
| travel.v.01 | 10.60 | 12.36 | 10.16 | 10.28 |
| make.v.03 | 9.47 | 9.80 | 8.67 | 10.47 |
| change.v.01 | 8.88 | 8.36 | 7.53 | 11.14 |
| think.v.03 | 8.48 | 8.50 | 8.35 | 8.65 |
| make.v.01 | 8.13 | 7.35 | 9.50 | 6.54 |
| get.v.01 | 5.72 | 6.63 | 5.56 | 5.46 |
| change.v.02 | 5.36 | 4.03 | 5.50 | 5.90 |
| be.v.01 | 4.23 | 4.32 | 4.41 | 3.91 |
| work.v.01 | 4.11 | 4.68 | 4.13 | 3.77 |
| total | 100.00 | | 100.00 | 100.00 |
| | | | | |
| interact.v.01 | 15.22 | 12.54 | 17.26 | 13.76 |
| evaluate.v.02 | 14.37 | 13.38 | 15.03 | 13.96 |
| put.v.01 | 11.68 | 13.84 | 12.06 | 10.00 |
| state.v.01 | 8.26 | 8.33 | 7.51 | 9.27 |
| construct.v.01 | 8.20 | 9.40 | 6.51 | 9.96 |
| keep.v.03 | 7.47 | 7.34 | 8.37 | 6.27 |
| travel_rapidly.v.01 | 7.29 | 10.86 | 5.91 | 7.37 |
| try.v.01 | 6.48 | 7.95 | 6.46 | 5.75 |
| change_magnitude.v.01 | 6.32 | 4.66 | 6.63 | 6.76 |
| attach.v.01 | 5.01 | 3.82 | 5.03 | 5.63 |
| send.v.01 | 4.93 | 3.82 | 5.69 | 4.45 |
| better.v.02 | 4.75 | 4.05 | 3.54 | 6.84 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 22.26 | 16.84 | 25.08 | 21.06 |
| run.v.01 | 11.45 | 16.61 | 9.06 | 12.17 |
| think.v.01 | 10.25 | 8.65 | 10.24 | 11.16 |
| increase.v.01 | 9.71 | 7.02 | 9.93 | 10.90 |
| install.v.01 | 9.56 | 13.68 | 10.15 | 6.28 |
| store.v.01 | 7.44 | 7.84 | 8.45 | 5.68 |
| repair.v.01 | 5.89 | 4.68 | 4.55 | 8.62 |
| name.v.01 | 5.57 | 6.67 | 5.25 | 5.41 |
| write.v.01 | 5.11 | 5.50 | 4.95 | 5.15 |
| expect.v.01 | 4.66 | 3.74 | 4.68 | 5.15 |
| save.v.02 | 4.25 | 3.39 | 4.33 | 4.61 |
| declare.v.01 | 3.86 | 5.38 | 3.33 | 3.81 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| inform.v.01 | 29.69 | 28.65 | 31.19 | 27.66 |
| add.v.01 | 17.83 | 14.62 | 17.33 | 20.19 |
| roll_up.v.02 | 13.48 | 19.30 | 14.19 | 9.54 |
| record.v.01 | 8.65 | 8.48 | 8.17 | 9.54 |
| overlap.v.01 | 4.87 | 5.56 | 3.30 | 7.19 |
| propose.v.01 | 4.44 | 4.09 | 3.71 | 5.81 |
| assume.v.01 | 4.13 | 2.92 | 4.13 | 4.70 |
| see.v.05 | 3.95 | 4.97 | 4.13 | 3.04 |
| talk.v.02 | 3.34 | 3.22 | 2.97 | 4.01 |
| talk.v.02 | | | | |
| | 3.21 | 0.58 | 4.62 | 2.07 |
| address.v.01 | 3.21 | 4.09 | 2.89 | 3.32 |
| believe.v.01 | 3.21 | 3.51 | 3.30 | 2.90 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

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: 2

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.26 | 1.26 | 1.26 | 1.26 |
| $\sigma(mindepth)$ | 1.46 | 1.43 | 1.47 | 1.47 |
| $\mu(max depth)$ | 1.26 | 1.27 | 1.26 | 1.26 |
| $\sigma(maxdepth)$ | 1.47 | 1.43 | 1.47 | 1.47 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.02 | 0.02 | 0.02 | 0.02 |
| $\sigma(domains)$ | 0.14 | 0.14 | 0.14 | 0.14 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.49 | 0.51 | 0.49 | 0.47 |
| $\sigma(verbgroups)$ | 0.60 | 0.61 | 0.60 | 0.59 |
| $\mu(lemmas)$ | 3.22 | 3.21 | 3.21 | 3.24 |
| $\sigma(lemmas)$ | 2.15 | 2.13 | 2.15 | 2.15 |
| $\mu(entailments)$ | 0.04 | 0.04 | 0.04 | 0.04 |
| $\sigma(entailments)$ | 0.20 | 0.21 | 0.20 | 0.20 |
| $\mu(hyponyms)$ | 15.24 | 14.29 | 15.04 | 16.04 |
| $\sigma(hyponyms)$ | 37.54 | 32.73 | 37.57 | 39.78 |
| $\mu(hypernyms)$ | 0.63 | 0.64 | 0.62 | 0.63 |
| $\sigma(hypernyms)$ | 0.49 | 0.49 | 0.49 | 0.49 |

TABLE S44. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 2

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| besides.r.02 | 21.85 | 23.87 | 19.86 | 23.29 |
| well.r.01 | 9.97 | 7.74 | 10.05 | 10.76 |
| even.r.01 | 8.01 | 10.32 | 7.00 | 8.23 |
| still.r.01 | 7.50 | 7.42 | 8.92 | 5.95 |
| possibly.r.01 | 7.40 | 7.10 | 9.26 | 5.44 |
| truly.r.01 | 7.40 | 6.77 | 8.35 | 6.58 |
| already.r.01 | 7.15 | 8.39 | 8.01 | 5.70 |
| however.r.01 | 6.65 | 8.71 | 6.32 | 6.20 |
| actually.r.01 | 6.50 | 2.58 | 5.30 | 9.37 |
| yet.r.01 | 6.24 | 5.81 | 6.55 | 6.08 |
| probably.r.01 | 5.79 | 6.13 | 5.64 | 5.82 |
| alternatively.r.01 | 5.54 | 5.16 | 4.74 | 6.58 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S45. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.11 | 0.09 | 0.10 | 0.14 |
| $\sigma(domains)$ | 0.33 | 0.29 | 0.30 | 0.38 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.14 | 3.13 | 3.07 | 3.24 |
| $\sigma(lemmas)$ | 2.17 | 2.19 | 2.13 | 2.21 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S46. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 2

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 40.46 | 45.66 | 39.01 | 38.54 |
| X | 0.25 | 0.16 | 0.10 | 0.39 |
| ADP | 11.28 | 9.51 | 11.83 | 11.90 |
| DET | 10.00 | 8.30 | 10.33 | 10.72 |
| VERB | 17.13 | 15.59 | 17.47 | 17.75 |
| ADJ | 5.39 | 5.05 | 5.73 | 5.37 |
| ADV | 5.94 | 4.51 | 6.05 | 6.63 |
| PRT | 1.97 | 1.83 | 1.89 | 2.08 |
| PRON | 4.09 | 3.86 | 4.19 | 4.15 |
| NUM | 1.88 | 4.12 | 1.54 | 0.88 |
| CONJ | 1.61 | 1.41 | 1.87 | 1.57 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 72.83 | 76.97 | 71.74 | 70.81 |
| ADJ | 8.20 | 6.69 | 8.82 | 8.81 |
| VERB | 3.92 | 2.38 | 4.05 | 4.85 |
| ADV | 15.05 | 13.96 | 15.40 | 15.53 |
| POS | 36.23 | 34.28 | 36.40 | 37.52 |
| POS! | 95.24 | 94.09 | 96.18 | 95.41 |

TABLE S47. 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 | 74.79 | 78.04 | 75.14 | 72.28 |
| physical_entity.n.01 | 25.21 | 21.96 | 24.86 | 27.72 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| measure.n.02 | 33.62 | 41.95 | 32.46 | 28.47 |
| object.n.01 | 19.84 | 16.05 | 19.79 | 22.54 |
| communication.n.02 | 14.98 | 13.52 | 15.12 | 15.91 |
| psychological_feature.n.01 | 10.22 | 9.27 | 11.12 | 10.33 |
| relation.n.01 | 7.09 | 4.32 | 7.67 | 8.67 |
| attribute.n.02 | 5.31 | 4.70 | 5.36 | 5.72 |
| group.n.01 | 3.57 | 4.27 | 3.40 | 3.18 |
| causal_agent.n.01 | 2.59 | 2.69 | 2.78 | 2.41 |
| matter.n.03 | 1.95 | 2.21 | 1.47 | 2.08 |
| process.n.06 | 0.42 | 0.45 | 0.46 | 0.37 |
| thing.n.12 | 0.41 | 0.57 | 0.37 | 0.33 |
| set.n.02 | 0.00 | 0.00 | 0.00 | 0.01 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| definite_quantity.n.01 | 22.16 | 34.99 | 21.05 | 13.69 |
| whole.n.02 | 18.05 | 15.34 | 17.99 | 20.02 |
| fundamental_quantity.n.01 | 15.21 | 13.23 | 14.80 | 16.89 |
| message.n.02 | 11.64 | 7.84 | 11.86 | 14.21 |
| event.n.01 | 7.94 | 6.55 | 8.50 | 8.59 |
| possession.n.02 | 4.27 | 2.39 | 4.54 | 5.45 |
| cognition.n.01 | 4.25 | 4.45 | 4.73 | 3.79 |
| state.n.02 | 4.16 | 3.52 | 4.06 | 4.68 |
| location.n.01 | 3.54 | 2.48 | 3.39 | 4.39 |
| written_communication.n.01 | 3.15 | 4.46 | 3.11 | 2.24 |
| person.n.01 | 3.07 | 3.18 | 3.25 | 2.88 |
| part.n.01 | 2.57 | 1.57 | 2.73 | 3.18 |
| total | 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: 3

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.98 | 7.05 | 6.95 | 6.95 |
| $\sigma(mindepth)$ | 2.01 | 1.93 | 2.02 | 2.06 |
| $\mu(max depth)$ | 7.10 | 7.17 | 7.07 | 7.05 |
| $\sigma(max depth)$ | 2.06 | 1.97 | 2.06 | 2.12 |
| $\mu(holonyms)$ | 0.10 | 0.12 | 0.09 | 0.10 |
| $\sigma(holonyms)$ | 0.61 | 0.63 | 0.50 | 0.66 |
| $\mu(meronyms)$ | 0.26 | 0.25 | 0.14 | 0.35 |
| $\sigma(meronyms)$ | 3.01 | 1.81 | 1.48 | 4.17 |
| $\mu(domains)$ | 0.06 | 0.06 | 0.05 | 0.07 |
| $\sigma(domains)$ | 0.28 | 0.24 | 0.23 | 0.33 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.13 | 3.73 | 3.11 | 2.71 |
| $\sigma(lemmas)$ | 3.08 | 3.85 | 3.10 | 2.29 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 4.32 | 3.71 | 4.04 | 4.94 |
| $\sigma(hyponyms)$ | 16.67 | 14.85 | 15.07 | 18.70 |
| $\mu(hypernyms)$ | 1.01 | 1.02 | 1.02 | 1.01 |
| $\sigma(hypernyms)$ | 0.12 | 0.14 | 0.13 | 0.10 |

TABLE S49. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 3

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| new.a.01 | 35.36 | 29.21 | 34.99 | 37.86 |
| available.a.01 | 33.02 | 28.78 | 33.43 | 34.38 |
| like.a.01 | 6.23 | 5.19 | 6.09 | 6.69 |
| near.a.01 | 4.32 | 10.16 | 4.38 | 2.10 |
| local.a.01 | 4.17 | 8.89 | 2.53 | 3.28 |
| current.a.01 | 3.22 | 1.38 | 3.34 | 3.84 |
| certain.a.02 | 2.41 | 1.06 | 1.56 | 3.36 |
| free.a.01 | 2.39 | 4.87 | 2.23 | 1.54 |
| first.a.01 | 2.30 | 3.07 | 2.75 | 1.78 |
| different.a.01 | 2.26 | 2.65 | 2.60 | 1.94 |
| sparse.s.01 | 2.20 | 2.75 | 3.49 | 1.31 |
| variable.a.01 | 2.14 | 2.01 | 2.60 | 1.94 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S50. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.04 | 0.04 | 0.04 | 0.04 |
| $\sigma(domains)$ | 0.19 | 0.19 | 0.19 | 0.20 |
| $\mu(similar)$ | 8.38 | 7.15 | 8.30 | 9.04 |
| $\sigma(similar)$ | 7.22 | 7.71 | 7.06 | 6.98 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.56 | 1.79 | 1.53 | 1.46 |
| $\sigma(lemmas)$ | 1.31 | 1.63 | 1.19 | 1.18 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S51. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 3

| | g. | p. | i. | h. |
|------------------|--------|--------|--------|--------|
| think.v.03 | 15.81 | 10.55 | 15.37 | 18.84 |
| act.v.01 | 13.33 | 16.07 | 14.17 | 11.39 |
| change.v.01 | 12.79 | 16.47 | 12.88 | 10.80 |
| travel.v.01 | 10.57 | 12.22 | 9.51 | 10.32 |
| make.v.03 | 8.59 | 8.89 | 9.77 | 7.73 |
| use.v.01 | 8.57 | 6.24 | 8.41 | 9.90 |
| move.v.02 | 6.66 | 8.12 | 6.80 | 5.80 |
| be.v.01 | 5.35 | 5.40 | 4.66 | 5.72 |
| make.v.01 | 4.90 | 4.57 | 5.18 | 4.92 |
| get.v.01 | 4.68 | 4.17 | 3.88 | 5.42 |
| perceive.v.01 | 4.39 | 3.81 | 4.37 | 4.71 |
| change.v.02 | 4.36 | 3.48 | 4.98 | 4.46 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| evaluate.v.02 | 20.77 | 14.79 | 21.89 | 23.42 |
| interact.v.01 | 15.45 | 18.65 | 19.00 | 11.76 |
| keep.v.03 | 7.99 | 10.61 | 8.82 | 6.09 |
| try.v.01 | 6.96 | 8.17 | 5.67 | 7.01 |
| see.v.01 | 6.78 | 5.21 | 6.95 | 7.54 |
| put.v.01 | 6.76 | 9.45 | 6.18 | 5.60 |
| please.v.01 | 6.74 | 13.18 | 5.80 | 3.73 |
| state.v.01 | 6.32 | 5.59 | 6.31 | 6.73 |
| follow.v.01 | 6.14 | 5.21 | 4.76 | 7.40 |
| better.v.02 | 5.89 | 2.77 | 6.05 | 7.50 |
| look.v.02 | 5.23 | 4.69 | 4.25 | 6.06 |
| reason.v.03 | 4.98 | 1.67 | 4.31 | 7.15 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 23.41 | 28.06 | 25.64 | 19.04 |
| think.v.01 | 16.55 | 6.77 | 13.79 | 24.46 |
| repair.v.01 | 8.72 | 4.18 | 8.27 | 11.83 |
| save.v.02 | 8.32 | 11.14 | 8.36 | 6.53 |
| name.v.01 | 6.54 | 7.46 | 6.25 | 6.16 |
| run.v.01 | 6.35 | 10.35 | 6.07 | 4.07 |
| install.v.01 | 5.36 | 8.76 | 4.23 | 4.00 |
| write.v.01 | 5.33 | 4.78 | 5.51 | 5.55 |
| salvage.v.01 | 5.27 | 4.98 | 6.16 | 4.87 |
| measure.v.04 | 4.74 | 7.56 | 4.78 | 2.96 |
| increase.v.01 | 4.71 | 2.69 | 5.24 | 5.61 |
| expect.v.01 | 4.71 | 3.28 | 5.70 | 4.93 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| inform.v.01 | 34.26 | 36.71 | 39.93 | 28.08 |
| record.v.01 | 15.41 | 17.72 | 15.53 | 13.47 |
| add.v.01 | 7.63 | 2.69 | 9.04 | 10.55 |
| roll_up.v.02 | 7.28 | 7.91 | 7.00 | 6.99 |
| classify.v.01 | 7.08 | 0.16 | 0.51 | 17.53 |
| configure.v.01 | 6.83 | 14.72 | 5.97 | 1.14 |
| propose.v.01 | 4.89 | 1.58 | 4.10 | 8.13 |
| see.v.05 | 3.84 | 3.32 | 4.27 | 3.94 |
| overlap.v.01 | 3.74 | 5.70 | 5.12 | 1.14 |
| replace.v.01 | 3.44 | 3.80 | 4.27 | 2.54 |
| write.v.07 | 3.04 | 3.64 | 3.41 | 2.29 |
| talk.v.02 | 2.54 | 2.06 | 0.85 | 4.19 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S52. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.41 | 1.48 | 1.46 | 1.35 |
| $\sigma(mindepth)$ | 1.41 | 1.42 | 1.46 | 1.37 |
| $\mu(max depth)$ | 1.42 | 1.50 | 1.46 | 1.35 |
| $\sigma(max depth)$ | 1.42 | 1.44 | 1.47 | 1.37 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.03 | 0.04 | 0.04 | 0.03 |
| $\sigma(domains)$ | 0.18 | 0.19 | 0.19 | 0.16 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.45 | 0.46 | 0.47 | 0.44 |
| $\sigma(verbgroups)$ | 0.62 | 0.62 | 0.62 | 0.62 |
| $\mu(lemmas)$ | 3.18 | 2.95 | 3.17 | 3.33 |
| $\sigma(lemmas)$ | 2.15 | 2.06 | 2.17 | 2.18 |
| $\mu(entailments)$ | 0.05 | 0.04 | 0.04 | 0.06 |
| $\sigma(entailments)$ | 0.22 | 0.20 | 0.20 | 0.23 |
| $\mu(hyponyms)$ | 14.39 | 11.45 | 15.42 | 15.47 |
| $\sigma(hyponyms)$ | 42.12 | 31.44 | 46.49 | 44.58 |
| $\mu(hypernyms)$ | 0.71 | 0.73 | 0.71 | 0.70 |
| $\sigma(hypernyms)$ | 0.46 | 0.45 | 0.46 | 0.46 |

TABLE S53. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 3

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| freely.r.01 | 50.95 | 48.06 | 52.37 | 51.14 |
| besides.r.02 | 11.83 | 10.47 | 11.91 | 12.21 |
| alternatively.r.01 | 6.00 | 5.81 | 6.32 | 5.90 |
| possibly.r.01 | 5.86 | 4.26 | 5.71 | 6.44 |
| even.r.01 | 4.27 | 8.53 | 4.62 | 2.77 |
| truly.r.01 | 3.30 | 2.13 | 2.79 | 3.91 |
| still.r.01 | 3.23 | 4.07 | 3.16 | 3.01 |
| first.r.01 | 3.10 | 4.26 | 2.43 | 3.07 |
| probably.r.01 | 3.10 | 1.55 | 2.31 | 3.97 |
| however.r.01 | 2.97 | 5.23 | 2.92 | 2.29 |
| well.r.01 | 2.83 | 4.65 | 3.52 | 1.93 |
| already.r.01 | 2.57 | 0.97 | 1.94 | 3.37 |
| 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: 3

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.04 | 0.05 | 0.05 | 0.04 |
| $\sigma(domains)$ | 0.21 | 0.21 | 0.22 | 0.19 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.62 | 2.71 | 2.58 | 2.62 |
| $\sigma(lemmas)$ | 2.06 | 2.24 | 2.01 | 2.02 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S55. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 3

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 28.09 | 33.52 | 28.61 | 25.22 |
| X | 0.19 | 0.20 | 0.29 | 0.10 |
| ADP | 10.79 | 10.37 | 10.98 | 10.82 |
| DET | 11.36 | 10.09 | 11.49 | 11.82 |
| VERB | 22.24 | 20.84 | 22.08 | 22.99 |
| ADJ | 6.16 | 5.83 | 6.00 | 6.43 |
| ADV | 6.76 | 5.29 | 6.74 | 7.45 |
| PRT | 3.76 | 3.35 | 3.34 | 4.27 |
| PRON | 6.82 | 7.05 | 6.55 | 6.93 |
| NUM | 0.85 | 0.79 | 0.77 | 0.94 |
| CONJ | 2.99 | 2.66 | 3.13 | 3.03 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 57.42 | 60.95 | 57.51 | 55.60 |
| ADJ | 11.51 | 10.32 | 11.08 | 12.45 |
| VERB | 5.37 | 3.61 | 5.13 | 6.44 |
| ADV | 25.70 | 25.12 | 26.28 | 25.50 |
| POS | 33.00 | 33.17 | 32.60 | 33.24 |
| POS! | 94.87 | 94.96 | 93.43 | 96.05 |

TABLE S56. 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: 4

| | 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 | 68.54 | 73.78 | 68.47 | 65.74 |
| physical_entity.n.01 | 31.46 | 26.22 | 31.53 | 34.26 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communication.n.02 | 20.18 | 21.93 | 18.38 | 20.79 |
| object.n.01 | 18.82 | 15.06 | 19.57 | 20.21 |
| measure.n.02 | 17.34 | 21.14 | 17.93 | 14.76 |
| psychological_feature.n.01 | 17.15 | 17.53 | 17.81 | 16.38 |
| causal_agent.n.01 | 7.89 | 5.49 | 6.89 | 10.06 |
| attribute.n.02 | 6.33 | 5.47 | 6.58 | 6.58 |
| group.n.01 | 4.50 | 4.82 | 5.10 | 3.80 |
| matter.n.03 | 3.77 | 4.63 | 4.03 | 3.07 |
| relation.n.01 | 3.04 | 2.89 | 2.68 | 3.42 |
| process.n.06 | 0.51 | 0.68 | 0.48 | 0.44 |
| thing.n.12 | 0.48 | 0.36 | 0.56 | 0.48 |
| set.n.02 | 0.00 | 0.00 | 0.00 | 0.01 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| whole.n.02 | 18.76 | 15.43 | 19.28 | 20.08 |
| definite_quantity.n.01 | 17.99 | 23.51 | 18.26 | 14.82 |
| event.n.01 | 12.40 | 12.65 | 12.88 | 11.86 |
| message.n.02 | 9.63 | 7.98 | 8.55 | 11.44 |
| person.n.01 | 8.95 | 6.55 | 8.23 | 10.85 |
| cognition.n.01 | 8.41 | 9.05 | 8.73 | 7.79 |
| written_communication.n.01 | 6.27 | 6.19 | 5.51 | 6.96 |
| state.n.02 | 4.19 | 3.63 | 4.53 | 4.19 |
| indication.n.01 | 3.87 | 5.09 | 3.63 | 3.42 |
| location.n.01 | 3.77 | 2.95 | 4.10 | 3.93 |
| substance.n.01 | 3.19 | 4.43 | 3.18 | 2.53 |
| message.n.01 | 2.57 | 2.53 | 3.11 | 2.14 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S57. 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: 4

| | g. | р. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.55 | 6.58 | 6.50 | 6.59 |
| $\sigma(mindepth)$ | 1.71 | 1.64 | 1.75 | 1.70 |
| $\mu(max depth)$ | 6.87 | 6.82 | 6.80 | 6.97 |
| $\sigma(max depth)$ | 1.86 | 1.72 | 1.86 | 1.93 |
| $\mu(holonyms)$ | 0.12 | 0.12 | 0.12 | 0.11 |
| $\sigma(holonyms)$ | 0.63 | 0.53 | 0.61 | 0.68 |
| $\mu(meronyms)$ | 0.54 | 0.61 | 0.56 | 0.48 |
| $\sigma(meronyms)$ | 3.02 | 3.40 | 3.13 | 2.68 |
| $\mu(domains)$ | 0.07 | 0.06 | 0.08 | 0.07 |
| $\sigma(domains)$ | 0.27 | 0.24 | 0.28 | 0.28 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.89 | 2.94 | 2.99 | 2.79 |
| $\sigma(lemmas)$ | 2.58 | 2.49 | 2.79 | 2.43 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 7.77 | 6.96 | 8.53 | 7.55 |
| $\sigma(hyponyms)$ | 30.78 | 27.75 | 32.57 | 30.74 |
| $\mu(hypernyms)$ | 1.05 | 1.03 | 1.05 | 1.07 |
| $\sigma(hypernyms)$ | 0.25 | 0.18 | 0.23 | 0.30 |

TABLE S58. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 4

| | g. | р. | i. | h. |
|----------------|--------|--------|--------|--------|
| cardinal.s.01 | 18.99 | 15.87 | 21.55 | 18.80 |
| public.a.01 | 12.62 | 11.64 | 17.36 | 10.01 |
| like.a.01 | 11.72 | 9.90 | 13.28 | 11.56 |
| new.a.01 | 9.45 | 9.17 | 9.10 | 9.80 |
| major.a.01 | 6.95 | 0.58 | 0.73 | 13.93 |
| secret.s.01 | 6.63 | 7.13 | 7.53 | 5.81 |
| available.a.01 | 6.28 | 5.68 | 6.69 | 6.29 |
| good.a.01 | 5.99 | 4.08 | 6.80 | 6.36 |
| net.a.01 | 5.93 | 3.35 | 7.64 | 6.02 |
| unsigned.a.01 | 5.93 | 25.62 | 0.94 | 0.00 |
| first.a.01 | 4.93 | 2.62 | 3.24 | 7.10 |
| able.a.01 | 4.58 | 4.37 | 5.13 | 4.33 |
| 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: 4

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.05 | 0.05 | 0.05 | 0.04 |
| $\sigma(domains)$ | 0.21 | 0.21 | 0.21 | 0.20 |
| $\mu(similar)$ | 5.63 | 4.87 | 5.54 | 6.02 |
| $\sigma(similar)$ | 6.72 | 5.92 | 6.55 | 7.12 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.75 | 1.73 | 1.80 | 1.73 |
| $\sigma(lemmas)$ | 1.44 | 1.50 | 1.47 | 1.38 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S60. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 4

| act.v.01 17.56 23.09 16.46 15.77 use.v.01 12.61 12.03 12.37 13.09 think.v.03 10.82 6.14 9.40 14.26 move.v.02 9.61 8.37 10.90 9.14 travel.v.01 8.98 8.96 8.53 9.36 change.v.01 8.86 8.62 8.51 9.28 make.v.03 8.14 7.67 9.52 7.22 get.v.01 5.72 7.78 6.55 4.04 express.v.02 5.30 4.22 5.14 5.95 make.v.01 4.87 4.99 5.45 4.32 change.v.02 4.20 4.05 4.07 4.39 be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 | | g. | p. | i. | h. |
|---|---------------------|--------|--------|--------|--------|
| think.v.03 10.82 6.14 9.40 14.26 move.v.02 9.61 8.37 10.90 9.14 travel.v.01 8.98 8.96 8.53 9.36 change.v.01 8.86 8.62 8.51 9.28 make.v.03 8.14 7.67 9.52 7.22 get.v.01 5.72 7.78 6.55 4.04 express.v.02 5.30 4.22 5.14 5.95 make.v.01 4.87 4.99 5.45 4.32 change.v.02 4.20 4.05 4.07 4.39 be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 | act.v.01 | 17.56 | 23.09 | 16.46 | 15.77 |
| move.v.02 9.61 8.37 10.90 9.14 travel.v.01 8.98 8.96 8.53 9.36 change.v.01 8.86 8.62 8.51 9.28 make.v.03 8.14 7.67 9.52 7.22 get.v.01 5.72 7.78 6.55 4.04 express.v.02 5.30 4.22 5.14 5.95 make.v.01 4.87 4.99 5.45 4.32 change.v.02 4.20 4.05 4.07 4.39 be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 <t< td=""><td>use.v.01</td><td>12.61</td><td>12.03</td><td>12.37</td><td>13.09</td></t<> | use.v.01 | 12.61 | 12.03 | 12.37 | 13.09 |
| travel.v.01 | think.v.03 | 10.82 | 6.14 | 9.40 | 14.26 |
| change.v.01 8.86 8.62 8.51 9.28 make.v.03 8.14 7.67 9.52 7.22 get.v.01 5.72 7.78 6.55 4.04 express.v.02 5.30 4.22 5.14 5.95 make.v.01 4.87 4.99 5.45 4.32 change.v.02 4.20 4.05 4.07 4.39 be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 send.v.01 5.43 3.67 10.08 2.43 conect.v.01 4.55 1.18 1.98 4.28 <t< td=""><td>move.v.02</td><td>9.61</td><td>8.37</td><td>10.90</td><td>9.14</td></t<> | move.v.02 | 9.61 | 8.37 | 10.90 | 9.14 |
| make.v.03 8.14 7.67 9.52 7.22 get.v.01 5.72 7.78 6.55 4.04 express.v.02 5.30 4.22 5.14 5.95 make.v.01 4.87 4.99 5.45 4.32 change.v.02 4.20 4.05 4.07 4.39 be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.01 6.86 10.24 8.21 4.14 send.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 | travel.v.01 | 8.98 | 8.96 | 8.53 | 9.36 |
| get.v.01 5.72 7.78 6.55 4.04 express.v.02 5.30 4.22 5.14 5.95 make.v.01 4.87 4.99 5.45 4.32 change.v.02 4.20 4.05 4.07 4.39 be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.01 6.86 10.24 8.21 4.14 send.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 | change.v.01 | 8.86 | 8.62 | 8.51 | 9.28 |
| express.v.02 5.30 4.22 5.14 5.95 make.v.01 4.87 4.99 5.45 4.32 change.v.02 4.20 4.05 4.07 4.39 be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.01 6.86 10.24 8.21 4.14 send.v.01 5.43 5.60 7.34 3.78 check.v.01 5.43 5.60 7.34 3.78 check.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 | make.v.03 | 8.14 | 7.67 | 9.52 | 7.22 |
| make.v.01 4.87 4.99 5.45 4.32 change.v.02 4.20 4.05 4.07 4.39 be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 send.v.01 5.43 5.60 7.34 3.78 check.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 seev.01 4.32 4.08 4.20 4.53 | get.v.01 | 5.72 | 7.78 | | 4.04 |
| change.v.02 4.20 4.05 4.07 4.39 be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 send.v.01 5.43 5.60 7.34 3.78 check.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 total 100.00 100.00 100.00 100.00 < | express.v.02 | 5.30 | 4.22 | 5.14 | 5.95 |
| be.v.01 3.34 4.08 3.10 3.17 total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 send.v.01 5.43 5.60 7.34 3.78 check.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 <td>make.v.01</td> <td>4.87</td> <td>4.99</td> <td>5.45</td> <td>4.32</td> | make.v.01 | 4.87 | 4.99 | 5.45 | 4.32 |
| total 100.00 100.00 100.00 100.00 interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 send.v.01 5.43 3.67 10.08 2.43 check.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.6 | change.v.02 | | 4.05 | | |
| interact.v.01 23.86 32.92 20.03 22.73 evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 send.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 conwert.v.03 5.11 6.36 5.28 4.37 come.v.01 4.35 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel.rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.87 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll.up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | be.v.01 | 3.34 | 4.08 | 3.10 | 3.17 |
| evaluate.v.02 | total | 100.00 | 100.00 | 100.00 | 100.00 |
| evaluate.v.02 17.50 9.96 14.48 23.58 state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 send.v.01 5.43 5.60 7.34 3.78 check.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 | interact.v.01 | 23.86 | 32.92 | 20.03 | 22.73 |
| state.v.01 10.20 8.30 9.80 11.43 put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 send.v.01 5.43 5.60 7.34 3.78 check.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 </td <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | |
| put.v.01 7.62 7.12 7.70 7.78 try.v.01 6.86 10.24 8.21 4.14 send.v.01 5.43 5.60 7.34 3.78 check.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.84 5.51 6.14 | | | | - | |
| try.v.01 | | | | | _ |
| send.v.01 5.43 5.60 7.34 3.78 check.v.01 5.43 3.67 10.08 2.43 convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 write.v.01 4.88 3.46 6.51 4.25 | * | | | | |
| convert.v.02 5.22 5.88 6.43 3.91 keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 | | 5.43 | 5.60 | 7.34 | 3.78 |
| keep.v.03 5.11 6.36 5.28 4.37 come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 | check.v.01 | 5.43 | 3.67 | 10.08 | 2.43 |
| come.v.01 4.55 1.18 1.98 8.28 see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 | convert.v.02 | 5.22 | 5.88 | 6.43 | 3.91 |
| see.v.01 4.32 4.08 4.20 4.53 travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 | keep.v.03 | 5.11 | 6.36 | 5.28 | 4.37 |
| travel_rapidly.v.01 3.91 4.70 4.48 3.05 total 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00< | come.v.01 | 4.55 | 1.18 | 1.98 | 8.28 |
| total 100.00 100.00 100.00 100.00 100.00 communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 <td>see.v.01</td> <td>4.32</td> <td>4.08</td> <td>4.20</td> <td>4.53</td> | see.v.01 | 4.32 | 4.08 | 4.20 | 4.53 |
| communicate.v.02 34.17 44.54 30.12 32.63 accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 </td <td>travel_rapidly.v.01</td> <td>3.91</td> <td>4.70</td> <td>4.48</td> <td>3.05</td> | travel_rapidly.v.01 | 3.91 | 4.70 | 4.48 | 3.05 |
| accept.v.01 9.65 2.92 4.38 16.81 think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 | total | 100.00 | 100.00 | 100.00 | 100.00 |
| think.v.01 8.51 6.05 9.96 8.50 encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 | communicate.v.02 | 34.17 | 44.54 | 30.12 | 32.63 |
| encode.v.01 7.99 9.19 10.14 5.76 run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 </td <td>accept.v.01</td> <td>9.65</td> <td>2.92</td> <td>4.38</td> <td>16.81</td> | accept.v.01 | 9.65 | 2.92 | 4.38 | 16.81 |
| run.v.01 5.98 7.35 7.01 4.54 increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 </td <td>think.v.01</td> <td>8.51</td> <td>6.05</td> <td>9.96</td> <td>8.50</td> | think.v.01 | 8.51 | 6.05 | 9.96 | 8.50 |
| increase.v.01 5.84 5.51 6.14 5.76 install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 | encode.v.01 | 7.99 | | 10.14 | 5.76 |
| install.v.01 5.58 6.92 6.57 4.20 write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 <td>run.v.01</td> <td>5.98</td> <td>7.35</td> <td>7.01</td> <td>4.54</td> | run.v.01 | 5.98 | 7.35 | 7.01 | 4.54 |
| write.v.01 4.88 3.46 6.51 4.25 read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 | increase.v.01 | 5.84 | 5.51 | 6.14 | 5.76 |
| read.v.01 4.79 3.78 6.01 4.30 store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.04 9.41 1.70 0.80 | | 5.58 | | | |
| store.v.01 4.57 5.08 5.07 3.96 declare.v.01 4.18 2.92 4.13 4.79 expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | | | | 6.51 | _ |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | | | |
| expect.v.01 3.85 2.27 3.94 4.49 total 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | | | | | |
| total 100.00 100.00 100.00 100.00 100.00 inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | | | | _ | |
| inform.v.01 23.36 33.97 19.06 21.05 write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | | | | | |
| write.v.02 16.95 12.50 17.78 18.57 believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | total | 100.00 | 100.00 | 100.00 | 100.00 |
| believe.v.01 13.10 2.79 5.64 23.31 code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | inform.v.01 | 23.36 | 33.97 | | 21.05 |
| code.v.02 11.53 12.35 16.40 7.79 add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | write.v.02 | | | 17.78 | 18.57 |
| add.v.01 7.69 6.47 8.84 7.50 roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | believe.v.01 | 13.10 | 2.79 | | 23.31 |
| roll_up.v.02 5.48 5.59 7.45 4.08 record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | code.v.02 | 11.53 | 12.35 | 16.40 | 7.79 |
| record.v.01 4.78 6.32 5.43 3.57 ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | | 7.69 | 6.47 | | 7.50 |
| ask.v.01 4.31 3.68 5.54 3.79 see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | | | | | |
| see.v.05 3.61 2.65 4.37 3.57 propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | | | | | |
| propose.v.01 3.38 2.06 3.73 3.79 ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | | | | | |
| ignore.v.01 3.04 9.41 1.70 0.80 communicate.v.01 2.77 2.21 4.05 2.18 | | | | | |
| communicate.v.01 2.77 2.21 4.05 2.18 | | | | | |
| | _ | | | | |
| total 100.00 100.00 100.00 100.00 | communicate.v.01 | 2.77 | 2.21 | 4.05 | 2.18 |
| | 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 (\mathbf{p} . for periphery, \mathbf{i} . for intermediary, \mathbf{h} . for hubs). TAG: 4

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.40 | 1.39 | 1.33 | 1.46 |
| $\sigma(mindepth)$ | 1.56 | 1.59 | 1.51 | 1.58 |
| $\mu(max depth)$ | 1.40 | 1.39 | 1.33 | 1.46 |
| $\sigma(max depth)$ | 1.56 | 1.59 | 1.51 | 1.58 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.03 | 0.03 | 0.03 | 0.02 |
| $\sigma(domains)$ | 0.17 | 0.18 | 0.17 | 0.15 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.44 | 0.44 | 0.46 | 0.41 |
| $\sigma(verbgroups)$ | 0.59 | 0.58 | 0.61 | 0.58 |
| $\mu(lemmas)$ | 3.20 | 3.04 | 3.32 | 3.17 |
| $\sigma(lemmas)$ | 2.15 | 2.07 | 2.26 | 2.08 |
| $\mu(entailments)$ | 0.04 | 0.05 | 0.04 | 0.04 |
| $\sigma(entailments)$ | 0.21 | 0.23 | 0.20 | 0.20 |
| $\mu(hyponyms)$ | 14.52 | 14.62 | 14.18 | 14.76 |
| $\sigma(hyponyms)$ | 37.89 | 37.40 | 36.19 | 39.52 |
| $\mu(hypernyms)$ | 0.65 | 0.63 | 0.64 | 0.66 |
| $\sigma(hypernyms)$ | 0.48 | 0.49 | 0.48 | 0.48 |

TABLE S62. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 4

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| besides.r.02 | 14.54 | 13.39 | 12.14 | 16.44 |
| still.r.01 | 10.86 | 12.99 | 11.50 | 9.86 |
| truly.r.01 | 9.98 | 10.24 | 10.06 | 9.86 |
| well.r.01 | 9.71 | 7.48 | 8.95 | 10.82 |
| even.r.01 | 9.33 | 9.45 | 9.11 | 9.44 |
| possibly.r.01 | 8.94 | 6.30 | 11.34 | 8.06 |
| however.r.01 | 7.24 | 5.51 | 7.19 | 7.74 |
| probably.r.01 | 6.97 | 3.54 | 5.91 | 8.59 |
| already.r.01 | 6.69 | 9.84 | 7.35 | 5.41 |
| never.r.01 | 5.81 | 6.69 | 7.03 | 4.77 |
| alternatively.r.01 | 5.05 | 9.45 | 4.79 | 4.03 |
| always.r.01 | 4.88 | 5.12 | 4.63 | 4.98 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S63. 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: 4

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| (' 1 11) | | | 0.00 | 0.00 |
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.09 | 0.08 | 0.10 | 0.09 |
| $\sigma(domains)$ | 0.29 | 0.27 | 0.30 | 0.29 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.11 | 3.09 | 3.13 | 3.11 |
| $\sigma(lemmas)$ | 2.17 | 2.06 | 2.23 | 2.17 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S64. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 4

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 25.38 | 28.59 | 27.85 | 23.02 |
| X | 0.20 | 0.51 | 0.28 | 0.08 |
| ADP | 11.85 | 11.43 | 11.44 | 12.21 |
| DET | 11.29 | 10.75 | 11.15 | 11.50 |
| VERB | 22.83 | 22.46 | 22.43 | 23.18 |
| ADJ | 6.32 | 5.77 | 6.22 | 6.52 |
| ADV | 8.05 | 7.12 | 7.41 | 8.69 |
| PRT | 3.70 | 3.24 | 3.57 | 3.89 |
| PRON | 6.71 | 6.42 | 5.93 | 7.29 |
| NUM | 0.75 | 1.04 | 0.85 | 0.62 |
| CONJ | 2.91 | 2.67 | 2.87 | 2.99 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 50.94 | 55.89 | 54.12 | 47.36 |
| ADJ | 12.42 | 10.42 | 11.54 | 13.56 |
| VERB | 7.42 | 5.84 | 5.96 | 8.89 |
| ADV | 29.23 | 27.85 | 28.39 | 30.19 |
| POS | 32.81 | 31.84 | 32.63 | 33.20 |
| POS! | 94.93 | 94.48 | 94.90 | 95.08 |

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: 5

| | 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 | 70.54 | 70.02 | 71.21 | 70.13 |
| physical_entity.n.01 | 29.46 | 29.98 | 28.79 | 29.87 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| psychological_feature.n.01 | 19.83 | 17.31 | 18.96 | 21.31 |
| communication.n.02 | 18.48 | 20.02 | 19.00 | 17.59 |
| object.n.01 | 16.89 | 17.85 | 17.78 | 15.86 |
| measure.n.02 | 15.00 | 17.16 | 16.50 | 13.11 |
| attribute.n.02 | 8.18 | 7.12 | 7.75 | 8.86 |
| causal_agent.n.01 | 8.08 | 6.95 | 7.00 | 9.32 |
| group.n.01 | 5.29 | 5.33 | 5.05 | 5.47 |
| relation.n.01 | 3.75 | 3.09 | 3.94 | 3.79 |
| matter.n.03 | 3.33 | 4.31 | 2.77 | 3.51 |
| thing.n.12 | 0.61 | 0.52 | 0.62 | 0.63 |
| process.n.06 | 0.55 | 0.35 | 0.62 | 0.54 |
| set.n.02 | 0.00 | 0.00 | 0.00 | 0.01 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| event.n.01 | 14.83 | 14.14 | 14.01 | 15.72 |
| definite_quantity.n.01 | 14.83 | 17.70 | 16.57 | 12.50 |
| whole.n.02 | 14.78 | 16.05 | 14.42 | 14.69 |
| person.n.01 | 10.18 | 8.66 | 8.84 | 11.77 |
| cognition.n.01 | 10.03 | 7.35 | 9.76 | 11.08 |
| message.n.02 | 8.85 | 10.67 | 9.12 | 8.07 |
| written_communication.n.01 | 7.19 | 6.51 | 7.14 | 7.43 |
| location.n.01 | 5.59 | 5.22 | 7.17 | 4.38 |
| state.n.02 | 4.91 | 4.97 | 3.87 | 5.76 |
| substance.n.01 | 3.40 | 4.60 | 3.09 | 3.29 |
| property.n.02 | 2.76 | 2.31 | 3.04 | 2.66 |
| collection.n.01 | 2.66 | 1.81 | 2.98 | 2.65 |
| 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: 5

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.36 | 6.53 | 6.34 | 6.32 |
| $\sigma(min depth)$ | 1.73 | 1.74 | 1.72 | 1.73 |
| $\mu(max depth)$ | 6.67 | 6.81 | 6.61 | 6.68 |
| $\sigma(max depth)$ | 1.84 | 1.83 | 1.83 | 1.86 |
| $\mu(holonyms)$ | 0.12 | 0.14 | 0.12 | 0.11 |
| $\sigma(holonyms)$ | 0.48 | 0.75 | 0.46 | 0.37 |
| $\mu(meronyms)$ | 0.45 | 0.50 | 0.50 | 0.40 |
| $\sigma(meronyms)$ | 2.77 | 3.45 | 3.00 | 2.30 |
| $\mu(domains)$ | 0.07 | 0.07 | 0.06 | 0.08 |
| $\sigma(domains)$ | 0.26 | 0.26 | 0.25 | 0.27 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.14 | 3.25 | 3.07 | 3.18 |
| $\sigma(lemmas)$ | 3.11 | 3.27 | 2.85 | 3.27 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 9.51 | 9.75 | 9.00 | 9.87 |
| $\sigma(hyponyms)$ | 35.35 | 38.32 | 32.82 | 36.45 |
| $\mu(hypernyms)$ | 1.03 | 1.02 | 1.02 | 1.03 |
| $\sigma(hypernyms)$ | 0.17 | 0.16 | 0.15 | 0.18 |

TABLE S67. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: $5\,$

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| like.a.01 | 14.46 | 13.54 | 16.41 | 13.51 |
| good.a.01 | 12.21 | 8.85 | 7.03 | 15.74 |
| public.a.01 | 12.15 | 17.71 | 8.59 | 13.24 |
| pro.a.01 | 11.90 | 14.58 | 26.09 | 3.31 |
| new.a.01 | 9.44 | 9.38 | 9.84 | 9.21 |
| itinerant.s.01 | 8.10 | 0.00 | 0.00 | 14.13 |
| easy.a.01 | 7.44 | 9.38 | 6.88 | 7.42 |
| certain.a.02 | 5.28 | 5.21 | 6.72 | 4.47 |
| small.a.01 | 5.28 | 4.17 | 7.19 | 4.38 |
| first.a.01 | 4.92 | 6.77 | 5.62 | 4.20 |
| great.s.01 | 4.41 | 6.77 | 2.19 | 5.28 |
| least.a.01 | 4.41 | 3.65 | 3.44 | 5.10 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S68. 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: 5

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.06 | 0.07 | 0.04 | 0.06 |
| $\sigma(domains)$ | 0.23 | 0.26 | 0.20 | 0.24 |
| $\mu(similar)$ | 5.63 | 5.92 | 5.52 | 5.64 |
| $\sigma(similar)$ | 7.10 | 7.91 | 6.91 | 7.05 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.74 | 1.74 | 1.72 | 1.76 |
| $\sigma(lemmas)$ | 1.59 | 1.60 | 1.42 | 1.68 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S69. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 5

| | g. | p. | i. | h. |
|-----------------------|--------|--------|--------|--------|
| act.v.01 | 13.53 | 15.50 | 14.14 | 12.71 |
| make.v.03 | 11.50 | 12.06 | 12.45 | 10.76 |
| change.v.01 | 11.47 | 9.61 | 11.99 | 11.54 |
| move.v.02 | 11.39 | 12.06 | 9.20 | 12.67 |
| think.v.03 | 9.96 | 9.61 | 9.54 | 10.31 |
| change.v.02 | 8.37 | 9.25 | 7.11 | 9.00 |
| travel.v.01 | 7.67 | 7.89 | 7.61 | 7.67 |
| use.v.01 | 6.32 | 5.26 | 6.13 | 6.67 |
| make.v.01 | 5.38 | 6.44 | 5.83 | 4.87 |
| get.v.01 | 4.99 | 5.35 | 4.81 | 5.02 |
| be.v.01 | 4.78 | 3.81 | 6.69 | 3.75 |
| perceive.v.01 | 4.63 | 3.17 | 4.51 | 5.02 |
| _ | | | | |
| total | 100.00 | | 100.00 | 100.00 |
| interact.v.01 | 15.68 | 18.77 | 17.60 | 13.87 |
| evaluate.v.02 | 15.03 | 17.43 | 14.41 | 14.92 |
| construct.v.01 | 13.89 | 15.71 | 15.05 | 12.81 |
| state.v.01 | 8.77 | 7.85 | 8.74 | 8.98 |
| see.v.01 | 7.35 | 4.98 | 7.21 | 7.93 |
| put.v.01 | 6.95 | 8.24 | 7.08 | 6.60 |
| change_magnitude.v.01 | 6.49 | 6.51 | 5.48 | 7.11 |
| better.v.02 | 6.00 | 4.21 | 6.51 | 6.05 |
| push.v.01 | 6.00 | 2.49 | 1.85 | 9.26 |
| keep.v.03 | 4.99 | 4.79 | 5.42 | 4.77 |
| try.v.01 | 4.52 | 4.79 | 5.48 | 3.87 |
| look.v.02 | 4.32 | 4.21 | 5.17 | 3.83 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 26.75 | 29.77 | 28.54 | 24.81 |
| think.v.01 | 12.50 | 14.89 | 11.91 | 12.37 |
| increase.v.01 | 11.23 | 10.68 | 9.01 | 12.89 |
| repair.v.01 | 8.83 | 4.53 | 8.69 | 9.91 |
| run.v.01 | 5.96 | 6.47 | 5.47 | 6.18 |
| name.v.01 | 5.77 | 4.21 | 6.22 | 5.81 |
| expect.v.01 | 5.65 | 3.88 | 4.61 | 6.78 |
| declare.v.01 | 5.57 | 4.53 | 5.79 | 5.66 |
| install.v.01 | 4.99 | 7.44 | 7.08 | 2.98 |
| save.v.02 | 4.96 | 3.56 | 5.58 | 4.84 |
| update.v.01 | 3.91 | 5.50 | 3.76 | 3.65 |
| store.v.01 | 3.87 | 4.53 | 3.33 | 4.10 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| inform.v.01 | 29.70 | 35.39 | 33.15 | 26.40 |
| add.v.01 | 16.89 | 17.98 | 13.94 | 18.49 |
| record.v.01 | 8.16 | 6.18 | 9.79 | 7.56 |
| propose.v.01 | 5.99 | 6.18 | 4.90 | 6.63 |
| unify.v.01 | 5.93 | 2.25 | 2.26 | 8.95 |
| roll_up.v.02 | 5.61 | 7.87 | 5.27 | 5.35 |
| think.v.02 | 5.35 | 1.69 | 3.20 | 7.44 |
| mention.v.01 | 5.04 | 2.25 | 6.21 | 4.88 |
| see.v.05 | 4.72 | 8.99 | 7.53 | 2.09 |
| replace.v.01 | 4.40 | 1.69 | 5.84 | 4.07 |
| talk.v.02 | 4.33 | 5.06 | 6.21 | 3.02 |
| believe.v.01 | 3.89 | 4.49 | 1.69 | 5.12 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| | 1 | | | |

TABLE S70. 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: 5

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.33 | 1.33 | 1.31 | 1.34 |
| $\sigma(mindepth)$ | 1.47 | 1.44 | 1.46 | 1.48 |
| $\mu(max depth)$ | 1.33 | 1.33 | 1.31 | 1.34 |
| $\sigma(maxdepth)$ | 1.47 | 1.44 | 1.46 | 1.48 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.02 | 0.02 | 0.02 | 0.02 |
| $\sigma(domains)$ | 0.13 | 0.14 | 0.14 | 0.12 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.47 | 0.46 | 0.46 | 0.48 |
| $\sigma(verbgroups)$ | 0.62 | 0.62 | 0.62 | 0.62 |
| $\mu(lemmas)$ | 3.21 | 3.27 | 3.27 | 3.16 |
| $\sigma(lemmas)$ | 2.23 | 2.42 | 2.27 | 2.15 |
| $\mu(entailments)$ | 0.07 | 0.06 | 0.05 | 0.09 |
| $\sigma(entailments)$ | 0.32 | 0.27 | 0.25 | 0.38 |
| $\mu(hyponyms)$ | 18.05 | 18.52 | 18.05 | 17.94 |
| $\sigma(hyponyms)$ | 48.05 | 51.06 | 49.64 | 46.17 |
| $\mu(hypernyms)$ | 0.66 | 0.68 | 0.65 | 0.67 |
| $\sigma(hypernyms)$ | 0.47 | 0.47 | 0.48 | 0.47 |

TABLE S71. Measures of wordnet features in each Erdös sector (${f p}_{f \cdot}$ for periphery, ${f i}_{f \cdot}$ for intermediary, ${f h}_{f \cdot}$ for hubs). TAG: 5

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| besides.r.02 | 16.71 | 28.89 | 21.24 | 11.72 |
| well.r.01 | 11.94 | 6.67 | 14.59 | 11.60 |
| truly.r.01 | 9.62 | 6.67 | 7.94 | 11.14 |
| possibly.r.01 | 9.55 | 6.11 | 8.15 | 11.02 |
| still.r.01 | 9.48 | 10.00 | 8.58 | 9.86 |
| already.r.01 | 8.29 | 6.67 | 10.73 | 7.31 |
| even.r.01 | 7.16 | 9.44 | 6.44 | 7.08 |
| probably.r.01 | 6.03 | 7.78 | 3.00 | 7.31 |
| anyhow.r.01 | 5.57 | 2.22 | 3.22 | 7.54 |
| alternatively.r.01 | 5.37 | 4.44 | 5.79 | 5.34 |
| always.r.01 | 5.31 | 2.78 | 3.86 | 6.61 |
| presently.r.02 | 4.97 | 8.33 | 6.44 | 3.48 |
| 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: 5

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.12 | 0.08 | 0.12 | 0.12 |
| $\sigma(domains)$ | 0.32 | 0.27 | 0.33 | 0.33 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.02 | 2.95 | 3.06 | 3.01 |
| $\sigma(lemmas)$ | 2.06 | 2.03 | 2.12 | 2.04 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S73. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 5

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 31.34 | 34.11 | 31.36 | 27.68 |
| X | 0.13 | 0.07 | 0.05 | 0.30 |
| ADP | 10.91 | 10.63 | 11.00 | 11.17 |
| DET | 10.97 | 10.70 | 10.69 | 11.70 |
| VERB | 22.88 | 21.83 | 23.21 | 23.82 |
| ADJ | 5.45 | 5.20 | 5.27 | 6.02 |
| ADV | 4.80 | 4.59 | 4.54 | 5.40 |
| PRT | 3.72 | 3.56 | 3.92 | 3.66 |
| PRON | 6.89 | 6.26 | 6.97 | 7.62 |
| NUM | 0.81 | 0.86 | 0.93 | 0.58 |
| CONJ | 2.10 | 2.18 | 2.06 | 2.05 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 64.26 | 65.96 | 64.93 | 60.83 |
| ADJ | 7.43 | 7.19 | 6.89 | 8.57 |
| VERB | 3.21 | 2.87 | 2.97 | 4.04 |
| ADV | 25.10 | 23.97 | 25.21 | 26.56 |
| POS | 32.20 | 31.36 | 32.11 | 33.63 |
| POS! | 93.64 | 93.55 | 93.29 | 94.32 |

TABLE S74. 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. | 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 | 78.78 | 77.64 | 79.08 | 80.06 |
| physical_entity.n.01 | 21.22 | 22.36 | 20.92 | 19.94 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communication.n.02 | 22.61 | 20.37 | 22.69 | 25.94 |
| measure.n.02 | 16.27 | 17.37 | 18.02 | 11.80 |
| psychological_feature.n.01 | 15.90 | 17.24 | 14.35 | 16.27 |
| group.n.01 | 14.89 | 12.83 | 15.11 | 17.72 |
| object.n.01 | 11.65 | 12.19 | 11.52 | 11.00 |
| attribute.n.02 | 6.31 | 6.74 | 6.09 | 5.97 |
| causal_agent.n.01 | 4.70 | 4.69 | 4.80 | 4.54 |
| matter.n.03 | 3.15 | 3.73 | 3.02 | 2.46 |
| relation.n.01 | 2.80 | 3.08 | 2.80 | 2.34 |
| process.n.06 | 0.99 | 1.07 | 0.97 | 0.92 |
| thing.n.12 | 0.73 | 0.68 | 0.60 | 1.02 |
| set.n.02 | 0.01 | 0.01 | 0.01 | 0.01 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| definite_quantity.n.01 | 17.21 | 18.28 | 19.57 | 11.63 |
| written_communication.n.01 | 15.86 | 13.69 | 15.89 | 19.32 |
| event.n.01 | 13.01 | 12.66 | 12.29 | 14.76 |
| cognition.n.01 | 9.33 | 11.14 | 7.76 | 8.97 |
| message.n.02 | 9.30 | 8.50 | 9.24 | 10.71 |
| whole.n.02 | 9.27 | 10.18 | 8.91 | 8.40 |
| person.n.01 | 6.44 | 6.29 | 6.62 | 6.39 |
| message.n.01 | 4.56 | 3.58 | 4.94 | 5.51 |
| location.n.01 | 4.16 | 4.00 | 4.23 | 4.31 |
| substance.n.01 | 4.05 | 4.78 | 3.83 | 3.23 |
| system_of_measurement.n.01 | 3.78 | 3.60 | 3.98 | 3.74 |
| collection.n.01 | 3.03 | 3.31 | 2.75 | 3.03 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S75. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.01 | 6.09 | 5.99 | 5.93 |
| $\sigma(mindepth)$ | 2.23 | 2.12 | 2.24 | 2.37 |
| $\mu(max depth)$ | 6.21 | 6.30 | 6.19 | 6.12 |
| $\sigma(max depth)$ | 2.36 | 2.25 | 2.36 | 2.51 |
| $\mu(holonyms)$ | 0.08 | 0.09 | 0.07 | 0.07 |
| $\sigma(holonyms)$ | 0.39 | 0.40 | 0.37 | 0.39 |
| $\mu(meronyms)$ | 0.26 | 0.31 | 0.23 | 0.22 |
| $\sigma(meronyms)$ | 1.63 | 2.01 | 1.39 | 1.28 |
| $\mu(domains)$ | 0.03 | 0.03 | 0.03 | 0.03 |
| $\sigma(domains)$ | 0.18 | 0.19 | 0.18 | 0.17 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.62 | 2.73 | 2.63 | 2.43 |
| $\sigma(lemmas)$ | 2.39 | 2.48 | 2.39 | 2.22 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 9.65 | 9.64 | 9.26 | 10.28 |
| $\sigma(hyponyms)$ | 27.51 | 30.61 | 24.29 | 27.23 |
| $\mu(hypernyms)$ | 1.01 | 1.01 | 1.02 | 1.01 |
| $\sigma(hypernyms)$ | 0.12 | 0.12 | 0.13 | 0.12 |

TABLE S76. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 6

| | g. | p. | i. | h. |
|-----------------|--------|--------|--------|--------|
| like.a.01 | 19.89 | 22.03 | 19.33 | 17.84 |
| new.a.01 | 13.11 | 16.83 | 11.34 | 10.64 |
| public.a.01 | 10.77 | 4.00 | 7.28 | 24.10 |
| true.a.01 | 8.64 | 10.05 | 11.10 | 3.60 |
| different.a.01 | 7.16 | 6.42 | 8.00 | 7.04 |
| false.a.01 | 6.90 | 8.84 | 8.83 | 1.88 |
| common.a.01 | 6.77 | 4.84 | 4.30 | 12.52 |
| able.a.01 | 5.86 | 5.93 | 7.16 | 4.07 |
| certain.a.02 | 5.73 | 4.60 | 5.85 | 7.04 |
| possible.a.01 | 5.30 | 6.66 | 5.25 | 3.60 |
| null.s.01 | 5.17 | 5.33 | 7.76 | 1.56 |
| individual.a.01 | 4.69 | 4.48 | 3.82 | 6.10 |
| 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: 6

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.07 | 0.07 | 0.08 | 0.07 |
| $\sigma(domains)$ | 0.25 | 0.25 | 0.26 | 0.25 |
| $\mu(similar)$ | 5.98 | 5.98 | 5.89 | 6.10 |
| $\sigma(similar)$ | 7.15 | 7.27 | 7.08 | 7.09 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.70 | 1.77 | 1.70 | 1.61 |
| $\sigma(lemmas)$ | 1.40 | 1.55 | 1.35 | 1.26 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S78. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 6

| | g. | p. | i. | h. |
|--------------------------|--------|--------|--------|--------|
| get.v.01 | 17.33 | 16.36 | 18.12 | 17.42 |
| offer.v.07 | 11.80 | 9.86 | 12.30 | 13.54 |
| travel.v.03 | 11.77 | 9.91 | 12.21 | 13.49 |
| act.v.01 | 10.56 | 12.10 | 10.56 | 8.64 |
| travel.v.01 | 8.68 | 10.54 | 8.48 | 6.63 |
| use.v.01 | 7.32 | 8.41 | 6.13 | 7.64 |
| move.v.02 | 6.10 | 7.03 | 6.32 | 4.62 |
| make.v.03 | 6.05 | 6.57 | 5.97 | 5.50 |
| change.v.02 | 6.04 | 5.72 | 5.77 | 6.82 |
| think.v.03 | 6.01 | 5.37 | 5.75 | 7.20 |
| change.v.01 | 4.96 | 4.61 | 4.83 | 5.57 |
| be.v.01 | 3.38 | 3.53 | 3.56 | 2.94 |
| | | | | |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| receive.v.01 | 19.31 | 18.49 | 20.10 | 19.18 |
| subscribe.v.01 | 18.19 | 16.42 | 18.92 | 19.11 |
| travel.v.02 | 18.14 | 16.51 | 18.78 | 19.05 |
| interact.v.01 | 9.43 | 11.36 | 9.50 | 7.27 |
| evaluate.v.02 | 7.34 | 6.70 | 6.71 | 8.82 |
| keep.v.03 | 4.93 | 5.56 | 4.05 | 5.39 |
| try.v.01 | 4.34 | 5.79 | 4.36 | 2.74 |
| travel_rapidly.v.01 | 4.23 | 5.18 | 3.76 | 3.80 |
| state.v.01 | 4.11 | 3.96 | 4.00 | 4.40 |
| put.v.01 | 3.89 | 4.16 | 4.12 | 3.31 |
| see.v.01 | 3.21 | 3.06 | 2.90 | 3.77 |
| change_magnitude.v.01 | 2.90 | 2.80 | 2.78 | 3.15 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| tour.v.01 | 36.31 | 30.72 | 38.39 | 40.33 |
| communicate.v.02 | 13.12 | 13.92 | 13.25 | 11.95 |
| run.v.01 | 8.47 | 9.64 | 7.71 | 8.05 |
| save.v.02 | 7.58 | 8.18 | 6.19 | 8.71 |
| think.v.01 | 5.93 | 4.12 | 5.45 | 8.78 |
| increase.v.01 | 5.54 | 5.09 | 5.45 | 6.20 |
| meet.v.07 | 4.91 | 6.28 | 5.60 | 2.31 |
| nest.v.01 | 4.13 | 5.04 | 5.65 | 0.99 |
| name.v.01 | 3.74 | 5.96 | 2.75 | 2.38 |
| expect.v.01 | 3.71 | 3.36 | 3.73 | 4.09 |
| declare.v.01 | 3.33 | 3.52 | 3.09 | 3.43 |
| represent.v.09 | 3.24 | 4.17 | 2.75 | 2.77 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| visit.v.01 | 47.56 | 42.89 | 49.53 | 50.08 |
| inform.v.01 | 11.94 | 12.56 | 13.05 | 9.84 |
| record.v.01 | 9.92 | 11.42 | 7.98 | 10.82 |
| cluster.v.01 | 6.43 | 8.77 | 7.22 | 2.87 |
| add.v.01 | 5.90 | 5.67 | 5.89 | 6.15 |
| map.v.01 | 4.08 | 5.60 | 3.29 | 3.44 |
| unify.v.01 | 3.03 | 1.74 | 2.91 | 4.59 |
| propose.v.01 | 2.74 | 3.33 | 2.34 | 2.62 |
| propose.v.01 see.v.05 | | | | |
| | 2.55 | 1.44 | 1.77 | 4.75 |
| filter.v.01 | 2.52 | 2.50 | 3.55 | 1.23 |
| address.v.01 | 1.80 | 2.72 | 0.89 | 1.97 |
| promise.v.01 | 1.53 | 1.36 | 1.58 | 1.64 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S79. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.43 | 1.39 | 1.43 | 1.48 |
| $\sigma(mindepth)$ | 1.46 | 1.47 | 1.46 | 1.46 |
| $\mu(max depth)$ | 1.43 | 1.39 | 1.43 | 1.48 |
| $\sigma(maxdepth)$ | 1.46 | 1.47 | 1.46 | 1.46 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.08 | 0.07 | 0.09 | 0.10 |
| $\sigma(domains)$ | 0.28 | 0.25 | 0.28 | 0.29 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.48 | 0.47 | 0.48 | 0.50 |
| $\sigma(verbgroups)$ | 0.58 | 0.58 | 0.59 | 0.58 |
| $\mu(lemmas)$ | 2.84 | 2.84 | 2.81 | 2.89 |
| $\sigma(lemmas)$ | 2.03 | 2.00 | 2.01 | 2.09 |
| $\mu(entailments)$ | 0.03 | 0.03 | 0.03 | 0.02 |
| $\sigma(entailments)$ | 0.17 | 0.17 | 0.17 | 0.16 |
| $\mu(hyponyms)$ | 12.43 | 12.54 | 12.05 | 12.82 |
| $\sigma(hyponyms)$ | 33.76 | 33.18 | 32.12 | 36.61 |
| $\mu(hypernyms)$ | 0.73 | 0.71 | 0.74 | 0.75 |
| $\sigma(hypernyms)$ | 0.45 | 0.46 | 0.45 | 0.45 |

TABLE S80. Measures of wordnet features in each Erdös sector (${f p}_{f \cdot}$ for periphery, ${f i}_{f \cdot}$ for intermediary, ${f h}_{f \cdot}$ for hubs). TAG: 6

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| besides.r.02 | 19.09 | 19.58 | 17.97 | 19.95 |
| possibly.r.01 | 10.83 | 8.20 | 7.82 | 16.92 |
| still.r.01 | 10.67 | 10.32 | 12.90 | 8.33 |
| truly.r.01 | 8.74 | 4.76 | 11.84 | 8.84 |
| well.r.01 | 8.66 | 8.73 | 7.40 | 10.10 |
| however.r.01 | 7.46 | 12.43 | 6.34 | 4.04 |
| back.r.01 | 7.22 | 6.35 | 8.67 | 6.31 |
| even.r.01 | 6.58 | 8.47 | 5.07 | 6.57 |
| alternatively.r.01 | 6.01 | 7.94 | 4.86 | 5.56 |
| much.r.01 | 5.29 | 3.97 | 6.77 | 4.80 |
| already.r.01 | 5.13 | 4.76 | 5.29 | 5.30 |
| actually.r.01 | 4.33 | 4.50 | 5.07 | 3.28 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S81. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.08 | 0.08 | 0.08 | 0.08 |
| $\sigma(domains)$ | 0.27 | 0.26 | 0.27 | 0.27 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.15 | 3.27 | 3.08 | 3.09 |
| $\sigma(lemmas)$ | 2.19 | 2.35 | 2.14 | 2.08 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S82. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 6

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 24.91 | 29.24 | 25.88 | 23.90 |
| X | 0.26 | 0.16 | 0.56 | 0.11 |
| ADP | 12.01 | 12.00 | 12.00 | 12.01 |
| DET | 12.28 | 11.41 | 11.77 | 12.66 |
| VERB | 22.89 | 21.89 | 22.72 | 23.09 |
| ADJ | 5.52 | 5.57 | 5.50 | 5.52 |
| ADV | 7.38 | 6.41 | 7.34 | 7.51 |
| PRT | 4.01 | 3.46 | 3.74 | 4.21 |
| PRON | 7.33 | 6.26 | 6.94 | 7.67 |
| NUM | 0.60 | 0.70 | 0.69 | 0.54 |
| CONJ | 2.81 | 2.89 | 2.86 | 2.78 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 52.04 | 57.71 | 53.91 | 50.25 |
| ADJ | 11.45 | 10.15 | 11.14 | 11.80 |
| VERB | 7.12 | 5.48 | 6.39 | 7.74 |
| ADV | 29.39 | 26.66 | 28.57 | 30.21 |
| POS | 32.88 | 32.71 | 31.73 | 33.60 |
| POS! | 95.14 | 95.76 | 94.29 | 95.56 |

TABLE S83. 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 | 70.57 | 70.44 | 71.22 | 70.19 |
| physical_entity.n.01 | 29.43 | 29.56 | 28.78 | 29.81 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| psychological_feature.n.01 | 24.89 | 20.04 | 23.65 | 26.36 |
| object.n.01 | 17.05 | 17.69 | 18.06 | 16.34 |
| communication.n.02 | 12.97 | 15.12 | 13.18 | 12.52 |
| measure.n.02 | 12.30 | 17.79 | 14.90 | 9.90 |
| attribute.n.02 | 10.18 | 7.77 | 9.37 | 11.03 |
| causal_agent.n.01 | 7.99 | 6.07 | 6.50 | 9.18 |
| group.n.01 | 6.82 | 6.94 | 6.90 | 6.75 |
| relation.n.01 | 3.41 | 2.79 | 3.21 | 3.62 |
| matter.n.03 | 3.25 | 4.95 | 3.11 | 3.08 |
| process.n.06 | 0.79 | 0.58 | 0.85 | 0.78 |
| thing.n.12 | 0.36 | 0.27 | 0.27 | 0.43 |
| set.n.02 | 0.00 | 0.00 | 0.01 | 0.00 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| event.n.01 | 16.76 | 15.35 | 15.71 | 17.60 |
| whole.n.02 | 15.23 | 16.54 | 16.57 | 14.22 |
| cognition.n.01 | 14.07 | 9.64 | 13.66 | 14.97 |
| definite_quantity.n.01 | 11.84 | 17.76 | 15.12 | 8.97 |
| person.n.01 | 9.89 | 7.42 | 8.03 | 11.39 |
| message.n.02 | 6.34 | 7.17 | 6.57 | 6.07 |
| state.n.02 | 5.51 | 4.36 | 4.80 | 6.12 |
| written_communication.n.01 | 5.33 | 5.43 | 5.09 | 5.46 |
| location.n.01 | 4.64 | 4.79 | 4.82 | 4.50 |
| collection.n.01 | 4.46 | 4.21 | 4.03 | 4.76 |
| trait.n.01 | 2.97 | 2.38 | 2.54 | 3.32 |
| substance.n.01 | 2.96 | 4.94 | 3.06 | 2.62 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S84. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 6.34 | 6.43 | 6.43 | 6.27 |
| $\sigma(mindepth)$ | 1.96 | 2.09 | 1.98 | 1.92 |
| $\mu(max depth)$ | 6.64 | 6.70 | 6.68 | 6.61 |
| $\sigma(max depth)$ | 2.13 | 2.15 | 2.10 | 2.14 |
| $\mu(holonyms)$ | 0.13 | 0.13 | 0.14 | 0.12 |
| $\sigma(holonyms)$ | 0.67 | 0.36 | 0.73 | 0.67 |
| $\mu(meronyms)$ | 0.32 | 0.28 | 0.34 | 0.31 |
| $\sigma(meronyms)$ | 1.65 | 1.85 | 1.70 | 1.58 |
| $\mu(domains)$ | 0.05 | 0.06 | 0.05 | 0.05 |
| $\sigma(domains)$ | 0.23 | 0.24 | 0.23 | 0.23 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.85 | 3.08 | 2.97 | 2.74 |
| $\sigma(lemmas)$ | 2.73 | 3.04 | 2.90 | 2.56 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 9.29 | 8.16 | 8.41 | 9.99 |
| $\sigma(hyponyms)$ | 28.09 | 26.68 | 24.26 | 30.36 |
| $\mu(hypernyms)$ | 1.03 | 1.04 | 1.02 | 1.04 |
| $\sigma(hypernyms)$ | 0.18 | 0.21 | 0.15 | 0.19 |

TABLE S85. Measures of wordnet features in each Erdös sector (${f p}_{f \cdot}$ for periphery, ${f i}_{f \cdot}$ for intermediary, ${f h}_{f \cdot}$ for hubs). TAG: 7

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| like.a.01 | 24.48 | 17.65 | 23.44 | 26.01 |
| new.a.01 | 13.39 | 17.65 | 11.51 | 13.93 |
| good.a.01 | 8.31 | 7.69 | 10.48 | 7.12 |
| certain.a.02 | 7.53 | 5.88 | 7.37 | 7.85 |
| small.a.01 | 7.00 | 7.24 | 6.74 | 7.12 |
| all_right.s.01 | 6.25 | 4.98 | 7.26 | 5.83 |
| different.a.01 | 6.11 | 5.88 | 5.60 | 6.44 |
| last.s.01 | 5.93 | 13.12 | 7.26 | 4.17 |
| easy.a.01 | 5.58 | 3.62 | 5.29 | 6.01 |
| many.a.01 | 5.26 | 4.07 | 5.29 | 5.40 |
| first.a.01 | 5.08 | 6.79 | 5.50 | 4.60 |
| simple.a.01 | 5.08 | 5.43 | 4.25 | 5.52 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S86. 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. |
|-----------------------|------|------|------|------|
| | 8. | р. | | |
| $ \mu(mindepth) $ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.06 | 0.06 | 0.05 | 0.07 |
| $\sigma(domains)$ | 0.24 | 0.24 | 0.23 | 0.25 |
| $\mu(similar)$ | 5.90 | 6.08 | 5.67 | 6.00 |
| $\sigma(similar)$ | 6.79 | 6.50 | 6.41 | 7.02 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.79 | 1.63 | 1.73 | 1.84 |
| $\sigma(lemmas)$ | 1.64 | 1.36 | 1.47 | 1.75 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S87. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 7

| | g. | p. | i. | h. |
|-----------------------|--------|--------|--------|--------|
| think.v.03 | 12.75 | 9.43 | 11.82 | 13.64 |
| act.v.01 | 12.43 | 12.81 | 13.27 | 11.92 |
| make.v.03 | 10.83 | 11.83 | 10.61 | 10.84 |
| travel.v.01 | 9.94 | 11.21 | 9.85 | 9.84 |
| change.v.01 | 9.68 | 8.19 | 10.27 | 9.53 |
| use.v.01 | 9.08 | 10.94 | 8.89 | 8.96 |
| move.v.02 | 8.42 | 11.57 | 9.24 | 7.62 |
| change.v.02 | 6.53 | 5.69 | 6.88 | 6.44 |
| get.v.01 | 5.60 | 5.34 | 5.72 | 5.57 |
| make.v.01 | 5.19 | 5.60 | 4.32 | 5.61 |
| be.v.01 | 4.96 | 4.54 | 4.80 | 5.10 |
| express.v.02 | 4.59 | 2.85 | 4.32 | 4.94 |
| total | 100.00 | | 100.00 | 100.00 |
| | l | | | |
| evaluate.v.02 | 21.32 | 12.58 | 18.86 | 23.85 |
| interact.v.01 | 14.48 | 10.91 | 14.41 | 14.97 |
| put.v.01 | 9.96 | 15.77 | 10.66 | 8.81 |
| state.v.01 | 9.20 | 5.37 | 8.35 | 10.18 |
| construct.v.01 | 6.97 | 10.07 | 7.02 | 6.54 |
| try.v.01 | 6.55 | 8.72 | 6.76 | 6.16 |
| see.v.01 | 6.37 | 4.36 | 6.50 | 6.54 |
| label.v.01 | 5.50 | 9.90 | 6.05 | 4.62 |
| travel_rapidly.v.01 | 5.42 | 6.88 | 6.13 | 4.83 |
| change_magnitude.v.01 | 5.03 | 3.69 | 5.79 | 4.77 |
| look.v.02 | 4.83 | 6.54 | 4.94 | 4.56 |
| keep.v.03 | 4.37 | 5.20 | 4.53 | 4.17 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 21.25 | 15.27 | 20.94 | 22.23 |
| think.v.01 | 16.04 | 10.18 | 14.65 | 17.65 |
| name.v.01 | 8.54 | 15.01 | 9.32 | 7.22 |
| run.v.01 | 8.40 | 10.43 | 9.38 | 7.56 |
| increase.v.01 | 7.68 | 5.60 | 8.70 | 7.35 |
| write.v.01 | 6.66 | 5.09 | 6.86 | 6.75 |
| install.v.01 | 6.39 | 20.10 | 8.12 | 3.54 |
| save.v.02 | 5.76 | 6.11 | 5.66 | 5.77 |
| declare.v.01 | 5.23 | 3.82 | 4.52 | 5.84 |
| supply.v.01 | 4.86 | 2.80 | 2.97 | 6.24 |
| repair.v.01 | 4.74 | 3.31 | 4.86 | 4.86 |
| disapprove.v.02 | 4.45 | 2.29 | 4.00 | 4.99 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| inform.v.01 | 29.08 | 34.85 | 31.74 | 27.17 |
| add.v.01 | 15.36 | 15.91 | 18.06 | 13.89 |
| record.v.01 | 12.34 | 18.18 | 12.77 | 11.59 |
| object.v.01 | 8.90 | 6.06 | 8.77 | 9.21 |
| believe.v.01 | 6.71 | 3.03 | 2.45 | 9.28 |
| propose.v.01 | 5.58 | 6.82 | 5.55 | 5.49 |
| talk.v.02 | 4.62 | 1.52 | 3.23 | 5.62 |
| ask.v.01 | 3.73 | 3.03 | 4.77 | 3.25 |
| promise.v.01 | 3.69 | 3.03 | 3.23 | 4.00 |
| think.v.02 | 3.52 | 1.52 | 3.10 | 3.93 |
| see.v.05 | 3.27 | 4.55 | 3.87 | 2.85 |
| talk.v.01 | 3.19 | 1.52 | 2.45 | 3.73 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| | | | | |

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: 7

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.29 | 1.28 | 1.30 | 1.29 |
| $\sigma(mindepth)$ | 1.47 | 1.43 | 1.46 | 1.47 |
| $\mu(max depth)$ | 1.29 | 1.28 | 1.30 | 1.29 |
| $\sigma(max depth)$ | 1.47 | 1.43 | 1.46 | 1.48 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.03 | 0.03 | 0.03 | 0.03 |
| $\sigma(domains)$ | 0.16 | 0.17 | 0.17 | 0.16 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.46 | 0.48 | 0.47 | 0.46 |
| $\sigma(verbgroups)$ | 0.61 | 0.63 | 0.62 | 0.61 |
| $\mu(lemmas)$ | 3.17 | 3.06 | 3.13 | 3.21 |
| $\sigma(lemmas)$ | 2.17 | 1.97 | 2.11 | 2.22 |
| $\mu(entailments)$ | 0.05 | 0.05 | 0.05 | 0.04 |
| $\sigma(entailments)$ | 0.22 | 0.22 | 0.22 | 0.21 |
| $\mu(hyponyms)$ | 16.81 | 16.53 | 16.79 | 16.86 |
| $\sigma(hyponyms)$ | 42.18 | 44.95 | 42.75 | 41.54 |
| $\mu(hypernyms)$ | 0.64 | 0.66 | 0.64 | 0.63 |
| $\sigma(hypernyms)$ | 0.48 | 0.48 | 0.48 | 0.49 |

TABLE S89. Measures of wordnet features in each Erdös sector (${f p}_{f \cdot}$ for periphery, ${f i}_{f \cdot}$ for intermediary, ${f h}_{f \cdot}$ for hubs). TAG: 7

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| besides.r.02 | 17.62 | 21.43 | 17.63 | 17.25 |
| well.r.01 | 11.29 | 12.34 | 11.32 | 11.18 |
| truly.r.01 | 9.85 | 9.74 | 10.66 | 9.48 |
| possibly.r.01 | 9.49 | 5.19 | 11.18 | 9.10 |
| actually.r.01 | 7.85 | 1.30 | 6.05 | 9.35 |
| still.r.01 | 7.21 | 7.14 | 7.37 | 7.14 |
| however.r.01 | 7.13 | 8.44 | 6.71 | 7.20 |
| probably.r.01 | 6.73 | 7.79 | 5.66 | 7.14 |
| even.r.01 | 6.09 | 3.90 | 6.71 | 6.00 |
| alternatively.r.01 | 5.81 | 11.69 | 4.87 | 5.69 |
| right.r.01 | 5.57 | 5.19 | 6.05 | 5.37 |
| already.r.01 | 5.37 | 5.84 | 5.79 | 5.12 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S90. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.10 | 0.10 | 0.09 | 0.11 |
| $\sigma(domains)$ | 0.30 | 0.30 | 0.29 | 0.31 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.18 | 3.17 | 3.10 | 3.22 |
| $\sigma(lemmas)$ | 2.16 | 2.12 | 2.12 | 2.18 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S91. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 7

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 34.96 | 34.00 | 35.52 | 34.88 |
| X | 0.54 | 0.18 | 0.29 | 0.74 |
| ADP | 10.26 | 10.55 | 10.48 | 10.08 |
| DET | 9.65 | 10.98 | 9.88 | 9.23 |
| VERB | 23.31 | 23.05 | 21.96 | 24.06 |
| ADJ | 4.91 | 4.96 | 5.11 | 4.80 |
| ADV | 5.56 | 5.36 | 5.77 | 5.50 |
| PRT | 3.11 | 3.00 | 2.88 | 3.25 |
| PRON | 4.71 | 4.77 | 4.79 | 4.66 |
| NUM | 0.73 | 0.76 | 0.81 | 0.69 |
| CONJ | 2.27 | 2.39 | 2.51 | 2.12 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 60.30 | 60.79 | 60.61 | 60.03 |
| ADJ | 8.17 | 8.13 | 9.07 | 7.73 |
| VERB | 4.25 | 3.76 | 4.72 | 4.11 |
| ADV | 27.28 | 27.32 | 25.60 | 28.12 |
| POS | 30.76 | 32.38 | 31.61 | 30.02 |
| POS! | 91.53 | 91.10 | 93.73 | 90.56 |

TABLE S92. 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 | 70.26 | 70.15 | 68.21 | 71.33 |
| physical_entity.n.01 | 29.72 | 29.85 | 31.76 | 28.65 |
| thing.n.08 | 0.02 | 0.00 | 0.03 | 0.02 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| measure.n.02 | 24.19 | 24.11 | 23.77 | 24.41 |
| psychological_feature.n.01 | 18.88 | 19.12 | 17.72 | 19.42 |
| object.n.01 | 16.64 | 15.95 | 17.77 | 16.23 |
| communication.n.02 | 15.75 | 13.97 | 15.18 | 16.44 |
| causal_agent.n.01 | 7.35 | 8.07 | 6.65 | 7.54 |
| attribute.n.02 | 5.45 | 6.37 | 5.70 | 5.12 |
| matter.n.03 | 4.48 | 4.71 | 6.12 | 3.60 |
| group.n.01 | 3.28 | 3.72 | 3.24 | 3.20 |
| relation.n.01 | 2.71 | 2.86 | 2.59 | 2.73 |
| process.n.06 | 0.70 | 0.55 | 0.63 | 0.77 |
| thing.n.12 | 0.55 | 0.57 | 0.60 | 0.52 |
| whacker.n.01 | 0.02 | 0.00 | 0.03 | 0.02 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| definite_quantity.n.01 | 24.41 | 25.48 | 23.07 | 24.86 |
| event.n.01 | 16.41 | 17.04 | 15.06 | 16.96 |
| whole.n.02 | 16.02 | 15.51 | 17.11 | 15.58 |
| message.n.02 | 8.80 | 7.89 | 7.14 | 9.85 |
| person.n.01 | 8.57 | 9.48 | 7.72 | 8.80 |
| cognition.n.01 | 5.62 | 5.42 | 5.49 | 5.73 |
| written_communication.n.01 | 4.79 | 4.64 | 6.24 | 4.09 |
| substance.n.01 | 4.66 | 4.60 | 6.24 | 3.87 |
| state.n.02 | 3.17 | 3.44 | 3.42 | 2.99 |
| location.n.01 | 3.03 | 2.65 | 3.15 | 3.06 |
| fundamental_quantity.n.01 | 2.36 | 1.27 | 3.22 | 2.16 |
| property.n.02 | 2.14 | 2.57 | 2.13 | 2.06 |
| 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: 8

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.79 | 6.67 | 6.76 | 6.84 |
| $\sigma(mindepth)$ | 1.61 | 1.60 | 1.63 | 1.60 |
| $\mu(max depth)$ | 7.09 | 7.00 | 7.05 | 7.13 |
| $\sigma(max depth)$ | 1.75 | 1.75 | 1.75 | 1.74 |
| $\mu(holonyms)$ | 0.14 | 0.13 | 0.17 | 0.13 |
| $\sigma(holonyms)$ | 0.59 | 0.59 | 0.59 | 0.58 |
| $\mu(meronyms)$ | 0.47 | 0.40 | 0.53 | 0.46 |
| $\sigma(meronyms)$ | 2.70 | 2.84 | 3.30 | 2.30 |
| $\mu(domains)$ | 0.06 | 0.07 | 0.08 | 0.05 |
| $\sigma(domains)$ | 0.27 | 0.27 | 0.30 | 0.25 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.19 | 3.11 | 3.20 | 3.21 |
| $\sigma(lemmas)$ | 2.74 | 2.54 | 2.84 | 2.73 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 5.47 | 6.05 | 5.63 | 5.26 |
| $\sigma(hyponyms)$ | 19.17 | 24.09 | 20.16 | 17.33 |
| $\mu(hypernyms)$ | 1.04 | 1.04 | 1.04 | 1.03 |
| $\sigma(hypernyms)$ | 0.21 | 0.23 | 0.22 | 0.20 |

TABLE S94. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 8

| | g. | p. | i. | h. |
|-----------------|--------|--------|--------|--------|
| like.a.01 | 15.59 | 26.07 | 18.23 | 13.12 |
| new.a.01 | 13.01 | 13.27 | 22.03 | 9.34 |
| capable.s.02 | 9.31 | 3.32 | 2.22 | 12.99 |
| net.a.01 | 8.90 | 4.27 | 9.83 | 9.15 |
| commercial.a.01 | 8.44 | 0.47 | 1.74 | 12.22 |
| best.a.01 | 8.40 | 6.16 | 3.80 | 10.56 |
| available.a.01 | 6.69 | 7.58 | 7.92 | 6.08 |
| incorrect.a.01 | 6.49 | 9.95 | 6.50 | 6.01 |
| certain.a.02 | 6.32 | 6.16 | 7.13 | 6.01 |
| possible.a.01 | 6.32 | 7.58 | 6.81 | 5.95 |
| last.s.01 | 5.61 | 7.58 | 7.61 | 4.54 |
| correct.a.01 | 4.91 | 7.58 | 6.18 | 4.03 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S95. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.07 | 0.06 | 0.05 | 0.08 |
| $\sigma(domains)$ | 0.25 | 0.23 | 0.22 | 0.27 |
| $\mu(similar)$ | 5.30 | 5.52 | 5.30 | 5.24 |
| $\sigma(similar)$ | 6.42 | 7.10 | 6.35 | 6.30 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.75 | 1.76 | 1.74 | 1.77 |
| $\sigma(lemmas)$ | 1.34 | 1.40 | 1.24 | 1.38 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S96. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 8

| | g. | p. | i. | h. |
|---------------------------|-------------|--------------|---------------------|--------|
| mean.v.03 | 16.88 | 15.40 | 14.80 | 18.00 |
| change.v.01 | 14.78 | 13.45 | 14.67 | 15.09 |
| move.v.02 | 13.51 | 13.75 | 14.52 | 13.05 |
| act.v.01 | 9.69 | 11.98 | 10.25 | 9.02 |
| think.v.03 | 8.41 | 6.87 | 7.72 | 8.99 |
| make.v.01 | 7.81 | 4.21 | 4.71 | 9.75 |
| use.v.01 | 6.58 | 9.47 | 8.57 | 5.22 |
| travel.v.01 | 6.25 | 9.17 | 6.47 | 5.58 |
| make.v.03 | 5.35 | 6.35 | 6.64 | 4.64 |
| express.v.02 | 3.84 | 2.48 | 3.55 | 4.22 |
| change.v.02 | 3.51 | 3.16 | 4.61 | 3.14 |
| be.v.01 | 3.40 | 3.72 | 3.48 | 3.30 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| denote.v.02 | 26.67 | 26.83 | 24.69 | 27.36 |
| transmit.v.04 | 13.40 | 13.48 | 12.44 | 13.73 |
| automatize.v.02 | 13.32 | 13.42 | 12.34 | 13.66 |
| evaluate.v.02 | 10.74 | 8.51 | 10.30 | 11.28 |
| interact.v.01 | 10.20 | 12.70 | 12.16 | 9.07 |
| state.v.01 | 6.07 | 4.32 | 5.92 | 6.42 |
| see.v.01 | 4.34 | 3.08 | 4.37 | 4.54 |
| put.v.01 | 3.52 | 4.38 | 3.60 | 3.34 |
| keep.v.03 | 3.25 | 4.91 | 3.16 | 3.00 |
| change_magnitude.v.01 | 2.95 | 3.14 | 4.71 | 2.28 |
| construct.v.01 | 2.80 | 3.08 | 3.13 | 2.64 |
| label.v.01 | 2.74 | 2.16 | 3.16 | 2.69 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| name.v.02 | 37.34 | 36.32 | 33.81 | 38.85 |
| send.v.02 | 18.69 | 18.25 | 16.91 | 19.44 |
| communicate.v.02 | 13.36 | 16.65 | 15.80 | 11.85 |
| think.v.01 | 6.12 | 3.54 | 5.82 | 6.69 |
| increase.v.01 | 4.07 | 4.25 | 6.41 | 3.15 |
| expect.v.01 | 3.96 | 2.04 | 2.51 | 4.84 |
| name.v.01 | 3.84 | 2.92 | 4.33 | 3.82 |
| store.v.01 | 2.94 | 4.34 | 3.10 | 2.63 |
| run.v.01 | 2.88 | 3.28 | 3.36 | 2.63 |
| coincide.v.01 | 2.47 | 3.54 | 2.93 | 2.10 |
| repair.v.01 write.v.01 | 2.23 | 1.86 3.01 | $\frac{2.17}{2.85}$ | 2.33 |
| total | 100.00 | 100.00 | 100.00 | 1.00 |
| | | | | |
| enumerate.v.01 | 45.19 | 42.14 | 42.75 | 46.63 |
| mail.v.01 | 22.62 | 21.17 | 21.37 | 23.34 |
| inform.v.01 | 10.39 | 11.72 | 11.65 | 9.70 |
| add.v.01 | 4.23 | 4.52 1.34 | 6.44 | 3.39 |
| see.v.05 roll_up.v.02 | 3.51 | | 2.09 | 4.42 |
| overlap.v.01 | 3.00 | 4.93 | | 2.75 |
| write.v.02 | 2.99 | 4.11 | 3.71 | 2.52 |
| record.v.01 | 2.13 | 3.80 | 2.95 1.50 | 1.53 |
| propose.v.01 | 1.90 | 1.13 | 1.93 | 1.93 |
| talk.v.02 | 1.55 | 1.13 | 1.93 | 1.49 |
| believe.v.01 | 1.27 | 1.13 | 1.40 | 1.24 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| | 1 2 3 . 0 0 | 1-00.00 | | |

TABLE S97. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.66 | 1.67 | 1.55 | 1.71 |
| $\sigma(mindepth)$ | 1.61 | 1.65 | 1.60 | 1.60 |
| $\mu(max depth)$ | 1.66 | 1.67 | 1.56 | 1.71 |
| $\sigma(max depth)$ | 1.61 | 1.65 | 1.61 | 1.61 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.02 | 0.02 | 0.02 | 0.01 |
| $\sigma(domains)$ | 0.12 | 0.14 | 0.12 | 0.12 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.38 | 0.35 | 0.36 | 0.39 |
| $\sigma(verbgroups)$ | 0.58 | 0.58 | 0.57 | 0.58 |
| $\mu(lemmas)$ | 2.95 | 3.01 | 2.96 | 2.93 |
| $\sigma(lemmas)$ | 1.94 | 1.96 | 1.91 | 1.95 |
| $\mu(entailments)$ | 0.04 | 0.05 | 0.04 | 0.04 |
| $\sigma(entailments)$ | 0.20 | 0.21 | 0.20 | 0.19 |
| $\mu(hyponyms)$ | 12.10 | 10.44 | 13.22 | 11.94 |
| $\sigma(hyponyms)$ | 37.95 | 26.92 | 38.97 | 39.44 |
| $\mu(hypernyms)$ | 0.70 | 0.72 | 0.66 | 0.71 |
| $\sigma(hypernyms)$ | 0.46 | 0.45 | 0.48 | 0.45 |

TABLE S98. Measures of wordnet features in each Erdös sector (${f p}_{f \cdot}$ for periphery, ${f i}_{f \cdot}$ for intermediary, ${f h}_{f \cdot}$ for hubs). TAG: 8

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| besides.r.02 | 14.16 | 19.02 | 15.04 | 12.71 |
| presently.r.02 | 9.71 | 4.39 | 18.44 | 5.30 |
| still.r.01 | 9.41 | 9.76 | 10.47 | 8.68 |
| well.r.01 | 9.36 | 10.73 | 9.44 | 9.05 |
| truly.r.01 | 8.90 | 7.80 | 8.11 | 9.60 |
| however.r.01 | 7.89 | 8.78 | 5.60 | 9.14 |
| even.r.01 | 7.89 | 8.78 | 9.44 | 6.76 |
| possibly.r.01 | 7.79 | 10.24 | 5.90 | 8.50 |
| already.r.01 | 6.83 | 6.34 | 4.87 | 8.14 |
| alternatively.r.01 | 6.32 | 4.39 | 4.57 | 7.77 |
| far.r.01 | 5.87 | 4.39 | 3.10 | 7.86 |
| probably.r.01 | 5.87 | 5.37 | 5.01 | 6.49 |
| 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: 8

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| | | | 0.00 | 0.00 |
| $\mu(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.09 | 0.06 | 0.09 | 0.09 |
| $\sigma(domains)$ | 0.28 | 0.24 | 0.29 | 0.28 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.13 | 3.19 | 3.02 | 3.19 |
| $\sigma(lemmas)$ | 2.16 | 2.27 | 2.05 | 2.20 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S100. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 8

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 25.97 | 30.18 | 27.02 | 24.16 |
| X | 0.29 | 0.12 | 0.50 | 0.14 |
| ADP | 11.96 | 11.00 | 11.61 | 12.47 |
| DET | 11.77 | 11.82 | 11.83 | 11.70 |
| VERB | 23.38 | 22.26 | 22.82 | 24.12 |
| ADJ | 6.19 | 5.41 | 5.89 | 6.62 |
| ADV | 6.92 | 5.85 | 6.76 | 7.29 |
| PRT | 3.89 | 3.41 | 3.87 | 4.01 |
| PRON | 6.09 | 5.74 | 6.02 | 6.23 |
| NUM | 0.80 | 1.49 | 0.76 | 0.71 |
| CONJ | 2.74 | 2.74 | 2.91 | 2.58 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 53.26 | 59.31 | 54.09 | 51.16 |
| ADJ | 12.01 | 9.40 | 11.46 | 13.09 |
| VERB | 6.71 | 4.65 | 6.50 | 7.35 |
| ADV | 28.02 | 26.64 | 27.95 | 28.40 |
| POS | 35.30 | 32.75 | 34.04 | 37.24 |
| POS! | 95.26 | 94.71 | 94.50 | 96.11 |

TABLE S101. 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 | 68.64 | 68.31 | 68.58 | 68.79 |
| physical_entity.n.01 | 31.36 | 31.69 | 31.42 | 31.21 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| psychological_feature.n.01 | 21.97 | 20.95 | 20.52 | 23.67 |
| communication.n.02 | 15.14 | 16.03 | 15.46 | 14.60 |
| object.n.01 | 15.13 | 15.79 | 14.55 | 15.52 |
| measure.n.02 | 13.37 | 18.24 | 14.74 | 10.77 |
| attribute.n.02 | 8.48 | 6.01 | 7.99 | 9.61 |
| causal_agent.n.01 | 8.10 | 8.84 | 8.20 | 7.82 |
| group.n.01 | 5.78 | 3.73 | 5.82 | 6.25 |
| relation.n.01 | 3.90 | 3.35 | 4.05 | 3.89 |
| matter.n.03 | 3.71 | 3.53 | 4.51 | 2.97 |
| thing.n.12 | 3.45 | 2.30 | 3.04 | 4.16 |
| process.n.06 | 0.96 | 1.23 | 1.12 | 0.74 |
| set.n.02 | 0.01 | 0.00 | 0.01 | 0.01 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| event.n.01 | 17.21 | 15.73 | 17.26 | 17.56 |
| whole.n.02 | 15.06 | 13.77 | 14.67 | 15.78 |
| definite_quantity.n.01 | 14.03 | 19.81 | 16.12 | 10.44 |
| cognition.n.01 | 11.20 | 9.88 | 9.67 | 13.06 |
| person.n.01 | 10.39 | 10.46 | 10.67 | 10.09 |
| message.n.02 | 8.26 | 9.49 | 7.51 | 8.67 |
| part.n.03 | 4.30 | 2.84 | 3.76 | 5.21 |
| message.n.01 | 4.24 | 3.89 | 5.24 | 3.34 |
| state.n.02 | 4.09 | 3.50 | 3.82 | 4.51 |
| written_communication.n.01 | 3.89 | 4.53 | 3.89 | 3.72 |
| location.n.01 | 3.71 | 4.22 | 3.44 | 3.84 |
| property.n.02 | 3.62 | 1.88 | 3.95 | 3.78 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S102. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.23 | 6.42 | 6.16 | 6.25 |
| $\sigma(mindepth)$ | 1.74 | 1.72 | 1.72 | 1.77 |
| $\mu(max depth)$ | 6.54 | 6.74 | 6.49 | 6.54 |
| $\sigma(max depth)$ | 1.91 | 1.86 | 1.88 | 1.94 |
| $\mu(holonyms)$ | 0.16 | 0.14 | 0.16 | 0.17 |
| $\sigma(holonyms)$ | 0.69 | 0.58 | 0.72 | 0.68 |
| $\mu(meronyms)$ | 0.30 | 0.45 | 0.28 | 0.28 |
| $\sigma(meronyms)$ | 2.05 | 4.02 | 1.59 | 1.67 |
| $\mu(domains)$ | 0.08 | 0.07 | 0.08 | 0.07 |
| $\sigma(domains)$ | 0.27 | 0.27 | 0.28 | 0.26 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.80 | 2.96 | 2.85 | 2.71 |
| $\sigma(lemmas)$ | 2.54 | 2.64 | 2.57 | 2.48 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 8.55 | 7.02 | 9.17 | 8.33 |
| $\sigma(hyponyms)$ | 28.89 | 21.03 | 34.08 | 24.70 |
| $\mu(hypernyms)$ | 1.03 | 1.03 | 1.03 | 1.02 |
| $\sigma(hypernyms)$ | 0.17 | 0.17 | 0.19 | 0.16 |

TABLE S103. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 9

| | g. | p. | i. | h. |
|-----------------|--------|--------|--------|--------|
| like.a.01 | 21.86 | 21.85 | 22.03 | 21.73 |
| new.a.01 | 12.41 | 17.88 | 10.15 | 13.28 |
| different.a.01 | 8.29 | 7.28 | 9.08 | 7.85 |
| individual.a.01 | 7.60 | 3.97 | 6.01 | 9.36 |
| good.a.01 | 6.97 | 2.65 | 6.94 | 7.65 |
| current.a.01 | 6.76 | 5.96 | 6.94 | 6.74 |
| multiple.a.01 | 6.44 | 10.60 | 6.68 | 5.63 |
| many.a.01 | 6.23 | 6.62 | 5.34 | 6.84 |
| able.a.01 | 6.23 | 5.96 | 8.41 | 4.63 |
| certain.a.02 | 5.97 | 5.30 | 6.68 | 5.53 |
| first.a.01 | 5.81 | 7.95 | 6.54 | 4.93 |
| possible.a.01 | 5.44 | 3.97 | 5.21 | 5.84 |
| 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: 9

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.05 | 0.06 | 0.05 | 0.06 |
| $\sigma(domains)$ | 0.22 | 0.24 | 0.21 | 0.23 |
| $\mu(similar)$ | 5.78 | 5.49 | 5.46 | 6.09 |
| $\sigma(similar)$ | 6.78 | 6.45 | 6.55 | 7.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.65 | 1.71 | 1.63 | 1.66 |
| $\sigma(lemmas)$ | 1.29 | 1.38 | 1.24 | 1.31 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S105. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 9

| | g. | p. | i. | h. |
|-----------------------|---------|--------|--------|--------|
| act.v.01 | 14.31 | 13.78 | 15.15 | 13.62 |
| move.v.02 | 12.19 | 15.73 | 12.34 | 11.29 |
| use.v.01 | 10.82 | 10.71 | 10.43 | 11.22 |
| think.v.03 | 9.83 | 7.82 | 10.82 | 9.31 |
| travel.v.01 | 8.47 | 10.12 | 8.51 | 8.08 |
| make.v.03 | 8.40 | 9.18 | 8.19 | 8.42 |
| change.v.01 | 7.54 | 5.78 | 6.83 | 8.60 |
| get.v.01 | 6.71 | 7.82 | 7.76 | 5.47 |
| be.v.01 | 5.80 | 4.51 | 5.36 | 6.49 |
| connect.v.01 | 5.41 | 7.31 | 5.51 | 4.91 |
| change.v.02 | 5.26 | 4.34 | 4.61 | 6.08 |
| express.v.02 | 5.26 | 2.89 | 4.48 | 6.51 |
| total | | | | |
| | 100.00 | | 100.00 | 100.00 |
| interact.v.01 | 21.83 | 17.88 | 23.08 | 21.48 |
| evaluate.v.02 | 16.87 | 13.83 | 17.79 | 16.65 |
| state.v.01 | 11.22 | 5.73 | 9.15 | 14.73 |
| send.v.01 | 10.56 | 17.37 | 9.85 | 9.66 |
| put.v.01 | 5.78 | 5.06 | 6.70 | 4.99 |
| see.v.01 | 5.65 | 5.06 | 5.45 | 6.01 |
| receive.v.01 | 5.17 | 8.09 | 7.40 | 2.13 |
| change_magnitude.v.01 | 4.80 | 2.87 | 3.85 | 6.26 |
| construct.v.01 | 4.58 | 6.75 | 4.55 | 4.09 |
| look.v.02 | 4.57 | 5.90 | 3.89 | 4.95 |
| keep.v.03 | 4.53 | 8.60 | 4.63 | 3.44 |
| label.v.01 | 4.42 | 2.87 | 3.66 | 5.61 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 32.59 | 33.12 | 34.16 | 30.88 |
| think.v.01 | 14.92 | 11.90 | 15.94 | 14.45 |
| increase.v.01 | 6.87 | 5.47 | 5.53 | 8.52 |
| name.v.01 | 6.87 | 5.47 | 5.59 | 8.46 |
| run.v.01 | 5.93 | 10.61 | 6.98 | 3.95 |
| write.v.01 | 5.82 | 3.22 | 6.31 | 5.81 |
| convey.v.03 | 5.18 | 4.18 | 4.81 | 5.74 |
| declare.v.01 | 4.81 | 4.50 | 3.61 | 6.11 |
| attach.v.03 | 4.76 | 7.72 | 4.09 | 4.88 |
| expect.v.01 | 4.31 | 6.11 | 4.45 | 3.83 |
| save.v.02 | 4.06 | 5.79 | 4.99 | 2.78 |
| supply.v.01 | 3.87 | 1.93 | 3.55 | 4.57 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| inform.v.01 | 33.52 | 29.72 | 36.75 | 31.06 |
| add.v.01 | 10.38 | 5.19 | 8.48 | 13.53 |
| adhere.v.06 | 8.18 | 11.32 | 7.12 | 8.55 |
| communicate.v.01 | 8.13 | 5.66 | 7.64 | 9.20 |
| record.v.01 | 6.98 | 8.49 | 8.69 | 4.87 |
| talk.v.02 | 6.46 | 4.72 | 4.19 | 9.20 |
| propose.v.01 | 5.16 | 2.83 | 4.29 | 6.60 |
| address.v.01 | 4.69 | 3.77 | 6.39 | 3.14 |
| barricade.v.01 | 4.45 | 7.55 | 3.35 | 4.87 |
| ask.v.01 | 4.16 | 0.94 | 6.28 | 2.71 |
| see.v.05 | 4.10 | 6.13 | 4.19 | 3.46 |
| roll_up.v.02 | 3.83 | 13.68 | 2.62 | 2.81 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| 55641 | 1 20.00 | 100.00 | 100.00 | 100.00 |

TABLE S106. Counts for the most incident synsets three step from the semantic roots in each Erdös sector (\mathbf{p} . for periphery, \mathbf{i} . for intermediary, \mathbf{h} . for hubs). TAG: 9

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.37 | 1.35 | 1.40 | 1.35 |
| $\sigma(mindepth)$ | 1.55 | 1.56 | 1.51 | 1.58 |
| $\mu(max depth)$ | 1.37 | 1.35 | 1.40 | 1.35 |
| $\sigma(max depth)$ | 1.55 | 1.56 | 1.51 | 1.58 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.02 | 0.02 | 0.03 | 0.02 |
| $\sigma(domains)$ | 0.15 | 0.13 | 0.17 | 0.14 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.46 | 0.45 | 0.46 | 0.46 |
| $\sigma(verbgroups)$ | 0.61 | 0.59 | 0.61 | 0.62 |
| $\mu(lemmas)$ | 3.20 | 3.26 | 3.20 | 3.19 |
| $\sigma(lemmas)$ | 2.13 | 2.20 | 2.14 | 2.11 |
| $\mu(entailments)$ | 0.05 | 0.05 | 0.05 | 0.05 |
| $\sigma(entailments)$ | 0.22 | 0.23 | 0.23 | 0.22 |
| $\mu(hyponyms)$ | 14.72 | 12.97 | 14.35 | 15.43 |
| $\sigma(hyponyms)$ | 36.91 | 33.11 | 35.99 | 38.45 |
| $\mu(hypernyms)$ | 0.65 | 0.66 | 0.67 | 0.64 |
| $\sigma(hypernyms)$ | 0.48 | 0.48 | 0.47 | 0.48 |

TABLE S107. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 9

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| besides.r.02 | 13.43 | 18.69 | 15.97 | 10.86 |
| truly.r.01 | 10.96 | 14.02 | 14.71 | 7.71 |
| possibly.r.01 | 10.22 | 7.48 | 12.89 | 8.47 |
| however.r.01 | 9.82 | 13.08 | 6.02 | 12.38 |
| still.r.01 | 9.18 | 9.35 | 8.68 | 9.55 |
| well.r.01 | 7.69 | 7.48 | 7.14 | 8.14 |
| therefore.r.01 | 7.63 | 7.48 | 3.50 | 10.86 |
| even.r.01 | 7.52 | 2.80 | 6.72 | 8.69 |
| already.r.01 | 6.31 | 4.67 | 5.04 | 7.49 |
| back.r.01 | 6.03 | 8.41 | 7.56 | 4.56 |
| actually.r.01 | 5.63 | 1.87 | 5.88 | 5.86 |
| probably.r.01 | 5.57 | 4.67 | 5.88 | 5.43 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S108. 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. |
|-----------------------|------|------|------|------|
| | | | 0.00 | 0.00 |
| $\mu(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.09 | 0.07 | 0.09 | 0.09 |
| $\sigma(domains)$ | 0.29 | 0.26 | 0.29 | 0.29 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.28 | 3.25 | 3.21 | 3.34 |
| $\sigma(lemmas)$ | 2.33 | 2.30 | 2.27 | 2.38 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S109. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 9

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 28.60 | 30.42 | 27.98 | 28.43 |
| X | 0.05 | 0.04 | 0.07 | 0.04 |
| ADP | 11.82 | 11.45 | 11.74 | 12.25 |
| DET | 11.30 | 11.11 | 11.54 | 10.98 |
| VERB | 21.46 | 20.87 | 21.61 | 21.60 |
| ADJ | 5.16 | 5.38 | 5.07 | 5.17 |
| ADV | 7.61 | 6.79 | 7.64 | 8.12 |
| PRT | 4.56 | 4.72 | 4.59 | 4.38 |
| PRON | 6.21 | 5.90 | 6.54 | 5.83 |
| NUM | 0.76 | 0.80 | 0.74 | 0.77 |
| CONJ | 2.47 | 2.51 | 2.48 | 2.43 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 57.60 | 58.45 | 57.00 | 58.05 |
| ADJ | 9.54 | 9.85 | 9.48 | 9.40 |
| VERB | 6.26 | 5.58 | 6.39 | 6.51 |
| ADV | 26.61 | 26.12 | 27.12 | 26.03 |
| POS | 34.46 | 34.93 | 33.88 | 35.18 |
| POS! | 95.63 | 95.32 | 95.73 | 95.69 |

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: 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 | 64.44 | 64.64 | 64.55 | 64.13 |
| physical_entity.n.01 | 35.56 | 35.36 | 35.45 | 35.87 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communication.n.02 | 23.80 | 26.87 | 22.88 | 23.21 |
| object.n.01 | 17.83 | 17.27 | 17.79 | 18.30 |
| measure.n.02 | 14.59 | 12.71 | 15.22 | 14.83 |
| psychological_feature.n.01 | 12.77 | 13.29 | 12.69 | 12.53 |
| causal_agent.n.01 | 11.19 | 11.27 | 11.13 | 11.24 |
| attribute.n.02 | 7.84 | 6.80 | 8.07 | 8.20 |
| matter.n.03 | 5.26 | 5.15 | 5.32 | 5.24 |
| group.n.01 | 3.51 | 3.36 | 3.55 | 3.56 |
| relation.n.01 | 1.93 | 1.61 | 2.14 | 1.79 |
| thing.n.12 | 0.72 | 1.07 | 0.59 | 0.70 |
| process.n.06 | 0.55 | 0.59 | 0.62 | 0.40 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| whole.n.02 | 17.06 | 15.48 | 17.41 | 17.61 |
| definite_quantity.n.01 | 14.89 | 12.93 | 15.28 | 15.62 |
| message.n.02 | 13.79 | 15.27 | 13.08 | 13.92 |
| person.n.01 | 12.92 | 12.95 | 13.09 | 12.59 |
| event.n.01 | 10.06 | 9.74 | 10.35 | 9.78 |
| written_communication.n.01 | 7.68 | 9.00 | 7.37 | 7.26 |
| cognition.n.01 | 5.17 | 5.89 | 4.85 | 5.19 |
| indication.n.01 | 4.45 | 4.52 | 4.61 | 4.14 |
| state.n.02 | 4.32 | 4.02 | 4.53 | 4.18 |
| location.n.01 | 3.42 | 4.12 | 3.06 | 3.56 |
| substance.n.01 | 3.15 | 3.26 | 3.32 | 2.79 |
| substance.n.07 | 3.09 | 2.82 | 3.05 | 3.37 |
| 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: 10

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.63 | 6.61 | 6.62 | 6.65 |
| $\sigma(mindepth)$ | 1.87 | 1.87 | 1.91 | 1.80 |
| $\mu(max depth)$ | 7.01 | 6.99 | 7.01 | 7.02 |
| $\sigma(max depth)$ | 2.06 | 2.05 | 2.10 | 2.00 |
| $\mu(holonyms)$ | 0.13 | 0.11 | 0.14 | 0.14 |
| $\sigma(holonyms)$ | 0.45 | 0.46 | 0.43 | 0.47 |
| $\mu(meronyms)$ | 0.33 | 0.35 | 0.33 | 0.32 |
| $\sigma(meronyms)$ | 2.19 | 2.70 | 1.91 | 2.25 |
| $\mu(domains)$ | 0.09 | 0.11 | 0.09 | 0.09 |
| $\sigma(domains)$ | 0.30 | 0.33 | 0.29 | 0.29 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.08 | 3.01 | 3.09 | 3.12 |
| $\sigma(lemmas)$ | 2.64 | 2.55 | 2.60 | 2.77 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 7.83 | 8.00 | 7.92 | 7.57 |
| $\sigma(hyponyms)$ | 29.36 | 30.48 | 29.36 | 28.54 |
| $\mu(hypernyms)$ | 1.02 | 1.02 | 1.02 | 1.02 |
| $\sigma(hypernyms)$ | 0.14 | 0.13 | 0.14 | 0.13 |

TABLE S112. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 10

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| inactive.s.10 | 33.48 | 29.38 | 33.30 | 36.93 |
| clean.a.01 | 18.31 | 16.38 | 18.28 | 19.85 |
| like.a.01 | 9.31 | 9.88 | 9.75 | 8.11 |
| public.a.01 | 8.60 | 20.38 | 5.60 | 4.77 |
| new.a.01 | 5.89 | 4.25 | 6.09 | 6.77 |
| able.a.01 | 4.68 | 4.00 | 5.15 | 4.39 |
| certain.a.02 | 3.72 | 3.62 | 4.21 | 2.96 |
| small.a.01 | 3.53 | 2.00 | 3.93 | 4.01 |
| good.a.01 | 3.23 | 1.75 | 3.93 | 3.15 |
| difficult.a.01 | 3.20 | 3.25 | 3.16 | 3.24 |
| all_right.s.01 | 3.18 | 2.00 | 4.43 | 1.91 |
| free.a.01 | 2.87 | 3.12 | 2.16 | 3.91 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S113. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.04 | 0.04 | 0.05 | 0.04 |
| $\sigma(domains)$ | 0.20 | 0.20 | 0.21 | 0.18 |
| $\mu(similar)$ | 5.86 | 5.80 | 5.81 | 6.00 |
| $\sigma(similar)$ | 7.16 | 6.74 | 7.40 | 7.03 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.98 | 1.84 | 2.05 | 1.96 |
| $\sigma(lemmas)$ | 1.46 | 1.36 | 1.54 | 1.39 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S114. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 10

| | g. | p. | i. | h. |
|---------------------|--------|--------|--------|--------|
| travel.v.01 | 16.07 | 15.23 | 16.33 | 16.17 |
| express.v.02 | 10.54 | 10.09 | 9.82 | 12.15 |
| act.v.01 | 10.23 | 12.63 | 10.40 | 8.25 |
| get.v.01 | 9.88 | 10.09 | 10.13 | 9.27 |
| move.v.02 | 8.50 | 9.08 | 8.90 | 7.38 |
| change.v.02 | 8.44 | 8.30 | 8.14 | 9.11 |
| make.v.01 | 7.57 | 6.70 | 7.46 | 8.38 |
| make.v.03 | 6.46 | 5.86 | 6.04 | 7.67 |
| change.v.01 | 6.27 | 6.25 | 6.56 | 5.76 |
| use.v.01 | 6.11 | 6.35 | 5.96 | 6.21 |
| think.v.03 | 5.78 | 6.02 | 6.02 | 5.16 |
| connect.v.01 | 4.14 | 3.42 | 4.24 | 4.48 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| state.v.01 | 22.33 | 21.63 | 20.99 | 25.17 |
| interact.v.01 | 10.49 | 15.56 | 9.71 | 8.44 |
| evaluate.v.02 | 9.91 | 9.21 | 10.64 | 9.10 |
| put.v.01 | 9.26 | 9.42 | 9.41 | 8.86 |
| change_shape.v.01 | 9.19 | 9.28 | 8.69 | 10.00 |
| try.v.01 | 7.68 | 7.54 | 9.09 | 5.26 |
| travel_rapidly.v.01 | 6.93 | 7.54 | 6.85 | 6.68 |
| keep.v.03 | 5.93 | 4.82 | 6.10 | 6.40 |
| construct.v.01 | 5.09 | 4.54 | 3.93 | 7.54 |
| attach.v.01 | 5.00 | 3.42 | 5.03 | 6.02 |
| see.v.01 | 4.20 | 3.14 | 4.79 | 3.89 |
| look.v.02 | 3.98 | 3.91 | 4.76 | 2.65 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| note.v.01 | 25.81 | 24.05 | 23.92 | 30.48 |
| communicate.v.02 | 14.48 | 21.74 | 13.56 | 10.93 |
| start.v.14 | 13.60 | 13.13 | 13.04 | 14.95 |
| run.v.01 | 10.35 | 10.82 | 10.27 | 10.14 |
| install.v.01 | 5.98 | 7.01 | 6.54 | 4.24 |
| think.v.01 | 5.49 | 5.01 | 6.18 | 4.60 |
| increase.v.01 | 5.24 | 4.11 | 5.46 | 5.68 |
| store.v.01 | 5.08 | 4.11 | 5.46 | 5.10 |
| read.v.01 | 3.95 | 2.91 | 4.61 | 3.52 |
| save.v.02 | 3.77 | 2.81 | 3.69 | 4.60 |
| write.v.01 | 3.46 | 2.30 | 4.49 | 2.44 |
| repair.v.01 | 2.77 | 2.00 | 2.77 | 3.31 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| inform.v.01 | 24.78 | 36.50 | 22.02 | 19.28 |
| add.v.01 | 12.94 | 8.03 | 13.25 | 17.11 |
| roll_up.v.02 | 12.71 | 9.00 | 13.69 | 14.22 |
| record.v.01 | 10.58 | 6.81 | 10.08 | 15.42 |
| operate.v.03 | 7.19 | 8.03 | 6.35 | 8.19 |
| upgrade.v.01 | 6.56 | 6.33 | 7.23 | 5.30 |
| overlap.v.01 | 6.15 | 7.54 | 6.46 | 4.10 |
| write.v.07 | 4.54 | 3.65 | 5.48 | 3.37 |
| address.v.01 | 4.03 | 4.62 | 4.49 | 2.41 |
| post.v.01 | 3.97 | 1.95 | 5.26 | 3.13 |
| mention.v.01 | 3.39 | 4.87 | 3.07 | 2.65 |
| assume.v.01 | 3.16 | 2.68 | 2.63 | 4.82 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S115. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.22 | 1.29 | 1.22 | 1.18 |
| $\sigma(mindepth)$ | 1.42 | 1.48 | 1.42 | 1.35 |
| $\mu(max depth)$ | 1.22 | 1.29 | 1.22 | 1.18 |
| $\sigma(max depth)$ | 1.42 | 1.49 | 1.43 | 1.35 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.02 | 0.02 | 0.02 | 0.02 |
| $\sigma(domains)$ | 0.15 | 0.15 | 0.15 | 0.14 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.49 | 0.48 | 0.49 | 0.50 |
| $\sigma(verbgroups)$ | 0.60 | 0.60 | 0.60 | 0.60 |
| $\mu(lemmas)$ | 3.26 | 3.18 | 3.25 | 3.34 |
| $\sigma(lemmas)$ | 2.13 | 2.05 | 2.15 | 2.16 |
| $\mu(entailments)$ | 0.04 | 0.03 | 0.04 | 0.03 |
| $\sigma(entailments)$ | 0.20 | 0.19 | 0.21 | 0.19 |
| $\mu(hyponyms)$ | 20.99 | 19.92 | 21.28 | 21.20 |
| $\sigma(hyponyms)$ | 45.55 | 43.98 | 46.33 | 45.20 |
| $\mu(hypernyms)$ | 0.60 | 0.61 | 0.60 | 0.58 |
| $\sigma(hypernyms)$ | 0.49 | 0.49 | 0.49 | 0.50 |

TABLE S116. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 10

| | g. | р. | i. | h. |
|---------------|--------|--------|--------|--------|
| slowly.r.01 | 36.71 | 37.58 | 35.02 | 39.01 |
| loose.r.01 | 20.37 | 21.13 | 19.57 | 21.25 |
| besides.r.02 | 8.89 | 7.10 | 9.84 | 8.42 |
| still.r.01 | 5.69 | 4.52 | 6.04 | 5.85 |
| well.r.01 | 5.08 | 6.77 | 4.17 | 5.54 |
| possibly.r.01 | 3.78 | 3.23 | 4.47 | 2.98 |
| even.r.01 | 3.69 | 3.55 | 3.99 | 3.29 |
| probably.r.01 | 3.51 | 3.39 | 3.38 | 3.80 |
| already.r.01 | 3.42 | 3.23 | 3.93 | 2.67 |
| truly.r.01 | 3.08 | 3.06 | 3.50 | 2.36 |
| back.r.01 | 2.92 | 2.74 | 3.20 | 2.57 |
| however.r.01 | 2.86 | 3.71 | 2.90 | 2.26 |
| 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: 10

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(\min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.28 | 0.30 | 0.26 | 0.29 |
| $\sigma(domains)$ | 0.45 | 0.46 | 0.44 | 0.46 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.15 | 3.17 | 3.18 | 3.09 |
| $\sigma(lemmas)$ | 1.85 | 1.86 | 1.89 | 1.77 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S118. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 10

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 34.52 | 36.26 | 34.67 | 32.98 |
| X | 0.08 | 0.08 | 0.06 | 0.10 |
| ADP | 12.17 | 12.23 | 12.15 | 12.16 |
| DET | 9.19 | 9.05 | 9.42 | 9.03 |
| VERB | 18.87 | 18.54 | 18.68 | 19.35 |
| ADJ | 7.50 | 7.35 | 7.37 | 7.79 |
| ADV | 5.72 | 4.92 | 5.68 | 6.38 |
| PRT | 3.29 | 3.18 | 3.28 | 3.39 |
| PRON | 5.31 | 4.64 | 5.39 | 5.74 |
| NUM | 0.43 | 0.43 | 0.42 | 0.45 |
| CONJ | 2.91 | 3.31 | 2.89 | 2.63 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 61.21 | 62.91 | 61.64 | 59.30 |
| ADJ | 12.95 | 12.33 | 12.75 | 13.71 |
| VERB | 4.44 | 3.75 | 4.40 | 5.06 |
| ADV | 21.39 | 21.01 | 21.21 | 21.94 |
| POS | 37.75 | 39.28 | 37.60 | 36.76 |
| POS! | 96.41 | 96.48 | 96.39 | 96.37 |

TABLE S119. 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 | 67.58 | 67.90 | 67.50 | 67.42 |
| physical_entity.n.01 | 32.42 | 32.10 | 32.50 | 32.58 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| object.n.01 | 20.38 | 19.87 | 20.39 | 20.83 |
| psychological_feature.n.01 | 17.92 | 19.67 | 17.41 | 17.05 |
| communication.n.02 | 17.31 | 16.28 | 17.61 | 17.82 |
| measure.n.02 | 11.74 | 11.16 | 12.34 | 11.50 |
| causal_agent.n.01 | 8.03 | 8.75 | 7.65 | 7.88 |
| group.n.01 | 7.52 | 8.20 | 7.37 | 7.12 |
| attribute.n.02 | 7.20 | 7.22 | 6.98 | 7.47 |
| relation.n.01 | 5.88 | 5.36 | 5.79 | 6.44 |
| matter.n.03 | 2.89 | 2.46 | 3.42 | 2.60 |
| process.n.06 | 0.68 | 0.68 | 0.61 | 0.78 |
| thing.n.12 | 0.43 | 0.34 | 0.44 | 0.49 |
| set.n.02 | 0.01 | 0.01 | 0.01 | 0.01 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| event.n.01 | 14.98 | 16.86 | 14.47 | 13.98 |
| whole.n.02 | 14.40 | 13.32 | 14.45 | 15.30 |
| message.n.02 | 12.50 | 11.73 | 12.92 | 12.65 |
| person.n.01 | 10.05 | 10.83 | 9.63 | 9.91 |
| location.n.01 | 9.83 | 9.97 | 9.99 | 9.49 |
| definite_quantity.n.01 | 9.43 | 8.77 | 10.13 | 9.13 |
| cognition.n.01 | 7.68 | 7.85 | 7.66 | 7.57 |
| state.n.02 | 5.20 | 4.81 | 5.10 | 5.68 |
| social_group.n.01 | 4.59 | 5.53 | 4.45 | 3.93 |
| written_communication.n.01 | 4.56 | 4.15 | 4.54 | 4.94 |
| collection.n.01 | 3.39 | 3.10 | 3.37 | 3.67 |
| part.n.01 | 3.38 | 3.07 | 3.30 | 3.75 |
| 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 (p. for periphery, i. for intermediary, h. for hubs). TAG: 11

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.47 | 6.43 | 6.46 | 6.51 |
| $\sigma(mindepth)$ | 1.66 | 1.66 | 1.67 | 1.65 |
| $\mu(max depth)$ | 6.77 | 6.75 | 6.77 | 6.80 |
| $\sigma(max depth)$ | 1.81 | 1.81 | 1.82 | 1.80 |
| $\mu(holonyms)$ | 0.24 | 0.22 | 0.24 | 0.24 |
| $\sigma(holonyms)$ | 0.70 | 0.63 | 0.70 | 0.76 |
| $\mu(meronyms)$ | 0.86 | 0.92 | 0.87 | 0.81 |
| $\sigma(meronyms)$ | 3.82 | 4.46 | 3.86 | 3.08 |
| $\mu(domains)$ | 0.05 | 0.05 | 0.05 | 0.05 |
| $\sigma(domains)$ | 0.23 | 0.23 | 0.22 | 0.23 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.67 | 2.66 | 2.68 | 2.65 |
| $\sigma(lemmas)$ | 2.11 | 2.06 | 2.13 | 2.12 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 8.82 | 8.77 | 9.01 | 8.62 |
| $\sigma(hyponyms)$ | 28.63 | 26.47 | 30.75 | 27.62 |
| $\mu(hypernyms)$ | 1.03 | 1.02 | 1.03 | 1.02 |
| $\sigma(hypernyms)$ | 0.17 | 0.16 | 0.17 | 0.16 |

TABLE S121. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 11

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| much.a.01 | 21.79 | 20.88 | 21.36 | 22.86 |
| possible.a.01 | 20.44 | 20.17 | 20.52 | 20.53 |
| apparent.s.01 | 18.12 | 17.78 | 18.31 | 18.14 |
| annual.a.01 | 11.99 | 13.05 | 12.56 | 10.70 |
| like.a.01 | 6.29 | 5.65 | 6.03 | 6.98 |
| new.a.01 | 4.48 | 5.10 | 4.82 | 3.72 |
| good.a.01 | 3.75 | 3.51 | 3.38 | 4.29 |
| many.a.01 | 3.45 | 3.51 | 3.53 | 3.31 |
| different.a.01 | 2.53 | 2.30 | 2.47 | 2.74 |
| small.a.01 | 2.45 | 2.72 | 2.12 | 2.63 |
| large.a.01 | 2.42 | 2.76 | 2.60 | 2.01 |
| best.a.01 | 2.29 | 2.55 | 2.32 | 2.09 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S122. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.08 | 0.08 | 0.08 | 0.08 |
| $\sigma(domains)$ | 0.28 | 0.28 | 0.28 | 0.27 |
| $\mu(similar)$ | 5.04 | 5.08 | 4.99 | 5.05 |
| $\sigma(similar)$ | 6.68 | 6.82 | 6.74 | 6.50 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.91 | 1.86 | 1.91 | 1.94 |
| $\sigma(lemmas)$ | 1.61 | 1.53 | 1.63 | 1.63 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S123. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 11

| | g. | p. | i. | h. |
|---------------------------|--------|--------------|---------------------|--------|
| satisfy.v.02 | 17.20 | 16.76 | 16.95 | 17.79 |
| act.v.01 | 13.64 | 14.07 | 13.64 | 13.31 |
| move.v.02 | 12.97 | 12.48 | 13.71 | 12.50 |
| express.v.02 | 12.65 | 11.61 | 12.38 | 13.73 |
| think.v.03 | 9.65 | 9.17 | 9.25 | 10.45 |
| make.v.03 | 7.93 | 8.47 | 8.61 | 6.79 |
| travel.v.01 | 6.00 | 6.02 | 6.11 | 5.86 |
| change.v.01 | 4.60 | 4.92 | 4.39 | 4.61 |
| use.v.01 | 4.49 | 4.82 | 4.20 | 4.58 |
| get.v.01 | 4.31 | 4.54 | 3.96 | 4.53 |
| be.v.01 | 3.34 | 3.52 | 3.60 | 2.91 |
| change.v.02 | 3.22 | 3.61 | 3.21 | 2.94 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| please.v.01 | 26.13 | 26.57 | 25.60 | 26.42 |
| state.v.01 | 19.18 | 18.32 | 18.67 | 20.35 |
| interact.v.01 | 14.73 | 15.97 | 15.10 | 13.48 |
| separate.v.02 | 11.66 | 11.15 | 11.76 | 11.88 |
| evaluate.v.02 | 10.06 | 8.98 | 9.35 | 11.59 |
| give.v.03 | 3.67 | 4.26 | 4.13 | 2.74 |
| see.v.01 | 3.05 | 3.31 | 3.26 | 2.64 |
| put.v.01 | 2.69 | 2.45 | 2.90 | 2.62 |
| associate.v.01 | 2.34 | 2.65 | 2.38 | 2.08 |
| take.v.01 | 2.22 | 1.94 | 2.07 | 2.57 |
| create_verbally.v.01 | 2.21 | 2.42 | 2.71 | 1.51 |
| create_by_mental_act.v.01 | 2.07 | 1.97 | 2.08 | 2.12 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 24.43 | 26.52 | 24.94 | 22.38 |
| answer.v.01 | 22.11 | 20.56 | 21.93 | 23.40 |
| cut.v.01 | 20.46 | 19.38 | 20.53 | 21.14 |
| think.v.01 | 10.62 | 8.68 | 9.17 | 13.62 |
| write.v.01 | 3.87 | 4.21 | 4.74 | 2.66 |
| supply.v.01 | 3.84 | 5.35 | 3.83 | 2.79 |
| declare.v.01 | 2.72 | 3.33 | 2.27 | 2.79 |
| increase.v.01 | 2.63 | 2.98 | 2.52 | 2.51 |
| expect.v.01 | 2.48 | 2.24 | 2.19 | 2.97 |
| name.v.01 | 2.31 | 2.19 | 2.57 | 2.10 |
| read.v.01 | 2.30 | 2.24 | 2.76 | 1.83 |
| accept.v.01 | 2.24 | 2.32 | 2.55 | 1.83 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| pare.v.04 | 36.82 | 34.73 | 36.63 | 38.54 |
| inform.v.01 | 23.29 | 26.93 | 22.88 | 21.17 |
| talk.v.02 | 6.23 | 6.08 | 7.05 | 5.38 |
| ask.v.01 | 6.10 | 4.76 | 6.65 | 6.43 |
| see.v.05 | 4.41 | 4.11 | 3.30 | 5.91 |
| talk.v.01 | 3.92 | 3.53 | 3.81 | 4.33 |
| propose.v.01 | 3.78 | 4.27 | 3.35 | 3.92 |
| communicate.v.01 | 3.33 | 3.28 | 3.55 | 3.10 |
| | | | | 2.69 |
| add.v.01 | 3.27 | 3.61 | 3.55 | 2.09 |
| add.v.01 believe.v.01 | | 3.61 2.79 | $\frac{3.55}{3.45}$ | 2.63 |
| | 3.27 | | | |
| believe.v.01 | 3.27 | 2.79 | 3.45 | 2.63 |

TABLE S124. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.49 | 1.47 | 1.49 | 1.51 |
| $\sigma(mindepth)$ | 1.51 | 1.52 | 1.51 | 1.51 |
| $\mu(max depth)$ | 1.49 | 1.47 | 1.49 | 1.51 |
| $\sigma(max depth)$ | 1.51 | 1.52 | 1.51 | 1.51 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.02 | 0.02 | 0.03 | 0.02 |
| $\sigma(domains)$ | 0.16 | 0.16 | 0.16 | 0.15 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.44 | 0.43 | 0.44 | 0.46 |
| $\sigma(verbgroups)$ | 0.61 | 0.60 | 0.61 | 0.61 |
| $\mu(lemmas)$ | 2.98 | 3.00 | 2.98 | 2.97 |
| $\sigma(lemmas)$ | 1.91 | 1.95 | 1.94 | 1.85 |
| $\mu(entailments)$ | 0.05 | 0.05 | 0.05 | 0.04 |
| $\sigma(entailments)$ | 0.23 | 0.24 | 0.23 | 0.23 |
| $\mu(hyponyms)$ | 11.03 | 10.45 | 11.20 | 11.29 |
| $\sigma(hyponyms)$ | 27.32 | 24.56 | 27.27 | 29.36 |
| $\mu(hypernyms)$ | 0.73 | 0.73 | 0.72 | 0.73 |
| $\sigma(hypernyms)$ | 0.45 | 0.45 | 0.45 | 0.45 |

TABLE S125. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 11

| | g. | p. | i. | h. |
|-----------------|--------|--------|--------|--------|
| besides.r.02 | 18.89 | 23.51 | 18.95 | 15.89 |
| well.r.01 | 13.26 | 13.32 | 12.18 | 14.40 |
| truly.r.01 | 11.41 | 9.72 | 11.01 | 12.91 |
| even.r.01 | 9.95 | 10.82 | 9.48 | 9.93 |
| possibly.r.01 | 7.48 | 7.52 | 6.68 | 8.34 |
| frequently.r.01 | 7.12 | 7.52 | 6.77 | 7.25 |
| still.r.01 | 6.54 | 6.27 | 7.31 | 5.86 |
| always.r.01 | 5.48 | 5.02 | 6.50 | 4.67 |
| actually.r.01 | 5.45 | 4.39 | 5.69 | 5.86 |
| back.r.01 | 4.98 | 3.76 | 6.68 | 3.87 |
| reasonably.r.01 | 4.72 | 3.92 | 3.88 | 6.16 |
| much.r.01 | 4.72 | 4.23 | 4.87 | 4.87 |
| 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: 11

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| | | | 0.00 | 0.00 |
| $\mu(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.11 | 0.10 | 0.11 | 0.11 |
| $\sigma(domains)$ | 0.31 | 0.30 | 0.31 | 0.31 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.08 | 3.12 | 3.06 | 3.08 |
| $\sigma(lemmas)$ | 2.12 | 2.13 | 2.09 | 2.15 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S127. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 11

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 29.27 | 30.94 | 31.86 | 22.21 |
| X | 0.15 | 0.10 | 0.20 | 0.06 |
| ADP | 11.37 | 11.07 | 11.24 | 11.86 |
| DET | 11.12 | 11.35 | 10.51 | 12.36 |
| VERB | 21.58 | 21.08 | 20.67 | 24.01 |
| ADJ | 5.91 | 5.90 | 5.96 | 5.78 |
| ADV | 6.69 | 6.06 | 6.25 | 8.13 |
| PRT | 3.73 | 3.56 | 3.71 | 3.90 |
| PRON | 6.66 | 6.32 | 6.13 | 8.08 |
| NUM | 0.74 | 0.71 | 0.79 | 0.64 |
| CONJ | 2.78 | 2.90 | 2.67 | 2.97 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 58.82 | 59.32 | 61.81 | 49.90 |
| ADJ | 10.62 | 10.44 | 10.17 | 12.06 |
| VERB | 5.06 | 4.85 | 4.38 | 7.16 |
| ADV | 25.50 | 25.39 | 23.64 | 30.89 |
| POS | 33.10 | 32.91 | 32.94 | 33.74 |
| POS! | 92.51 | 93.21 | 91.83 | 93.94 |

TABLE S128. 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 | 67.07 | 63.83 | 68.09 | 66.42 |
| physical_entity.n.01 | 32.93 | 36.17 | 31.91 | 33.58 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| measure.n.02 | 23.39 | 20.70 | 26.26 | 15.72 |
| object.n.01 | 20.73 | 23.74 | 19.66 | 21.77 |
| psychological_feature.n.01 | 19.61 | 19.51 | 18.79 | 22.61 |
| communication.n.02 | 11.21 | 10.09 | 11.01 | 12.95 |
| causal_agent.n.01 | 6.09 | 5.88 | 5.97 | 6.72 |
| attribute.n.02 | 5.34 | 7.20 | 4.49 | 6.64 |
| group.n.01 | 4.88 | 3.84 | 5.05 | 5.23 |
| matter.n.03 | 4.80 | 5.47 | 4.92 | 3.75 |
| relation.n.01 | 2.64 | 2.49 | 2.50 | 3.28 |
| thing.n.12 | 0.72 | 0.51 | 0.80 | 0.63 |
| process.n.06 | 0.59 | 0.57 | 0.55 | 0.72 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| definite_quantity.n.01 | 23.50 | 20.04 | 26.69 | 15.46 |
| whole.n.02 | 18.79 | 20.41 | 18.02 | 19.99 |
| event.n.01 | 15.09 | 14.01 | 15.57 | 14.40 |
| cognition.n.01 | 8.76 | 8.83 | 7.45 | 13.37 |
| person.n.01 | 6.45 | 6.43 | 6.11 | 7.70 |
| location.n.01 | 5.82 | 6.79 | 5.37 | 6.47 |
| message.n.02 | 5.50 | 5.34 | 5.07 | 7.20 |
| substance.n.01 | 3.66 | 4.56 | 3.56 | 3.15 |
| state.n.02 | 3.50 | 5.63 | 2.72 | 4.22 |
| written_communication.n.01 | 3.44 | 3.16 | 3.33 | 4.07 |
| fundamental_quantity.n.01 | 3.37 | 2.83 | 4.07 | 1.38 |
| collection.n.01 | 2.14 | 1.95 | 2.06 | 2.58 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S129. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.57 | 6.58 | 6.58 | 6.53 |
| $\sigma(mindepth)$ | 1.57 | 1.58 | 1.55 | 1.62 |
| $\mu(max depth)$ | 6.82 | 6.85 | 6.82 | 6.79 |
| $\sigma(max depth)$ | 1.67 | 1.70 | 1.64 | 1.72 |
| $\mu(holonyms)$ | 0.14 | 0.13 | 0.15 | 0.13 |
| $\sigma(holonyms)$ | 0.49 | 0.44 | 0.48 | 0.56 |
| $\mu(meronyms)$ | 0.54 | 0.45 | 0.62 | 0.35 |
| $\sigma(meronyms)$ | 3.03 | 2.20 | 3.49 | 1.54 |
| $\mu(domains)$ | 0.09 | 0.10 | 0.09 | 0.09 |
| $\sigma(domains)$ | 0.30 | 0.33 | 0.30 | 0.30 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.01 | 2.95 | 3.08 | 2.82 |
| $\sigma(lemmas)$ | 2.66 | 2.52 | 2.69 | 2.64 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 8.18 | 8.64 | 7.58 | 9.90 |
| $\sigma(hyponyms)$ | 28.40 | 30.73 | 25.60 | 34.79 |
| $\mu(hypernyms)$ | 1.03 | 1.03 | 1.04 | 1.03 |
| $\sigma(hypernyms)$ | 0.18 | 0.18 | 0.19 | 0.18 |

TABLE S130. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 12

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| public.a.01 | 26.32 | 27.41 | 31.37 | 8.81 |
| like.a.01 | 11.52 | 13.09 | 9.46 | 16.98 |
| extra.s.03 | 11.32 | 9.88 | 14.06 | 3.56 |
| new.a.01 | 8.75 | 8.89 | 7.73 | 11.95 |
| certain.a.02 | 7.48 | 3.21 | 6.39 | 14.68 |
| local.a.01 | 6.46 | 11.11 | 5.18 | 6.71 |
| pale.s.02 | 6.01 | 4.94 | 5.30 | 9.22 |
| different.a.01 | 5.35 | 4.20 | 5.05 | 7.34 |
| all_right.s.01 | 5.27 | 3.70 | 5.05 | 7.34 |
| possible.a.01 | 3.88 | 5.19 | 3.00 | 5.66 |
| last.s.01 | 3.88 | 3.46 | 4.35 | 2.73 |
| first.a.01 | 3.76 | 4.94 | 3.07 | 5.03 |
| 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: 12

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.05 | 0.05 | 0.05 | 0.06 |
| $\sigma(domains)$ | 0.22 | 0.22 | 0.22 | 0.23 |
| $\mu(similar)$ | 5.38 | 5.13 | 5.37 | 5.57 |
| $\sigma(similar)$ | 6.45 | 6.14 | 6.23 | 7.10 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.77 | 1.75 | 1.75 | 1.83 |
| $\sigma(lemmas)$ | 1.42 | 1.35 | 1.39 | 1.55 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S132. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 12

| | g. | p. | i. | h. |
|---------------------|--------|--------|--------|--------|
| move.v.02 | 14.42 | 19.11 | 15.52 | 9.34 |
| act.v.01 | 13.71 | 13.95 | 13.32 | 14.40 |
| travel.v.01 | 11.52 | 12.36 | 11.65 | 10.74 |
| change.v.01 | 10.73 | 8.85 | 10.10 | 13.18 |
| think.v.03 | 10.30 | 7.96 | 9.72 | 12.92 |
| get.v.01 | 6.71 | 7.01 | 7.09 | 5.72 |
| use.v.01 | 6.43 | 6.37 | 6.62 | 6.05 |
| work.v.01 | 6.14 | 5.86 | 5.93 | 6.76 |
| make.v.03 | 5.56 | 5.61 | 5.44 | 5.80 |
| perceive.v.01 | 5.08 | 3.89 | 5.27 | 5.35 |
| change.v.02 | 4.77 | 3.76 | 4.72 | 5.46 |
| connect.v.01 | 4.63 | 5.29 | 4.62 | 4.28 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| evaluate.v.02 | 16.70 | 12.12 | 16.16 | 20.89 |
| put.v.01 | 13.46 | 20.94 | 13.58 | 8.49 |
| interact.v.01 | 11.53 | 10.71 | 10.96 | 13.37 |
| try.v.01 | 10.66 | 12.12 | 10.77 | 9.47 |
| send.v.01 | 7.71 | 8.24 | 9.09 | 4.13 |
| state.v.01 | 7.52 | 6.59 | 7.00 | 9.32 |
| travel_rapidly.v.01 | 7.23 | 6.71 | 6.84 | 8.49 |
| see.v.01 | 6.78 | 4.47 | 6.80 | 8.19 |
| look.v.02 | 4.90 | 4.47 | 4.97 | 5.03 |
| establish.v.01 | 4.64 | 8.82 | 4.77 | 1.65 |
| check.v.01 | 4.56 | 1.65 | 6.19 | 2.63 |
| better.v.02 | 4.30 | 3.18 | 2.87 | 8.34 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 18.79 | 15.07 | 18.75 | 20.85 |
| install.v.01 | 13.75 | 26.71 | 14.47 | 5.49 |
| run.v.01 | 13.10 | 13.01 | 12.78 | 13.78 |
| think.v.01 | 11.04 | 9.36 | 11.39 | 11.22 |
| repair.v.01 | 7.68 | 5.94 | 5.30 | 13.41 |
| rate.v.01 | 6.86 | 3.65 | 7.29 | 7.68 |
| save.v.02 | 5.83 | 10.96 | 5.67 | 3.41 |
| increase.v.01 | 5.38 | 3.42 | 4.82 | 7.56 |
| expect.v.01 | 4.66 | 2.74 | 4.40 | 6.22 |
| update.v.01 | 4.56 | 3.88 | 5.24 | 3.54 |
| supply.v.01 | 4.53 | 1.60 | 6.33 | 2.44 |
| test.v.01 | 3.81 | 3.65 | 3.56 | 4.39 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| inform.v.01 | 25.15 | 25.00 | 23.92 | 27.66 |
| upgrade.v.01 | 14.71 | 7.29 | 15.73 | 16.49 |
| record.v.01 | 12.96 | 25.00 | 12.63 | 7.45 |
| add.v.01 | 10.67 | 7.81 | 9.27 | 14.89 |
| configure.v.01 | 6.02 | 11.46 | 6.59 | 2.13 |
| see.v.05 | 5.87 | 6.77 | 6.99 | 3.19 |
| think.v.02 | 5.03 | 1.56 | 6.05 | 4.79 |
| address.v.01 | 4.65 | 2.60 | 5.24 | 4.52 |
| balance.v.01 | 4.42 | 3.65 | 4.57 | 4.52 |
| ask.v.01 | 3.58 | 2.08 | 3.90 | 3.72 |
| mention.v.01 | 3.51 | 4.69 | 2.15 | 5.59 |
| propose.v.01 | 3.43 | 2.08 | 2.96 | 5.05 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| | 1 | | | |

TABLE S133. 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. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.26 | 1.26 | 1.26 | 1.28 |
| $\sigma(mindepth)$ | 1.38 | 1.35 | 1.37 | 1.42 |
| $\mu(max depth)$ | 1.27 | 1.26 | 1.26 | 1.29 |
| $\sigma(max depth)$ | 1.39 | 1.36 | 1.38 | 1.42 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.02 | 0.02 | 0.02 | 0.01 |
| $\sigma(domains)$ | 0.12 | 0.13 | 0.12 | 0.11 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.43 | 0.39 | 0.45 | 0.44 |
| $\sigma(verbgroups)$ | 0.60 | 0.56 | 0.61 | 0.60 |
| $\mu(lemmas)$ | 3.18 | 3.10 | 3.20 | 3.17 |
| $\sigma(lemmas)$ | 2.19 | 2.01 | 2.21 | 2.26 |
| $\mu(entailments)$ | 0.04 | 0.03 | 0.04 | 0.04 |
| $\sigma(entailments)$ | 0.20 | 0.19 | 0.20 | 0.20 |
| $\mu(hyponyms)$ | 16.20 | 15.61 | 16.33 | 16.29 |
| $\sigma(hyponyms)$ | 39.78 | 40.76 | 38.36 | 42.09 |
| $\mu(hypernyms)$ | 0.66 | 0.72 | 0.66 | 0.64 |
| $\sigma(hypernyms)$ | 0.49 | 0.53 | 0.48 | 0.48 |

TABLE S134. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 12

| | g. | p. | i. | h. |
|---------------|--------|--------|--------|--------|
| besides.r.02 | 14.35 | 17.70 | 16.26 | 8.58 |
| still.r.01 | 12.99 | 7.00 | 16.01 | 10.54 |
| well.r.01 | 11.14 | 11.52 | 11.33 | 10.54 |
| even.r.01 | 10.80 | 9.47 | 12.19 | 8.82 |
| already.r.01 | 8.54 | 6.58 | 9.98 | 6.86 |
| truly.r.01 | 8.00 | 11.52 | 5.67 | 10.54 |
| back.r.01 | 7.18 | 6.58 | 6.28 | 9.31 |
| possibly.r.01 | 6.49 | 7.82 | 5.05 | 8.58 |
| yet.r.01 | 5.74 | 5.76 | 4.56 | 8.09 |
| never.r.01 | 5.47 | 6.58 | 4.93 | 5.88 |
| actually.r.01 | 4.99 | 5.76 | 4.06 | 6.37 |
| right.r.01 | 4.31 | 3.70 | 3.69 | 5.88 |
| 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 (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 12

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| Lu(main danth) | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.11 | 0.09 | 0.11 | 0.12 |
| $\sigma(domains)$ | 0.31 | 0.29 | 0.31 | 0.32 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.88 | 2.94 | 2.86 | 2.89 |
| $\sigma(lemmas)$ | 2.03 | 1.95 | 2.07 | 2.00 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S136. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 12

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 51.86 | 63.77 | 48.31 | 37.37 |
| X | 0.08 | 0.14 | 0.02 | 0.07 |
| ADP | 7.25 | 5.23 | 7.86 | 9.69 |
| DET | 7.48 | 6.47 | 7.43 | 9.28 |
| VERB | 16.93 | 11.93 | 20.01 | 20.54 |
| ADJ | 3.97 | 3.37 | 3.83 | 5.18 |
| ADV | 4.02 | 2.41 | 4.45 | 6.05 |
| PRT | 3.17 | 3.98 | 2.37 | 3.05 |
| PRON | 3.16 | 1.29 | 3.64 | 5.55 |
| NUM | 0.43 | 0.30 | 0.38 | 0.74 |
| CONJ | 1.65 | 1.11 | 1.70 | 2.49 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 72.75 | 76.89 | 72.91 | 66.57 |
| ADJ | 6.20 | 6.00 | 5.47 | 7.74 |
| VERB | 2.69 | 1.50 | 2.57 | 4.59 |
| ADV | 18.36 | 15.61 | 19.05 | 21.10 |
| POS | 32.92 | 32.94 | 31.48 | 35.64 |
| POS! | 91.50 | 83.74 | 96.82 | 95.23 |

TABLE S137. 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 | 57.40 | 63.17 | 47.11 | 66.95 |
| physical_entity.n.01 | 42.60 | 36.83 | 52.89 | 33.05 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| object.n.01 | 30.58 | 27.42 | 39.64 | 19.01 |
| communication.n.02 | 19.60 | 29.26 | 13.77 | 14.52 |
| psychological_feature.n.01 | 13.60 | 13.92 | 10.87 | 18.12 |
| measure.n.02 | 10.72 | 9.76 | 6.99 | 19.17 |
| causal_agent.n.01 | 8.79 | 5.77 | 10.33 | 10.90 |
| group.n.01 | 5.87 | 2.08 | 10.01 | 4.45 |
| attribute.n.02 | 4.27 | 5.42 | 2.91 | 4.89 |
| relation.n.01 | 3.34 | 2.73 | 2.55 | 5.78 |
| matter.n.03 | 2.06 | 1.89 | 2.18 | 2.13 |
| process.n.06 | 0.72 | 0.82 | 0.64 | 0.70 |
| thing.n.12 | 0.45 | 0.94 | 0.10 | 0.31 |
| set.n.02 | 0.01 | 0.00 | 0.01 | 0.01 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| location.n.01 | 14.69 | 11.37 | 21.28 | 6.99 |
| whole.n.02 | 13.43 | 14.72 | 14.49 | 9.17 |
| message.n.02 | 12.27 | 23.57 | 5.05 | 8.06 |
| definite_quantity.n.01 | 10.90 | 10.58 | 6.28 | 20.70 |
| person.n.01 | 10.41 | 7.02 | 11.73 | 13.37 |
| event.n.01 | 8.86 | 10.25 | 6.70 | 10.89 |
| cognition.n.01 | 7.21 | 6.72 | 5.58 | 11.29 |
| land.n.04 | 6.52 | 3.42 | 8.96 | 6.77 |
| collection.n.01 | 5.78 | 1.66 | 10.00 | 4.11 |
| written_communication.n.01 | 4.55 | 4.95 | 3.69 | 5.58 |
| state.n.02 | 2.90 | 4.94 | 1.30 | 2.76 |
| signal.n.01 | 2.48 | 0.81 | 4.94 | 0.31 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S138. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 6.60 | 6.40 | 6.72 | 6.68 |
| $\sigma(mindepth)$ | 1.99 | 1.96 | 2.11 | 1.76 |
| $\mu(max depth)$ | 6.95 | 6.64 | 7.15 | 7.09 |
| $\sigma(max depth)$ | 2.28 | 2.19 | 2.42 | 2.10 |
| $\mu(holonyms)$ | 0.17 | 0.10 | 0.24 | 0.17 |
| $\sigma(holonyms)$ | 0.43 | 0.36 | 0.49 | 0.38 |
| $\mu(meronyms)$ | 0.41 | 0.25 | 0.53 | 0.44 |
| $\sigma(meronyms)$ | 1.38 | 1.12 | 1.47 | 1.57 |
| $\mu(domains)$ | 0.12 | 0.13 | 0.12 | 0.10 |
| $\sigma(domains)$ | 0.33 | 0.34 | 0.33 | 0.31 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.63 | 2.51 | 2.46 | 3.16 |
| $\sigma(lemmas)$ | 2.30 | 2.30 | 2.02 | 2.66 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 6.67 | 5.95 | 7.21 | 6.85 |
| $\sigma(hyponyms)$ | 21.70 | 19.05 | 22.92 | 23.36 |
| $\mu(hypernyms)$ | 1.01 | 1.01 | 1.01 | 1.01 |
| $\sigma(hypernyms)$ | 0.10 | 0.11 | 0.10 | 0.10 |

TABLE S139. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 13

| | g. | р. | i. | h. |
|----------------|--------|--------|--------|--------|
| new.a.01 | 38.94 | 63.77 | 11.49 | 27.90 |
| public.a.01 | 12.71 | 11.16 | 15.48 | 11.59 |
| like.a.01 | 11.95 | 5.58 | 16.35 | 19.31 |
| chief.s.01 | 5.34 | 1.46 | 12.61 | 1.93 |
| variable.a.01 | 4.66 | 5.22 | 4.87 | 3.00 |
| different.a.01 | 4.49 | 1.01 | 8.61 | 5.58 |
| first.a.01 | 4.41 | 2.47 | 7.87 | 3.00 |
| native.a.01 | 3.64 | 0.82 | 9.11 | 0.86 |
| good.a.01 | 3.64 | 0.37 | 3.50 | 11.59 |
| current.a.01 | 3.52 | 1.28 | 4.87 | 6.44 |
| simple.a.01 | 3.39 | 1.83 | 3.87 | 6.22 |
| multiple.a.01 | 3.31 | 5.03 | 1.37 | 2.58 |
| 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: 13

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.05 | 0.03 | 0.06 | 0.05 |
| $\sigma(domains)$ | 0.21 | 0.18 | 0.24 | 0.22 |
| $\mu(similar)$ | 6.88 | 8.53 | 5.66 | 6.53 |
| $\sigma(similar)$ | 6.97 | 7.48 | 5.79 | 7.31 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.59 | 1.46 | 1.70 | 1.60 |
| $\sigma(lemmas)$ | 1.20 | 0.96 | 1.34 | 1.24 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S141. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 13

| | g. | p. | i. | h. |
|---------------------------|--------|--------|-----------|--------------|
| change.v.01 | 17.37 | 25.20 | 16.31 | 10.58 |
| make.v.03 | 16.88 | 9.06 | 24.68 | 12.71 |
| act.v.01 | 11.57 | 6.15 | 16.22 | 9.92 |
| move.v.02 | 7.84 | 11.44 | 6.60 | 5.94 |
| think.v.03 | 7.59 | 5.94 | 7.25 | 9.92 |
| get.v.01 | 7.44 | 6.88 | 4.03 | 13.56 |
| change.v.02 | 7.36 | 7.98 | 4.45 | 11.40 |
| travel.v.01 | 7.09 | 9.55 | 5.20 | 7.48 |
| use.v.01 | 5.71 | 5.76 | 5.66 | 5.74 |
| have.v.01 | 4.72 | 5.57 | 5.01 | 3.33 |
| make.v.01 | 3.30 | 2.22 | 2.33 | 6.03 |
| necessitate.v.01 | 3.14 | 4.24 | 2.24 | 3.38 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| interact.v.01 | 15.01 | 8.83 | 19.84 | 10.76 |
| construct.v.01 | 14.63 | 10.29 | 18.11 | 11.45 |
| evaluate.v.02 | 11.66 | 10.76 | 10.31 | 14.95 |
| end.v.02 | 10.16 | 2.26 | 17.67 | 2.17 |
| keep.v.03 | 8.82 | 14.14 | 7.97 | 6.20 |
| recover.v.01 | 7.59 | 10.42 | 1.67 | 16.60 |
| put.v.01 | 6.93 | 10.36 | 5.88 | 6.20 |
| modify.v.01 | 5.64 | 7.04 | 1.89 | 11.66 |
| change_magnitude.v.01 | 5.57 | 9.96 | 3.23 | 6.52 |
| see.v.01 | 5.10 | 2.92 | 6.52 | 4.14 |
| travel_rapidly.v.01 | 4.45 | 9.10 | 2.40 | 4.67 |
| state.v.01 | 4.43 | 3.92 | 4.51 | 4.67 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 24.34 | 12.18 | 30.82 | 21.59 |
| decide.v.02 | 15.16 | 0.70 | 27.04 | 1.53 |
| save.v.02 | 10.12 | 14.77 | 8.63 | 8.72 |
| increase.v.01 | 8.74 | 13.77 | 4.84 | 12.87 |
| think.v.01 | 7.54 | 4.39 | 6.08 | 14.61 |
| run.v.01 | 7.42 | 13.67 | 3.79 | 9.60 |
| arrange.v.01 | 5.01 | 7.98 | 3.83 | 4.69 |
| salvage.v.01 | 4.61 | 7.78 | 3.21 | 4.58 |
| supply.v.01 | 4.46 | 8.78 | 1.76 | 6.43 |
| write.v.01 | 4.39 | 5.19 | 2.86 | 7.31 |
| store.v.01 | 4.18 | 5.49 | 3.87 | 3.49 4.58 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| | - | | | |
| inform.v.01 | 35.56 | 17.18 | 48.60 | 23.52 |
| record.v.01 | 18.25 | 27.06 | 15.64 | 15.30 |
| add.v.01 | 13.78 | 19.74 | 8.22 | 20.84 |
| string.v.01 | 8.74 | 14.44 | 6.70 | 7.65 |
| roll_up.v.02 | 5.12 | 3.66 | 5.91 | 4.78 |
| object.v.01 | 4.30 | 4.75 | 2.55 | 8.03 |
| permit.v.01 | 2.71 | 3.66 | 2.31 | 2.68 |
| propose.v.01 talk.v.02 | 2.58 | 1.83 | 2.00 | 4.78 |
| see.v.05 | 2.32 | 1.28 | 2.31 2.08 | 3.44 |
| communicate.v.01 | 2.32 | 3.84 | 1.76 | 3.63 1.91 |
| ask.v.01 | | 0.91 | 1.76 | 3.44 |
| | 2.02 | | | |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S142. 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. |
|-----------------------|-------|--------|-------|-------|
| $\mu(min depth)$ | 1.38 | 1.21 | 1.52 | 1.34 |
| $\sigma(mindepth)$ | 1.46 | 1.32 | 1.55 | 1.42 |
| $\mu(max depth)$ | 1.38 | 1.21 | 1.52 | 1.34 |
| $\sigma(maxdepth)$ | 1.46 | 1.33 | 1.55 | 1.42 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.03 | 0.03 | 0.02 | 0.03 |
| $\sigma(domains)$ | 0.16 | 0.18 | 0.14 | 0.16 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.45 | 0.39 | 0.45 | 0.50 |
| $\sigma(verbgroups)$ | 0.58 | 0.55 | 0.60 | 0.59 |
| $\mu(lemmas)$ | 3.20 | 3.23 | 3.17 | 3.21 |
| $\sigma(lemmas)$ | 2.16 | 2.10 | 2.19 | 2.17 |
| $\mu(entailments)$ | 0.03 | 0.03 | 0.02 | 0.04 |
| $\sigma(entailments)$ | 0.17 | 0.18 | 0.16 | 0.20 |
| $\mu(hyponyms)$ | 27.10 | 54.33 | 14.79 | 17.19 |
| $\sigma(hyponyms)$ | 76.65 | 121.93 | 37.95 | 45.40 |
| $\mu(hypernyms)$ | 0.69 | 0.64 | 0.72 | 0.69 |
| $\sigma(hypernyms)$ | 0.47 | 0.49 | 0.46 | 0.47 |

TABLE S143. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 13

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| besides.r.02 | 16.65 | 17.68 | 16.49 | 16.34 |
| probably.r.01 | 9.32 | 3.31 | 8.11 | 13.12 |
| possibly.r.01 | 9.21 | 8.29 | 10.81 | 8.17 |
| alternatively.r.01 | 8.90 | 10.50 | 10.00 | 7.18 |
| well.r.01 | 8.59 | 4.97 | 10.00 | 8.91 |
| still.r.01 | 7.75 | 8.84 | 7.84 | 7.18 |
| presently.r.02 | 7.33 | 8.84 | 7.84 | 6.19 |
| truly.r.01 | 6.91 | 5.52 | 5.41 | 8.91 |
| always.r.01 | 6.81 | 13.26 | 6.49 | 4.21 |
| however.r.01 | 6.39 | 9.94 | 5.95 | 5.20 |
| anyhow.r.01 | 6.28 | 2.21 | 6.49 | 7.92 |
| even.r.01 | 5.86 | 6.63 | 4.59 | 6.68 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S144. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.08 | 0.04 | 0.09 | 0.08 |
| $\sigma(domains)$ | 0.27 | 0.20 | 0.28 | 0.28 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.18 | 3.28 | 3.11 | 3.20 |
| $\sigma(lemmas)$ | 2.13 | 2.15 | 2.10 | 2.13 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S145. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 13

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 29.30 | 30.40 | 29.72 | 28.53 |
| X | 0.13 | 0.16 | 0.18 | 0.07 |
| ADP | 11.88 | 12.01 | 11.98 | 11.72 |
| DET | 11.50 | 11.21 | 11.45 | 11.63 |
| VERB | 21.54 | 21.11 | 21.29 | 21.95 |
| ADJ | 6.24 | 6.13 | 6.10 | 6.44 |
| ADV | 6.11 | 5.53 | 5.98 | 6.40 |
| PRT | 3.43 | 3.46 | 3.51 | 3.32 |
| PRON | 6.15 | 6.21 | 6.17 | 6.10 |
| NUM | 1.01 | 1.10 | 0.90 | 1.12 |
| CONJ | 2.71 | 2.67 | 2.71 | 2.71 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 58.38 | 59.08 | 58.29 | 58.34 |
| ADJ | 11.39 | 11.21 | 11.07 | 11.82 |
| VERB | 4.99 | 4.30 | 4.86 | 5.32 |
| ADV | 25.24 | 25.42 | 25.79 | 24.52 |
| POS | 38.17 | 37.32 | 38.53 | 37.95 |
| POS! | 94.99 | 94.67 | 94.86 | 95.23 |

TABLE S146. 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: 14

| | 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 | 66.23 | 66.54 | 67.00 | 65.22 |
| physical_entity.n.01 | 33.77 | 33.46 | 33.00 | 34.78 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| psychological_feature.n.01 | 18.98 | 19.22 | 18.88 | 19.04 |
| object.n.01 | 17.78 | 16.34 | 16.61 | 19.53 |
| communication.n.02 | 16.14 | 16.05 | 16.06 | 16.27 |
| measure.n.02 | 14.57 | 14.98 | 14.85 | 14.13 |
| causal_agent.n.01 | 12.10 | 13.25 | 12.76 | 11.04 |
| group.n.01 | 6.50 | 6.80 | 6.84 | 6.03 |
| attribute.n.02 | 6.49 | 5.93 | 6.82 | 6.22 |
| relation.n.01 | 3.53 | 3.54 | 3.55 | 3.51 |
| matter.n.03 | 3.16 | 3.00 | 2.99 | 3.40 |
| process.n.06 | 0.44 | 0.52 | 0.37 | 0.49 |
| thing.n.12 | 0.30 | 0.36 | 0.27 | 0.32 |
| set.n.02 | 0.01 | 0.01 | 0.01 | 0.02 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| whole.n.02 | 15.33 | 14.93 | 13.38 | 17.72 |
| event.n.01 | 15.17 | 15.21 | 15.76 | 14.45 |
| person.n.01 | 14.91 | 16.30 | 15.82 | 13.49 |
| definite_quantity.n.01 | 13.95 | 15.28 | 13.93 | 13.64 |
| message.n.02 | 8.48 | 7.94 | 8.08 | 9.09 |
| cognition.n.01 | 8.16 | 8.41 | 7.64 | 8.73 |
| written_communication.n.01 | 5.48 | 4.11 | 5.87 | 5.36 |
| location.n.01 | 5.11 | 3.48 | 5.48 | 5.05 |
| state.n.02 | 4.35 | 3.89 | 4.68 | 4.06 |
| substance.n.01 | 3.18 | 3.20 | 3.12 | 3.24 |
| indication.n.01 | 2.99 | 4.28 | 2.89 | 2.81 |
| social_group.n.01 | 2.89 | 2.97 | 3.33 | 2.35 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S147. 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: 14

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.48 | 6.48 | 6.37 | 6.62 |
| $\sigma(mindepth)$ | 1.80 | 1.75 | 1.72 | 1.89 |
| $\mu(max depth)$ | 6.93 | 6.97 | 6.85 | 7.03 |
| $\sigma(max depth)$ | 2.10 | 2.12 | 2.08 | 2.12 |
| $\mu(holonyms)$ | 0.14 | 0.14 | 0.12 | 0.16 |
| $\sigma(holonyms)$ | 0.56 | 0.42 | 0.50 | 0.65 |
| $\mu(meronyms)$ | 0.45 | 0.39 | 0.44 | 0.47 |
| $\sigma(meronyms)$ | 2.74 | 2.32 | 2.83 | 2.73 |
| $\mu(domains)$ | 0.08 | 0.08 | 0.09 | 0.07 |
| $\sigma(domains)$ | 0.28 | 0.27 | 0.29 | 0.27 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.03 | 3.12 | 3.04 | 2.99 |
| $\sigma(lemmas)$ | 2.55 | 2.60 | 2.60 | 2.48 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 11.02 | 11.19 | 11.84 | 9.99 |
| $\sigma(hyponyms)$ | 43.82 | 45.47 | 46.53 | 39.85 |
| $\mu(hypernyms)$ | 1.04 | 1.03 | 1.04 | 1.03 |
| $\sigma(hypernyms)$ | 0.19 | 0.18 | 0.20 | 0.18 |

TABLE S148. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 14

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| net.a.01 | 25.65 | 23.09 | 28.43 | 22.85 |
| new.a.01 | 15.60 | 13.89 | 16.08 | 15.48 |
| like.a.01 | 11.69 | 12.72 | 11.37 | 11.79 |
| real.a.01 | 6.21 | 9.20 | 5.15 | 6.69 |
| free.a.01 | 5.90 | 4.89 | 6.13 | 5.90 |
| easy.a.01 | 5.63 | 5.68 | 6.35 | 4.71 |
| honest.a.01 | 5.46 | 8.61 | 4.58 | 5.67 |
| blunt.s.03 | 5.44 | 8.61 | 4.58 | 5.61 |
| good.a.01 | 4.75 | 2.94 | 4.49 | 5.61 |
| available.a.01 | 4.68 | 1.57 | 2.58 | 8.28 |
| first.a.01 | 4.64 | 6.26 | 4.22 | 4.71 |
| best.a.01 | 4.35 | 2.54 | 6.04 | 2.72 |
| 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 (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 14

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.05 | 0.04 | 0.06 | 0.05 |
| $\sigma(domains)$ | 0.23 | 0.20 | 0.24 | 0.22 |
| $\mu(similar)$ | 5.76 | 5.10 | 5.73 | 5.94 |
| $\sigma(similar)$ | 7.16 | 6.42 | 7.11 | 7.36 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.87 | 2.00 | 1.87 | 1.84 |
| $\sigma(lemmas)$ | 1.62 | 1.79 | 1.62 | 1.58 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S150. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 14

| | g. | p. | i. | h. |
|-----------------------|---------|--------|--------|--------|
| act.v.01 | 13.24 | 12.54 | 12.23 | 14.75 |
| think.v.03 | 9.91 | 7.84 | 10.19 | 10.06 |
| change.v.01 | 9.20 | 7.91 | 9.56 | 9.06 |
| move.v.02 | 9.05 | 10.87 | 8.30 | 9.58 |
| travel.v.01 | 8.49 | 10.13 | 8.04 | 8.66 |
| transfer.v.05 | 8.39 | 9.33 | 8.56 | 7.91 |
| use.v.01 | 8.31 | 8.09 | 8.64 | 7.94 |
| get.v.01 | 8.11 | 9.33 | 8.87 | 6.79 |
| make.v.03 | 7.38 | 7.35 | 7.31 | 7.47 |
| make.v.01 | 7.25 | 6.86 | 7.73 | 6.73 |
| change.v.02 | 6.76 | 5.87 | 6.71 | 7.07 |
| be.v.01 | 3.91 | 3.89 | 3.86 | 3.98 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| give.v.03 | 15.83 | 18.71 | 16.48 | 14.32 |
| interact.v.01 | 15.63 | 16.23 | 14.88 | 16.42 |
| evaluate.v.02 | 14.44 | 13.75 | 14.64 | 14.35 |
| put.v.01 | 9.95 | 13.75 | 8.76 | 10.54 |
| state.v.01 | 7.30 | 4.83 | 7.23 | 7.99 |
| keep.v.03 | 6.67 | 5.58 | 6.82 | 6.75 |
| change_magnitude.v.01 | 6.16 | 3.47 | 6.73 | 6.10 |
| try.v.01 | 5.34 | 5.33 | 5.19 | 5.53 |
| see.v.01 | 5.19 | 5.33 | 4.44 | 6.10 |
| choose.v.01 | 4.60 | 3.59 | 5.31 | 3.94 |
| attach.v.01 | 4.50 | 4.34 | 5.08 | 3.82 |
| look.v.02 | 4.38 | 5.08 | 4.44 | 4.14 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 20.60 | 19.59 | 18.69 | 23.61 |
| support.v.02 | 18.83 | 22.41 | 20.25 | 15.76 |
| think.v.01 | 10.01 | 8.31 | 10.51 | 9.80 |
| increase.v.01 | 8.60 | 4.39 | 9.06 | 9.20 |
| save.v.02 | 7.72 | 5.96 | 7.86 | 8.04 |
| install.v.01 | 7.58 | 10.19 | 6.14 | 8.87 |
| read.v.01 | 5.79 | 7.68 | 4.98 | 6.38 |
| run.v.01 | 5.11 | 4.70 | 4.30 | 6.38 |
| write.v.01 | 5.02 | 3.45 | 6.11 | 3.93 |
| name.v.01 | 4.12 | 6.11 | 3.91 | 3.84 |
| compound.v.05 | 3.34 | 3.13 | 4.14 | 2.26 |
| tag.v.01 | 3.27 | 4.08 | 4.04 | 1.94 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| sponsor.v.01 | 28.86 | 36.86 | 29.65 | 25.32 |
| inform.v.01 | 22.59 | 23.71 | 19.66 | 26.87 |
| add.v.01 | 11.91 | 6.19 | 12.17 | 13.14 |
| record.v.01 | 11.83 | 9.79 | 11.51 | 12.92 |
| integrate.v.01 | 5.12 | 5.15 | 6.06 | 3.64 |
| code.v.01 | 3.41 | 3.87 | 4.22 | 2.00 |
| script.v.01 | 3.04 | 3.09 | 3.93 | 1.63 |
| propose.v.01 | 2.96 | 1.29 | 2.98 | 3.41 |
| enumerate.v.01 | 2.81 | 1.80 | 3.03 | 2.75 |
| see.v.05 | 2.81 | 3.61 | 2.94 | 2.38 |
| upgrade.v.01 | 2.44 | 3.87 | 1.80 | 3.04 |
| talk.v.01 | 2.21 | 0.77 | 2.04 | 2.90 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| - | 1 23.00 | | | |

TABLE S151. 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: 14

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.35 | 1.37 | 1.36 | 1.34 |
| $\sigma(mindepth)$ | 1.54 | 1.58 | 1.55 | 1.52 |
| $\mu(max depth)$ | 1.35 | 1.37 | 1.36 | 1.34 |
| $\sigma(max depth)$ | 1.54 | 1.58 | 1.55 | 1.53 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.04 | 0.04 | 0.04 | 0.03 |
| $\sigma(domains)$ | 0.20 | 0.19 | 0.21 | 0.18 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.44 | 0.44 | 0.43 | 0.44 |
| $\sigma(verbgroups)$ | 0.61 | 0.62 | 0.61 | 0.61 |
| $\mu(lemmas)$ | 3.18 | 3.16 | 3.17 | 3.19 |
| $\sigma(lemmas)$ | 2.06 | 2.03 | 2.04 | 2.10 |
| $\mu(entailments)$ | 0.04 | 0.03 | 0.04 | 0.04 |
| $\sigma(entailments)$ | 0.20 | 0.19 | 0.20 | 0.20 |
| $\mu(hyponyms)$ | 14.65 | 14.39 | 14.83 | 14.48 |
| $\sigma(hyponyms)$ | 37.28 | 34.28 | 38.20 | 36.80 |
| $\mu(hypernyms)$ | 0.62 | 0.62 | 0.61 | 0.63 |
| $\sigma(hypernyms)$ | 0.49 | 0.49 | 0.49 | 0.48 |

TABLE S152. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 14

| | g. | р. | i. | h. |
|---------------|--------|--------|--------|--------|
| truly.r.01 | 17.78 | 31.18 | 17.15 | 15.99 |
| besides.r.02 | 14.00 | 10.22 | 15.47 | 13.13 |
| quickly.r.01 | 8.49 | 10.75 | 11.84 | 4.54 |
| possibly.r.01 | 8.41 | 9.14 | 9.79 | 6.81 |
| well.r.01 | 8.32 | 4.84 | 6.90 | 10.46 |
| even.r.01 | 7.09 | 4.84 | 6.71 | 7.90 |
| still.r.01 | 6.82 | 6.99 | 8.29 | 5.23 |
| never.r.01 | 6.25 | 3.23 | 2.61 | 10.66 |
| probably.r.01 | 5.94 | 4.84 | 5.03 | 7.11 |
| however.r.01 | 5.85 | 5.91 | 4.94 | 6.81 |
| already.r.01 | 5.59 | 2.69 | 5.68 | 6.02 |
| back.r.01 | 5.46 | 5.38 | 5.59 | 5.33 |
| 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 (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 14

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.09 | 0.10 | 0.08 | 0.11 |
| $\sigma(domains)$ | 0.29 | 0.29 | 0.28 | 0.31 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.21 | 3.15 | 3.20 | 3.22 |
| $\sigma(lemmas)$ | 2.15 | 2.05 | 2.05 | 2.27 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S154. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 14

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 25.34 | 33.50 | 26.86 | 22.62 |
| X | 0.24 | 0.18 | 0.23 | 0.26 |
| ADP | 12.27 | 10.35 | 12.54 | 12.52 |
| DET | 11.22 | 9.95 | 11.09 | 11.57 |
| VERB | 23.03 | 22.61 | 22.71 | 23.31 |
| ADJ | 6.58 | 5.26 | 6.33 | 7.02 |
| ADV | 8.11 | 6.23 | 7.42 | 8.93 |
| PRT | 3.29 | 2.92 | 3.26 | 3.39 |
| PRON | 6.56 | 5.72 | 5.98 | 7.10 |
| NUM | 0.68 | 0.83 | 0.79 | 0.57 |
| CONJ | 2.70 | 2.46 | 2.79 | 2.70 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 51.05 | 60.24 | 53.37 | 47.14 |
| ADJ | 12.71 | 8.82 | 12.10 | 14.14 |
| VERB | 7.84 | 5.00 | 6.59 | 9.38 |
| ADV | 28.40 | 25.94 | 27.94 | 29.34 |
| POS | 32.17 | 29.25 | 32.55 | 32.79 |
| POS! | 93.96 | 88.38 | 93.86 | 95.61 |

TABLE S155. 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 | 73.45 | 71.55 | 70.95 | 75.90 |
| physical_entity.n.01 | 26.55 | 28.45 | 29.05 | 24.10 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| psychological_feature.n.01 | 23.46 | 16.03 | 21.65 | 27.28 |
| measure.n.02 | 19.57 | 31.15 | 17.74 | 17.00 |
| object.n.01 | 14.34 | 16.93 | 15.16 | 12.88 |
| communication.n.02 | 14.12 | 11.11 | 14.83 | 14.62 |
| attribute.n.02 | 9.10 | 7.23 | 10.04 | 9.05 |
| causal_agent.n.01 | 5.67 | 4.94 | 6.50 | 5.32 |
| matter.n.03 | 5.02 | 5.41 | 5.38 | 4.63 |
| relation.n.01 | 3.60 | 3.09 | 3.30 | 3.98 |
| group.n.01 | 3.59 | 2.92 | 3.38 | 3.96 |
| process.n.06 | 0.79 | 0.46 | 0.98 | 0.75 |
| thing.n.12 | 0.73 | 0.70 | 1.03 | 0.52 |
| set.n.02 | 0.01 | 0.02 | 0.01 | 0.01 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| definite_quantity.n.01 | 19.37 | 34.05 | 17.30 | 15.71 |
| event.n.01 | 14.98 | 10.01 | 14.46 | 17.12 |
| cognition.n.01 | 13.37 | 8.75 | 11.82 | 16.12 |
| whole.n.02 | 13.17 | 14.98 | 14.31 | 11.69 |
| message.n.02 | 6.82 | 4.23 | 7.50 | 7.23 |
| person.n.01 | 6.76 | 5.78 | 7.86 | 6.30 |
| state.n.02 | 6.39 | 5.26 | 7.50 | 5.98 |
| substance.n.01 | 5.49 | 5.47 | 5.93 | 5.16 |
| written_communication.n.01 | 5.20 | 3.96 | 4.96 | 5.81 |
| location.n.01 | 3.62 | 4.17 | 3.37 | 3.61 |
| property.n.02 | 2.54 | 1.74 | 2.48 | 2.87 |
| indication.n.01 | 2.30 | 1.60 | 2.50 | 2.40 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S156. 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. | р. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.61 | 6.93 | 6.57 | 6.53 |
| $\sigma(mindepth)$ | 1.90 | 2.05 | 1.88 | 1.84 |
| $\mu(max depth)$ | 6.88 | 7.16 | 6.87 | 6.78 |
| $\sigma(max depth)$ | 1.99 | 2.07 | 1.98 | 1.96 |
| $\mu(holonyms)$ | 0.15 | 0.18 | 0.16 | 0.12 |
| $\sigma(holonyms)$ | 0.57 | 0.46 | 0.72 | 0.48 |
| $\mu(meronyms)$ | 0.33 | 0.38 | 0.32 | 0.31 |
| $\sigma(meronyms)$ | 1.68 | 1.93 | 1.78 | 1.50 |
| $\mu(domains)$ | 0.06 | 0.06 | 0.06 | 0.05 |
| $\sigma(domains)$ | 0.24 | 0.24 | 0.25 | 0.23 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.49 | 4.74 | 3.24 | 3.25 |
| $\sigma(lemmas)$ | 3.41 | 4.88 | 2.98 | 2.98 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 7.41 | 5.97 | 7.89 | 7.56 |
| $\sigma(hyponyms)$ | 25.78 | 24.60 | 28.10 | 24.36 |
| $\mu(hypernyms)$ | 1.04 | 1.04 | 1.05 | 1.03 |
| $\sigma(hypernyms)$ | 0.20 | 0.20 | 0.22 | 0.19 |

TABLE S157. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 15

| | g. | р. | i. | h. |
|-----------------|--------|--------|--------|--------|
| like.a.01 | 17.62 | 25.00 | 17.63 | 16.74 |
| new.a.01 | 14.79 | 13.57 | 21.40 | 11.81 |
| certain.a.02 | 8.54 | 7.14 | 7.91 | 9.01 |
| standard.a.01 | 8.12 | 5.71 | 7.91 | 8.50 |
| regretful.a.01 | 7.15 | 4.29 | 5.22 | 8.41 |
| all_right.s.01 | 6.94 | 10.71 | 7.01 | 6.46 |
| current.a.01 | 6.83 | 7.14 | 4.50 | 7.90 |
| good.a.01 | 6.78 | 2.86 | 7.01 | 7.14 |
| small.a.01 | 6.25 | 3.57 | 6.47 | 6.46 |
| incorrect.a.01 | 5.87 | 9.29 | 4.32 | 6.20 |
| particular.s.01 | 5.77 | 2.14 | 5.58 | 6.29 |
| possible.a.01 | 5.34 | 8.57 | 5.04 | 5.10 |
| 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. |
|-----------------------|------|------|------|------|
| (' 1 11) | | | 0.00 | 0.00 |
| $\mu(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.07 | 0.05 | 0.07 | 0.07 |
| $\sigma(domains)$ | 0.25 | 0.21 | 0.25 | 0.26 |
| $\mu(similar)$ | 5.59 | 5.27 | 5.70 | 5.57 |
| $\sigma(similar)$ | 6.75 | 6.85 | 6.92 | 6.64 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.79 | 1.81 | 1.78 | 1.79 |
| $\sigma(lemmas)$ | 1.52 | 1.46 | 1.57 | 1.51 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S159. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 15

| act.v.01 | 4.00 3.70 0.70 9.73 9.63 8.51 6.97 6.30 5.85 5.09 4.98 4.53 00.00 23.04 6.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 4.96 | 7.48 13.01 19.08 7.62 9.51 7.69 6.00 6.88 5.39 3.91 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 4.59 | 12.98 12.05 10.24 9.90 9.67 8.17 6.50 6.59 5.49 7.52 4.72 100.00 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 4.93 | 16.16 14.82 8.94 10.15 9.63 8.91 7.67 6.04 5.54 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 5.75 |
|--|--|--|--|---|
| make.v.03 1 change.v.01 9 travel.v.01 9 use.v.01 6 change.v.02 6 move.v.02 6 be.v.01 5 include.v.01 2 express.v.02 2 total 10 evaluate.v.02 2 interact.v.01 1 state.v.01 6 change_magnitude.v.01 7 create_verbally.v.01 6 put.v.01 6 | 0.70 9.73 9.63 8.51 6.97 6.30 5.85 5.09 4.98 4.53 00.00 23.04 6.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 19.08 7.62 9.51 7.69 6.00 6.88 5.39 3.91 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 10.24 9.90 9.67 8.17 6.50 6.59 5.49 7.52 4.72 100.00 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 8.94 10.15 9.63 8.91 7.67 6.04 5.54 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| change.v.01 9 travel.v.01 9 use.v.01 8 change.v.02 6 move.v.02 6 be.v.01 3 include.v.01 4 express.v.02 4 total 10 evaluate.v.02 2 interact.v.01 1 state.v.01 6 change_magnitude.v.01 7 create_verbally.v.01 6 put.v.01 5 | 9.73 9.63 8.51 6.97 6.30 5.85 5.09 4.98 4.53 00.00 23.04 6.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 7.62 9.51 7.69 6.00 6.88 5.39 3.91 10.72 2.70 100.00 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 9.90 9.67 8.17 6.17 6.50 6.59 5.49 7.52 4.72 100.00 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 10.15 9.63 8.91 7.67 6.04 5.54 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| travel.v.01 use.v.01 change.v.02 move.v.02 be.v.01 include.v.01 express.v.02 total construct.v.01 construct.v.01 | 9.63 8.51 6.97 6.30 5.85 5.09 4.98 4.53 00.00 23.04 6.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 9.51 7.69 6.00 6.88 5.39 3.91 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 9.67 8.17 6.17 6.50 6.59 5.49 7.52 4.72 100.00 23.30 15.93 7.06 4.37 6.75 7.25 5.93 | 9.63 8.91 7.67 6.04 5.54 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| travel.v.01 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 8.51 6.97 6.30 5.85 5.09 4.98 4.53 00.00 23.04 16.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 7.69 6.00 6.88 5.39 3.91 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 8.17 6.17 6.50 6.59 5.49 7.52 4.72 100.00 23.30 10.43 7.06 4.37 6.75 7.25 5.93 | 8.91 7.67 6.04 5.54 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| use.v.01 | 8.51 6.97 6.30 5.85 5.09 4.98 4.53 00.00 23.04 16.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 7.69 6.00 6.88 5.39 3.91 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 8.17 6.17 6.50 6.59 5.49 7.52 4.72 100.00 23.30 10.43 7.06 4.37 6.75 7.25 5.93 | 7.67 6.04 5.54 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| Change.v.02 | 6.97 6.30 5.85 5.09 4.98 4.53 00.00 23.04 6.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 6.00 6.88 5.39 3.91 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 6.17 6.50 6.59 5.49 7.52 4.72 100.00 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 7.67 6.04 5.54 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| move.v.02 6 | 6.30 5.85 5.09 4.98 4.53 00.00 23.04 6.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 6.88 5.39 3.91 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 6.50 6.59 5.49 7.52 4.72 100.00 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 6.04 5.54 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| be.v.01 | 5.85 5.09 4.98 4.53 00.00 23.04 6.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 5.39 3.91 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 6.59 5.49 7.52 4.72 100.00 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 5.54 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| make.v.01 ! include.v.01 2 express.v.02 2 total 10 evaluate.v.02 2 interact.v.01 1 state.v.01 8 change_magnitude.v.01 5 construct.v.01 7 create_verbally.v.01 6 put.v.01 5 | 5.09 4.98 4.53 00.00 23.04 16.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 3.91 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 5.49 7.52 4.72 100.00 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 5.15 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| include.v.01 | 4.98 4.53 00.00 23.04 6.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 10.72 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 7.52 4.72 100.00 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 2.13 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| express.v.02 4 total 10 evaluate.v.02 2 interact.v.01 1 state.v.01 8 change_magnitude.v.01 3 construct.v.01 3 create_verbally.v.01 6 put.v.01 5 | 4.53 00.00 23.04 6.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 2.70 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 4.72 100.00 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 4.85 100.00 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| total 10 evaluate.v.02 2 interact.v.01 1 state.v.01 8 change_magnitude.v.01 5 construct.v.01 7 create_verbally.v.01 6 put.v.01 8 | 23.04 16.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 100.00 10.14 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 23.30 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 25.81 17.22 8.90 7.78 3.60 6.54 4.84 |
| interact.v.01 1 state.v.01 8 change_magnitude.v.01 6 construct.v.01 7 create_verbally.v.01 6 put.v.01 8 | 16.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 17.22 8.90 7.78 3.60 6.54 4.84 |
| interact.v.01 1 state.v.01 8 change_magnitude.v.01 6 construct.v.01 7 create_verbally.v.01 6 put.v.01 8 | 16.83 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 17.03 5.41 4.46 28.51 3.11 7.57 5.41 | 15.93 10.43 7.06 4.37 6.75 7.25 5.93 | 17.22 8.90 7.78 3.60 6.54 4.84 |
| state.v.01 8 change_magnitude.v.01 7 construct.v.01 7 create_verbally.v.01 8 put.v.01 8 | 8.87 7.14 7.08 6.15 5.88 5.76 5.01 | 5.41 4.46 28.51 3.11 7.57 5.41 | 10.43 7.06 4.37 6.75 7.25 5.93 | 8.90 7.78 3.60 6.54 4.84 |
| change_magnitude.v.01 construct.v.01 create_verbally.v.01 gut.v.01 create_verbally.v.01 creat | 7.14 7.08 6.15 5.88 5.76 5.01 | 4.46 28.51 3.11 7.57 5.41 | 7.06 4.37 6.75 7.25 5.93 | 7.78 3.60 6.54 4.84 |
| construct.v.01 create_verbally.v.01 e | 7.08 6.15 5.88 5.76 5.01 | 28.51 3.11 7.57 5.41 | 4.37 6.75 7.25 5.93 | 3.60 6.54 4.84 |
| create_verbally.v.01 create_verbally.v.01 s | 6.15 5.88 5.76 5.01 | 3.11 7.57 5.41 | 6.75 7.25 5.93 | 6.54 4.84 |
| put.v.01 | 5.88 5.76 5.01 | 7.57 5.41 | 7.25 5.93 | 4.84 |
| * | 5.76 5.01 | 5.41 | 5.93 | _ |
| | 5.01 | | | 0.10 |
| | | 1.00 | 44.4.3 | 5.14 |
| | | 3.24 | 4.75 | 5.45 |
| | 4.80 | 4.86 | 3.69 | 5.33 |
| | 4.48 | 5.68 | 5.62 | 3.66 |
| | | | | 100.00 |
| | 24.55 | 31.86 | 22.77 | 24.22 |
| | 6.25 | 5.26 | 15.24 | 18.49 |
| | 0.21 | 8.31 | 9.97 | 10.43 |
| | 9.44 | 6.37 | 10.16 | 9.60 |
| | 6.31 | 5.82 | 5.36 | 6.84 |
| | $\frac{0.31}{5.88}$ | 5.26 | 5.64 | 6.09 |
| | 5.44 | 4.43 | 5.74 | 5.47 |
| | 4.87 | 9.70 | 4.99 | 4.04 |
| | 4.71 | 9.10 | 4.33 | 4.04 |
| | 4.71 | 2.49 | 6.87 | 4.13 |
| | 4.71 | 8.31 | 5.64 | 3.07 |
| | 3.29 | 3.05 | 3.29 | 3.33 |
| | 00.00 | 100.00 | 100.00 | 100.00 |
| | | 44.44 | 27.41 | 31.24 |
| | 81.46 8.30 | 12.63 | 15.86 | 20.67 |
| | 8.39 | 14.65 | 10.17 | 6.27 |
| | $\frac{6.39}{6.17}$ | 4.04 | 5.69 | 6.83 |
| | 5.41 | 2.02 | 5.52 | 5.99 |
| | 5.20 | 3.54 | 4.83 | 5.71 |
| | $\frac{3.20}{4.93}$ | 6.06 | 5.17 | 4.58 |
| | 4.66 | 3.54 | 4.48 | 4.96 |
| | 4.01 | 2.02 | 4.48 | 4.12 |
| 9 | 3.84 | 3.54 | 3.28 | 4.21 |
| | 3.84 | 2.02 | 10.52 | 0.56 |
| | 3.79 | 1.52 | 2.59 | 4.86 |
| | 00.00 | 100.00 | 100.00 | 100.00 |

TABLE S160. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.37 | 1.34 | 1.32 | 1.41 |
| $\sigma(mindepth)$ | 1.52 | 1.48 | 1.45 | 1.57 |
| $\mu(max depth)$ | 1.37 | 1.34 | 1.32 | 1.41 |
| $\sigma(maxdepth)$ | 1.52 | 1.48 | 1.45 | 1.57 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.03 | 0.02 | 0.03 | 0.03 |
| $\sigma(domains)$ | 0.16 | 0.13 | 0.16 | 0.17 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.46 | 0.48 | 0.45 | 0.45 |
| $\sigma(verbgroups)$ | 0.61 | 0.61 | 0.61 | 0.61 |
| $\mu(lemmas)$ | 3.25 | 3.16 | 3.28 | 3.26 |
| $\sigma(lemmas)$ | 2.16 | 2.17 | 2.22 | 2.11 |
| $\mu(entailments)$ | 0.07 | 0.09 | 0.08 | 0.06 |
| $\sigma(entailments)$ | 0.26 | 0.29 | 0.27 | 0.24 |
| $\mu(hyponyms)$ | 16.19 | 12.63 | 16.06 | 17.10 |
| $\sigma(hyponyms)$ | 42.76 | 29.49 | 43.05 | 45.09 |
| $\mu(hypernyms)$ | 0.66 | 0.69 | 0.64 | 0.66 |
| $\sigma(hypernyms)$ | 0.48 | 0.48 | 0.48 | 0.48 |

TABLE S161. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 15

| | g. | p. | i. | h. |
|--------------------|--------|--------|--------|--------|
| besides.r.02 | 15.85 | 19.87 | 14.86 | 15.76 |
| possibly.r.01 | 9.91 | 10.26 | 7.24 | 10.99 |
| truly.r.01 | 8.36 | 7.69 | 8.19 | 8.52 |
| actually.r.01 | 8.31 | 5.13 | 7.05 | 9.24 |
| still.r.01 | 8.16 | 4.49 | 9.33 | 8.12 |
| already.r.01 | 8.00 | 5.77 | 7.62 | 8.44 |
| however.r.01 | 7.95 | 7.05 | 6.29 | 8.76 |
| probably.r.01 | 7.69 | 7.69 | 7.81 | 7.64 |
| well.r.01 | 7.49 | 7.05 | 10.48 | 6.29 |
| therefore.r.01 | 6.61 | 5.77 | 7.24 | 6.45 |
| even.r.01 | 6.40 | 12.18 | 6.48 | 5.65 |
| alternatively.r.01 | 5.27 | 7.05 | 7.43 | 4.14 |
| 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 (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 15

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.09 | 0.09 | 0.11 | 0.08 |
| $\sigma(domains)$ | 0.29 | 0.28 | 0.31 | 0.28 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.22 | 3.16 | 3.11 | 3.28 |
| $\sigma(lemmas)$ | 2.17 | 2.05 | 2.10 | 2.21 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S163. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 15

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 25.75 | 29.96 | 26.74 | 23.60 |
| X | 0.15 | 0.11 | 0.20 | 0.11 |
| ADP | 11.70 | 11.32 | 11.53 | 11.98 |
| DET | 11.38 | 10.79 | 11.26 | 11.67 |
| VERB | 21.68 | 21.15 | 21.35 | 22.16 |
| ADJ | 6.15 | 5.95 | 5.97 | 6.38 |
| ADV | 7.68 | 6.37 | 7.34 | 8.39 |
| PRT | 3.70 | 3.58 | 3.71 | 3.71 |
| PRON | 7.36 | 5.96 | 7.37 | 7.75 |
| NUM | 1.00 | 1.39 | 1.14 | 0.76 |
| CONJ | 3.44 | 3.41 | 3.39 | 3.49 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 55.29 | 61.26 | 56.97 | 51.55 |
| ADJ | 11.94 | 10.33 | 11.41 | 13.02 |
| VERB | 7.12 | 5.11 | 6.41 | 8.53 |
| ADV | 25.65 | 23.29 | 25.21 | 26.90 |
| POS | 34.93 | 35.29 | 34.14 | 35.69 |
| POS! | 95.40 | 93.78 | 95.11 | 96.25 |

TABLE S164. 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 | 67.99 | 70.88 | 68.81 | 65.91 |
| physical_entity.n.01 | 32.01 | 29.12 | 31.19 | 34.09 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| measure.n.02 | 19.99 | 23.93 | 21.56 | 16.63 |
| object.n.01 | 19.58 | 18.45 | 19.46 | 20.14 |
| psychological_feature.n.01 | 17.52 | 15.56 | 17.28 | 18.56 |
| communication.n.02 | 14.54 | 16.31 | 14.40 | 14.01 |
| attribute.n.02 | 8.77 | 7.24 | 8.69 | 9.46 |
| causal_agent.n.01 | 6.32 | 4.97 | 5.47 | 7.83 |
| matter.n.03 | 4.21 | 4.05 | 4.43 | 4.02 |
| group.n.01 | 3.86 | 3.96 | 3.70 | 4.01 |
| relation.n.01 | 3.30 | 3.86 | 3.18 | 3.22 |
| thing.n.12 | 1.06 | 0.96 | 1.00 | 1.17 |
| process.n.06 | 0.85 | 0.69 | 0.82 | 0.94 |
| set.n.02 | 0.01 | 0.01 | 0.00 | 0.00 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| definite_quantity.n.01 | 19.44 | 25.72 | 21.61 | 14.36 |
| whole.n.02 | 18.41 | 16.63 | 18.00 | 19.61 |
| event.n.01 | 13.72 | 12.56 | 13.30 | 14.68 |
| cognition.n.01 | 8.69 | 7.04 | 8.79 | 9.23 |
| person.n.01 | 6.96 | 5.38 | 6.04 | 8.67 |
| location.n.01 | 6.15 | 5.91 | 6.37 | 5.98 |
| message.n.02 | 5.63 | 6.89 | 5.66 | 5.10 |
| state.n.02 | 5.15 | 3.98 | 4.95 | 5.86 |
| written_communication.n.01 | 5.02 | 4.71 | 4.59 | 5.66 |
| substance.n.01 | 4.48 | 4.51 | 4.65 | 4.27 |
| auditory_communication.n.01 | 3.31 | 4.01 | 3.00 | 3.41 |
| property.n.02 | 3.04 | 2.66 | 3.04 | 3.18 |
| 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: 16

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.43 | 6.47 | 6.46 | 6.39 |
| $\sigma(mindepth)$ | 1.73 | 1.70 | 1.71 | 1.77 |
| $\mu(max depth)$ | 6.68 | 6.67 | 6.68 | 6.67 |
| $\sigma(max depth)$ | 1.83 | 1.78 | 1.80 | 1.88 |
| $\mu(holonyms)$ | 0.16 | 0.16 | 0.16 | 0.16 |
| $\sigma(holonyms)$ | 0.56 | 0.55 | 0.56 | 0.56 |
| $\mu(meronyms)$ | 0.45 | 0.46 | 0.44 | 0.45 |
| $\sigma(meronyms)$ | 2.74 | 3.01 | 2.92 | 2.37 |
| $\mu(domains)$ | 0.08 | 0.09 | 0.07 | 0.09 |
| $\sigma(domains)$ | 0.28 | 0.29 | 0.27 | 0.29 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.13 | 3.37 | 3.17 | 2.99 |
| $\sigma(lemmas)$ | 3.00 | 3.14 | 3.05 | 2.89 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 8.28 | 8.11 | 7.48 | 9.29 |
| $\sigma(hyponyms)$ | 26.65 | 27.20 | 24.25 | 28.97 |
| $\mu(hypernyms)$ | 1.03 | 1.02 | 1.03 | 1.03 |
| $\sigma(hypernyms)$ | 0.17 | 0.16 | 0.17 | 0.16 |

TABLE S166. Measures of wordnet features in each Erdös sector (p. for periphery, i. for intermediary, h. for hubs). TAG: 16

| | g. | р. | i. | h. |
|----------------|--------|--------|--------|--------|
| like.a.01 | 22.71 | 19.67 | 23.67 | 22.56 |
| good.a.01 | 10.93 | 7.00 | 11.44 | 11.40 |
| new.a.01 | 9.94 | 15.00 | 7.51 | 10.93 |
| public.a.01 | 8.11 | 12.33 | 12.23 | 3.43 |
| different.a.01 | 6.46 | 4.33 | 6.72 | 6.71 |
| open.a.01 | 6.35 | 7.00 | 5.15 | 7.26 |
| many.a.01 | 6.24 | 6.33 | 4.45 | 7.81 |
| certain.a.02 | 6.20 | 3.33 | 6.46 | 6.64 |
| much.a.01 | 5.94 | 4.67 | 4.19 | 7.81 |
| small.a.01 | 5.94 | 6.00 | 6.72 | 5.23 |
| free.a.01 | 5.69 | 5.67 | 5.68 | 5.70 |
| able.a.01 | 5.50 | 8.67 | 5.76 | 4.53 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S167. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.06 | 0.04 | 0.05 | 0.07 |
| $\sigma(domains)$ | 0.24 | 0.21 | 0.22 | 0.26 |
| $\mu(similar)$ | 5.84 | 5.61 | 5.71 | 6.02 |
| $\sigma(similar)$ | 7.14 | 7.13 | 6.95 | 7.31 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.67 | 1.58 | 1.68 | 1.68 |
| $\sigma(lemmas)$ | 1.34 | 1.21 | 1.37 | 1.34 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S168. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 16

| | g. | p. | i. | h. |
|----------------------|---------|---------|--------|--------|
| act.v.01 | 14.10 | 15.75 | 13.93 | 13.79 |
| think.v.03 | 11.00 | 9.29 | 10.29 | 12.21 |
| travel.v.01 | 10.97 | 10.46 | 10.41 | 11.69 |
| use.v.01 | 9.88 | 9.91 | 9.78 | 9.97 |
| get.v.01 | 8.48 | 7.45 | 9.07 | 8.17 |
| change.v.01 | 8.48 | 7.94 | 8.40 | 8.70 |
| move.v.02 | 8.30 | 10.34 | 8.71 | 7.31 |
| make.v.03 | 7.74 | 7.02 | 7.69 | 7.99 |
| be.v.01 | 6.01 | 6.52 | 6.62 | 5.25 |
| make.v.01 | 5.23 | 4.68 | 5.32 | 5.30 |
| change.v.02 | 4.96 | 6.71 | 4.83 | 4.60 |
| express.v.02 | 4.84 | 3.94 | 4.93 | 5.00 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| evaluate.v.02 | 18.36 | 15.06 | 16.48 | 21.38 |
| interact.v.01 | 15.99 | 19.34 | 14.72 | 16.40 |
| state.v.01 | 9.51 | 7.59 | 9.34 | 10.26 |
| look.v.02 | 9.14 | 11.14 | 10.20 | 7.40 |
| put.v.01 | 8.85 | 10.16 | 9.44 | 7.84 |
| try.v.01 | 7.81 | 7.59 | 8.84 | 6.75 |
| travel_rapidly.v.01 | 7.72 | 6.98 | 7.54 | 8.13 |
| see.v.01 | 6.16 | 5.14 | 6.01 | 6.61 |
| keep.v.03 | 5.58 | 7.47 | 6.98 | 3.50 |
| give.v.03 | 4.34 | 3.67 | 3.12 | 5.85 |
| create_verbally.v.01 | 3.41 | 2.33 | 3.69 | 3.43 |
| play.v.01 | 3.14 | 3.55 | 3.65 | 2.46 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| communicate.v.02 | 25.23 | 29.46 | 23.69 | 25.58 |
| think.v.01 | 15.90 | 9.88 | 13.61 | 20.08 |
| run.v.01 | 12.54 | 11.05 | 12.56 | 12.96 |
| sound.v.01 | 7.65 | 11.43 | 9.57 | 4.51 |
| save.v.02 | 6.32 | 7.17 | 8.69 | 3.59 |
| expect.v.01 | 5.78 | 3.49 | 5.53 | 6.71 |
| install.v.01 | 5.58 | 6.40 | 6.81 | 4.05 |
| write.v.01 | 5.53 | 3.68 | 6.14 | 5.44 |
| increase.v.01 | 4.39 | 8.53 | 3.98 | 3.59 |
| supply.v.01 | 4.37 | 3.49 | 2.55 | 6.54 |
| declare.v.01 | 3.65 | 2.33 | 3.71 | 3.99 |
| read.v.01 | 3.06 | 3.10 | 3.15 | 2.95 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| inform.v.01 | 31.11 | 32.94 | 28.30 | 33.55 |
| record.v.01 | 13.80 | 14.68 | 18.82 | 8.06 |
| add.v.01 | 7.92 | 15.48 | 7.19 | 6.24 |
| see.v.05 | 7.71 | 5.95 | 5.88 | 10.27 |
| think.v.02 | 6.36 | 3.17 | 6.47 | 7.28 |
| propose.v.01 | 5.98 | 3.17 | 6.47 | 6.37 |
| ask.v.01 | 5.39 | 3.57 | 7.55 | 3.64 |
| roll_up.v.02 | 5.34 | 9.13 | 5.64 | 3.77 |
| talk.v.02 | 4.96 | 2.38 | 4.20 | 6.63 |
| talk.v.01 | 4.53 | 0.79 | 4.08 | 6.24 |
| believe.v.01 | 3.50 | 2.78 | 2.64 | 4.68 |
| address.v.01 | 3.40 | 5.95 | 2.76 | 3.25 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| .5041 | 1 20.00 | 1 20.00 | 100.00 | 100.00 |

TABLE S169. 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. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.28 | 1.39 | 1.26 | 1.27 |
| $\sigma(mindepth)$ | 1.47 | 1.59 | 1.43 | 1.47 |
| $\mu(max depth)$ | 1.28 | 1.39 | 1.27 | 1.27 |
| $\sigma(max depth)$ | 1.47 | 1.59 | 1.43 | 1.47 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.03 | 0.03 | 0.04 | 0.03 |
| $\sigma(domains)$ | 0.18 | 0.17 | 0.19 | 0.17 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.47 | 0.44 | 0.47 | 0.48 |
| $\sigma(verbgroups)$ | 0.60 | 0.59 | 0.61 | 0.61 |
| $\mu(lemmas)$ | 3.15 | 3.11 | 3.15 | 3.16 |
| $\sigma(lemmas)$ | 2.17 | 2.17 | 2.15 | 2.18 |
| $\mu(entailments)$ | 0.06 | 0.06 | 0.06 | 0.07 |
| $\sigma(entailments)$ | 0.27 | 0.25 | 0.26 | 0.28 |
| $\mu(hyponyms)$ | 15.41 | 13.51 | 15.73 | 15.64 |
| $\sigma(hyponyms)$ | 35.79 | 32.81 | 36.55 | 35.81 |
| $\mu(hypernyms)$ | 0.62 | 0.65 | 0.62 | 0.62 |
| $\sigma(hypernyms)$ | 0.49 | 0.48 | 0.49 | 0.49 |

TABLE S170. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 16

| | g. | p. | i. | h. |
|---------------|--------|--------|--------|--------|
| besides.r.02 | 14.53 | 21.95 | 15.38 | 12.41 |
| truly.r.01 | 12.43 | 10.57 | 10.97 | 13.92 |
| well.r.01 | 11.30 | 9.76 | 10.26 | 12.41 |
| possibly.r.01 | 11.26 | 7.72 | 12.41 | 11.06 |
| still.r.01 | 9.64 | 8.13 | 11.08 | 8.83 |
| even.r.01 | 9.20 | 8.54 | 8.92 | 9.55 |
| probably.r.01 | 7.83 | 6.50 | 6.97 | 8.75 |
| however.r.01 | 5.08 | 6.50 | 4.31 | 5.41 |
| actually.r.01 | 4.84 | 3.66 | 5.03 | 4.93 |
| never.r.01 | 4.76 | 3.66 | 4.41 | 5.25 |
| yet.r.01 | 4.60 | 5.69 | 5.85 | 3.42 |
| already.r.01 | 4.52 | 7.32 | 4.41 | 4.06 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S171. 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. |
|-----------------------|------|------|------|------|
| Lu(main danth) | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.10 | 0.10 | 0.09 | 0.11 |
| $\sigma(domains)$ | 0.30 | 0.30 | 0.29 | 0.31 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.16 | 3.20 | 3.07 | 3.22 |
| $\sigma(lemmas)$ | 2.16 | 2.17 | 2.13 | 2.18 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S172. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 16

| | g. | p. | i. | h. |
|------|-------|-------|-------|-------|
| NOUN | 24.77 | 28.19 | 26.58 | 24.26 |
| X | 0.10 | 0.10 | 0.26 | 0.07 |
| ADP | 12.87 | 13.09 | 12.68 | 12.89 |
| DET | 12.24 | 11.74 | 12.20 | 12.28 |
| VERB | 21.81 | 21.07 | 21.78 | 21.86 |
| ADJ | 7.40 | 7.43 | 7.27 | 7.42 |
| ADV | 7.56 | 6.19 | 6.71 | 7.78 |
| PRT | 3.43 | 3.37 | 3.29 | 3.45 |
| PRON | 5.83 | 4.52 | 5.31 | 6.00 |
| NUM | 0.91 | 0.98 | 1.06 | 0.88 |
| CONJ | 3.09 | 3.31 | 2.84 | 3.11 |
| PUNC | 0.00 | 0.00 | 0.00 | 0.00 |
| N | 53.18 | 57.40 | 55.68 | 52.45 |
| ADJ | 14.16 | 13.38 | 13.41 | 14.35 |
| VERB | 7.66 | 5.57 | 6.32 | 8.03 |
| ADV | 25.00 | 23.65 | 24.60 | 25.17 |
| POS | 38.96 | 41.09 | 39.96 | 38.65 |
| POS! | 96.43 | 96.56 | 95.85 | 96.52 |

TABLE S173. 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 | 75.12 | 72.13 | 72.16 | 75.88 |
| physical_entity.n.01 | 24.88 | 27.87 | 27.84 | 24.12 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| psychological_feature.n.01 | 29.80 | 27.21 | 26.36 | 30.60 |
| causal_agent.n.01 | 12.95 | 11.43 | 13.52 | 12.98 |
| attribute.n.02 | 12.51 | 8.91 | 8.96 | 13.42 |
| measure.n.02 | 11.96 | 12.68 | 14.75 | 11.42 |
| communication.n.02 | 10.15 | 13.69 | 10.37 | 9.83 |
| object.n.01 | 8.63 | 11.97 | 10.24 | 8.08 |
| group.n.01 | 7.43 | 6.75 | 8.48 | 7.31 |
| relation.n.01 | 3.23 | 2.80 | 3.19 | 3.27 |
| matter.n.03 | 2.05 | 3.10 | 2.81 | 1.83 |
| process.n.06 | 0.94 | 0.94 | 0.91 | 0.95 |
| thing.n.12 | 0.31 | 0.43 | 0.35 | 0.29 |
| set.n.02 | 0.03 | 0.08 | 0.04 | 0.03 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| event.n.01 | 20.31 | 20.60 | 17.86 | 20.70 |
| person.n.01 | 15.25 | 13.99 | 16.10 | 15.21 |
| cognition.n.01 | 15.16 | 12.88 | 13.97 | 15.54 |
| definite_quantity.n.01 | 10.52 | 11.56 | 13.86 | 9.87 |
| message.n.02 | 7.13 | 8.11 | 8.10 | 6.89 |
| whole.n.02 | 6.47 | 8.41 | 7.79 | 6.10 |
| state.n.02 | 6.27 | 4.22 | 4.99 | 6.65 |
| property.n.02 | 5.61 | 3.05 | 3.68 | 6.14 |
| social_group.n.01 | 4.42 | 4.38 | 5.16 | 4.30 |
| location.n.01 | 3.68 | 5.96 | 4.48 | 3.36 |
| written_communication.n.01 | 2.85 | 4.94 | 2.54 | 2.74 |
| quality.n.01 | 2.32 | 1.91 | 1.46 | 2.50 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S174. 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. |
|-----------------------|-------|-------|-------|-------|
| $\mu(mindepth)$ | 6.22 | 6.27 | 6.25 | 6.21 |
| $\sigma(mindepth)$ | 1.48 | 1.48 | 1.47 | 1.48 |
| $\mu(max depth)$ | 6.69 | 6.73 | 6.75 | 6.68 |
| $\sigma(max depth)$ | 1.76 | 1.77 | 1.77 | 1.75 |
| $\mu(holonyms)$ | 0.13 | 0.15 | 0.15 | 0.13 |
| $\sigma(holonyms)$ | 0.43 | 0.58 | 0.49 | 0.40 |
| $\mu(meronyms)$ | 0.37 | 0.62 | 0.45 | 0.33 |
| $\sigma(meronyms)$ | 2.56 | 4.18 | 3.28 | 2.23 |
| $\mu(domains)$ | 0.05 | 0.07 | 0.06 | 0.05 |
| $\sigma(domains)$ | 0.24 | 0.28 | 0.27 | 0.24 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 2.82 | 2.78 | 2.83 | 2.83 |
| $\sigma(lemmas)$ | 2.29 | 2.44 | 2.38 | 2.26 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 10.85 | 11.55 | 10.72 | 10.81 |
| $\sigma(hyponyms)$ | 36.55 | 40.13 | 36.62 | 36.23 |
| $\mu(hypernyms)$ | 1.03 | 1.03 | 1.04 | 1.03 |
| $\sigma(hypernyms)$ | 0.18 | 0.16 | 0.21 | 0.17 |

TABLE S175. Measures of wordnet features in each Erdös sector (${f p}.$ for periphery, ${f i}.$ for intermediary, ${f h}.$ for hubs). TAG: 17

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| like.a.01 | 11.02 | 16.33 | 15.84 | 10.00 |
| sincere.a.01 | 10.75 | 0.23 | 6.23 | 12.05 |
| many.a.01 | 9.37 | 13.15 | 6.41 | 9.58 |
| small.a.01 | 9.13 | 7.71 | 7.33 | 9.48 |
| possible.a.01 | 8.99 | 5.90 | 6.32 | 9.56 |
| good.a.01 | 8.77 | 9.52 | 9.52 | 8.62 |
| new.a.01 | 7.53 | 11.79 | 13.46 | 6.41 |
| large.a.01 | 7.34 | 7.26 | 7.51 | 7.32 |
| strategic.a.01 | 7.20 | 1.13 | 4.58 | 7.95 |
| different.a.01 | 7.13 | 10.20 | 6.50 | 7.04 |
| first.a.01 | 6.58 | 11.56 | 8.61 | 5.99 |
| better.a.01 | 6.17 | 5.22 | 7.69 | 6.00 |
| 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 (p. for periphery, i. for intermediary, h. for hubs). Yes. TAG: 17

| | g. | p. | i. | h. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.06 | 0.06 | 0.07 | 0.06 |
| $\sigma(domains)$ | 0.25 | 0.23 | 0.26 | 0.25 |
| $\mu(similar)$ | 6.01 | 5.62 | 5.82 | 6.06 |
| $\sigma(similar)$ | 7.53 | 7.35 | 7.55 | 7.53 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 1.58 | 1.59 | 1.65 | 1.57 |
| $\sigma(lemmas)$ | 1.16 | 1.12 | 1.21 | 1.16 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S177. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 17

| | g. | р. | i. | h. |
|-------------------------------|--------|--------|-----------------------|--------|
| act.v.01 | 16.04 | 16.71 | 15.47 | 16.09 |
| think.v.03 | 14.05 | 9.74 | 13.11 | 14.48 |
| decide.v.01 | 13.60 | 13.57 | 14.36 | 13.48 |
| express.v.02 | 9.08 | 7.38 | 7.98 | 9.36 |
| be.v.01 | 7.68 | 6.60 | 8.59 | 7.61 |
| change.v.01 | 7.14 | 5.57 | 6.11 | 7.40 |
| perceive.v.01 | 6.15 | 8.91 | 7.83 | 5.70 |
| travel.v.01 | 5.59 | 6.89 | 6.04 | 5.44 |
| move.v.02 | 5.38 | 6.85 | 6.02 | 5.18 |
| make.v.01 | 5.30 | 3.84 | 3.68 | 5.65 |
| make.v.03 | 5.12 | 7.88 | 5.46 | 4.88 |
| use.v.01 | 4.87 | 6.06 | 5.35 | 4.72 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| choose.v.01 | 21.04 | 21.57 | 22.29 | 20.81 |
| evaluate.v.02 | 18.41 | 11.54 | 15.88 | 19.27 |
| interact.v.01 | 16.45 | 18.54 | 16.49 | 16.31 |
| state.v.01 | 14.70 | 12.02 | 12.94 | 15.16 |
| see.v.01 | 8.92 | 12.64 | $\frac{12.34}{11.76}$ | 8.22 |
| put.v.01 | 3.54 | 3.64 | 3.86 | 3.48 |
| give.v.03 | 3.18 | 5.29 | $\frac{3.00}{2.18}$ | 3.21 |
| look.v.02 | 3.15 | 2.54 | 3.58 | 3.12 |
| rank.v.01 | 2.93 | 1.92 | 2.94 | 3.00 |
| take.v.01 | 2.81 | 3.23 | 2.07 | 2.90 |
| trv.v.01 | 2.43 | 2.47 | 2.86 | 2.36 |
| create_verbally.v.01 | 2.42 | 4.60 | 3.14 | 2.16 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |
| | 24.47 | 28.54 | 25.25 | 24.09 |
| communicate.v.02 vote.v.01 | 22.75 | 23.93 | 23.23 | 22.49 |
| think.v.01 | 13.31 | 9.11 | 13.99 | 13.48 |
| expect.v.01 | 7.44 | 1.98 | 5.17 | 8.13 |
| declare.v.01 | 7.21 | 6.92 | 6.83 | 7.29 |
| elect.v.01 | 4.42 | 5.38 | 4.57 | 4.34 |
| accept.v.01 | 4.42 | 4.28 | 3.09 | 4.54 |
| write.v.01 | 3.81 | 7.24 | 5.17 | 3.38 |
| increase.v.01 | 3.30 | 4.39 | 4.06 | 3.12 |
| accept.v.03 | 3.13 | 2.20 | 2.68 | 3.12 |
| meet.v.05 | 2.91 | 1.76 | 3.00 | 2.97 |
| name.v.01 | 2.91 | 4.28 | 2.26 | 2.97 |
| total | 100.00 | | 100.00 | 100.00 |
| | 1 | | | |
| inform.v.01 | 31.94 | 39.80 | 33.52 | 31.28 |
| propose.v.01 | 11.10 | 10.81 | 10.38 | 11.22 |
| see.v.05 | 10.95 | 6.88 | 9.52 | 11.37 |
| assume.v.01 | 7.50 | 0.74 | 6.38 | 8.02 |
| talk.v.02 | 5.83 | 7.13 | 6.57 | 5.66 |
| permit.v.01 | 5.69 | 4.91 | 5.43 | 5.76 |
| satisfy.v.01 | 5.25 | 3.69 | 5.62 | 5.28 |
| believe.v.01 | 5.05 | 6.14 | 3.33 | 5.23 |
| mention.v.01 | 4.76 | 2.70 | 4.86 | 4.86 |
| communicate.v.01 | 4.52 | 9.09 | 4.67 | 4.25 |
| talk.v.01 | 3.78 | 3.69 | 4.10 | 3.74 |
| add.v.01 | 3.65 | 4.42 | 5.62 | 3.33 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S178. 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: 17

| | g. | p. | i. | h. |
|-----------------------|-------|-------|-------|-------|
| $\mu(min depth)$ | 1.48 | 1.50 | 1.46 | 1.48 |
| $\sigma(mindepth)$ | 1.61 | 1.60 | 1.58 | 1.62 |
| $\mu(max depth)$ | 1.48 | 1.50 | 1.46 | 1.48 |
| $\sigma(maxdepth)$ | 1.61 | 1.60 | 1.58 | 1.62 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.02 | 0.03 | 0.02 | 0.02 |
| $\sigma(domains)$ | 0.13 | 0.17 | 0.14 | 0.13 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.45 | 0.49 | 0.46 | 0.45 |
| $\sigma(verbgroups)$ | 0.63 | 0.65 | 0.64 | 0.62 |
| $\mu(lemmas)$ | 3.03 | 3.05 | 2.98 | 3.03 |
| $\sigma(lemmas)$ | 2.02 | 2.10 | 1.96 | 2.02 |
| $\mu(entailments)$ | 0.06 | 0.06 | 0.06 | 0.06 |
| $\sigma(entailments)$ | 0.24 | 0.25 | 0.25 | 0.24 |
| $\mu(hyponyms)$ | 12.49 | 12.73 | 12.31 | 12.50 |
| $\sigma(hyponyms)$ | 34.69 | 34.55 | 33.73 | 34.85 |
| $\mu(hypernyms)$ | 0.69 | 0.71 | 0.70 | 0.68 |
| $\sigma(hypernyms)$ | 0.47 | 0.45 | 0.46 | 0.47 |

TABLE S179. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 17

| | g. | p. | i. | h. |
|----------------|--------|--------|--------|--------|
| besides.r.02 | 13.91 | 19.66 | 16.90 | 13.29 |
| even.r.01 | 10.96 | 13.22 | 12.65 | 10.65 |
| possibly.r.01 | 10.17 | 9.15 | 10.52 | 10.16 |
| however.r.01 | 9.73 | 9.15 | 13.50 | 9.27 |
| quite.r.01 | 8.81 | 3.73 | 3.51 | 9.70 |
| actually.r.01 | 7.99 | 6.44 | 5.53 | 8.37 |
| well.r.01 | 7.83 | 8.14 | 8.50 | 7.74 |
| truly.r.01 | 7.81 | 6.10 | 6.59 | 8.04 |
| merely.r.01 | 6.80 | 2.71 | 3.61 | 7.37 |
| therefore.r.01 | 6.42 | 9.49 | 6.70 | 6.26 |
| still.r.01 | 5.32 | 6.78 | 7.86 | 4.94 |
| far.r.01 | 4.25 | 5.42 | 4.14 | 4.21 |
| total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE S180. 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. |
|-----------------------|------|------|------|------|
| $\mu(min depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(mindepth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(max depth)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(holonyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(meronyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(domains)$ | 0.09 | 0.09 | 0.08 | 0.09 |
| $\sigma(domains)$ | 0.28 | 0.28 | 0.27 | 0.28 |
| $\mu(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(similar)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(verbgroups)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(lemmas)$ | 3.23 | 3.07 | 3.29 | 3.23 |
| $\sigma(lemmas)$ | 2.23 | 2.20 | 2.33 | 2.22 |
| $\mu(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(entailments)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hyponyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mu(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |
| $\sigma(hypernyms)$ | 0.00 | 0.00 | 0.00 | 0.00 |

TABLE S181. Measures of wordnet features in each Erdös sector (${f p}$. for periphery, ${f i}$. for intermediary, ${f h}$. for hubs). TAG: 17

C. Differentiation of the texts from Erdös sectors

1. Snapshots of 2000 messages

| | g. | p. | i. | h. |
|----|--------|--------|--------|--------|
| g. | 0.000 | 8.605 | 2.998 | 13.555 |
| | 0.000 | 0.037 | 0.009 | 0.058 |
| p. | 8.605 | 0.000 | 5.970 | 17.360 |
| | 0.037 | 0.000 | 0.028 | 0.095 |
| i. | 2.998 | 5.970 | 0.000 | 14.621 |
| | 0.009 | 0.028 | 0.000 | 0.067 |
| h. | 13.555 | 17.360 | 14.621 | 0.000 |
| | 0.058 | 0.095 | 0.067 | 0.000 |

TABLE S182. KS distances on size of tokens. TAG: 0

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 3.608 | 1.724 | 2.199 |
| | | | 0.011 | |
| p. | 3.608 | | | |
| | | | 0.041 | |
| i. | 1.724 | | | |
| | 0.011 | 0.041 | 0.000 | 0.016 |
| h. | 2.199 | | 1.860 | |
| | 0.017 | 0.049 | 0.016 | 0.000 |

TABLE S183. KS distances on size of known words. TAG: 0

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 0.776 | |
| | | | 0.014 | |
| p. | | | 1.122 | |
| | | | 0.034 | |
| i. | 0.776 | | | |
| | | | 0.000 | |
| h. | 0.978 | | | |
| | 0.023 | 0.055 | 0.029 | 0.000 |

TABLE S184. KS distances on size of sentences. TAG: 0

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 0.890 | 0.947 | 1.026 |
| | | | 0.017 | |
| p. | 0.890 | 0.000 | 1.065 | 1.186 |
| | | | 0.032 | |
| i. | 0.947 | | | |
| | | | 0.000 | |
| h. | 1.026 | | | |
| | 0.024 | 0.039 | 0.041 | 0.000 |

TABLE S185. KS distances on use of adjectives on sentences. TAG: $\boldsymbol{0}$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | 0.038 | | |
| p. | | 0.000 | | |
| | | 0.000 | | |
| i. | 0.320 | | | |
| | | 0.035 | | |
| h. | 1.483 | | | |
| | 0.034 | 0.077 | 0.040 | 0.000 |

TABLE S186. KS distances on use of substantives on sentences. TAG: 0

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 1.195 | 0.275 | 1.262 |
| | | 0.034 | | |
| p. | 1.195 | | | |
| | | 0.000 | | |
| i. | 0.275 | | | |
| | | 0.034 | | |
| h. | 1.262 | | | |
| | 0.029 | 0.086 | 0.034 | 0.000 |

TABLE S187. KS distances on use of punctuations on sentences. TAG: $\boldsymbol{0}$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 3.291 | | |
| | 0.000 | 0.208 | 0.160 | 0.224 |
| p. | 3.291 | | | |
| | 0.208 | 0.000 | 0.100 | 0.438 |
| i. | | 1.464 | | |
| | | 0.100 | | |
| h. | 5.494 | | | |
| | 0.224 | 0.438 | 0.384 | 0.000 |

TABLE S188. KS distances on use of number of characters in messages. TAG: $0\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 3.521 | | |
| | 0.000 | 0.152 | 0.036 | 0.209 |
| p. | 3.521 | | | |
| | 0.152 | 0.000 | 0.140 | 0.353 |
| i. | 1.136 | l | | |
| | | 0.140 | | |
| h. | 4.896 | | | |
| | 0.209 | 0.353 | 0.241 | 0.000 |

TABLE S189. KS distances on use of verbs in each 100 tokens. TAG: $\boldsymbol{0}$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.016 | |
| p. | 5.984 | | | |
| | 0.019 | 0.000 | 0.036 | 0.143 |
| i. | 4.963 | | | |
| | | | 0.000 | |
| h. | 8.572 | | | |
| | 0.123 | 0.143 | 0.107 | 0.000 |

TABLE S190. KS distances on size of tokens. TAG: $1\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 5.264 | |
| | | | 0.040 | |
| p. | 5.904 | | | |
| | | | 0.083 | |
| i. | 5.264 | 9.547 | 0.000 | 4.058 |
| | 1 | | 0.000 | l |
| h. | 5.549 | 7.073 | 4.058 | 0.000 |
| | 0.150 | 0.193 | 0.111 | 0.000 |

TABLE S191. KS distances on size of known words. TAG: 1

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 1.604 | |
| | | | 0.060 | |
| p. | 0.524 | | | |
| | 0.019 | 0.000 | 0.041 | 0.489 |
| i. | | | 0.000 | |
| | | | 0.000 | |
| h. | 6.070 | | | |
| | 0.470 | 0.489 | 0.574 | 0.000 |

TABLE S192. KS distances on size of sentences. TAG: 1

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.059 | |
| p. | 0.764 | 0.000 | 1.583 | 6.664 |
| | | | 0.069 | |
| i. | 1.586 | | | |
| | | | 0.000 | |
| h. | 6.574 | | | |
| | 0.509 | 0.536 | 0.568 | 0.000 |

TABLE S193. KS distances on use of adjectives on sentences. TAG: $\boldsymbol{1}$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | 0.023 | | |
| p. | 0.642 | | | |
| | | 0.000 | | |
| i. | 1.791 | 1.007 | 0.000 | 7.510 |
| | | 0.044 | | |
| h. | 6.936 | | | |
| | 0.537 | 0.560 | 0.607 | 0.000 |

TABLE S194. KS distances on use of substantives on sentences. TAG: $\boldsymbol{1}$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 0.249 | 1.356 | 4.505 |
| | | | 0.051 | |
| p. | 0.249 | | | |
| | | | | 0.358 |
| i. | | | 0.000 | |
| | 0.051 | 0.042 | 0.000 | 0.597 |
| h. | | | 7.385 | |
| | 0.349 | 0.358 | 0.597 | 0.000 |

TABLE S195. KS distances on use of punctuations on sentences. TAG: $1\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | | 2.702 |
| | 0.000 | 0.016 | 0.011 | 0.395 |
| p. | 0.394 | | | |
| | 0.016 | 0.000 | 0.019 | 0.429 |
| i. | 0.288 | l | | |
| | 0.011 | 0.019 | 0.000 | 0.457 |
| h. | 2.702 | 2.899 | 3.091 | 0.000 |
| | 0.395 | 0.429 | 0.457 | 0.000 |

TABLE S196. KS distances on use of number of characters in messages. TAG: $1\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.200 | 1.094 | 4.570 |
| | 0.000 | 0.039 | 0.036 | 0.652 |
| p. | 1.200 | l | | |
| | | 0.000 | | |
| i. | 1.094 | | | |
| | 0.036 | 0.075 | 0.000 | 0.661 |
| h. | 4.570 | | | |
| | 0.652 | 0.677 | 0.661 | 0.000 |

TABLE S197. KS distances on use of verbs in each 100 tokens. TAG: $1\,$

| | g. | p. | i. | h. |
|----|-------|-------|--------|--------|
| g. | 0.000 | 3.765 | 3.982 | 7.936 |
| | 0.000 | 0.019 | 0.013 | 0.031 |
| p. | 3.765 | 0.000 | 1.021 | 8.734 |
| | 0.019 | 0.000 | 0.005 | 0.050 |
| i. | 3.982 | 1.021 | 0.000 | 10.167 |
| | 0.013 | 0.005 | 0.000 | 0.044 |
| h. | 7.936 | 8.734 | 10.167 | 0.000 |
| | 0.031 | 0.050 | 0.044 | 0.000 |

TABLE S198. KS distances on size of tokens. TAG: $2\,$

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | | 1.424 | | |
| | | 0.013 | | |
| p. | | 0.000 | | |
| | 0.013 | 0.000 | 0.009 | 0.034 |
| i. | | 0.942 | | |
| | 0.011 | 0.009 | 0.000 | 0.033 |
| h. | 3.138 | | | |
| | 0.022 | 0.034 | 0.033 | 0.000 |

TABLE S199. KS distances on size of known words. TAG: $2\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 0.733 | 2.077 | 2.834 |
| | 0.000 | 0.020 | 0.038 | 0.059 |
| p. | 0.733 | | | |
| | | | 0.048 | |
| i. | | | 0.000 | |
| | 0.038 | 0.048 | 0.000 | 0.097 |
| h. | 2.834 | | | |
| | 0.059 | 0.080 | 0.097 | 0.000 |

TABLE S200. KS distances on size of sentences. TAG: 2

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.021 | |
| p. | 1.108 | 0.000 | 0.747 | 2.060 |
| | | | 0.022 | |
| i. | 1.174 | | | |
| | 0.021 | 0.022 | 0.000 | 0.052 |
| h. | | | 2.245 | |
| | 0.034 | 0.064 | 0.052 | 0.000 |

TABLE S201. KS distances on use of adjectives on sentences. TAG: $2\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 0.668 | | |
| | | 0.018 | | |
| p. | 0.668 | | | |
| | | 0.000 | | |
| i. | 1.546 | | | |
| | | 0.046 | | |
| h. | 1.584 | | | |
| | 0.033 | 0.034 | 0.060 | 0.000 |

TABLE S202. KS distances on use of substantives on sentences. TAG: $2\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 0.545 | 1.588 | 2.146 |
| | | | | 0.045 |
| p. | 0.545 | | | |
| | | | 0.025 | |
| i. | | | | 3.146 |
| | | | 0.000 | |
| h. | 2.146 | | | |
| | 0.045 | 0.049 | 0.074 | 0.000 |

TABLE S203. KS distances on use of punctuations on sentences. TAG: $2\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | 0.099 | | |
| p. | 1.584 | | | |
| | 0.099 | 0.000 | 0.071 | 0.190 |
| i. | 1.596 | | | |
| | 0.064 | 0.071 | 0.000 | 0.167 |
| h. | 2.457 | 2.783 | 3.430 | 0.000 |
| | 0.103 | 0.190 | 0.167 | 0.000 |

TABLE S204. KS distances on use of number of characters in messages. TAG: $2\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.746 | 1.762 | 2.656 |
| | | 0.086 | | |
| p. | 1.746 | | | |
| | | 0.000 | | |
| i. | | 0.739 | | |
| | | 0.039 | | |
| h. | 2.656 | | | |
| | 0.104 | 0.181 | 0.149 | 0.000 |

TABLE S205. KS distances on use of verbs in each 100 tokens. TAG: $2\,$

| | g. | p. | i. | h. |
|----|--------|--------|--------|--------|
| g. | 0.000 | 22.383 | 1.775 | 16.687 |
| | 0.000 | 0.079 | 0.007 | 0.052 |
| p. | 22.383 | 0.000 | 19.039 | 32.369 |
| | 0.079 | 0.000 | 0.085 | 0.131 |
| i. | 1.775 | 19.039 | 0.000 | 10.884 |
| | 0.007 | 0.085 | 0.000 | 0.045 |
| h. | 16.687 | 32.369 | 10.884 | 0.000 |
| | 0.052 | 0.131 | 0.045 | 0.000 |

TABLE S206. KS distances on size of tokens. TAG: $3\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.014 | |
| p. | 7.581 | | | |
| | | | 0.067 | |
| i. | 2.112 | | | |
| | 0.014 | 0.067 | 0.000 | 0.013 |
| h. | 3.916 | | | |
| | 0.022 | 0.074 | 0.013 | 0.000 |

TABLE S207. KS distances on size of known words. TAG: 3

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 3.463 | 2.202 | 1.487 |
| | | | 0.047 | |
| p. | 3.463 | | | |
| | | | 0.103 | |
| i. | 2.202 | | | |
| | | | 0.000 | |
| h. | | | 3.050 | |
| | 0.027 | 0.113 | 0.073 | 0.000 |

TABLE S208. KS distances on size of sentences. TAG: 3

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.474 | 1.273 | 1.866 |
| | | | 0.027 | |
| p. | | | 1.033 | |
| | | | 0.030 | |
| i. | | | 0.000 | |
| | | | 0.000 | |
| h. | | | 2.558 | |
| | 0.034 | 0.071 | 0.061 | 0.000 |

TABLE S209. KS distances on use of adjectives on sentences. TAG: $3\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 3.805 | | |
| | | 0.094 | | |
| p. | 3.805 | | | |
| | | 0.000 | | |
| i. | 1.909 | | | |
| | | 0.099 | | |
| h. | 2.139 | | | |
| | 0.039 | 0.133 | 0.058 | 0.000 |

TABLE S210. KS distances on use of substantives on sentences. TAG: $3\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 3.702 | 1.208 | 2.252 |
| | 1 | l | 0.026 | |
| p. | 3.702 | | | |
| | | | 0.092 | |
| i. | 1.208 | | | |
| | 0.026 | 0.092 | 0.000 | 0.045 |
| h. | 2.252 | | | |
| | 0.041 | 0.133 | 0.045 | 0.000 |

TABLE S211. KS distances on use of punctuations on sentences. TAG: $3\,$

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 4.597 | 0.621 | 2.103 |
| | | 0.270 | | |
| p. | 4.597 | | | |
| | 1 | 0.000 | | |
| i. | 0.621 | | | |
| | | 0.285 | | |
| h. | 2.103 | | | |
| | 0.079 | 0.346 | 0.077 | 0.000 |

TABLE S212. KS distances on use of number of characters in messages. TAG: $3\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 5.482 | 1.024 | 3.582 |
| | 0.000 | 0.193 | 0.038 | 0.111 |
| p. | 5.482 | | | |
| | | 0.000 | | |
| i. | 1.024 | 5.075 | 0.000 | 2.012 |
| | 0.038 | 0.228 | 0.000 | 0.084 |
| h. | 3.582 | | | |
| | 0.111 | 0.305 | 0.084 | 0.000 |

TABLE S213. KS distances on use of verbs in each 100 tokens. TAG: $3\,$

| | g. | p. | i. | h. |
|----|-------|--------|-------|--------|
| g. | 0.000 | 8.829 | 1.356 | 6.961 |
| | 0.000 | 0.041 | 0.005 | 0.025 |
| p. | 8.829 | 0.000 | 6.760 | 12.734 |
| | 0.041 | 0.000 | 0.036 | 0.065 |
| i. | 1.356 | 6.760 | 0.000 | 6.799 |
| | 0.005 | 0.036 | 0.000 | 0.030 |
| h. | 6.961 | 12.734 | 6.799 | 0.000 |
| | 0.025 | 0.065 | 0.030 | 0.000 |

TABLE S214. KS distances on size of tokens. TAG: $4\,$

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | | | |
| | | 0.031 | | |
| p. | 3.759 | | | |
| | | 0.000 | | |
| i. | | 3.784 | | |
| | | 0.036 | | |
| h. | 2.409 | | | |
| | 0.016 | 0.045 | 0.023 | 0.000 |

TABLE S215. KS distances on size of known words. TAG: 4

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 0.958 | | |
| | | 0.025 | | |
| p. | 0.958 | | | |
| | | 0.000 | | |
| i. | | 0.684 | | |
| | 0.021 | 0.020 | 0.000 | 0.043 |
| h. | | 1.392 | | |
| | 0.021 | 0.039 | 0.043 | 0.000 |

TABLE S216. KS distances on size of sentences. TAG: 4

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.882 | 0.358 | 0.863 |
| | 0.000 | 0.048 | 0.007 | 0.015 |
| p. | | | 1.811 | |
| | | | 0.053 | |
| i. | 0.358 | | | |
| | | | 0.000 | |
| h. | 0.863 | | | |
| | 0.015 | 0.064 | 0.011 | 0.000 |

TABLE S217. KS distances on use of adjectives on sentences. TAG: $4\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 1.708 | | |
| | 1 | 0.044 | | |
| p. | | 0.000 | | |
| | | 0.000 | | |
| i. | 0.360 | | | |
| | | 0.037 | | |
| h. | 1.243 | | | |
| | 0.022 | 0.066 | 0.029 | 0.000 |

TABLE S218. KS distances on use of substantives on sentences. TAG: $4\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.545 | 0.914 | 1.596 |
| | 0.000 | 0.040 | 0.018 | 0.028 |
| p. | 1.545 | | | |
| | | 0.000 | | |
| i. | 0.914 | | | |
| | 0.018 | 0.021 | 0.000 | 0.047 |
| h. | 1.596 | | | |
| | 0.028 | 0.075 | 0.047 | 0.000 |

TABLE S219. KS distances on use of punctuations on sentences. TAG: $4\,$

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 0.401 | 0.491 | 0.481 |
| | | 0.022 | | |
| p. | 0.401 | | | |
| | | 0.000 | | |
| i. | 0.491 | | | |
| | | 0.035 | | |
| h. | 0.481 | | | |
| | 0.019 | 0.038 | 0.047 | 0.000 |

TABLE S220. KS distances on use of number of characters in messages. TAG: $4\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 3.354 | 1.197 | 2.958 |
| | 0.000 | 0.154 | 0.045 | 0.104 |
| p. | 3.354 | 0.000 | 2.543 | 5.053 |
| | 0.154 | 0.000 | 0.134 | 0.259 |
| i. | 1.197 | l | | |
| | | 0.134 | | |
| h. | 2.958 | | | |
| | 0.104 | 0.259 | 0.140 | 0.000 |

TABLE S221. KS distances on use of verbs in each 100 tokens. TAG: $4\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.013 | |
| p. | 2.548 | | | |
| | | | 0.008 | |
| i. | 2.904 | | | |
| | | | 0.000 | |
| h. | 3.529 | | | |
| | 0.015 | 0.033 | 0.028 | 0.000 |

TABLE S222. KS distances on size of tokens. TAG: 5

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.012 | |
| p. | | | | |
| | | | 0.030 | |
| i. | 1.423 | | | |
| | 0.012 | 0.030 | 0.000 | 0.024 |
| h. | | | 2.615 | |
| | 0.014 | 0.048 | 0.024 | 0.000 |

TABLE S223. KS distances on size of known words. TAG: 5

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 0.516 | |
| | | | 0.014 | |
| p. | 1.184 | | | |
| | | | 0.040 | |
| i. | | | 0.000 | |
| | 0.014 | 0.040 | 0.000 | 0.032 |
| h. | 0.818 | | | |
| | 0.019 | 0.064 | 0.032 | 0.000 |

TABLE S224. KS distances on size of sentences. TAG: 5

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 2.263 | 0.604 | 1.435 |
| | 0.000 | 0.086 | 0.016 | 0.032 |
| p. | | | 1.697 | |
| | | | 0.072 | |
| i. | 0.604 | | | |
| | | | 0.000 | |
| h. | | | 1.656 | |
| | 0.032 | 0.118 | 0.048 | 0.000 |

TABLE S225. KS distances on use of adjectives on sentences. TAG: $5\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 0.810 | | |
| | | 0.031 | | |
| p. | | 0.000 | | |
| | 0.031 | 0.000 | 0.026 | 0.051 |
| i. | 0.745 | | | |
| | | 0.026 | | |
| h. | 0.904 | | | |
| | 0.020 | 0.051 | 0.040 | 0.000 |

TABLE S226. KS distances on use of substantives on sentences. TAG: $5\,$

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 0.955 | 1.425 | 1.500 |
| | 0.000 | 0.036 | 0.038 | 0.034 |
| p. | 0.955 | | | |
| | | | 0.013 | |
| i. | 1.425 | l | | |
| | | | 0.000 | |
| h. | 1.500 | | | |
| | 0.034 | 0.070 | 0.071 | 0.000 |

TABLE S227. KS distances on use of punctuations on sentences. TAG: $5\,$

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 0.945 | 0.683 | 0.381 |
| | | 0.065 | | |
| p. | 0.945 | 0.000 | 1.085 | 0.948 |
| | | 0.000 | | |
| i. | 0.683 | | | |
| | | 0.082 | | |
| h. | 0.381 | | | |
| | 0.014 | 0.069 | 0.044 | 0.000 |

TABLE S228. KS distances on use of number of characters in messages. TAG: $5\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 1.701 | | |
| | 0.000 | 0.120 | 0.104 | 0.095 |
| p. | 1.701 | 0.000 | 0.710 | 2.795 |
| | 0.120 | 0.000 | 0.055 | 0.209 |
| i. | 2.244 | 0.710 | 0.000 | 3.585 |
| | 0.104 | 0.055 | 0.000 | 0.188 |
| h. | 2.259 | | | |
| | 0.095 | 0.209 | 0.188 | 0.000 |

TABLE S229. KS distances on use of verbs in each 100 tokens. TAG: $5\,$

| | g. | p. | i. | h. |
|----|--------|--------|--------|--------|
| g. | 0.000 | 7.560 | 3.017 | 13.784 |
| | 0.000 | 0.025 | 0.010 | 0.054 |
| p. | 7.560 | 0.000 | 3.798 | 17.531 |
| | 0.025 | 0.000 | 0.015 | 0.079 |
| i. | 3.017 | 3.798 | 0.000 | 14.216 |
| | 0.010 | 0.015 | 0.000 | 0.064 |
| h. | 13.784 | 17.531 | 14.216 | 0.000 |
| | 0.054 | 0.079 | 0.064 | 0.000 |

TABLE S230. KS distances on size of tokens. TAG: $6\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | | 2.601 |
| | 1 | | 0.006 | |
| p. | | | 3.309 | |
| | 0.019 | 0.000 | 0.025 | 0.036 |
| i. | 1.025 | 3.309 | 0.000 | 2.257 |
| | 0.006 | 0.025 | 0.000 | 0.019 |
| h. | 2.601 | | | |
| | 0.019 | 0.036 | 0.019 | 0.000 |

TABLE S231. KS distances on size of known words. TAG: 6

| | 1 | | | - |
|----|-------|-------|-------|-------|
| | g. | р. | i. | h. |
| g. | 0.000 | | | |
| | 0.000 | 0.018 | 0.007 | 0.022 |
| p. | 0.918 | | | |
| | | | 0.025 | |
| i. | 0.345 | | | |
| | 0.007 | 0.025 | 0.000 | 0.032 |
| h. | 1.079 | | | |
| | 0.022 | 0.038 | 0.032 | 0.000 |

TABLE S232. KS distances on size of sentences. TAG: 6

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | 0.000 | 0.011 | 0.009 | 0.023 |
| p. | 0.544 | | | |
| | | | 0.016 | |
| i. | 0.486 | | | |
| | | | 0.000 | |
| h. | | | 1.314 | |
| | 0.023 | 0.034 | 0.032 | 0.000 |

TABLE S233. KS distances on use of adjectives on sentences. TAG: $6\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 0.997 | 0.444 | 1.504 |
| | | 0.020 | | |
| p. | 0.997 | | | |
| | | 0.000 | | |
| i. | 0.444 | | | |
| | | 0.017 | | |
| h. | 1.504 | | | |
| | 0.031 | 0.050 | 0.042 | 0.000 |

TABLE S234. KS distances on use of substantives on sentences. TAG: $6\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 0.862 | 0.434 | 1.213 |
| | | | | 0.025 |
| p. | 0.862 | | | |
| | | | 0.012 | |
| i. | 0.434 | | | |
| | | | 0.000 | |
| h. | 1.213 | | | |
| | 0.025 | 0.046 | 0.030 | 0.000 |

TABLE S235. KS distances on use of punctuations on sentences. TAG: $6\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 2.384 | | |
| | | 0.114 | | |
| p. | | 0.000 | | |
| | 1 | 0.000 | | |
| i. | | 2.625 | | |
| | | 0.144 | | |
| h. | | 3.092 | | |
| | 0.064 | 0.180 | 0.054 | 0.000 |

TABLE S236. KS distances on use of number of characters in messages. TAG: $6\,$

| | g. | р. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 2.554 | 0.669 | 3.703 |
| | | | 0.022 | |
| p. | 2.554 | | | |
| | 0.085 | 0.000 | 0.091 | 0.225 |
| i. | 0.669 | 2.294 | 0.000 | 3.510 |
| | 0.022 | 0.091 | 0.000 | 0.157 |
| h. | 3.703 | | | |
| | 0.145 | 0.225 | 0.157 | 0.000 |

TABLE S237. KS distances on use of verbs in each 100 tokens. TAG: $6\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 5.681 | |
| | 0.000 | 0.029 | 0.021 | 0.016 |
| p. | 4.114 | | | |
| | | | 0.013 | |
| i. | 5.681 | 1.798 | 0.000 | 9.311 |
| | 1 | | 0.000 | l |
| h. | 5.323 | | | |
| | 0.016 | 0.045 | 0.037 | 0.000 |

TABLE S238. KS distances on size of tokens. TAG: 7

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | | 2.117 |
| | 1 | | 0.017 | |
| p. | | | 0.564 | |
| | 0.018 | 0.000 | 0.008 | 0.030 |
| i. | 2.520 | | | |
| | 0.017 | 0.008 | 0.000 | 0.028 |
| h. | 2.117 | | | |
| | 0.011 | 0.030 | 0.028 | 0.000 |

TABLE S239. KS distances on size of known words. TAG: 7

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | 0.000 | 0.037 | 0.008 | 0.005 |
| p. | 0.989 | | | |
| | | | 0.039 | |
| i. | 0.441 | | | |
| | 0.008 | 0.039 | 0.000 | 0.013 |
| h. | 0.337 | | | |
| | 0.005 | 0.040 | 0.013 | 0.000 |

TABLE S240. KS distances on size of sentences. TAG: 7

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.008 | |
| p. | 0.725 | | | |
| | | | 0.020 | |
| i. | 0.423 | | | |
| | | | 0.000 | |
| h. | 0.456 | | | |
| | 0.007 | 0.034 | 0.015 | 0.000 |

TABLE S241. KS distances on use of adjectives on sentences. TAG: $7\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | 0.042 | | |
| p. | | 0.000 | | |
| | | 0.000 | | |
| i. | 1.130 | | | |
| | | 0.031 | | |
| h. | 1.002 | | | |
| | 0.016 | 0.056 | 0.037 | 0.000 |

TABLE S242. KS distances on use of substantives on sentences. TAG: $7\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.247 | 1.598 | 1.311 |
| | 1 | l | 0.030 | |
| p. | 1.247 | | | |
| | | | 0.021 | |
| i. | 1.598 | | | |
| | 0.030 | 0.021 | 0.000 | 0.051 |
| h. | 1.311 | | | |
| | 0.020 | 0.066 | 0.051 | 0.000 |

TABLE S243. KS distances on use of punctuations on sentences. TAG: 7

| | g. | p. | i. | h. |
|----------------|-------|-------|-------|-------|
| \mathbf{g} . | 0.000 | 1.156 | 0.874 | 0.562 |
| | | 0.098 | | |
| p. | 1.156 | | | |
| | | 0.000 | | |
| i. | 0.874 | | | |
| | | 0.120 | | |
| h. | 0.562 | | | |
| | 0.021 | 0.096 | 0.059 | 0.000 |

TABLE S244. KS distances on use of number of characters in messages. TAG: $7\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 3.009 | 2.811 | 3.064 |
| | 0.000 | 0.211 | 0.103 | 0.094 |
| p. | 3.009 | 0.000 | 1.496 | 4.137 |
| | 0.211 | 0.000 | 0.111 | 0.297 |
| i. | 2.811 | l | | |
| | 0.103 | 0.111 | 0.000 | 0.186 |
| h. | 3.064 | | | |
| | 0.094 | 0.297 | 0.186 | 0.000 |

TABLE S245. KS distances on use of verbs in each 100 tokens. TAG: $7\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 0.642 | |
| | 0.000 | 0.012 | 0.002 | 0.002 |
| p. | | | 2.495 | |
| | | | 0.014 | |
| i. | 0.642 | | | |
| | 1 | | 0.000 | l |
| h. | 0.640 | | | |
| | 0.002 | 0.013 | 0.017 | 0.000 |

TABLE S246. KS distances on size of tokens. TAG: 8

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 5.683 | |
| | 1 | | 0.039 | |
| p. | 2.382 | 0.000 | 1.770 | 4.603 |
| | | | 0.019 | |
| i. | 5.683 | | | |
| | 0.039 | 0.019 | 0.000 | 0.062 |
| h. | | | 8.480 | |
| | 0.023 | 0.045 | 0.062 | 0.000 |

TABLE S247. KS distances on size of known words. TAG: 8

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | 0.018 | | |
| p. | 0.631 | | | |
| | | 0.000 | | |
| i. | | 1.668 | | |
| | | 0.053 | | |
| h. | 2.338 | | | |
| | 0.037 | 0.053 | 0.097 | 0.000 |

TABLE S248. KS distances on size of sentences. TAG: 8

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 0.374 | 0.685 | 0.480 |
| | | | 0.013 | |
| p. | 0.374 | | | |
| | 0.011 | 0.000 | 0.020 | 0.013 |
| i. | 0.685 | | | |
| | | | 0.000 | |
| h. | | | 0.908 | |
| | 0.008 | 0.013 | 0.019 | 0.000 |

TABLE S249. KS distances on use of adjectives on sentences. TAG: $8\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 1.042 | | |
| | | 0.030 | | |
| p. | | 0.000 | | |
| | | 0.000 | | |
| i. | 2.338 | | | |
| | | 0.030 | | |
| h. | 2.023 | | | |
| | 0.032 | 0.062 | 0.077 | 0.000 |

TABLE S250. KS distances on use of substantives on sentences. TAG: $8\,$

| | g. | p. | i. | h. |
|----|------------------|-------|-------|-------|
| g. | $0.000 \\ 0.000$ | 1.380 | 3.583 | 2.894 |
| | | | | |
| p. | 1.380 | | | |
| | | 0.000 | | |
| i. | 3.583 | | | |
| | | 0.054 | | |
| h. | 2.894 | | | |
| | 0.046 | 0.085 | 0.114 | 0.000 |

TABLE S251. KS distances on use of punctuations on sentences. TAG: $8\,$

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 0.502 | 1.094 | 0.501 |
| | | 0.033 | | |
| p. | 0.502 | 0.000 | 1.095 | 0.765 |
| | | 0.000 | | |
| i. | 1.094 | | | |
| | | 0.084 | | |
| h. | 0.501 | | | |
| | 0.018 | 0.052 | 0.073 | 0.000 |

TABLE S252. KS distances on use of number of characters in messages. TAG: $8\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.388 | 1.981 | 1.315 |
| | | | 0.067 | |
| p. | | | 1.313 | |
| | | | 0.072 | |
| i. | | | 0.000 | |
| | | | 0.000 | |
| h. | | | 2.722 | |
| | 0.034 | 0.085 | 0.099 | 0.000 |

TABLE S253. KS distances on use of verbs in each 100 tokens. TAG: $8\,$

| | g. | p. | i. | h. |
|----|--------|--------|-------|--------|
| g. | 0.000 | 10.172 | 3.551 | 8.081 |
| | 0.000 | 0.071 | 0.014 | 0.032 |
| p. | 10.172 | 0.000 | 7.714 | 13.923 |
| | 0.071 | 0.000 | 0.057 | 0.103 |
| i. | 3.551 | 7.714 | 0.000 | 9.904 |
| | 0.014 | 0.057 | 0.000 | 0.046 |
| h. | 8.081 | 13.923 | 9.904 | 0.000 |
| | 0.032 | 0.103 | 0.046 | 0.000 |

TABLE S254. KS distances on size of tokens. TAG: $9\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 1.743 | | |
| | 0.000 | 0.022 | 0.020 | 0.022 |
| p. | | 0.000 | | |
| | 0.022 | 0.000 | 0.021 | 0.036 |
| i. | 2.918 | 1.614 | 0.000 | 5.275 |
| | 0.020 | 0.021 | 0.000 | 0.041 |
| h. | 3.279 | | | |
| | 0.022 | 0.036 | 0.041 | 0.000 |

TABLE S255. KS distances on size of known words. TAG: 9

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.186 | 2.844 | 2.682 |
| | | | 0.059 | |
| p. | | | 1.464 | |
| | | | 0.060 | |
| i. | 2.844 | | | |
| | 0.059 | 0.060 | 0.000 | 0.109 |
| h. | 2.682 | 2.150 | 4.679 | 0.000 |
| | 0.051 | 0.086 | 0.109 | 0.000 |

TABLE S256. KS distances on size of sentences. TAG: 9

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.498 | 0.465 | 0.391 |
| | | | 0.010 | |
| p. | | | 1.484 | |
| | | | 0.061 | |
| i. | 0.465 | | | |
| | | | 0.000 | |
| h. | 0.391 | | | |
| | 0.007 | 0.065 | 0.013 | 0.000 |

TABLE S257. KS distances on use of adjectives on sentences. TAG: $9\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | 0.000 | 0.059 | 0.068 | 0.055 |
| p. | | 0.000 | | |
| | | 0.000 | | |
| i. | 3.280 | | | |
| | | 0.048 | | |
| h. | 2.936 | | | |
| | 0.055 | 0.125 | 0.124 | 0.000 |

TABLE S258. KS distances on use of substantives on sentences. TAG: $9\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 2.128 | 2.361 | 2.445 |
| | 0.000 | 0.082 | 0.049 | 0.046 |
| p. | 2.128 | | | |
| | | | 0.057 | |
| i. | 2.361 | | | |
| | | | 0.000 | |
| h. | 2.445 | | | |
| | 0.046 | 0.115 | 0.095 | 0.000 |

TABLE S259. KS distances on use of punctuations on sentences. TAG: $9\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | 0.141 | | |
| p. | 1.752 | | | |
| | | 0.000 | | |
| i. | 2.111 | | | |
| | 0.094 | 0.071 | 0.000 | 0.165 |
| h. | 1.993 | | | |
| | 0.074 | 0.206 | 0.165 | 0.000 |

TABLE S260. KS distances on use of number of characters in messages. TAG: $9\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 2.951 | 2.351 | 3.529 |
| | 0.000 | 0.205 | 0.092 | 0.139 |
| p. | 2.951 | | | |
| | | | | 0.339 |
| i. | 2.351 | 1.733 | 0.000 | 4.872 |
| | | | | 0.226 |
| h. | 3.529 | | | |
| | 0.139 | 0.339 | 0.226 | 0.000 |

TABLE S261. KS distances on use of verbs in each 100 tokens. TAG: $9\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 3.874 | 1.733 | 1.013 |
| | | | 0.006 | |
| p. | 3.874 | 0.000 | 4.616 | 3.882 |
| | | | 0.024 | |
| i. | 1.733 | | | |
| | | | 0.000 | |
| h. | 1.013 | | | |
| | 0.004 | 0.022 | 0.008 | 0.000 |

TABLE S262. KS distances on size of tokens. TAG: 10

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | | 1.475 |
| | | | 0.013 | |
| p. | 2.115 | | | |
| | | | 0.033 | |
| i. | 2.146 | | | |
| | | | 0.000 | |
| h. | 1.475 | | | |
| | 0.011 | 0.012 | 0.025 | 0.000 |

TABLE S263. KS distances on size of known words. TAG: $10\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.011 | |
| p. | 0.822 | | | |
| | | | 0.022 | |
| i. | 0.771 | | | |
| | | | 0.000 | |
| h. | 1.530 | | | |
| | 0.029 | 0.039 | 0.035 | 0.000 |

TABLE S264. KS distances on size of sentences. TAG: 10

| | g. | р. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 0.348 | |
| | | | 0.005 | |
| p. | | | 0.576 | |
| | | | 0.013 | |
| i. | | | 0.000 | |
| | 0.005 | 0.013 | 0.000 | 0.016 |
| h. | 0.576 | 0.481 | 0.779 | 0.000 |
| | 0.011 | 0.012 | 0.016 | 0.000 |

TABLE S265. KS distances on use of adjectives on sentences. TAG: $10\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | 0.023 | | |
| p. | | 0.000 | | |
| | | 0.000 | | |
| i. | 0.795 | | | |
| | | 0.030 | | |
| h. | 1.138 | | | |
| | 0.021 | 0.042 | 0.031 | 0.000 |

TABLE S266. KS distances on use of substantives on sentences. TAG: $10\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.520 | 0.354 | 1.101 |
| | | 0.032 | | |
| p. | | 0.000 | | |
| | | 0.000 | | |
| i. | 0.354 | | | |
| | | 0.034 | | |
| h. | | 2.075 | | |
| | 0.021 | 0.053 | 0.019 | 0.000 |

TABLE S267. KS distances on use of punctuations on sentences. TAG: 10

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.038 | |
| p. | 0.869 | | | |
| | | | 0.084 | |
| i. | 0.996 | | | |
| | | | 0.000 | |
| h. | 1.042 | | | |
| | 0.051 | 0.085 | 0.083 | 0.000 |

TABLE S268. KS distances on use of number of characters in messages. TAG: $10\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | 0.000 | 0.046 | 0.036 | 0.023 |
| p. | 0.971 | | | |
| | | 0.000 | | |
| i. | 1.076 | | | |
| | 0.036 | 0.079 | 0.000 | 0.024 |
| h. | 0.543 | | | |
| | 0.023 | 0.061 | 0.024 | 0.000 |

TABLE S269. KS distances on use of verbs in each 100 tokens. TAG: $10\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.004 | |
| p. | 6.484 | | | |
| | 0.020 | 0.000 | 0.023 | 0.032 |
| i. | 1.368 | | | |
| | | | 0.000 | |
| h. | | | 3.231 | |
| | 0.012 | 0.032 | 0.011 | 0.000 |

TABLE S270. KS distances on size of tokens. TAG: 11

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 6.321 | 1.329 | 4.723 |
| | 0.000 | 0.034 | 0.006 | 0.023 |
| p. | 6.321 | | | |
| | | | 0.037 | |
| i. | | | 0.000 | |
| | 0.006 | 0.037 | 0.000 | 0.020 |
| h. | | | | |
| | 0.023 | 0.058 | 0.020 | 0.000 |

TABLE S271. KS distances on size of known words. TAG: $^{11}\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 1.608 | |
| | 0.000 | 0.021 | 0.024 | 0.029 |
| p. | | | 1.768 | |
| | | | 0.035 | |
| i. | | | 0.000 | |
| | 0.024 | 0.035 | 0.000 | 0.050 |
| h. | | | 2.725 | |
| | 0.029 | 0.039 | 0.050 | 0.000 |

TABLE S272. KS distances on size of sentences. TAG: 11

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.905 | 0.878 | 1.622 |
| | 0.000 | 0.032 | 0.013 | 0.025 |
| p. | | 0.000 | | |
| | | 0.000 | | |
| i. | | 1.659 | | |
| | | 0.032 | | |
| h. | | 2.850 | | |
| | 0.025 | 0.057 | 0.025 | 0.000 |

TABLE S273. KS distances on use of adjectives on sentences. TAG: 11

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | 1 | 0.023 | | |
| p. | 1.379 | | | |
| | 0.023 | 0.000 | 0.021 | 0.065 |
| i. | 1.506 | | | |
| | | 0.021 | | |
| h. | 2.664 | | | |
| | 0.041 | 0.065 | 0.063 | 0.000 |

TABLE S274. KS distances on use of substantives on sentences. TAG: 11

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.329 | 1.188 | 0.830 |
| | | | | 0.013 |
| p. | 1.329 | | | |
| | | | 0.036 | |
| i. | 1.188 | | | |
| | | | 0.000 | |
| h. | 0.830 | | | |
| | 0.013 | 0.024 | 0.030 | 0.000 |

TABLE S275. KS distances on use of punctuations on sentences. TAG: 11

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | | | |
| | | 0.099 | | |
| p. | | 0.000 | | |
| | | 0.000 | | |
| i. | 0.947 | | | |
| | | 0.090 | | |
| h. | 1.813 | | | |
| | 0.077 | 0.169 | 0.112 | 0.000 |

TABLE S276. KS distances on use of number of characters in messages. TAG: $11\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 0.782 | 0.877 | 0.882 |
| | 0.000 | 0.024 | 0.023 | 0.025 |
| p. | 0.782 | | | |
| | 0.024 | 0.000 | 0.035 | 0.045 |
| i. | 0.877 | | | |
| | 0.023 | 0.035 | 0.000 | 0.048 |
| h. | 0.882 | | | |
| | 0.025 | 0.045 | 0.048 | 0.000 |

TABLE S277. KS distances on use of verbs in each 100 tokens. TAG: 11

| | g. | p. | i. | h. |
|----|--------|-------|--------|--------|
| g. | 0.000 | 2.045 | 5.602 | 11.791 |
| | 0.000 | 0.012 | 0.020 | 0.062 |
| p. | 2.045 | 0.000 | 2.955 | 9.288 |
| | 0.012 | 0.000 | 0.018 | 0.066 |
| i. | 5.602 | 2.955 | 0.000 | 14.807 |
| | 0.020 | 0.018 | 0.000 | 0.081 |
| h. | 11.791 | 9.288 | 14.807 | 0.000 |
| | 0.062 | 0.066 | 0.081 | 0.000 |

TABLE S278. KS distances on size of tokens. TAG: 12

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 2.445 | |
| | | | 0.016 | |
| p. | | | 2.955 | |
| | | | 0.034 | |
| i. | 2.445 | | | |
| | 0.016 | 0.034 | 0.000 | 0.049 |
| h. | 3.490 | | | |
| | 0.032 | 0.032 | 0.049 | 0.000 |

TABLE S279. KS distances on size of known words. TAG: 12

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.011 | |
| p. | | | | |
| | | | 0.036 | |
| i. | 0.581 | | | |
| | | | 0.000 | |
| h. | 0.718 | | | |
| | 0.019 | 0.048 | 0.033 | 0.000 |

TABLE S280. KS distances on size of sentences. TAG: 12

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 0.589 | 0.614 | 0.822 |
| | 0.000 | 0.019 | 0.012 | 0.022 |
| p. | | | 0.909 | |
| | 0.019 | 0.000 | 0.031 | 0.025 |
| i. | | | 0.000 | |
| | 0.012 | 0.031 | 0.000 | 0.031 |
| h. | 0.822 | 0.646 | 1.104 | 0.000 |
| | 0.022 | 0.025 | 0.031 | 0.000 |

TABLE S281. KS distances on use of adjectives on sentences. TAG: $12\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 1.196 | | |
| | | 0.039 | | |
| p. | 1.196 | | | |
| | | 0.000 | | |
| i. | 0.802 | | | |
| | | 0.024 | | |
| h. | 2.241 | | | |
| | 0.059 | 0.098 | 0.076 | 0.000 |

TABLE S282. KS distances on use of substantives on sentences. TAG: $12\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | | 2.637 |
| | 1 | l | 0.020 | |
| p. | 1.222 | | | |
| | | | 0.025 | |
| i. | | | 0.000 | |
| | 0.020 | 0.025 | 0.000 | 0.090 |
| h. | 2.637 | | | |
| | 0.069 | 0.108 | 0.090 | 0.000 |

TABLE S283. KS distances on use of punctuations on sentences. TAG: 12

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 2.681 | 5.068 | 5.868 |
| | | 0.186 | | |
| p. | 2.681 | | | |
| | | 0.000 | | |
| i. | 5.068 | | | |
| | | 0.092 | | |
| h. | 5.868 | | | |
| | 0.233 | 0.414 | 0.442 | 0.000 |

TABLE S284. KS distances on use of number of characters in messages. TAG: $12\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.799 | 2.706 | 6.031 |
| | 0.000 | 0.104 | 0.096 | 0.315 |
| p. | 1.799 | | | |
| | 0.104 | 0.000 | 0.062 | 0.419 |
| i. | 2.706 | | | |
| | 0.096 | 0.062 | 0.000 | 0.409 |
| h. | 6.031 | | | |
| | 0.315 | 0.419 | 0.409 | 0.000 |

TABLE S285. KS distances on use of verbs in each 100 tokens. TAG: $12\,$

| | g. | p. | i. | h. |
|----|--------|--------|--------|--------|
| g. | 0.000 | 20.813 | 19.624 | 7.178 |
| | 0.000 | 0.071 | 0.062 | 0.029 |
| p. | 20.813 | 0.000 | 33.642 | 14.261 |
| | 0.071 | 0.000 | 0.133 | 0.067 |
| i. | 19.624 | 33.642 | 0.000 | 15.763 |
| | 0.062 | 0.133 | 0.000 | 0.071 |
| h. | 7.178 | 14.261 | 15.763 | 0.000 |
| | 0.029 | 0.067 | 0.071 | 0.000 |

TABLE S286. KS distances on size of tokens. TAG: 13

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | | 5.184 |
| | | | 0.027 | |
| p. | 3.545 | | | |
| | | | 0.040 | |
| i. | | | 0.000 | |
| | 0.027 | 0.040 | 0.000 | 0.066 |
| h. | 5.184 | | | |
| | 0.039 | 0.035 | 0.066 | 0.000 |

TABLE S287. KS distances on size of known words. TAG: $13\,$

| | g. | p. | i. | h. |
|----|-------|--------|-------|--------|
| g. | 0.000 | 0.125 | 0.248 | 0.397 |
| | 0.000 | 0.003 | 0.006 | 0.010 |
| p. | 0.125 | 0.000 | 0.257 | 13.499 |
| | 0.003 | 0.000 | 0.008 | 0.424 |
| i. | 0.248 | 0.257 | 0.000 | 0.529 |
| | 0.006 | 0.008 | 0.000 | 0.016 |
| h. | 0.397 | 13.499 | 0.529 | 0.000 |
| | 0.010 | 0.424 | 0.016 | 0.000 |

TABLE S288. KS distances on size of sentences. TAG: 13

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 3.952 | 1.974 | 2.021 |
| | 0.000 | 0.099 | 0.048 | 0.053 |
| p. | 3.952 | | | |
| | 0.099 | 0.000 | 0.147 | 0.151 |
| i. | | 4.883 | | |
| | 0.048 | 0.147 | 0.000 | 0.015 |
| h. | 2.021 | | 0.471 | |
| | 0.053 | 0.151 | 0.015 | 0.000 |

TABLE S289. KS distances on use of adjectives on sentences. TAG: $13\,$

| | g. | p. | i. | h. |
|----|-------|--------|-------|--------|
| g. | 0.000 | 0.338 | 0.177 | 0.415 |
| | 0.000 | 0.008 | 0.004 | 0.011 |
| p. | 0.338 | 0.000 | 0.241 | 15.736 |
| | 0.008 | 0.000 | 0.007 | 0.494 |
| i. | 0.177 | 0.241 | 0.000 | 0.387 |
| | 0.004 | 0.007 | 0.000 | 0.012 |
| h. | 0.415 | 15.736 | 0.387 | 0.000 |
| | 0.011 | 0.494 | 0.012 | 0.000 |

TABLE S290. KS distances on use of substantives on sentences. TAG: $13\,$

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | | 0.227 | | |
| | | 0.006 | | |
| p. | 0.227 | | | |
| | | 0.000 | | |
| i. | 0.349 | | | |
| | | 0.014 | | |
| h. | 0.183 | | | |
| | 0.005 | 0.247 | 0.013 | 0.000 |

TABLE S291. KS distances on use of punctuations on sentences. TAG: 13

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 4.000 | 4.959 | 2.105 |
| | | 0.152 | | |
| p. | 4.000 | | | |
| | | 0.000 | | |
| i. | | 7.175 | | |
| | 0.279 | 0.431 | 0.000 | 0.279 |
| h. | 2.105 | | | |
| | 0.100 | 0.252 | 0.279 | 0.000 |

TABLE S292. KS distances on use of number of characters in messages. TAG: $13\,$

| | g. | р. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 4.129 | 1.847 | 5.456 |
| | 0.000 | 0.141 | 0.058 | 0.220 |
| p. | 1 | | 3.831 | |
| | 0.141 | 0.000 | 0.151 | 0.361 |
| i. | 1.847 | 3.831 | 0.000 | 4.889 |
| | 0.058 | 0.151 | 0.000 | 0.220 |
| h. | 5.456 | | | |
| | 0.220 | 0.361 | 0.220 | 0.000 |

TABLE S293. KS distances on use of verbs in each 100 tokens. TAG: $13\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 1.257 | |
| | | | 0.004 | |
| p. | 3.150 | | | |
| | 0.019 | 0.000 | 0.017 | 0.025 |
| i. | 1.257 | | | |
| | 0.004 | 0.017 | 0.000 | 0.007 |
| h. | | | 1.980 | |
| | 0.006 | 0.025 | 0.007 | 0.000 |

TABLE S294. KS distances on size of tokens. TAG: 14

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 0.759 | |
| | 0.000 | 0.021 | 0.004 | 0.010 |
| p. | | | 1.509 | |
| | | | 0.017 | |
| i. | 0.759 | | | |
| | 0.004 | 0.017 | 0.000 | 0.014 |
| h. | | | 2.104 | |
| | 0.010 | 0.031 | 0.014 | 0.000 |

TABLE S295. KS distances on size of known words. TAG: $14\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.021 | |
| p. | | | | |
| | | | 0.014 | |
| i. | | | 0.000 | |
| | 0.021 | 0.014 | 0.000 | 0.047 |
| h. | | | 2.694 | |
| | 0.026 | 0.043 | 0.047 | 0.000 |

TABLE S296. KS distances on size of sentences. TAG: 14

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 0.287 | |
| | 0.000 | 0.056 | 0.004 | 0.017 |
| p. | | | 1.764 | |
| | 0.056 | 0.000 | 0.052 | 0.073 |
| i. | | | 0.000 | |
| | 0.004 | 0.052 | 0.000 | 0.021 |
| h. | 1.103 | 2.439 | 1.175 | 0.000 |
| | 0.017 | 0.073 | 0.021 | 0.000 |

TABLE S297. KS distances on use of adjectives on sentences. TAG: $14\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 0.923 | | |
| | | 0.026 | | |
| p. | 0.923 | 0.000 | 0.941 | 1.386 |
| | | 0.000 | | |
| i. | 0.590 | | | |
| | | 0.028 | | |
| h. | 0.823 | | | |
| | 0.013 | 0.041 | 0.021 | 0.000 |

TABLE S298. KS distances on use of substantives on sentences. TAG: 14

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 0.437 | 1.825 | 2.110 |
| | 0.000 | 0.012 | 0.027 | 0.032 |
| p. | 0.437 | | | |
| | | | 0.017 | |
| i. | 1.825 | | | |
| | 0.027 | 0.017 | 0.000 | 0.059 |
| h. | 2.110 | | | |
| | 0.032 | 0.042 | 0.059 | 0.000 |

TABLE S299. KS distances on use of punctuations on sentences. TAG: 14

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.070 | |
| p. | | | | |
| | 0.088 | 0.000 | 0.043 | 0.168 |
| i. | 1.722 | | | |
| | | | 0.000 | |
| h. | 1.984 | | | |
| | 0.078 | 0.168 | 0.149 | 0.000 |

TABLE S300. KS distances on use of number of characters in messages. TAG: $14\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | 0.000 | 0.066 | 0.014 | 0.022 |
| p. | 1.122 | | | |
| | 0.066 | 0.000 | 0.077 | 0.076 |
| i. | 0.450 | | | |
| | 0.014 | 0.077 | 0.000 | 0.021 |
| h. | 0.660 | | | |
| | 0.022 | 0.076 | 0.021 | 0.000 |

TABLE S301. KS distances on use of verbs in each 100 tokens. TAG: $14\,$

| | g. | p. | i. | h. |
|---------------|--------|--------|--------|--------|
| $\mathbf{g}.$ | 0.000 | 17.655 | 2.754 | 7.060 |
| | 0.000 | 0.105 | 0.012 | 0.026 |
| p. | 17.655 | 0.000 | 16.831 | 20.801 |
| | 0.105 | 0.000 | 0.113 | 0.132 |
| i. | 2.754 | 16.831 | 0.000 | 3.867 |
| | 0.012 | 0.113 | 0.000 | 0.019 |
| h. | 7.060 | 20.801 | 3.867 | 0.000 |
| | 0.026 | 0.132 | 0.019 | 0.000 |

TABLE S302. KS distances on size of tokens. TAG: 15

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 7.416 | 2.106 | 3.280 |
| | | 0.085 | | |
| p. | 7.416 | | | |
| | | 0.000 | | |
| i. | | 6.935 | | |
| | | 0.088 | | |
| h. | 3.280 | | | |
| | 0.022 | 0.104 | 0.024 | 0.000 |

TABLE S303. KS distances on size of known words. TAG: $15\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.026 | |
| p. | | | | |
| | | | 0.043 | |
| i. | 1.148 | | | |
| | 1 | | 0.000 | l |
| h. | 0.789 | | | |
| | 0.015 | 0.022 | 0.041 | 0.000 |

TABLE S304. KS distances on size of sentences. TAG: 15

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.696 | 1 392 | 1 672 |
| 8. | 0.000 | 0.060 | 0.031 | 0.033 |
| p. | | 0.000 | | |
| | 0.060 | 0.000 | 0.039 | 0.088 |
| i. | | 1.012 | | |
| | | 0.039 | | |
| h. | 1.672 | 2.366 | 2.565 | 0.000 |
| | 0.033 | 0.088 | 0.064 | 0.000 |

TABLE S305. KS distances on use of adjectives on sentences. TAG: $15\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.775 | 0.395 | 0.733 |
| | | 0.063 | | |
| p. | 1.775 | 0.000 | 1.857 | 2.106 |
| | | 0.000 | | |
| i. | 0.395 | | | |
| | | 0.072 | | |
| h. | 0.733 | | | |
| | 0.014 | 0.078 | 0.019 | 0.000 |

TABLE S306. KS distances on use of substantives on sentences. TAG: $15\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.061 | 2.056 | 1.159 |
| | | 0.038 | | |
| p. | 1.061 | | | |
| | | 0.000 | | |
| i. | 2.056 | | | |
| | 0.046 | 0.084 | 0.000 | 0.069 |
| h. | 1.159 | | | |
| | 0.023 | 0.044 | 0.069 | 0.000 |

TABLE S307. KS distances on use of punctuations on sentences. TAG: 15

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 1.609 | 1.642 | 1.543 |
| | | 0.119 | | |
| p. | 1.609 | | | |
| | | 0.000 | | |
| i. | | 0.587 | | |
| | | 0.048 | | |
| h. | 1.543 | | | |
| | 0.056 | 0.175 | 0.145 | 0.000 |

TABLE S308. KS distances on use of number of characters in messages. TAG: $15\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | 1 | 0.257 | | |
| p. | 4.307 | 0.000 | 3.647 | 5.298 |
| | 0.257 | 0.000 | 0.245 | 0.336 |
| i. | 0.967 | | | |
| | 0.042 | 0.245 | 0.000 | 0.123 |
| h. | 2.325 | l | | |
| | 0.087 | 0.336 | 0.123 | 0.000 |

TABLE S309. KS distances on use of verbs in each 100 tokens. TAG: $15\,$

| | g. | p. | i. | h. |
|----|-------|-------|--------|--------|
| g. | 0.000 | 5.729 | 4.921 | 7.735 |
| | 0.000 | 0.032 | 0.017 | 0.028 |
| p. | 5.729 | 0.000 | 6.372 | 9.031 |
| | 0.032 | 0.000 | 0.038 | 0.055 |
| i. | 4.921 | 6.372 | 0.000 | 10.746 |
| | 0.017 | 0.038 | 0.000 | 0.045 |
| h. | 7.735 | 9.031 | 10.746 | 0.000 |
| | 0.028 | 0.055 | 0.045 | 0.000 |

TABLE S310. KS distances on size of tokens. TAG: 16

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | 0.000 | 0.024 | 0.019 | 0.019 |
| p. | 2.320 | | | |
| | | | 0.043 | |
| i. | 3.051 | | | |
| | 0.019 | 0.043 | 0.000 | 0.036 |
| h. | 3.044 | | | |
| | 0.019 | 0.026 | 0.036 | 0.000 |

TABLE S311. KS distances on size of known words. TAG: $16\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | | 0.020 | |
| p. | 0.896 | | | |
| | | | 0.008 | |
| i. | 1.145 | | | |
| | | | 0.000 | |
| h. | | | 2.173 | |
| | 0.025 | 0.052 | 0.045 | 0.000 |

TABLE S312. KS distances on size of sentences. TAG: 16

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 0.792 | |
| | 0.000 | 0.013 | 0.014 | 0.009 |
| p. | | | 0.843 | |
| | | | 0.027 | |
| i. | 0.792 | | | |
| | 0.014 | 0.027 | 0.000 | 0.024 |
| h. | 0.553 | | | |
| | 0.009 | 0.005 | 0.024 | 0.000 |

TABLE S313. KS distances on use of adjectives on sentences. TAG: $16\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 2.242 | | |
| | | 0.067 | | |
| p. | 2.242 | | | |
| | | 0.000 | | |
| i. | 1.868 | | | |
| | | 0.034 | | |
| h. | 2.732 | | | |
| | 0.047 | 0.114 | 0.080 | 0.000 |

TABLE S314. KS distances on use of substantives on sentences. TAG: $16\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.875 | 1.813 | 2.532 |
| | | 0.056 | | |
| p. | 1.875 | | | |
| | | 0.000 | | |
| i. | 1.813 | | | |
| | | 0.024 | | |
| h. | 2.532 | | | |
| | 0.043 | 0.099 | 0.076 | 0.000 |

TABLE S315. KS distances on use of punctuations on sentences. TAG: 16

| | g. | p. | i. | h. |
|---------------|-------|-------|-------|-------|
| $\mathbf{g}.$ | 0.000 | 0.942 | 0.591 | 0.992 |
| | | 0.064 | | |
| p. | 0.942 | | | |
| | | 0.000 | | |
| i. | 0.591 | | | |
| | | 0.042 | | |
| h. | 0.992 | | | |
| | 0.040 | 0.104 | 0.077 | 0.000 |

TABLE S316. KS distances on use of number of characters in messages. TAG: $16\,$

| | g. | р. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 2.629 | 2.205 | 3.487 |
| | 0.000 | 0.147 | 0.076 | 0.125 |
| p. | 2.629 | | | |
| | | | 0.075 | |
| i. | 2.205 | | | |
| | 0.076 | 0.075 | 0.000 | 0.191 |
| h. | 3.487 | | | |
| | 0.125 | 0.266 | 0.191 | 0.000 |

TABLE S317. KS distances on use of verbs in each 100 tokens. TAG: $16\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | | 2.210 | |
| | 0.000 | 0.016 | 0.007 | 0.001 |
| p. | 3.346 | | | |
| | | | 0.021 | |
| i. | 2.210 | 3.725 | 0.000 | 2.243 |
| | | | 0.000 | |
| h. | 0.598 | | | |
| | 0.001 | 0.017 | 0.007 | 0.000 |

TABLE S318. KS distances on size of tokens. TAG: 17

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.032 | 4.842 | 1.556 |
| | | | 0.026 | |
| p. | 1.032 | 0.000 | 3.414 | 1.561 |
| | | | 0.031 | |
| i. | | | 0.000 | |
| | 0.026 | 0.031 | 0.000 | 0.030 |
| h. | 1.556 | | | |
| | 0.004 | 0.012 | 0.030 | 0.000 |

TABLE S319. KS distances on size of known words. TAG: $17\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 4.185 | 3.562 | 1.657 |
| | | | 0.057 | |
| p. | 4.185 | | | |
| | 0.103 | 0.000 | 0.072 | 0.114 |
| i. | 3.562 | | | |
| | 0.057 | 0.072 | 0.000 | 0.071 |
| h. | 1.657 | | | |
| | 0.013 | 0.114 | 0.071 | 0.000 |

TABLE S320. KS distances on size of sentences. TAG: 17

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 2.305 | 1.155 | 0.757 |
| | 0.000 | 0.057 | 0.019 | 0.006 |
| p. | | | 1.342 | |
| | | | 0.038 | |
| i. | | | 0.000 | |
| | 0.019 | 0.038 | 0.000 | 0.024 |
| h. | | | 1.504 | |
| | 0.006 | 0.063 | 0.024 | 0.000 |
| | | | | |

TABLE S321. KS distances on use of adjectives on sentences. TAG: $17\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | | | |
| | | 0.137 | | |
| p. | 5.563 | | | |
| | | 0.000 | | |
| i. | 4.962 | | | |
| | | 0.064 | | |
| h. | 2.402 | | | |
| | 0.019 | 0.155 | 0.098 | 0.000 |

TABLE S322. KS distances on use of substantives on sentences. TAG: $17\,$

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 1.677 | 0.723 | 0.306 |
| | 0.000 | 0.041 | 0.012 | 0.002 |
| p. | 1.677 | | | |
| | | 0.000 | | |
| i. | 0.723 | | | |
| | | 0.042 | | |
| h. | 0.306 | 1.762 | 0.823 | 0.000 |
| | 0.002 | 0.044 | 0.013 | 0.000 |

TABLE S323. KS distances on use of punctuations on sentences. TAG: 17

| | g. | p. | i. | h. |
|----|-------|-------|-------|-------|
| g. | | 1.484 | | |
| | 0.000 | 0.125 | 0.134 | 0.047 |
| p. | 1.484 | | | |
| | 0.125 | 0.000 | 0.099 | 0.151 |
| i. | 2.499 | | | |
| | 0.134 | 0.099 | 0.000 | 0.180 |
| h. | 1.339 | | | |
| | 0.047 | 0.151 | 0.180 | 0.000 |

TABLE S324. KS distances on use of number of characters in messages. TAG: 17 $\,$

| | g. | р. | i. | h. |
|----|-------|-------|-------|-------|
| g. | 0.000 | 2.318 | 1.093 | 0.880 |
| | 0.000 | 0.110 | 0.036 | 0.014 |
| p. | 2.318 | | | |
| | | | 0.083 | |
| i. | 1.093 | 1.491 | 0.000 | 1.398 |
| | | | 0.000 | |
| h. | 0.880 | | | |
| | 0.014 | 0.125 | 0.046 | 0.000 |

TABLE S325. KS distances on use of verbs in each 100 tokens. TAG: $17\,$

- D. Correlation of topological and textual metrics
- 1. 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 | 1.00 | 0.00 | -0.00 | -0.10 | -0.01 | -0.09 | -0.05 | -0.05 | 0.00 |
| (p.) | 1.00 | 0.44 | 0.22 | -0.05 | -0.04 | -0.05 | -0.04 | -0.03 | -0.03 |
| (i.) | 1.00 | -0.41 | -0.21 | -0.09 | -0.09 | -0.16 | -0.14 | -0.20 | -0.17 |
| (h.) | 1.00 | -0.73 | -0.71 | 0.32 | 0.36 | 0.17 | 0.28 | -0.02 | 0.25 |
| d | 0.00 | 1.00 | 0.99 | -0.05 | -0.03 | -0.04 | -0.02 | 0.01 | 0.04 |
| | 0.44 | 1.00 | 0.68 | -0.03 | 0.02 | -0.02 | 0.01 | 0.01 | 0.08 |
| | -0.41 | 1.00 | 0.78 | -0.03 | 0.21 | 0.00 | 0.19 | 0.07 | 0.24 |
| | -0.73 | 1.00 | 0.99 | -0.29 | -0.28 | -0.23 | -0.24 | -0.14 | -0.24 |
| s | -0.00 | 0.99 | 1.00 | -0.05 | -0.00 | -0.04 | -0.01 | 0.01 | 0.07 |
| | 0.22 | 0.68 | 1.00 | 0.01 | 0.17 | 0.02 | 0.16 | 0.05 | 0.20 |
| | -0.21 | 0.78 | 1.00 | -0.02 | 0.37 | -0.00 | 0.31 | 0.09 | 0.44 |
| | -0.71 | 0.99 | 1.00 | -0.26 | -0.26 | -0.22 | -0.22 | -0.14 | -0.23 |
| $\mu_S(p)$ | -0.10 | -0.05 | -0.05 | 1.00 | 0.46 | 0.91 | 0.50 | 0.85 | 0.22 |
| | -0.05 | -0.03 | 0.01 | 1.00 | 0.50 | 0.91 | 0.51 | 0.88 | 0.29 |
| | -0.09 | -0.03 | -0.02 | 1.00 | 0.71 | 0.76 | 0.66 | 0.50 | 0.45 |
| | 0.32 | -0.29 | -0.26 | 1.00 | 0.99 | 0.98 | 1.00 | 0.86 | 0.95 |
| $\sigma_S(p)$ | -0.01 | -0.03 | -0.00 | 0.46 | 1.00 | 0.56 | 0.91 | 0.31 | 0.75 |
| | -0.04 | 0.02 | 0.17 | 0.50 | 1.00 | 0.64 | 0.94 | 0.30 | 0.71 |
| | -0.09 | 0.21 | 0.37 | 0.71 | 1.00 | 0.50 | 0.87 | 0.42 | 0.87 |
| | 0.36 | -0.28 | -0.26 | 0.99 | 1.00 | 0.96 | 0.99 | 0.84 | 0.95 |
| $\mu_S(kw)$ | -0.09 | -0.04 | -0.04 | 0.91 | 0.56 | 1.00 | 0.68 | 0.80 | 0.34 |
| | -0.05 | -0.02 | 0.02 | 0.91 | 0.64 | 1.00 | 0.71 | 0.81 | 0.47 |
| | -0.16 | 0.00 | -0.00 | 0.76 | 0.50 | 1.00 | 0.66 | 0.76 | 0.44 |
| | 0.17 | -0.23 | -0.22 | 0.98 | 0.96 | 1.00 | 0.98 | 0.94 | 0.96 |
| $\sigma_S(kw)$ | -0.05 | -0.02 | -0.01 | 0.50 | 0.91 | 0.68 | 1.00 | 0.36 | 0.69 |
| | -0.04 | 0.01 | 0.16 | 0.51 | 0.94 | 0.71 | 1.00 | 0.34 | 0.78 |
| | -0.14 | 0.19 | 0.31 | 0.66 | 0.87 | 0.66 | 1.00 | 0.41 | 0.79 |
| | 0.28 | -0.24 | -0.22 | 1.00 | 0.99 | 0.98 | 1.00 | 0.88 | 0.96 |
| $\mu_S(sw)$ | -0.05 | 0.01 | 0.01 | 0.85 | 0.31 | 0.80 | 0.36 | 1.00 | 0.33 |
| | -0.03 | 0.01 | 0.05 | 0.88 | 0.30 | 0.81 | 0.34 | 1.00 | 0.35 |
| | -0.20 | 0.07 | 0.09 | 0.50 | 0.42 | 0.76 | 0.41 | 1.00 | 0.53 |
| | -0.02 | -0.14 | -0.14 | 0.86 | 0.84 | 0.94 | 0.88 | 1.00 | 0.93 |
| $\sigma_S(sw)$ | 0.00 | 0.04 | 0.07 | 0.22 | 0.75 | 0.34 | 0.69 | 0.33 | 1.00 |
| | -0.03 | 0.08 | 0.20 | 0.29 | 0.71 | 0.47 | 0.78 | 0.35 | 1.00 |
| | -0.17 | 0.24 | 0.44 | 0.45 | 0.87 | 0.44 | 0.79 | 0.53 | 1.00 |
| | 0.25 | -0.24 | -0.23 | 0.95 | 0.95 | 0.96 | 0.96 | 0.93 | 1.00 |

TABLE S326. 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 | 0.25 | 0.27 | 0.05 | 0.09 | 0.03 | 0.20 | -0.03 | 0.23 |
| (p.) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (i.) | 1.00 | 0.22 | 0.30 | 0.33 | 0.29 | 0.32 | 0.40 | 0.09 | 0.33 |
| (h.) | 1.00 | 0.08 | 0.20 | -0.42 | -0.50 | -0.13 | -0.35 | 0.59 | 0.26 |
| d | 0.25 | 1.00 | 0.99 | -0.16 | -0.05 | -0.13 | -0.03 | -0.09 | 0.08 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 0.22 | 1.00 | 0.97 | 0.03 | -0.01 | 0.05 | 0.00 | 0.16 | 0.03 |
| | 0.08 | 1.00 | 0.96 | -0.10 | 0.59 | -0.13 | 0.29 | 0.03 | 0.32 |
| s | 0.27 | 0.99 | 1.00 | -0.15 | -0.05 | -0.12 | -0.03 | -0.09 | 0.10 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 0.30 | 0.97 | 1.00 | 0.05 | 0.00 | 0.06 | 0.01 | 0.17 | 0.09 |
| | 0.20 | 0.96 | 1.00 | -0.04 | 0.53 | -0.02 | 0.34 | 0.22 | 0.45 |
| $\mu_S(p)$ | 0.05 | -0.16 | -0.15 | 1.00 | 0.42 | 0.95 | 0.44 | 0.84 | 0.14 |
| | 0.00 | 0.00 | 0.00 | 1.00 | 0.34 | 0.95 | 0.34 | 0.87 | 0.01 |
| | 0.33 | 0.03 | 0.05 | 1.00 | 0.87 | 0.95 | 0.87 | 0.59 | 0.62 |
| | -0.42 | -0.10 | -0.04 | 1.00 | 0.70 | 0.94 | 0.92 | 0.22 | 0.63 |
| $\sigma_S(p)$ | 0.09 | -0.05 | -0.05 | 0.42 | 1.00 | 0.19 | 0.93 | -0.01 | 0.28 |
| | 0.00 | 0.00 | 0.00 | 0.34 | 1.00 | 0.11 | 0.98 | -0.05 | 0.20 |
| | 0.29 | -0.01 | 0.00 | 0.87 | 1.00 | 0.71 | 0.88 | 0.23 | 0.58 |
| | -0.50 | 0.59 | 0.53 | 0.70 | 1.00 | 0.55 | 0.88 | -0.04 | 0.54 |
| $\mu_S(kw)$ | 0.03 | -0.13 | -0.12 | 0.95 | 0.19 | 1.00 | 0.23 | 0.95 | 0.04 |
| | 0.00 | 0.00 | 0.00 | 0.95 | 0.11 | 1.00 | 0.11 | 0.97 | -0.07 |
| | 0.32 | 0.05 | 0.06 | 0.95 | 0.71 | 1.00 | 0.84 | 0.68 | 0.53 |
| | -0.13 | -0.13 | -0.02 | 0.94 | 0.55 | 1.00 | 0.87 | 0.52 | 0.81 |
| $\sigma_S(kw)$ | 0.20 | -0.03 | -0.03 | 0.44 | 0.93 | 0.23 | 1.00 | -0.02 | 0.42 |
| | 0.00 | 0.00 | 0.00 | 0.34 | 0.98 | 0.11 | 1.00 | -0.06 | 0.33 |
| | 0.40 | 0.00 | 0.01 | 0.87 | 0.88 | 0.84 | 1.00 | 0.21 | 0.57 |
| | -0.35 | 0.29 | 0.34 | 0.92 | 0.88 | 0.87 | 1.00 | 0.31 | 0.79 |
| $\mu_S(sw)$ | -0.03 | -0.09 | -0.09 | 0.84 | -0.01 | 0.95 | -0.02 | 1.00 | -0.04 |
| | 0.00 | 0.00 | 0.00 | 0.87 | -0.05 | 0.97 | -0.06 | 1.00 | -0.13 |
| | 0.09 | 0.16 | 0.17 | 0.59 | 0.23 | 0.68 | 0.21 | 1.00 | 0.39 |
| | 0.59 | 0.03 | 0.22 | 0.22 | -0.04 | 0.52 | 0.31 | 1.00 | 0.81 |
| $\sigma_S(sw)$ | 0.23 | 0.08 | 0.10 | 0.14 | 0.28 | 0.04 | 0.42 | -0.04 | 1.00 |
| | 0.00 | 0.00 | 0.00 | 0.01 | 0.20 | -0.07 | 0.33 | -0.13 | 1.00 |
| | 0.33 | 0.03 | 0.09 | 0.62 | 0.58 | 0.53 | 0.57 | 0.39 | 1.00 |
| | 0.26 | 0.32 | 0.45 | 0.63 | 0.54 | 0.81 | 0.79 | 0.81 | 1.00 |

TABLE S327. Pierson correlation coefficient for the topological and textual measures. TAG: 1

| | cc | d | s | $\mu_S(p)$ | $\sigma_S(p)$ | $\mu_S(kw)$ | $\sigma_S(kw)$ | $\mu_S(sw)$ | $\sigma_S(sw)$ |
|----------------|-------|-------|-------|------------|---------------|-------------|----------------|-------------|------------------|
| cc | 1.00 | 0.06 | 0.05 | -0.02 | 0.02 | 0.01 | 0.06 | 0.06 | 0.19 |
| (p.) | 1.00 | 0.35 | 0.28 | 0.01 | 0.07 | 0.02 | 0.09 | 0.01 | 0.11 |
| (i.) | 1.00 | -0.20 | -0.13 | -0.11 | -0.15 | -0.11 | -0.16 | -0.00 | -0.06 |
| (h.) | 1.00 | -0.58 | -0.44 | -0.01 | 0.17 | 0.40 | 0.31 | 0.37 | 0.26 |
| d | 0.06 | 1.00 | 0.98 | -0.04 | 0.01 | -0.00 | 0.04 | 0.07 | 0.20 |
| | 0.35 | 1.00 | 0.89 | 0.01 | 0.09 | -0.02 | 0.06 | 0.03 | 0.18 |
| | -0.20 | 1.00 | 0.90 | -0.11 | -0.04 | -0.16 | -0.11 | -0.11 | -0.09 |
| | -0.58 | 1.00 | 0.96 | 0.10 | -0.18 | 0.14 | 0.13 | 0.15 | 0.26 |
| s | 0.05 | 0.98 | 1.00 | -0.04 | 0.00 | 0.00 | 0.04 | 0.08 | 0.19 |
| | 0.28 | 0.89 | 1.00 | 0.02 | 0.12 | -0.02 | 0.07 | 0.05 | 0.19 |
| | -0.13 | 0.90 | 1.00 | -0.11 | -0.04 | -0.13 | -0.08 | -0.08 | -0.07 |
| | -0.44 | 0.96 | 1.00 | 0.08 | -0.18 | 0.29 | 0.24 | 0.32 | 0.40 |
| $\mu_S(p)$ | -0.02 | -0.04 | -0.04 | 1.00 | 0.88 | 0.82 | 0.79 | 0.23 | 0.31 |
| | 0.01 | 0.01 | 0.02 | 1.00 | 0.88 | 0.87 | 0.84 | 0.23 | 0.31 |
| | -0.11 | -0.11 | -0.11 | 1.00 | 0.93 | 0.73 | 0.75 | 0.25 | 0.41 |
| | -0.01 | 0.10 | 0.08 | 1.00 | 0.80 | -0.01 | 0.25 | -0.18 | -0.09 |
| $\sigma_S(p)$ | 0.02 | 0.01 | 0.00 | 0.88 | 1.00 | 0.62 | 0.83 | 0.12 | 0.41 |
| | 0.07 | 0.09 | 0.12 | 0.88 | 1.00 | 0.66 | 0.90 | 0.10 | 0.46 |
| | -0.15 | -0.04 | -0.04 | 0.93 | 1.00 | 0.60 | 0.74 | 0.13 | 0.34 |
| | 0.17 | -0.18 | -0.18 | 0.80 | 1.00 | -0.04 | 0.24 | -0.19 | -0.01 |
| $\mu_S(kw)$ | 0.01 | -0.00 | 0.00 | 0.82 | 0.62 | 1.00 | 0.78 | 0.58 | 0.46 |
| | 0.02 | -0.02 | -0.02 | 0.87 | 0.66 | 1.00 | 0.77 | 0.52 | 0.34 |
| | -0.11 | -0.16 | -0.13 | 0.73 | 0.60 | 1.00 | 0.84 | 0.72 | $\mid 0.74 \mid$ |
| | 0.40 | 0.14 | 0.29 | -0.01 | -0.04 | 1.00 | 0.57 | 0.90 | 0.60 |
| $\sigma_S(kw)$ | 0.06 | 0.04 | 0.04 | 0.79 | 0.83 | 0.78 | 1.00 | 0.25 | 0.60 |
| | 0.09 | 0.06 | 0.07 | 0.84 | 0.90 | 0.77 | 1.00 | 0.16 | 0.54 |
| | -0.16 | -0.11 | -0.08 | 0.75 | 0.74 | 0.84 | 1.00 | 0.35 | 0.64 |
| | 0.31 | 0.13 | 0.24 | 0.25 | 0.24 | 0.57 | 1.00 | 0.60 | 0.89 |
| $\mu_S(sw)$ | 0.06 | 0.07 | 0.08 | 0.23 | 0.12 | 0.58 | 0.25 | 1.00 | 0.54 |
| | 0.01 | 0.03 | 0.05 | 0.23 | 0.10 | 0.52 | 0.16 | 1.00 | 0.38 |
| | -0.00 | -0.11 | -0.08 | 0.25 | 0.13 | 0.72 | 0.35 | 1.00 | 0.79 |
| | 0.37 | 0.15 | 0.32 | -0.18 | -0.19 | 0.90 | 0.60 | 1.00 | 0.75 |
| $\sigma_S(sw)$ | 0.19 | 0.20 | 0.19 | 0.31 | 0.41 | 0.46 | 0.60 | 0.54 | 1.00 |
| | 0.11 | 0.18 | 0.19 | 0.31 | 0.46 | 0.34 | 0.54 | 0.38 | 1.00 |
| | -0.06 | -0.09 | -0.07 | 0.41 | 0.34 | 0.74 | 0.64 | 0.79 | 1.00 |
| | 0.26 | 0.26 | 0.40 | -0.09 | -0.01 | 0.60 | 0.89 | 0.75 | 1.00 |

TABLE S328. 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 | 1.00 | 0.01 | -0.00 | -0.05 | -0.04 | -0.05 | -0.00 | -0.02 | 0.04 |
| (p.) | 1.00 | 0.47 | 0.33 | -0.00 | -0.01 | -0.00 | 0.02 | -0.09 | -0.01 |
| (i.) | 1.00 | -0.45 | -0.17 | 0.19 | 0.22 | 0.07 | 0.22 | 0.03 | 0.21 |
| (h.) | 1.00 | -0.64 | -0.59 | -0.35 | -0.14 | -0.21 | -0.04 | -0.03 | -0.03 |
| d | 0.01 | 1.00 | 0.99 | -0.04 | -0.02 | -0.02 | -0.00 | 0.04 | 0.02 |
| | 0.47 | 1.00 | 0.75 | 0.07 | 0.11 | 0.04 | 0.10 | -0.00 | 0.05 |
| | -0.45 | 1.00 | 0.79 | -0.19 | -0.16 | -0.12 | -0.02 | -0.05 | -0.09 |
| | -0.64 | 1.00 | 1.00 | -0.10 | -0.20 | -0.16 | -0.22 | -0.14 | -0.04 |
| s | -0.00 | 0.99 | 1.00 | -0.04 | -0.02 | -0.02 | -0.01 | 0.04 | 0.02 |
| | 0.33 | 0.75 | 1.00 | 0.06 | 0.09 | 0.06 | 0.10 | 0.04 | 0.11 |
| | -0.17 | 0.79 | 1.00 | -0.14 | -0.10 | -0.08 | 0.04 | -0.02 | -0.01 |
| | -0.59 | 1.00 | 1.00 | -0.13 | -0.23 | -0.19 | -0.26 | -0.11 | -0.01 |
| $\mu_S(p)$ | -0.05 | -0.04 | -0.04 | 1.00 | 0.95 | 0.78 | 0.71 | 0.21 | 0.45 |
| | -0.00 | 0.07 | 0.06 | 1.00 | 0.95 | 0.78 | 0.71 | 0.21 | 0.46 |
| | 0.19 | -0.19 | -0.14 | 1.00 | 0.96 | 0.82 | 0.67 | 0.63 | 0.74 |
| | -0.35 | -0.10 | -0.13 | 1.00 | 0.90 | 0.99 | 0.87 | 0.44 | 0.47 |
| $\sigma_S(p)$ | -0.04 | -0.02 | -0.02 | 0.95 | 1.00 | 0.78 | 0.81 | 0.16 | 0.40 |
| | -0.01 | 0.11 | 0.09 | 0.95 | 1.00 | 0.78 | 0.81 | 0.15 | 0.40 |
| | 0.22 | -0.16 | -0.10 | 0.96 | 1.00 | 0.75 | 0.74 | 0.54 | 0.69 |
| | -0.14 | -0.20 | -0.23 | 0.90 | 1.00 | 0.92 | 0.95 | 0.34 | 0.42 |
| $\mu_S(kw)$ | -0.05 | -0.02 | -0.02 | 0.78 | 0.78 | 1.00 | 0.92 | 0.48 | 0.66 |
| | -0.00 | 0.04 | 0.06 | 0.78 | 0.78 | 1.00 | 0.92 | 0.48 | 0.68 |
| | 0.07 | -0.12 | -0.08 | 0.82 | 0.75 | 1.00 | 0.78 | 0.82 | 0.80 |
| | -0.21 | -0.16 | -0.19 | 0.99 | 0.92 | 1.00 | 0.90 | 0.49 | 0.52 |
| $\sigma_S(kw)$ | -0.00 | -0.00 | -0.01 | 0.71 | 0.81 | 0.92 | 1.00 | 0.27 | 0.54 |
| | 0.02 | 0.10 | 0.10 | 0.71 | 0.81 | 0.92 | 1.00 | 0.28 | 0.56 |
| | 0.22 | -0.02 | 0.04 | 0.67 | 0.74 | 0.78 | 1.00 | 0.52 | 0.67 |
| | -0.04 | -0.22 | -0.26 | 0.87 | 0.95 | 0.90 | 1.00 | 0.14 | 0.22 |
| $\mu_S(sw)$ | -0.02 | 0.04 | 0.04 | 0.21 | 0.16 | 0.48 | 0.27 | 1.00 | 0.78 |
| | -0.09 | -0.00 | 0.04 | 0.21 | 0.15 | 0.48 | 0.28 | 1.00 | 0.76 |
| | 0.03 | -0.05 | -0.02 | 0.63 | 0.54 | 0.82 | 0.52 | 1.00 | 0.91 |
| | -0.03 | -0.14 | -0.11 | 0.44 | 0.34 | 0.49 | 0.14 | 1.00 | 0.98 |
| $\sigma_S(sw)$ | 0.04 | 0.02 | 0.02 | 0.45 | 0.40 | 0.66 | 0.54 | 0.78 | 1.00 |
| | -0.01 | 0.05 | 0.11 | 0.46 | 0.40 | 0.68 | 0.56 | 0.76 | 1.00 |
| | 0.21 | -0.09 | -0.01 | 0.74 | 0.69 | 0.80 | 0.67 | 0.91 | 1.00 |
| | -0.03 | -0.04 | -0.01 | 0.47 | 0.42 | 0.52 | 0.22 | 0.98 | 1.00 |

TABLE S329. 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 | 0.01 | -0.00 | 0.03 | 0.07 | 0.08 | 0.09 | 0.13 | 0.16 |
| (p.) | 1.00 | 0.40 | 0.31 | -0.08 | -0.05 | -0.03 | -0.05 | 0.06 | 0.02 |
| (i.) | 1.00 | -0.15 | -0.11 | 0.09 | 0.14 | 0.15 | 0.21 | 0.14 | 0.23 |
| (h.) | 1.00 | -0.59 | -0.53 | 0.37 | 0.25 | 0.14 | 0.23 | -0.23 | -0.12 |
| d | 0.01 | 1.00 | 0.99 | -0.02 | 0.00 | -0.02 | -0.01 | 0.01 | 0.05 |
| | 0.40 | 1.00 | 0.84 | -0.15 | -0.14 | -0.15 | -0.17 | -0.03 | -0.05 |
| | -0.15 | 1.00 | 0.93 | -0.06 | -0.05 | -0.09 | -0.08 | -0.09 | -0.06 |
| | -0.59 | 1.00 | 0.98 | -0.26 | -0.19 | -0.26 | -0.19 | -0.08 | -0.21 |
| s | -0.00 | 0.99 | 1.00 | -0.02 | 0.01 | -0.02 | -0.00 | 0.01 | 0.04 |
| | 0.31 | 0.84 | 1.00 | -0.11 | -0.09 | -0.11 | -0.12 | 0.00 | -0.00 |
| | -0.11 | 0.93 | 1.00 | -0.07 | -0.02 | -0.09 | -0.05 | -0.09 | -0.04 |
| | -0.53 | 0.98 | 1.00 | -0.22 | -0.15 | -0.32 | -0.17 | -0.16 | -0.28 |
| $\mu_S(p)$ | 0.03 | -0.02 | -0.02 | 1.00 | 0.61 | 0.90 | 0.59 | 0.71 | 0.49 |
| | -0.08 | -0.15 | | 1.00 | 0.91 | 0.84 | 0.81 | 0.44 | 0.67 |
| | 0.09 | -0.06 | | 1.00 | 0.40 | 0.94 | 0.40 | 0.86 | 0.36 |
| | 0.37 | -0.26 | | 1.00 | 0.85 | 0.60 | 0.76 | 0.06 | 0.26 |
| $\sigma_S(p)$ | 0.07 | 0.00 | 0.01 | 0.61 | 1.00 | 0.48 | 0.93 | 0.19 | 0.68 |
| | -0.05 | -0.14 | | 0.91 | 1.00 | 0.72 | 0.92 | 0.34 | 0.76 |
| | 0.14 | -0.05 | | 0.40 | 1.00 | 0.33 | 0.95 | 0.13 | 0.63 |
| | 0.25 | -0.19 | | 0.85 | 1.00 | 0.49 | 0.97 | -0.16 | 0.04 |
| $\mu_S(kw)$ | 0.08 | -0.02 | | 0.90 | 0.48 | 1.00 | 0.56 | 0.88 | 0.58 |
| | -0.03 | -0.15 | | 0.84 | 0.72 | 1.00 | 0.77 | 0.73 | 0.70 |
| | 0.15 | -0.09 | | 0.94 | 0.33 | 1.00 | 0.41 | 0.95 | 0.49 |
| (1) | 0.14 | -0.26 | | 0.60 | 0.49 | 1.00 | 0.57 | 0.71 | 0.73 |
| $\sigma_S(kw)$ | 0.09 | -0.01 | -0.00 | 0.59 | 0.93 | 0.56 | 1.00 | 0.27 | 0.79 |
| | -0.05 | -0.17 | | 0.81 | 0.92 | 0.77 | 1.00 | 0.41 | 0.84 |
| | 0.21 | -0.08 | -0.05 | 0.40 | 0.95 | 0.41 | 1.00 | 0.21 | 0.76 |
| | 0.23 | -0.19 | | 0.76 | 0.97 | 0.57 | 1.00 | -0.04 | 0.11 |
| $\mu_S(sw)$ | 0.13 | 0.01 | 0.01 | 0.71 | 0.19 | 0.88 | 0.27 | 1.00 | 0.50 |
| | 0.06 | -0.03 | 0.00 | 0.44 | 0.34 | 0.73 | 0.41 | 1.00 | 0.62 |
| | 0.14 | -0.09 | -0.09 | 0.86 | 0.13 | 0.95 | 0.21 | 1.00 | 0.44 |
| | -0.23 | -0.08 | | 0.06 | -0.16 | 0.71 | -0.04 | 1.00 | 0.86 |
| $\sigma_S(sw)$ | 0.16 | 0.05 | 0.04 | 0.49 | 0.68 | 0.58 | 0.79 | 0.50 | 1.00 |
| | 0.02 | -0.05 | -0.00 | 0.67 | 0.76 | 0.70 | 0.84 | 0.62 | 1.00 |
| | 0.23 | -0.06 | | 0.36 | 0.63 | 0.49 | 0.76 | 0.44 | 1.00 |
| | -0.12 | -0.21 | -0.28 | 0.26 | 0.04 | 0.73 | 0.11 | 0.86 | 1.00 |

TABLE S330. Pierson correlation coefficient for the topological and textual measures. TAG: 4

| | cc | d | s | $\mu_S(p)$ | $\sigma_S(p)$ | $\mu_S(kw)$ | $\sigma_S(kw)$ | $\mu_S(sw)$ | $\sigma_S(sw)$ |
|----------------|-------|-------|-------|------------|---------------|-------------|----------------|-------------|----------------|
| cc | 1.00 | -0.00 | -0.04 | -0.03 | 0.18 | 0.02 | 0.20 | 0.14 | 0.19 |
| (p.) | 1.00 | 0.75 | 0.62 | -0.03 | 0.28 | -0.00 | 0.30 | 0.13 | 0.20 |
| (i.) | 1.00 | -0.39 | -0.30 | -0.12 | -0.04 | -0.10 | -0.06 | -0.08 | 0.04 |
| (h.) | 1.00 | -0.85 | -0.72 | -0.15 | -0.05 | -0.22 | -0.26 | -0.14 | -0.24 |
| d | -0.00 | 1.00 | 0.96 | -0.03 | 0.11 | 0.09 | 0.20 | 0.25 | 0.24 |
| | 0.75 | 1.00 | 0.84 | -0.17 | 0.23 | -0.04 | 0.37 | 0.26 | 0.37 |
| | -0.39 | 1.00 | 0.85 | 0.24 | 0.28 | 0.29 | 0.30 | 0.18 | 0.08 |
| | -0.85 | 1.00 | 0.95 | -0.00 | -0.05 | 0.00 | 0.05 | -0.11 | -0.03 |
| s | -0.04 | 0.96 | 1.00 | -0.01 | 0.11 | 0.07 | 0.19 | 0.20 | 0.21 |
| | 0.62 | 0.84 | 1.00 | -0.13 | 0.19 | -0.03 | 0.33 | 0.17 | 0.32 |
| | -0.30 | 0.85 | 1.00 | 0.31 | 0.42 | 0.29 | 0.42 | 0.13 | 0.15 |
| | -0.72 | 0.95 | 1.00 | -0.06 | -0.09 | -0.05 | -0.02 | -0.07 | -0.03 |
| $\mu_S(p)$ | -0.03 | -0.03 | -0.01 | 1.00 | 0.47 | 0.88 | 0.41 | 0.21 | 0.18 |
| | -0.03 | -0.17 | -0.13 | 1.00 | 0.30 | 0.88 | 0.16 | 0.10 | -0.04 |
| | -0.12 | 0.24 | 0.31 | 1.00 | 0.86 | 0.91 | 0.90 | 0.56 | 0.55 |
| | -0.15 | -0.00 | -0.06 | 1.00 | 0.72 | 0.90 | 0.93 | 0.74 | 0.81 |
| $\sigma_S(p)$ | 0.18 | 0.11 | 0.11 | 0.47 | 1.00 | 0.40 | 0.92 | 0.36 | 0.58 |
| | 0.28 | 0.23 | 0.19 | 0.30 | 1.00 | 0.14 | 0.84 | 0.16 | 0.44 |
| | -0.04 | 0.28 | 0.42 | 0.86 | 1.00 | 0.73 | 0.94 | 0.47 | 0.60 |
| | -0.05 | -0.05 | -0.09 | 0.72 | 1.00 | 0.55 | 0.78 | 0.41 | 0.52 |
| $\mu_S(kw)$ | 0.02 | 0.09 | 0.07 | 0.88 | 0.40 | 1.00 | 0.47 | 0.51 | 0.34 |
| | -0.00 | -0.04 | -0.03 | 0.88 | 0.14 | 1.00 | 0.17 | 0.38 | 0.08 |
| | -0.10 | 0.29 | 0.29 | 0.91 | 0.73 | 1.00 | 0.87 | 0.77 | 0.66 |
| | -0.22 | 0.00 | -0.05 | 0.90 | 0.55 | 1.00 | 0.89 | 0.86 | 0.87 |
| $\sigma_S(kw)$ | 0.20 | 0.20 | 0.19 | 0.41 | 0.92 | 0.47 | 1.00 | 0.53 | 0.76 |
| | 0.30 | 0.37 | 0.33 | 0.16 | 0.84 | 0.17 | 1.00 | 0.37 | 0.73 |
| | -0.06 | 0.30 | 0.42 | 0.90 | 0.94 | 0.87 | 1.00 | 0.63 | 0.74 |
| | -0.26 | 0.05 | -0.02 | 0.93 | 0.78 | 0.89 | 1.00 | 0.70 | 0.88 |
| $\mu_S(sw)$ | 0.14 | 0.25 | 0.20 | 0.21 | 0.36 | 0.51 | 0.53 | 1.00 | 0.74 |
| | 0.13 | 0.26 | 0.17 | 0.10 | 0.16 | 0.38 | 0.37 | 1.00 | 0.63 |
| | -0.08 | 0.18 | 0.13 | 0.56 | 0.47 | 0.77 | 0.63 | 1.00 | 0.84 |
| | -0.14 | -0.11 | -0.07 | 0.74 | 0.41 | 0.86 | 0.70 | 1.00 | 0.88 |
| $\sigma_S(sw)$ | 0.19 | 0.24 | 0.21 | 0.18 | 0.58 | 0.34 | 0.76 | 0.74 | 1.00 |
| | 0.20 | 0.37 | 0.32 | -0.04 | 0.44 | 0.08 | 0.73 | 0.63 | 1.00 |
| | 0.04 | 0.08 | 0.15 | 0.55 | 0.60 | 0.66 | 0.74 | 0.84 | 1.00 |
| | -0.24 | -0.03 | -0.03 | 0.81 | 0.52 | 0.87 | 0.88 | 0.88 | 1.00 |

TABLE S331. Pierson correlation coefficient for the topological and textual measures. TAG: 5

| | cc | d | s | $\mu_S(p)$ | $\sigma_S(p)$ | $\mu_S(kw)$ | $\sigma_S(kw)$ | $\mu_S(sw)$ | $\sigma_S(sw)$ |
|----------------|-------|-------|-------|------------|---------------|-------------|----------------|-------------|----------------|
| cc | 1.00 | 0.04 | 0.03 | 0.03 | 0.08 | 0.02 | 0.07 | 0.01 | 0.01 |
| (p.) | 1.00 | 0.26 | 0.10 | 0.04 | 0.05 | 0.05 | 0.05 | 0.04 | 0.03 |
| (i.) | 1.00 | -0.22 | -0.13 | 0.03 | 0.09 | -0.04 | 0.13 | -0.15 | -0.06 |
| (h.) | 1.00 | -0.50 | -0.50 | -0.28 | -0.35 | 0.07 | -0.13 | 0.01 | -0.13 |
| d | 0.04 | 1.00 | 0.97 | -0.03 | -0.01 | -0.02 | -0.00 | 0.04 | 0.01 |
| | 0.26 | 1.00 | 0.74 | 0.07 | 0.09 | 0.05 | 0.08 | 0.03 | 0.05 |
| | -0.22 | 1.00 | 0.73 | -0.09 | -0.04 | 0.01 | -0.02 | 0.06 | -0.00 |
| | -0.50 | 1.00 | 0.95 | 0.45 | 0.51 | -0.08 | 0.46 | -0.22 | 0.17 |
| s | 0.03 | 0.97 | 1.00 | -0.02 | 0.01 | -0.02 | 0.01 | 0.02 | 0.01 |
| | 0.10 | 0.74 | 1.00 | 0.05 | 0.07 | 0.04 | 0.06 | 0.07 | 0.06 |
| | -0.13 | 0.73 | 1.00 | 0.02 | 0.08 | 0.05 | 0.10 | 0.00 | 0.03 |
| | -0.50 | 0.95 | 1.00 | 0.65 | 0.74 | -0.19 | 0.69 | -0.36 | 0.19 |
| $\mu_S(p)$ | 0.03 | -0.03 | -0.02 | 1.00 | 0.94 | 0.89 | 0.88 | 0.38 | 0.53 |
| | 0.04 | 0.07 | 0.05 | 1.00 | 0.96 | 0.90 | 0.89 | 0.38 | 0.52 |
| | 0.03 | -0.09 | 0.02 | 1.00 | 0.88 | 0.81 | 0.81 | 0.42 | 0.58 |
| | -0.28 | 0.45 | 0.65 | 1.00 | 0.93 | -0.31 | 0.86 | -0.46 | 0.28 |
| $\sigma_S(p)$ | 0.08 | -0.01 | 0.01 | 0.94 | 1.00 | 0.84 | 0.93 | 0.33 | 0.52 |
| | 0.05 | 0.09 | 0.07 | 0.96 | 1.00 | 0.88 | 0.94 | 0.36 | 0.54 |
| | 0.09 | -0.04 | 0.08 | 0.88 | 1.00 | 0.65 | 0.91 | 0.24 | 0.42 |
| | -0.35 | 0.51 | 0.74 | 0.93 | 1.00 | -0.36 | 0.90 | -0.51 | 0.23 |
| $\mu_S(kw)$ | 0.02 | -0.02 | -0.02 | 0.89 | 0.84 | 1.00 | 0.92 | 0.64 | 0.73 |
| | 0.05 | 0.05 | 0.04 | 0.90 | 0.88 | 1.00 | 0.94 | 0.63 | 0.71 |
| | -0.04 | 0.01 | 0.05 | 0.81 | 0.65 | 1.00 | 0.76 | 0.80 | 0.81 |
| | 0.07 | -0.08 | -0.19 | -0.31 | -0.36 | 1.00 | -0.03 | 0.92 | 0.72 |
| $\sigma_S(kw)$ | 0.07 | -0.00 | 0.01 | 0.88 | 0.93 | 0.92 | 1.00 | 0.43 | 0.64 |
| | 0.05 | 0.08 | 0.06 | 0.89 | 0.94 | 0.94 | 1.00 | 0.46 | 0.66 |
| | 0.13 | -0.02 | 0.10 | 0.81 | 0.91 | 0.76 | 1.00 | 0.38 | 0.58 |
| | -0.13 | 0.46 | 0.69 | 0.86 | 0.90 | -0.03 | 1.00 | -0.29 | 0.47 |
| $\mu_S(sw)$ | 0.01 | 0.04 | 0.02 | 0.38 | 0.33 | 0.64 | 0.43 | 1.00 | 0.85 |
| | 0.04 | 0.03 | 0.07 | 0.38 | 0.36 | 0.63 | 0.46 | 1.00 | 0.87 |
| | -0.15 | 0.06 | 0.00 | 0.42 | 0.24 | 0.80 | 0.38 | 1.00 | 0.85 |
| | 0.01 | -0.22 | -0.36 | -0.46 | -0.51 | 0.92 | -0.29 | 1.00 | 0.61 |
| $\sigma_S(sw)$ | 0.01 | 0.01 | 0.01 | 0.53 | 0.52 | 0.73 | 0.64 | 0.85 | 1.00 |
| | 0.03 | 0.05 | 0.06 | 0.52 | 0.54 | 0.71 | 0.66 | 0.87 | 1.00 |
| | -0.06 | -0.00 | 0.03 | 0.58 | 0.42 | 0.81 | 0.58 | 0.85 | 1.00 |
| | -0.13 | 0.17 | 0.19 | 0.28 | 0.23 | 0.72 | 0.47 | 0.61 | 1.00 |

TABLE S332. 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 | 1.00 | -0.05 | -0.09 | 0.16 | 0.17 | 0.23 | 0.21 | 0.23 | 0.27 |
| (p.) | 1.00 | 0.70 | 0.58 | 0.18 | 0.17 | 0.27 | 0.23 | 0.27 | 0.31 |
| (i.) | 1.00 | -0.60 | -0.41 | -0.15 | -0.03 | -0.18 | -0.22 | -0.15 | -0.27 |
| (h.) | 1.00 | -0.96 | -0.53 | -0.01 | 0.22 | 0.17 | 0.29 | -0.01 | -0.16 |
| d | -0.05 | 1.00 | 0.90 | -0.05 | 0.00 | 0.11 | 0.05 | 0.22 | 0.16 |
| | 0.70 | 1.00 | 0.82 | 0.06 | 0.08 | 0.06 | 0.07 | 0.08 | 0.13 |
| | -0.60 | 1.00 | 0.70 | 0.04 | 0.12 | 0.04 | 0.20 | 0.10 | 0.37 |
| | -0.96 | 1.00 | 0.58 | -0.02 | -0.24 | -0.25 | -0.39 | -0.06 | 0.02 |
| s | -0.09 | 0.90 | 1.00 | -0.06 | -0.04 | 0.07 | 0.02 | 0.16 | 0.13 |
| | 0.58 | 0.82 | 1.00 | 0.08 | 0.08 | 0.05 | 0.06 | 0.06 | 0.12 |
| | -0.41 | 0.70 | 1.00 | 0.02 | 0.06 | -0.10 | 0.09 | -0.11 | 0.17 |
| | -0.53 | 0.58 | 1.00 | -0.28 | -0.36 | -0.34 | -0.30 | -0.10 | 0.13 |
| $\mu_S(p)$ | 0.16 | -0.05 | -0.06 | 1.00 | 0.86 | 0.74 | 0.86 | 0.49 | 0.66 |
| | 0.18 | 0.06 | 0.08 | 1.00 | 0.95 | 0.78 | 0.87 | 0.57 | 0.73 |
| | -0.15 | 0.04 | 0.02 | 1.00 | 0.69 | 0.62 | 0.80 | 0.23 | 0.27 |
| | -0.01 | -0.02 | -0.28 | 1.00 | 0.76 | 0.42 | 0.82 | 0.20 | 0.35 |
| $\sigma_S(p)$ | 0.17 | 0.00 | -0.04 | 0.86 | 1.00 | 0.58 | 0.83 | 0.38 | 0.56 |
| | 0.17 | 0.08 | 0.08 | 0.95 | 1.00 | 0.73 | 0.88 | 0.54 | 0.72 |
| | -0.03 | 0.12 | 0.06 | 0.69 | 1.00 | 0.22 | 0.85 | -0.03 | 0.12 |
| | 0.22 | -0.24 | -0.36 | 0.76 | 1.00 | -0.06 | 0.65 | -0.33 | -0.20 |
| $\mu_S(kw)$ | 0.23 | 0.11 | 0.07 | 0.74 | 0.58 | 1.00 | 0.89 | 0.91 | 0.91 |
| | 0.27 | 0.06 | 0.05 | 0.78 | 0.73 | 1.00 | 0.93 | 0.93 | 0.94 |
| | -0.18 | 0.04 | -0.10 | 0.62 | 0.22 | 1.00 | 0.57 | 0.81 | 0.66 |
| | 0.17 | -0.25 | -0.34 | 0.42 | -0.06 | 1.00 | 0.60 | 0.94 | 0.80 |
| $\sigma_S(kw)$ | 0.21 | 0.05 | 0.02 | 0.86 | 0.83 | 0.89 | 1.00 | 0.75 | 0.90 |
| | 0.23 | 0.07 | 0.06 | 0.87 | 0.88 | 0.93 | 1.00 | 0.83 | 0.94 |
| | -0.22 | 0.20 | 0.09 | 0.80 | 0.85 | 0.57 | 1.00 | 0.28 | 0.48 |
| | 0.29 | -0.39 | -0.30 | 0.82 | 0.65 | 0.60 | 1.00 | 0.42 | 0.58 |
| $\mu_S(sw)$ | 0.23 | 0.22 | 0.16 | 0.49 | 0.38 | 0.91 | 0.75 | 1.00 | 0.88 |
| | 0.27 | 0.08 | 0.06 | 0.57 | 0.54 | 0.93 | 0.83 | 1.00 | 0.91 |
| | -0.15 | 0.10 | -0.11 | 0.23 | -0.03 | 0.81 | 0.28 | 1.00 | 0.81 |
| | -0.01 | -0.06 | -0.10 | 0.20 | -0.33 | 0.94 | 0.42 | 1.00 | 0.88 |
| $\sigma_S(sw)$ | 0.27 | 0.16 | 0.13 | 0.66 | 0.56 | 0.91 | 0.90 | 0.88 | 1.00 |
| | 0.31 | 0.13 | 0.12 | 0.73 | 0.72 | 0.94 | 0.94 | 0.91 | 1.00 |
| | -0.27 | 0.37 | 0.17 | 0.27 | 0.12 | 0.66 | 0.48 | 0.81 | 1.00 |
| | -0.16 | 0.02 | 0.13 | 0.35 | -0.20 | 0.80 | 0.58 | 0.88 | 1.00 |

TABLE S333. 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 | 1.00 | 0.08 | 0.05 | -0.01 | 0.04 | 0.06 | 0.10 | 0.05 | 0.03 |
| (p.) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (i.) | 1.00 | -0.07 | -0.06 | 0.10 | 0.07 | 0.27 | 0.15 | 0.14 | -0.02 |
| (h.) | 1.00 | -0.76 | -0.67 | -0.29 | -0.56 | 0.02 | -0.42 | 0.21 | 0.01 |
| d | 0.08 | 1.00 | 0.97 | 0.01 | 0.08 | 0.01 | 0.11 | 0.03 | 0.06 |
| | 0.00 | 1.00 | 0.82 | 0.07 | 0.09 | 0.01 | 0.07 | 0.04 | 0.05 |
| | -0.07 | 1.00 | 0.93 | 0.08 | 0.09 | 0.08 | 0.09 | 0.07 | 0.12 |
| | -0.76 | 1.00 | 0.91 | 0.76 | 0.71 | -0.31 | 0.28 | -0.55 | -0.14 |
| s | 0.05 | 0.97 | 1.00 | 0.02 | 0.09 | 0.01 | 0.13 | 0.03 | 0.06 |
| | 0.00 | 0.82 | 1.00 | 0.06 | 0.09 | 0.00 | 0.05 | 0.04 | 0.04 |
| | -0.06 | 0.93 | 1.00 | 0.06 | 0.09 | 0.06 | 0.08 | 0.09 | 0.14 |
| | -0.67 | 0.91 | 1.00 | 0.88 | 0.92 | -0.18 | 0.59 | -0.54 | 0.05 |
| $\mu_S(p)$ | -0.01 | 0.01 | 0.02 | 1.00 | 0.91 | 0.85 | 0.76 | 0.73 | 0.75 |
| | 0.00 | 0.07 | 0.06 | 1.00 | 0.93 | 0.89 | 0.83 | 0.80 | 0.80 |
| | 0.10 | 0.08 | 0.06 | 1.00 | 0.90 | 0.42 | 0.58 | -0.02 | 0.17 |
| | -0.29 | 0.76 | 0.88 | 1.00 | 0.83 | -0.10 | 0.42 | -0.52 | -0.03 |
| $\sigma_S(p)$ | 0.04 | 0.08 | 0.09 | 0.91 | 1.00 | 0.77 | 0.87 | 0.67 | 0.76 |
| | 0.00 | 0.09 | 0.09 | 0.93 | 1.00 | 0.84 | 0.93 | 0.79 | 0.84 |
| | 0.07 | 0.09 | 0.09 | 0.90 | 1.00 | 0.36 | 0.70 | -0.07 | 0.19 |
| | -0.56 | 0.71 | 0.92 | 0.83 | 1.00 | 0.01 | 0.82 | -0.47 | 0.20 |
| $\mu_S(kw)$ | 0.06 | 0.01 | 0.01 | 0.85 | 0.77 | 1.00 | 0.80 | 0.79 | 0.68 |
| | 0.00 | 0.01 | 0.00 | 0.89 | 0.84 | 1.00 | 0.84 | 0.81 | 0.69 |
| | 0.27 | 0.08 | 0.06 | 0.42 | 0.36 | 1.00 | 0.74 | 0.69 | 0.54 |
| | 0.02 | -0.31 | -0.18 | -0.10 | 0.01 | 1.00 | 0.29 | 0.76 | 0.40 |
| $\sigma_S(kw)$ | 0.10 | 0.11 | 0.13 | 0.76 | 0.87 | 0.80 | 1.00 | 0.67 | $\mid 0.75 \mid$ |
| | 0.00 | 0.07 | 0.05 | 0.83 | 0.93 | 0.84 | 1.00 | 0.76 | $\begin{array}{ c c } \hline 0.82 \end{array}$ |
| | 0.15 | 0.09 | 0.08 | 0.58 | 0.70 | 0.74 | 1.00 | 0.30 | 0.48 |
| | -0.42 | 0.28 | 0.59 | 0.42 | 0.82 | 0.29 | 1.00 | -0.14 | 0.55 |
| $\mu_S(sw)$ | 0.05 | 0.03 | 0.03 | 0.73 | 0.67 | 0.79 | 0.67 | 1.00 | 0.86 |
| | 0.00 | 0.04 | 0.04 | 0.80 | 0.79 | 0.81 | 0.76 | 1.00 | 0.88 |
| | 0.14 | 0.07 | 0.09 | -0.02 | -0.07 | 0.69 | 0.30 | 1.00 | $\mid 0.71 \mid$ |
| | 0.21 | -0.55 | -0.54 | -0.52 | -0.47 | 0.76 | -0.14 | 1.00 | 0.50 |
| $\sigma_S(sw)$ | 0.03 | 0.06 | 0.06 | 0.75 | 0.76 | 0.68 | 0.75 | 0.86 | 1.00 |
| | 0.00 | 0.05 | 0.04 | 0.80 | 0.84 | 0.69 | 0.82 | 0.88 | 1.00 |
| | -0.02 | 0.12 | 0.14 | 0.17 | 0.19 | 0.54 | 0.48 | 0.71 | 1.00 |
| | 0.01 | -0.14 | 0.05 | -0.03 | 0.20 | 0.40 | 0.55 | 0.50 | 1.00 |

TABLE S334. 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 | -0.03 | -0.08 | 0.04 | 0.10 | 0.05 | 0.10 | 0.09 | 0.21 |
| (p.) | 1.00 | 0.64 | 0.42 | 0.12 | 0.19 | 0.09 | 0.22 | 0.08 | 0.22 |
| (i.) | 1.00 | -0.58 | -0.51 | -0.10 | -0.08 | -0.26 | -0.11 | -0.24 | -0.19 |
| (h.) | 1.00 | -0.86 | -0.85 | 0.33 | 0.09 | 0.14 | 0.21 | 0.14 | 0.11 |
| d | -0.03 | 1.00 | 0.98 | -0.05 | 0.00 | 0.04 | 0.05 | 0.09 | 0.12 |
| | 0.64 | 1.00 | 0.78 | 0.11 | 0.16 | -0.00 | 0.16 | 0.06 | 0.22 |
| | -0.58 | 1.00 | 0.86 | 0.10 | 0.14 | 0.29 | 0.18 | 0.30 | 0.28 |
| | -0.86 | 1.00 | 1.00 | -0.51 | -0.25 | -0.42 | -0.34 | -0.47 | -0.35 |
| s | -0.08 | 0.98 | 1.00 | -0.05 | -0.01 | 0.02 | 0.02 | 0.05 | 0.09 |
| | 0.42 | 0.78 | 1.00 | 0.10 | 0.15 | 0.10 | 0.19 | 0.21 | 0.35 |
| | -0.51 | 0.86 | 1.00 | 0.13 | 0.07 | 0.29 | 0.10 | 0.32 | 0.35 |
| | -0.85 | 1.00 | 1.00 | -0.50 | -0.25 | -0.40 | -0.32 | -0.47 | -0.34 |
| $\mu_S(p)$ | 0.04 | -0.05 | -0.05 | 1.00 | 0.82 | 0.65 | 0.61 | 0.19 | 0.52 |
| | 0.12 | 0.11 | 0.10 | 1.00 | 0.96 | 0.65 | 0.86 | 0.18 | 0.59 |
| | -0.10 | 0.10 | 0.13 | 1.00 | 0.84 | 0.77 | 0.76 | 0.34 | 0.50 |
| | 0.33 | -0.51 | -0.50 | 1.00 | 0.78 | 0.93 | 0.96 | 0.92 | 0.97 |
| $\sigma_S(p)$ | 0.10 | 0.00 | -0.01 | 0.82 | 1.00 | 0.58 | 0.92 | 0.16 | 0.52 |
| | 0.19 | 0.16 | 0.15 | 0.96 | 1.00 | 0.54 | 0.89 | 0.11 | 0.62 |
| | -0.08 | 0.14 | 0.07 | 0.84 | 1.00 | 0.73 | 0.98 | 0.26 | 0.44 |
| | 0.09 | -0.25 | -0.25 | 0.78 | 1.00 | 0.89 | 0.84 | 0.85 | 0.76 |
| $\mu_S(kw)$ | 0.05 | 0.04 | 0.02 | 0.65 | 0.58 | 1.00 | 0.64 | 0.73 | 0.67 |
| | 0.09 | -0.00 | 0.10 | 0.65 | 0.54 | 1.00 | 0.73 | 0.71 | 0.65 |
| | -0.26 | 0.29 | 0.29 | 0.77 | 0.73 | 1.00 | 0.76 | 0.74 | 0.72 |
| | 0.14 | -0.42 | -0.40 | 0.93 | 0.89 | 1.00 | 0.94 | 0.97 | 0.95 |
| $ \sigma_S(kw) $ | 0.10 | 0.05 | 0.02 | 0.61 | 0.92 | 0.64 | 1.00 | 0.27 | 0.56 |
| | 0.22 | 0.16 | 0.19 | 0.86 | 0.89 | 0.73 | 1.00 | 0.30 | 0.79 |
| | -0.11 | 0.18 | 0.10 | 0.76 | 0.98 | 0.76 | 1.00 | 0.31 | 0.48 |
| | 0.21 | -0.34 | -0.32 | 0.96 | 0.84 | 0.94 | 1.00 | 0.88 | 0.96 |
| $\mu_S(sw)$ | 0.09 | 0.09 | 0.05 | 0.19 | 0.16 | 0.73 | 0.27 | 1.00 | 0.61 |
| | 0.08 | 0.06 | 0.21 | 0.18 | 0.11 | 0.71 | 0.30 | 1.00 | 0.53 |
| | -0.24 | 0.30 | 0.32 | 0.34 | 0.26 | 0.74 | 0.31 | 1.00 | 0.74 |
| | 0.14 | -0.47 | -0.47 | 0.92 | 0.85 | 0.97 | 0.88 | 1.00 | 0.94 |
| $\sigma_S(sw)$ | 0.21 | 0.12 | 0.09 | 0.52 | 0.52 | 0.67 | 0.56 | 0.61 | 1.00 |
| | 0.22 | 0.22 | 0.35 | 0.59 | 0.62 | 0.65 | 0.79 | 0.53 | 1.00 |
| | -0.19 | 0.28 | 0.35 | 0.50 | 0.44 | 0.72 | 0.48 | 0.74 | 1.00 |
| | 0.11 | -0.35 | -0.34 | 0.97 | 0.76 | 0.95 | 0.96 | 0.94 | 1.00 |

TABLE S335. Pierson correlation coefficient for the topological and textual measures. TAG: 9

| | cc | d | s | $\mu_S(p)$ | $\sigma_S(p)$ | $\mu_S(kw)$ | $\sigma_S(kw)$ | $\mu_S(sw)$ | $\sigma_S(sw)$ |
|----------------|-------|-------|-------|------------|---------------|-------------|----------------|-------------|----------------|
| cc | 1.00 | 0.07 | 0.06 | 0.19 | 0.16 | 0.12 | 0.21 | 0.06 | 0.16 |
| (p.) | 1.00 | 0.25 | 0.15 | 0.20 | 0.18 | 0.08 | 0.14 | 0.03 | 0.11 |
| (i.) | 1.00 | -0.16 | -0.08 | 0.15 | 0.07 | 0.05 | 0.11 | -0.05 | 0.00 |
| (h.) | 1.00 | -0.60 | -0.54 | -0.03 | 0.12 | 0.22 | 0.16 | 0.31 | 0.38 |
| d | 0.07 | 1.00 | 0.99 | 0.08 | 0.14 | 0.13 | 0.21 | 0.13 | 0.21 |
| | 0.25 | 1.00 | 0.81 | 0.04 | 0.03 | 0.05 | 0.04 | 0.08 | 0.07 |
| | -0.16 | 1.00 | 0.89 | 0.12 | 0.14 | 0.15 | 0.15 | 0.17 | 0.18 |
| | -0.60 | 1.00 | 1.00 | -0.13 | -0.12 | -0.17 | -0.16 | -0.05 | 0.03 |
| s | 0.06 | 0.99 | 1.00 | 0.09 | 0.15 | 0.12 | 0.20 | 0.11 | 0.19 |
| | 0.15 | 0.81 | 1.00 | 0.07 | 0.07 | 0.02 | 0.02 | 0.06 | 0.05 |
| | -0.08 | 0.89 | 1.00 | 0.18 | 0.22 | 0.16 | 0.18 | 0.12 | 0.15 |
| | -0.54 | 1.00 | 1.00 | -0.12 | -0.08 | -0.18 | -0.13 | -0.06 | 0.05 |
| $\mu_S(p)$ | 0.19 | 0.08 | 0.09 | 1.00 | 0.85 | 0.45 | 0.57 | 0.19 | 0.27 |
| | 0.20 | 0.04 | 0.07 | 1.00 | 0.92 | 0.42 | 0.56 | 0.17 | 0.25 |
| | 0.15 | 0.12 | 0.18 | 1.00 | 0.81 | 0.48 | 0.59 | 0.21 | 0.27 |
| | -0.03 | -0.13 | -0.12 | 1.00 | 0.89 | 0.49 | 0.87 | -0.24 | -0.35 |
| $\sigma_S(p)$ | 0.16 | 0.14 | 0.15 | 0.85 | 1.00 | 0.38 | 0.73 | 0.11 | 0.31 |
| | 0.18 | 0.03 | 0.07 | 0.92 | 1.00 | 0.31 | 0.62 | 0.06 | 0.24 |
| | 0.07 | 0.14 | 0.22 | 0.81 | 1.00 | 0.42 | 0.78 | 0.14 | 0.35 |
| | 0.12 | -0.12 | -0.08 | 0.89 | 1.00 | 0.23 | 0.86 | -0.42 | -0.43 |
| $\mu_S(kw)$ | 0.12 | 0.13 | 0.12 | 0.45 | 0.38 | 1.00 | 0.65 | 0.86 | 0.60 |
| | 0.08 | 0.05 | 0.02 | 0.42 | 0.31 | 1.00 | 0.61 | 0.85 | 0.55 |
| | 0.05 | 0.15 | 0.16 | 0.48 | 0.42 | 1.00 | 0.67 | 0.88 | 0.62 |
| | 0.22 | -0.17 | -0.18 | 0.49 | 0.23 | 1.00 | 0.61 | 0.67 | 0.56 |
| $\sigma_S(kw)$ | 0.21 | 0.21 | 0.20 | 0.57 | 0.73 | 0.65 | 1.00 | 0.46 | 0.75 |
| | 0.14 | 0.04 | 0.02 | 0.56 | 0.62 | 0.61 | 1.00 | 0.44 | 0.78 |
| | 0.11 | 0.15 | 0.18 | 0.59 | 0.78 | 0.67 | 1.00 | 0.46 | 0.73 |
| | 0.16 | -0.16 | -0.13 | 0.87 | 0.86 | 0.61 | 1.00 | -0.10 | -0.09 |
| $\mu_S(sw)$ | 0.06 | 0.13 | 0.11 | 0.19 | 0.11 | 0.86 | 0.46 | 1.00 | 0.67 |
| | 0.03 | 0.08 | 0.06 | 0.17 | 0.06 | 0.85 | 0.44 | 1.00 | 0.62 |
| | -0.05 | 0.17 | 0.12 | 0.21 | 0.14 | 0.88 | 0.46 | 1.00 | 0.68 |
| | 0.31 | -0.05 | -0.06 | -0.24 | -0.42 | 0.67 | -0.10 | 1.00 | 0.92 |
| $\sigma_S(sw)$ | 0.16 | 0.21 | 0.19 | 0.27 | 0.31 | 0.60 | 0.75 | 0.67 | 1.00 |
| | 0.11 | 0.07 | 0.05 | 0.25 | 0.24 | 0.55 | 0.78 | 0.62 | 1.00 |
| | 0.00 | 0.18 | 0.15 | 0.27 | 0.35 | 0.62 | 0.73 | 0.68 | 1.00 |
| | 0.38 | 0.03 | 0.05 | -0.35 | -0.43 | 0.56 | -0.09 | 0.92 | 1.00 |

TABLE S336. 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 | 1.00 | 0.09 | 0.05 | -0.03 | 0.04 | -0.02 | 0.03 | 0.08 | 0.09 |
| (p.) | 1.00 | 0.46 | 0.47 | -0.11 | -0.02 | -0.07 | -0.00 | 0.00 | 0.01 |
| (i.) | 1.00 | -0.14 | -0.10 | 0.16 | 0.00 | 0.13 | 0.03 | 0.14 | 0.15 |
| (h.) | 1.00 | -0.70 | -0.65 | 0.48 | 0.32 | 0.11 | 0.12 | -0.01 | 0.05 |
| d | 0.09 | 1.00 | 0.98 | -0.02 | 0.10 | -0.00 | 0.07 | 0.08 | 0.09 |
| | 0.46 | 1.00 | 0.96 | -0.08 | -0.01 | -0.09 | -0.06 | 0.04 | 0.06 |
| | -0.14 | 1.00 | 0.97 | -0.05 | 0.08 | 0.04 | 0.15 | 0.10 | 0.12 |
| | -0.70 | 1.00 | 0.99 | -0.21 | -0.13 | -0.15 | -0.10 | -0.18 | -0.13 |
| s | 0.05 | 0.98 | 1.00 | -0.02 | 0.08 | -0.01 | 0.05 | 0.05 | 0.07 |
| | 0.47 | 0.96 | 1.00 | -0.10 | -0.02 | -0.09 | -0.06 | 0.06 | 0.06 |
| | -0.10 | 0.97 | 1.00 | -0.05 | 0.05 | 0.04 | 0.16 | 0.11 | 0.13 |
| | -0.65 | 0.99 | 1.00 | -0.16 | -0.11 | -0.13 | -0.08 | -0.17 | -0.11 |
| $\mu_S(p)$ | -0.03 | -0.02 | -0.02 | 1.00 | 0.57 | 0.64 | 0.26 | 0.13 | 0.14 |
| | -0.11 | -0.08 | -0.10 | 1.00 | 0.52 | 0.66 | 0.30 | 0.18 | 0.22 |
| | 0.16 | -0.05 | -0.05 | 1.00 | 0.74 | 0.59 | 0.09 | -0.03 | -0.15 |
| | 0.48 | -0.21 | -0.16 | 1.00 | 0.85 | 0.54 | 0.34 | 0.07 | -0.06 |
| $\sigma_S(p)$ | 0.04 | 0.10 | 0.08 | 0.57 | 1.00 | 0.41 | 0.47 | 0.01 | 0.16 |
| | -0.02 | -0.01 | -0.02 | 0.52 | 1.00 | 0.40 | 0.49 | -0.01 | 0.19 |
| | 0.00 | 0.08 | 0.05 | 0.74 | 1.00 | 0.51 | 0.36 | -0.03 | -0.06 |
| | 0.32 | -0.13 | -0.11 | 0.85 | 1.00 | 0.43 | 0.29 | -0.05 | -0.12 |
| $\mu_S(kw)$ | -0.02 | -0.00 | -0.01 | 0.64 | 0.41 | 1.00 | 0.65 | 0.68 | 0.62 |
| | -0.07 | -0.09 | -0.09 | 0.66 | 0.40 | 1.00 | 0.67 | 0.68 | 0.67 |
| | 0.13 | 0.04 | 0.04 | 0.59 | 0.51 | 1.00 | 0.55 | 0.67 | 0.38 |
| (5.) | 0.11 | -0.15 | -0.13 | 0.54 | 0.43 | 1.00 | 0.62 | 0.80 | 0.47 |
| $ \sigma_S(kw) $ | 0.03 | 0.07 | 0.05 | 0.26 | 0.47 | 0.65 | 1.00 | 0.41 | 0.72 |
| | -0.00 | -0.06 | -0.06 | 0.30 | 0.49 | 0.67 | 1.00 | 0.39 | 0.73 |
| | 0.03 | 0.15 | 0.16 | 0.09 | 0.36 | 0.55 | 1.00 | 0.51 | 0.69 |
| | 0.12 | -0.10 | -0.08 | 0.34 | 0.29 | 0.62 | 1.00 | 0.64 | 0.82 |
| $\mu_S(sw)$ | 0.08 | 0.08 | 0.05 | 0.13 | 0.01 | 0.68 | 0.41 | 1.00 | 0.77 |
| | 0.00 | 0.04 | 0.06 | 0.18 | -0.01 | 0.68 | 0.39 | 1.00 | 0.78 |
| | 0.14 | 0.10 | 0.11 | -0.03 | -0.03 | 0.67 | 0.51 | 1.00 | 0.70 |
| | -0.01 | -0.18 | -0.17 | 0.07 | -0.05 | 0.80 | 0.64 | 1.00 | 0.78 |
| $\sigma_S(sw)$ | 0.09 | 0.09 | 0.07 | 0.14 | 0.16 | 0.62 | 0.72 | 0.77 | 1.00 |
| | 0.01 | 0.06 | 0.06 | 0.22 | 0.19 | 0.67 | 0.73 | 0.78 | 1.00 |
| | 0.15 | 0.12 | 0.13 | -0.15 | -0.06 | 0.38 | 0.69 | 0.70 | 1.00 |
| | 0.05 | -0.13 | -0.11 | -0.06 | -0.12 | 0.47 | 0.82 | 0.78 | 1.00 |

TABLE S337. 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 | -0.07 | -0.07 | -0.07 | -0.04 | -0.08 | -0.06 | -0.10 | -0.05 |
| (p.) | 1.00 | 0.63 | 0.54 | -0.08 | -0.07 | -0.09 | -0.09 | -0.12 | -0.13 |
| (i.) | 1.00 | -0.55 | -0.28 | 0.14 | 0.12 | 0.06 | 0.05 | 0.01 | 0.05 |
| (h.) | 1.00 | -0.89 | -0.84 | 0.19 | 0.18 | -0.15 | -0.12 | -0.14 | -0.04 |
| d | -0.07 | 1.00 | 0.99 | -0.03 | -0.02 | -0.02 | -0.01 | 0.02 | 0.05 |
| | 0.63 | 1.00 | 0.77 | -0.10 | -0.09 | -0.12 | -0.11 | -0.12 | -0.06 |
| | -0.55 | 1.00 | 0.66 | -0.05 | -0.01 | 0.02 | -0.02 | 0.08 | 0.05 |
| | -0.89 | 1.00 | 0.99 | -0.22 | -0.24 | 0.02 | -0.05 | -0.05 | -0.10 |
| s | -0.07 | 0.99 | 1.00 | -0.02 | -0.01 | -0.02 | -0.00 | 0.02 | 0.06 |
| | 0.54 | 0.77 | 1.00 | -0.08 | -0.08 | -0.10 | -0.08 | -0.09 | 0.00 |
| | -0.28 | 0.66 | 1.00 | 0.19 | 0.28 | 0.16 | 0.22 | 0.08 | 0.29 |
| | -0.84 | 0.99 | 1.00 | -0.26 | -0.22 | -0.09 | -0.12 | -0.17 | -0.19 |
| $\mu_S(p)$ | -0.07 | -0.03 | -0.02 | 1.00 | 0.99 | 0.95 | 0.92 | 0.58 | 0.41 |
| | -0.08 | -0.10 | -0.08 | 1.00 | 1.00 | 0.95 | 0.96 | 0.64 | 0.48 |
| | 0.14 | -0.05 | 0.19 | 1.00 | 0.86 | 0.70 | 0.38 | 0.29 | 0.36 |
| | 0.19 | -0.22 | -0.26 | 1.00 | 0.46 | 0.65 | 0.67 | 0.60 | 0.84 |
| $\sigma_S(p)$ | -0.04 | -0.02 | -0.01 | 0.99 | 1.00 | 0.93 | 0.94 | 0.55 | 0.46 |
| | -0.07 | -0.09 | -0.08 | 1.00 | 1.00 | 0.94 | 0.96 | 0.62 | 0.48 |
| | 0.12 | -0.01 | 0.28 | 0.86 | 1.00 | 0.57 | 0.72 | 0.12 | 0.59 |
| | 0.18 | -0.24 | -0.22 | 0.46 | 1.00 | 0.03 | 0.72 | -0.13 | 0.33 |
| $\mu_S(kw)$ | -0.08 | -0.02 | -0.02 | 0.95 | 0.93 | 1.00 | 0.95 | 0.76 | 0.58 |
| | -0.09 | -0.12 | -0.10 | 0.95 | 0.94 | 1.00 | 0.99 | 0.81 | 0.66 |
| | 0.06 | 0.02 | 0.16 | 0.70 | 0.57 | 1.00 | 0.44 | 0.82 | 0.49 |
| | -0.15 | 0.02 | -0.09 | 0.65 | 0.03 | 1.00 | 0.68 | 0.97 | 0.94 |
| $\sigma_S(kw)$ | -0.06 | -0.01 | -0.00 | 0.92 | 0.94 | 0.95 | 1.00 | 0.66 | 0.65 |
| | -0.09 | -0.11 | -0.08 | 0.96 | 0.96 | 0.99 | 1.00 | 0.75 | 0.66 |
| | 0.05 | -0.02 | 0.22 | 0.38 | 0.72 | 0.44 | 1.00 | 0.12 | 0.73 |
| | -0.12 | -0.05 | -0.12 | 0.67 | 0.72 | 0.68 | 1.00 | 0.55 | 0.84 |
| $\mu_S(sw)$ | -0.10 | 0.02 | 0.02 | 0.58 | 0.55 | 0.76 | 0.66 | 1.00 | 0.67 |
| | -0.12 | -0.12 | -0.09 | 0.64 | 0.62 | 0.81 | 0.75 | 1.00 | 0.79 |
| | 0.01 | 0.08 | 0.08 | 0.29 | 0.12 | 0.82 | 0.12 | 1.00 | 0.32 |
| | -0.14 | -0.05 | -0.17 | 0.60 | -0.13 | 0.97 | 0.55 | 1.00 | 0.87 |
| $\sigma_S(sw)$ | -0.05 | 0.05 | 0.06 | 0.41 | 0.46 | 0.58 | 0.65 | 0.67 | 1.00 |
| | -0.13 | -0.06 | 0.00 | 0.48 | 0.48 | 0.66 | 0.66 | 0.79 | 1.00 |
| | 0.05 | 0.05 | 0.29 | 0.36 | 0.59 | 0.49 | 0.73 | 0.32 | 1.00 |
| | -0.04 | -0.10 | -0.19 | 0.84 | 0.33 | 0.94 | 0.84 | 0.87 | 1.00 |

TABLE S338. 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 | 0.25 | 0.13 | -0.03 | 0.19 | -0.03 | 0.19 | 0.20 | 0.27 |
| (p.) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (i.) | 1.00 | -0.14 | -0.10 | 0.23 | 0.21 | 0.19 | 0.20 | -0.37 | -0.21 |
| (h.) | 1.00 | -0.64 | -0.57 | -0.38 | -0.40 | -0.34 | -0.40 | 0.41 | -0.22 |
| d | 0.25 | 1.00 | 0.96 | -0.09 | -0.04 | -0.08 | -0.04 | 0.22 | 0.14 |
| | 0.00 | 1.00 | 0.94 | -0.17 | -0.10 | -0.17 | -0.12 | 0.20 | 0.29 |
| | -0.14 | 1.00 | 0.88 | -0.24 | -0.21 | -0.24 | -0.21 | -0.00 | -0.27 |
| | -0.64 | 1.00 | 0.99 | -0.39 | -0.37 | -0.46 | -0.37 | -0.31 | -0.44 |
| s | 0.13 | 0.96 | 1.00 | -0.07 | -0.03 | -0.06 | -0.03 | 0.17 | 0.11 |
| | 0.00 | 0.94 | 1.00 | -0.15 | -0.08 | -0.16 | -0.09 | 0.15 | 0.31 |
| | -0.10 | 0.88 | 1.00 | -0.13 | -0.11 | -0.13 | -0.11 | 0.11 | -0.15 |
| | -0.57 | 0.99 | 1.00 | -0.47 | -0.45 | -0.53 | -0.45 | -0.27 | -0.44 |
| $\mu_S(p)$ | -0.03 | -0.09 | -0.07 | 1.00 | 0.60 | 1.00 | 0.62 | -0.22 | 0.04 |
| | 0.00 | -0.17 | -0.15 | 1.00 | 0.97 | 1.00 | 0.97 | -0.25 | -0.19 |
| | 0.23 | -0.24 | -0.13 | 1.00 | 1.00 | 0.99 | 1.00 | -0.03 | 0.66 |
| | -0.38 | -0.39 | -0.47 | 1.00 | 1.00 | 0.99 | 1.00 | -0.48 | 0.50 |
| $\sigma_S(p)$ | 0.19 | -0.04 | -0.03 | 0.60 | 1.00 | 0.57 | 1.00 | -0.02 | 0.51 |
| | 0.00 | -0.10 | -0.08 | 0.97 | 1.00 | 0.97 | 1.00 | -0.21 | -0.10 |
| | 0.21 | -0.21 | -0.11 | 1.00 | 1.00 | 0.99 | 1.00 | -0.00 | 0.66 |
| | -0.40 | -0.37 | -0.45 | 1.00 | 1.00 | 0.99 | 1.00 | -0.50 | 0.47 |
| $\mu_S(kw)$ | -0.03 | -0.08 | -0.06 | 1.00 | 0.57 | 1.00 | 0.59 | -0.17 | 0.04 |
| | 0.00 | -0.17 | -0.16 | 1.00 | 0.97 | 1.00 | 0.97 | -0.22 | -0.18 |
| | 0.19 | -0.24 | -0.13 | 0.99 | 0.99 | 1.00 | 0.99 | 0.09 | 0.70 |
| | -0.34 | -0.46 | -0.53 | 0.99 | 0.99 | 1.00 | 0.99 | -0.38 | 0.57 |
| $\sigma_S(kw)$ | 0.19 | -0.04 | -0.03 | 0.62 | 1.00 | 0.59 | 1.00 | -0.01 | 0.52 |
| | 0.00 | -0.12 | -0.09 | 0.97 | 1.00 | 0.97 | 1.00 | -0.19 | -0.10 |
| | 0.20 | -0.21 | -0.11 | 1.00 | 1.00 | 0.99 | 1.00 | 0.01 | 0.68 |
| | -0.40 | -0.37 | -0.45 | 1.00 | 1.00 | 0.99 | 1.00 | -0.50 | 0.48 |
| $\mu_S(sw)$ | 0.20 | 0.22 | 0.17 | -0.22 | -0.02 | -0.17 | -0.01 | 1.00 | 0.51 |
| | 0.00 | 0.20 | 0.15 | -0.25 | -0.21 | -0.22 | -0.19 | 1.00 | 0.52 |
| | -0.37 | -0.00 | 0.11 | -0.03 | -0.00 | 0.09 | 0.01 | 1.00 | 0.43 |
| | 0.41 | -0.31 | -0.27 | -0.48 | -0.50 | -0.38 | -0.50 | 1.00 | 0.43 |
| $\sigma_S(sw)$ | 0.27 | 0.14 | 0.11 | 0.04 | 0.51 | 0.04 | 0.52 | 0.51 | 1.00 |
| | 0.00 | 0.29 | 0.31 | -0.19 | -0.10 | -0.18 | -0.10 | 0.52 | 1.00 |
| | -0.21 | -0.27 | -0.15 | 0.66 | 0.66 | 0.70 | 0.68 | 0.43 | 1.00 |
| | -0.22 | -0.44 | -0.44 | 0.50 | 0.47 | 0.57 | 0.48 | 0.43 | 1.00 |

TABLE S339. 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 | -0.04 | -0.05 | -0.09 | 0.04 | -0.01 | 0.13 | 0.13 | 0.18 |
| (p.) | 1.00 | 0.63 | 0.52 | -0.07 | 0.00 | -0.00 | 0.11 | 0.13 | 0.18 |
| (i.) | 1.00 | -0.36 | -0.21 | 0.03 | -0.02 | 0.02 | -0.04 | 0.03 | -0.10 |
| (h.) | 1.00 | -0.69 | -0.63 | 0.22 | 0.50 | 0.19 | 0.23 | -0.04 | 0.03 |
| d | -0.04 | 1.00 | 0.98 | -0.05 | 0.02 | -0.01 | 0.04 | 0.05 | 0.09 |
| | 0.63 | 1.00 | 0.92 | -0.17 | 0.02 | -0.10 | 0.05 | 0.05 | 0.12 |
| | -0.36 | 1.00 | 0.90 | -0.01 | 0.10 | 0.17 | 0.10 | 0.10 | 0.08 |
| | -0.69 | 1.00 | 0.98 | -0.40 | -0.70 | -0.14 | -0.24 | 0.14 | -0.19 |
| s | -0.05 | 0.98 | 1.00 | -0.04 | 0.00 | -0.01 | 0.04 | 0.04 | 0.07 |
| | 0.52 | 0.92 | 1.00 | -0.15 | 0.02 | -0.09 | 0.03 | 0.06 | 0.10 |
| | -0.21 | 0.90 | 1.00 | -0.04 | 0.05 | 0.15 | 0.09 | 0.09 | 0.09 |
| | -0.63 | 0.98 | 1.00 | -0.44 | -0.69 | -0.04 | -0.16 | 0.18 | -0.17 |
| $\mu_S(p)$ | -0.09 | -0.05 | -0.04 | 1.00 | 0.28 | 0.81 | 0.12 | 0.19 | -0.15 |
| | -0.07 | -0.17 | -0.15 | 1.00 | 0.28 | 0.84 | 0.10 | 0.22 | -0.18 |
| | 0.03 | -0.01 | -0.04 | 1.00 | 0.78 | 0.54 | 0.67 | 0.13 | 0.18 |
| | 0.22 | -0.40 | -0.44 | 1.00 | 0.46 | -0.50 | -0.62 | -0.65 | -0.37 |
| $\sigma_S(p)$ | 0.04 | 0.02 | 0.00 | 0.28 | 1.00 | 0.33 | 0.75 | -0.00 | 0.19 |
| | 0.00 | 0.02 | 0.02 | 0.28 | 1.00 | 0.37 | 0.74 | -0.01 | 0.19 |
| | -0.02 | 0.10 | 0.05 | 0.78 | 1.00 | 0.36 | 0.79 | -0.02 | 0.15 |
| | 0.50 | -0.70 | -0.69 | 0.46 | 1.00 | 0.10 | 0.02 | -0.10 | -0.01 |
| $\mu_S(kw)$ | -0.01 | -0.01 | -0.01 | 0.81 | 0.33 | 1.00 | 0.35 | 0.58 | 0.17 |
| | -0.00 | -0.10 | -0.09 | 0.84 | 0.37 | 1.00 | 0.31 | 0.56 | 0.10 |
| | 0.02 | 0.17 | 0.15 | 0.54 | 0.36 | 1.00 | 0.67 | 0.77 | 0.59 |
| | 0.19 | -0.14 | -0.04 | -0.50 | 0.10 | 1.00 | 0.84 | 0.77 | 0.74 |
| $\sigma_S(kw)$ | 0.13 | 0.04 | 0.04 | 0.12 | 0.75 | 0.35 | 1.00 | 0.19 | 0.55 |
| | 0.11 | 0.05 | 0.03 | 0.10 | 0.74 | 0.31 | 1.00 | 0.11 | 0.51 |
| | -0.04 | 0.10 | 0.09 | 0.67 | 0.79 | 0.67 | 1.00 | 0.32 | 0.57 |
| | 0.23 | -0.24 | -0.16 | -0.62 | 0.02 | 0.84 | 1.00 | 0.74 | 0.71 |
| $\mu_S(sw)$ | 0.13 | 0.05 | 0.04 | 0.19 | -0.00 | 0.58 | 0.19 | 1.00 | 0.62 |
| | 0.13 | 0.05 | 0.06 | 0.22 | -0.01 | 0.56 | 0.11 | 1.00 | 0.59 |
| | 0.03 | 0.10 | 0.09 | 0.13 | -0.02 | 0.77 | 0.32 | 1.00 | 0.72 |
| | -0.04 | 0.14 | 0.18 | -0.65 | -0.10 | 0.77 | 0.74 | 1.00 | 0.87 |
| $\sigma_S(sw)$ | 0.18 | 0.09 | 0.07 | -0.15 | 0.19 | 0.17 | 0.55 | 0.62 | 1.00 |
| | 0.18 | 0.12 | 0.10 | -0.18 | 0.19 | 0.10 | 0.51 | 0.59 | 1.00 |
| | -0.10 | 0.08 | 0.09 | 0.18 | 0.15 | 0.59 | 0.57 | 0.72 | 1.00 |
| | 0.03 | -0.19 | -0.17 | -0.37 | -0.01 | 0.74 | 0.71 | 0.87 | 1.00 |

TABLE S340. Pierson correlation coefficient for the topological and textual measures. TAG: 14

| | cc | d | s | $\mu_S(p)$ | $\sigma_S(p)$ | $\mu_S(kw)$ | $\sigma_S(kw)$ | $\mu_S(sw)$ | $\sigma_S(sw)$ |
|----------------|-------|-------|-------|------------|---------------|-------------|----------------|-------------|----------------|
| cc | 1.00 | -0.01 | -0.06 | -0.05 | -0.01 | -0.02 | 0.05 | 0.04 | 0.23 |
| (p.) | 1.00 | 0.58 | 0.50 | -0.05 | -0.06 | -0.05 | -0.00 | -0.02 | 0.14 |
| (i.) | 1.00 | -0.48 | -0.32 | 0.07 | 0.03 | 0.07 | 0.03 | 0.06 | 0.08 |
| (h.) | 1.00 | -0.88 | -0.72 | -0.03 | -0.58 | 0.41 | 0.05 | 0.36 | 0.02 |
| d | -0.01 | 1.00 | 0.94 | -0.03 | 0.03 | 0.02 | 0.09 | 0.14 | 0.26 |
| | 0.58 | 1.00 | 0.75 | 0.05 | 0.02 | 0.04 | 0.02 | 0.12 | 0.09 |
| | -0.48 | 1.00 | 0.83 | -0.11 | -0.10 | 0.02 | -0.01 | 0.05 | -0.01 |
| | -0.88 | 1.00 | 0.88 | 0.10 | 0.60 | -0.29 | 0.05 | -0.28 | -0.03 |
| s | -0.06 | 0.94 | 1.00 | -0.02 | 0.03 | 0.03 | 0.08 | 0.11 | 0.21 |
| | 0.50 | 0.75 | 1.00 | 0.09 | 0.08 | 0.07 | 0.09 | 0.09 | 0.19 |
| | -0.32 | 0.83 | 1.00 | -0.07 | 0.05 | 0.02 | 0.13 | -0.03 | 0.02 |
| | -0.72 | 0.88 | 1.00 | 0.52 | 0.60 | 0.02 | 0.33 | -0.02 | 0.21 |
| $\mu_S(p)$ | -0.05 | -0.03 | -0.02 | 1.00 | 0.73 | 0.87 | 0.58 | -0.02 | -0.01 |
| | -0.05 | 0.05 | 0.09 | 1.00 | 0.78 | 0.90 | 0.61 | -0.03 | -0.00 |
| | 0.07 | -0.11 | -0.07 | 1.00 | 0.81 | 0.52 | 0.69 | 0.12 | 0.18 |
| | -0.03 | 0.10 | 0.52 | 1.00 | 0.23 | 0.54 | 0.63 | 0.45 | 0.50 |
| $\sigma_S(p)$ | -0.01 | 0.03 | 0.03 | 0.73 | 1.00 | 0.71 | 0.87 | 0.02 | 0.16 |
| | -0.06 | 0.02 | 0.08 | 0.78 | 1.00 | 0.78 | 0.90 | -0.03 | 0.11 |
| | 0.03 | -0.10 | 0.05 | 0.81 | 1.00 | 0.44 | 0.78 | 0.13 | 0.24 |
| | -0.58 | 0.60 | 0.60 | 0.23 | 1.00 | -0.17 | 0.29 | -0.22 | -0.03 |
| $\mu_S(kw)$ | -0.02 | 0.02 | 0.03 | 0.87 | 0.71 | 1.00 | 0.71 | 0.37 | 0.22 |
| | -0.05 | 0.04 | 0.07 | 0.90 | 0.78 | 1.00 | 0.72 | 0.31 | 0.18 |
| | 0.07 | 0.02 | 0.02 | 0.52 | 0.44 | 1.00 | 0.66 | 0.79 | 0.52 |
| | 0.41 | -0.29 | 0.02 | 0.54 | -0.17 | 1.00 | 0.89 | 0.99 | 0.90 |
| $\sigma_S(kw)$ | 0.05 | 0.09 | 0.08 | 0.58 | 0.87 | 0.71 | 1.00 | 0.16 | 0.45 |
| | -0.00 | 0.02 | 0.09 | 0.61 | 0.90 | 0.72 | 1.00 | 0.09 | 0.40 |
| | 0.03 | -0.01 | 0.13 | 0.69 | 0.78 | 0.66 | 1.00 | 0.31 | 0.55 |
| | 0.05 | 0.05 | 0.33 | 0.63 | 0.29 | 0.89 | 1.00 | 0.86 | 0.90 |
| $\mu_S(sw)$ | 0.04 | 0.14 | 0.11 | -0.02 | 0.02 | 0.37 | 0.16 | 1.00 | 0.48 |
| | -0.02 | 0.12 | 0.09 | -0.03 | -0.03 | 0.31 | 0.09 | 1.00 | 0.36 |
| | 0.06 | 0.05 | -0.03 | 0.12 | 0.13 | 0.79 | 0.31 | 1.00 | 0.65 |
| | 0.36 | -0.28 | -0.02 | 0.45 | -0.22 | 0.99 | 0.86 | 1.00 | 0.93 |
| $\sigma_S(sw)$ | 0.23 | 0.26 | 0.21 | -0.01 | 0.16 | 0.22 | 0.45 | 0.48 | 1.00 |
| | 0.14 | 0.09 | 0.19 | -0.00 | 0.11 | 0.18 | 0.40 | 0.36 | 1.00 |
| | 0.08 | -0.01 | 0.02 | 0.18 | 0.24 | 0.52 | 0.55 | 0.65 | 1.00 |
| | 0.02 | -0.03 | 0.21 | 0.50 | -0.03 | 0.90 | 0.90 | 0.93 | 1.00 |

TABLE S341. 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 | 0.09 | 0.07 | 0.00 | 0.05 | 0.05 | 0.11 | 0.13 | 0.16 |
| (p.) | 1.00 | 0.33 | 0.30 | -0.00 | 0.02 | 0.00 | 0.02 | 0.11 | 0.05 |
| (i.) | 1.00 | -0.12 | -0.01 | 0.07 | 0.08 | 0.06 | 0.18 | 0.02 | 0.15 |
| (h.) | 1.00 | -0.45 | -0.37 | -0.06 | -0.07 | -0.05 | 0.07 | 0.00 | 0.08 |
| d | 0.09 | 1.00 | 0.96 | -0.06 | 0.01 | 0.01 | 0.07 | 0.11 | 0.18 |
| | 0.33 | 1.00 | 0.93 | 0.00 | 0.05 | -0.08 | 0.03 | -0.04 | 0.03 |
| | -0.12 | 1.00 | 0.87 | 0.07 | 0.10 | 0.09 | 0.12 | 0.11 | 0.28 |
| | -0.45 | 1.00 | 0.97 | -0.23 | 0.03 | -0.20 | -0.21 | -0.14 | -0.15 |
| s | 0.07 | 0.96 | 1.00 | -0.05 | 0.02 | -0.00 | 0.06 | 0.07 | 0.13 |
| | 0.30 | 0.93 | 1.00 | 0.05 | 0.09 | -0.06 | 0.06 | -0.05 | 0.04 |
| | -0.01 | 0.87 | 1.00 | 0.14 | 0.19 | 0.05 | 0.18 | 0.04 | 0.20 |
| | -0.37 | 0.97 | 1.00 | -0.21 | 0.01 | -0.18 | -0.19 | -0.12 | -0.13 |
| $\mu_S(p)$ | 0.00 | -0.06 | -0.05 | 1.00 | 0.87 | 0.67 | 0.67 | 0.18 | 0.12 |
| | -0.00 | 0.00 | 0.05 | 1.00 | 0.93 | 0.74 | 0.75 | 0.15 | 0.10 |
| | 0.07 | 0.07 | 0.14 | 1.00 | 0.71 | 0.61 | 0.59 | 0.46 | 0.34 |
| | -0.06 | -0.23 | -0.21 | 1.00 | 0.74 | 0.67 | 0.77 | 0.34 | 0.26 |
| $\sigma_S(p)$ | 0.05 | 0.01 | 0.02 | 0.87 | 1.00 | 0.47 | 0.79 | 0.04 | 0.20 |
| | 0.02 | 0.05 | 0.09 | 0.93 | 1.00 | 0.57 | 0.83 | 0.01 | 0.18 |
| | 0.08 | 0.10 | 0.19 | 0.71 | 1.00 | 0.22 | 0.71 | 0.07 | 0.25 |
| | -0.07 | 0.03 | 0.01 | 0.74 | 1.00 | 0.27 | 0.64 | -0.13 | -0.15 |
| $\mu_S(kw)$ | 0.05 | 0.01 | -0.00 | 0.67 | 0.47 | 1.00 | 0.62 | 0.75 | 0.39 |
| | 0.00 | -0.08 | -0.06 | 0.74 | 0.57 | 1.00 | 0.67 | 0.64 | 0.29 |
| | 0.06 | 0.09 | 0.05 | 0.61 | 0.22 | 1.00 | 0.50 | 0.92 | 0.52 |
| | -0.05 | -0.20 | -0.18 | 0.67 | 0.27 | 1.00 | 0.70 | 0.88 | 0.82 |
| $\sigma_S(kw)$ | 0.11 | 0.07 | 0.06 | 0.67 | 0.79 | 0.62 | 1.00 | 0.31 | 0.56 |
| | 0.02 | 0.03 | 0.06 | 0.75 | 0.83 | 0.67 | 1.00 | 0.25 | 0.53 |
| | 0.18 | 0.12 | 0.18 | 0.59 | 0.71 | 0.50 | 1.00 | 0.36 | 0.58 |
| | 0.07 | -0.21 | -0.19 | 0.77 | 0.64 | 0.70 | 1.00 | 0.34 | 0.54 |
| $\mu_S(sw)$ | 0.13 | 0.11 | 0.07 | 0.18 | 0.04 | 0.75 | 0.31 | 1.00 | 0.59 |
| | 0.11 | -0.04 | -0.05 | 0.15 | 0.01 | 0.64 | 0.25 | 1.00 | 0.50 |
| | 0.02 | 0.11 | 0.04 | 0.46 | 0.07 | 0.92 | 0.36 | 1.00 | $\begin{array}{ c c } \hline 0.64 \end{array}$ |
| | 0.00 | -0.14 | -0.12 | 0.34 | -0.13 | 0.88 | 0.34 | 1.00 | 0.86 |
| $\sigma_S(sw)$ | 0.16 | 0.18 | 0.13 | 0.12 | 0.20 | 0.39 | 0.56 | 0.59 | 1.00 |
| | 0.05 | 0.03 | 0.04 | 0.10 | 0.18 | 0.29 | 0.53 | 0.50 | 1.00 |
| | 0.15 | 0.28 | 0.20 | 0.34 | 0.25 | 0.52 | 0.58 | 0.64 | 1.00 |
| | 0.08 | -0.15 | -0.13 | 0.26 | -0.15 | 0.82 | 0.54 | 0.86 | 1.00 |

TABLE S342. Pierson correlation coefficient for the topological and textual measures. TAG: 16

| | 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 | 0.05 | 0.02 | 0.05 | 0.07 | 0.06 | 0.12 | 0.12 |
| (p.) | 1.00 | 0.56 | 0.58 | 0.05 | 0.08 | 0.01 | 0.01 | 0.06 | 0.05 |
| (i.) | 1.00 | -0.44 | -0.36 | -0.20 | -0.33 | -0.10 | -0.23 | 0.00 | -0.19 |
| (h.) | 1.00 | -0.62 | -0.55 | 0.21 | 0.40 | 0.09 | 0.13 | -0.16 | -0.19 |
| d | 0.19 | 1.00 | 0.91 | -0.06 | 0.03 | 0.04 | 0.12 | 0.11 | 0.21 |
| | 0.56 | 1.00 | 0.81 | 0.25 | 0.31 | 0.11 | 0.10 | 0.07 | 0.11 |
| | -0.44 | 1.00 | 0.88 | -0.14 | 0.02 | 0.11 | 0.09 | 0.06 | 0.19 |
| | -0.62 | 1.00 | 0.98 | -0.38 | -0.42 | -0.45 | -0.23 | -0.16 | 0.04 |
| s | 0.05 | 0.91 | 1.00 | -0.07 | 0.00 | -0.03 | 0.07 | 0.06 | 0.14 |
| | 0.58 | 0.81 | 1.00 | 0.38 | 0.43 | 0.14 | 0.17 | 0.23 | 0.24 |
| | -0.36 | 0.88 | 1.00 | -0.12 | 0.03 | 0.03 | 0.03 | 0.03 | 0.13 |
| | -0.55 | 0.98 | 1.00 | -0.30 | -0.34 | -0.38 | -0.15 | -0.12 | 0.05 |
| $\mu_S(p)$ | 0.02 | -0.06 | -0.07 | 1.00 | 0.71 | 0.51 | 0.41 | 0.23 | 0.24 |
| | 0.05 | 0.25 | 0.38 | 1.00 | 0.70 | 0.50 | 0.36 | 0.22 | 0.23 |
| | -0.20 | -0.14 | -0.12 | 1.00 | 0.86 | 0.58 | 0.72 | 0.31 | 0.51 |
| | 0.21 | -0.38 | -0.30 | 1.00 | 0.81 | 0.64 | 0.56 | 0.66 | 0.49 |
| $\sigma_S(p)$ | 0.05 | 0.03 | 0.00 | 0.71 | 1.00 | 0.24 | 0.55 | 0.19 | 0.34 |
| | 0.08 | 0.31 | 0.43 | 0.70 | 1.00 | 0.21 | 0.52 | 0.20 | 0.33 |
| | -0.33 | 0.02 | 0.03 | 0.86 | 1.00 | 0.41 | 0.85 | 0.09 | 0.49 |
| | 0.40 | -0.42 | -0.34 | 0.81 | 1.00 | 0.64 | 0.77 | 0.35 | 0.48 |
| $\mu_S(kw)$ | 0.07 | 0.04 | -0.03 | 0.51 | 0.24 | 1.00 | 0.69 | 0.80 | 0.66 |
| | 0.01 | 0.11 | 0.14 | 0.50 | 0.21 | 1.00 | 0.71 | 0.80 | 0.69 |
| | -0.10 | 0.11 | 0.03 | 0.58 | 0.41 | 1.00 | 0.52 | 0.84 | 0.50 |
| | 0.09 | -0.45 | -0.38 | 0.64 | 0.64 | 1.00 | 0.72 | 0.72 | 0.40 |
| $\sigma_S(kw)$ | 0.06 | 0.12 | 0.07 | 0.41 | 0.55 | 0.69 | 1.00 | 0.69 | 0.83 |
| | 0.01 | 0.10 | 0.17 | 0.36 | 0.52 | 0.71 | 1.00 | 0.74 | 0.85 |
| | -0.23 | 0.09 | 0.03 | 0.72 | 0.85 | 0.52 | 1.00 | 0.19 | 0.63 |
| | 0.13 | -0.23 | -0.15 | 0.56 | 0.77 | 0.72 | 1.00 | 0.48 | 0.77 |
| $\mu_S(sw)$ | 0.12 | 0.11 | 0.06 | 0.23 | 0.19 | 0.80 | 0.69 | 1.00 | 0.86 |
| | 0.06 | 0.07 | 0.23 | 0.22 | 0.20 | 0.80 | 0.74 | 1.00 | 0.88 |
| | 0.00 | 0.06 | 0.03 | 0.31 | 0.09 | 0.84 | 0.19 | 1.00 | 0.57 |
| | -0.16 | -0.16 | -0.12 | 0.66 | 0.35 | 0.72 | 0.48 | 1.00 | 0.59 |
| $\sigma_S(sw)$ | 0.12 | 0.21 | 0.14 | 0.24 | 0.34 | 0.66 | 0.83 | 0.86 | 1.00 |
| | 0.05 | 0.11 | 0.24 | 0.23 | 0.33 | 0.69 | 0.85 | 0.88 | 1.00 |
| | -0.19 | 0.19 | 0.13 | 0.51 | 0.49 | 0.50 | 0.63 | 0.57 | 1.00 |
| | -0.19 | 0.04 | 0.05 | 0.49 | 0.48 | 0.40 | 0.77 | 0.59 | 1.00 |

TABLE S343. Pierson correlation coefficient for the topological and textual measures. TAG: 17

E. Formation of principal components

1. Snapshots of 2000 messages

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | -1.76 | -0.35 | -5.94 | 71.32 | 2.31 |
| (p.) | -0.87 | -19.14 | -8.43 | 44.14 | 1.71 |
| (i.) | 4.61 | -12.28 | -26.99 | -22.94 | 8.51 |
| (h.) | 5.50 | -21.76 | 28.78 | 13.69 | 14.07 |
| d | -0.72 | -42.28 | 3.07 | 0.66 | 2.28 |
| | 0.82 | -27.94 | -6.90 | -8.85 | -1.15 |
| | -5.26 | 25.79 | 5.60 | -6.71 | 14.39 |
| | -5.86 | 24.45 | 14.00 | 6.51 | 1.28 |
| s | -0.41 | -42.38 | 2.46 | 0.03 | 1.54 |
| | 3.19 | -25.99 | -1.03 | -25.68 | -4.01 |
| | -6.80 | 24.71 | -6.46 | -11.72 | 4.67 |
| | -5.63 | 24.45 | 15.93 | 1.16 | 6.17 |
| $\mu_S(p)$ | 16.68 | 3.20 | 15.57 | 5.20 | 5.47 |
| | 16.00 | 6.30 | -15.10 | -1.67 | -9.03 |
| | -13.15 | -12.20 | 1.73 | 7.56 | 21.14 |
| | 14.14 | 2.99 | 5.83 | -12.93 | 0.60 |
| $\sigma_S(p)$ | 16.53 | -2.01 | -15.45 | -2.99 | 9.86 |
| | 16.18 | -2.98 | 13.61 | 5.41 | -16.63 |
| | -15.33 | 0.34 | -13.02 | 8.90 | -2.22 |
| | 14.07 | 2.75 | 9.43 | -9.34 | -2.68 |
| $\mu_S(kw)$ | 18.15 | 2.02 | 10.54 | 3.21 | 10.50 |
| | 17.78 | 4.69 | -8.51 | 1.56 | -7.49 |
| | -13.22 | -12.19 | 12.16 | -9.19 | 10.93 |
| | 14.00 | 5.74 | -4.01 | -7.59 | 12.65 |
| $\sigma_S(kw)$ | 17.21 | -1.66 | -12.53 | -4.43 | 16.69 |
| | 16.90 | -2.56 | 13.43 | 5.68 | -9.14 |
| | -15.27 | -1.15 | -8.76 | 9.29 | 2.03 |
| | 14.10 | 4.43 | 5.07 | -9.55 | -4.25 |
| $\mu_S(sw)$ | 15.20 | 0.16 | 16.55 | 9.43 | -21.79 |
| | 14.26 | 5.01 | -18.21 | -5.50 | 18.20 |
| | -11.74 | -7.29 | 15.54 | -22.51 | -13.96 |
| | 12.80 | 8.79 | -16.79 | 18.99 | 25.74 |
| $\sigma_S(sw)$ | 13.34 | -5.93 | -17.90 | -2.73 | -29.56 |
| | 13.99 | -5.38 | 14.78 | 1.53 | 32.66 |
| | -14.62 | 4.05 | -9.74 | 1.19 | -22.15 |
| | 13.90 | 4.63 | -0.15 | 20.24 | -32.55 |
| λ | 43.64 | 22.19 | 15.83 | 10.95 | 4.79 |
| | 45.53 | 21.77 | 14.91 | 8.62 | 4.43 |
| | 47.95 | 21.79 | 11.91 | 7.23 | 5.78 |
| | 66.80 | 26.39 | 5.23 | 1.14 | 0.21 |

TABLE S344. PCA formation TAG: 0

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | 1.14 | 13.34 | -2.84 | 31.50 | 31.75 |
| (p.) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (i.) | -8.07 | -10.57 | 24.15 | -29.30 | 15.49 |
| (h.) | -2.92 | -16.83 | -18.05 | 34.95 | -4.13 |
| d | -6.26 | 18.02 | -15.68 | -10.36 | -3.02 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | -2.15 | -32.98 | -1.05 | 10.05 | -0.80 |
| | 6.25 | -19.67 | 14.20 | 0.64 | -12.35 |
| s | -6.09 | 18.21 | -15.70 | -9.52 | -3.35 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | -2.71 | -33.27 | 0.76 | 5.85 | -3.54 |
| | 7.50 | -20.92 | 9.60 | -1.85 | 29.72 |
| $\mu_S(p)$ | 20.93 | -0.30 | -5.48 | -1.73 | 0.52 |
| | 27.01 | 1.83 | -0.95 | 42.73 | -9.01 |
| | -17.07 | 3.74 | -4.50 | 4.35 | 6.55 |
| | 14.49 | 13.10 | -1.07 | 13.40 | 13.64 |
| $\sigma_S(p)$ | 11.86 | 12.71 | 14.30 | -15.31 | 9.55 |
| | 11.14 | -28.32 | 19.32 | -8.66 | -26.67 |
| | -15.17 | 6.02 | 10.57 | 14.68 | -2.92 |
| | 14.22 | 0.43 | 14.45 | 5.24 | -19.79 |
| $\mu_S(kw)$ | 19.56 | -3.49 | -10.59 | 1.08 | -0.50 |
| | 26.09 | 9.56 | -4.47 | -3.55 | 20.12 |
| | -16.34 | 2.59 | -10.15 | 0.69 | 15.38 |
| | 14.81 | 9.07 | -9.09 | 8.68 | 4.17 |
| $\sigma_S(kw)$ | 12.43 | 14.47 | 14.03 | -7.86 | 5.93 |
| | 11.00 | -29.49 | 9.79 | -7.72 | 27.98 |
| | -15.79 | 5.26 | 12.58 | 10.47 | 6.35 |
| | 16.69 | 4.32 | 2.89 | 1.12 | 3.15 |
| $\mu_S(sw)$ | 16.82 | -6.56 | -14.62 | 2.07 | -3.48 |
| | 24.12 | 14.58 | -5.92 | -36.46 | -12.00 |
| | -9.99 | -4.62 | -33.99 | -14.05 | 3.95 |
| | 7.98 | -9.16 | -20.53 | -29.65 | -1.20 |
| $\sigma_S(sw)$ | 4.90 | 12.89 | 6.75 | 20.56 | -41.90 |
| | 0.64 | -16.23 | -59.55 | -0.88 | -4.23 |
| | -12.71 | 0.94 | 2.25 | -10.56 | -45.02 |
| | 15.13 | -6.50 | -10.13 | -4.46 | -11.84 |
| λ | 35.42 | 24.93 | 20.62 | 9.90 | 7.88 |
| | 49.66 | 34.91 | 14.41 | 0.75 | 0.23 |
| | 49.51 | 22.98 | 11.53 | 7.62 | 6.08 |
| | 50.00 | 25.07 | 22.46 | 1.97 | 0.48 |

TABLE S345. PCA formation TAG: $1\,$

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | 1.63 | 5.12 | 16.48 | -45.64 | 11.09 |
| (p.) | -2.49 | -17.10 | -4.20 | -53.84 | -4.77 |
| (i.) | 2.60 | -14.15 | 5.24 | 55.77 | -2.51 |
| (h.) | 5.85 | -22.35 | 5.58 | 7.10 | -35.91 |
| d | 1.95 | 31.93 | -7.31 | 0.45 | 3.24 |
| | -3.09 | -30.02 | -1.26 | 13.71 | -5.32 |
| | 3.96 | 34.02 | 4.24 | 7.71 | 2.08 |
| | 8.02 | 23.49 | -8.22 | 3.44 | -12.32 |
| s | 1.90 | 31.88 | -7.42 | 1.39 | 3.79 |
| | -3.36 | -29.46 | -0.45 | 18.47 | -4.18 |
| | 3.57 | 33.54 | 5.20 | 12.67 | -1.89 |
| | 11.25 | 21.24 | -6.76 | 5.28 | -15.45 |
| $\mu_S(p)$ | 17.73 | -6.88 | -10.38 | -2.46 | 11.25 |
| | -18.02 | 5.85 | -9.10 | 3.70 | -11.02 |
| | -15.57 | 3.81 | -14.75 | 8.50 | 17.29 |
| | -0.07 | -4.21 | -30.60 | 9.23 | -0.87 |
| $\sigma_S(p)$ | 17.01 | -4.78 | -12.26 | -10.10 | -4.64 |
| | -17.74 | 1.61 | -14.06 | 2.99 | 4.87 |
| | -14.26 | 6.78 | -18.10 | 8.29 | 11.09 |
| | -1.11 | -11.60 | -27.64 | 1.41 | 5.11 |
| $\mu_S(kw)$ | 17.96 | -3.12 | 2.81 | 9.37 | 16.24 |
| | -17.27 | 6.64 | 6.63 | -0.69 | -16.94 |
| | -17.45 | 0.70 | 5.53 | 0.14 | -0.08 |
| | 17.95 | -5.03 | 3.57 | 22.06 | 13.16 |
| $\sigma_S(kw)$ | 18.43 | -2.28 | -4.96 | -6.67 | -9.50 |
| | -18.35 | 2.69 | -9.70 | -1.34 | 6.78 |
| | -16.55 | 4.16 | -5.47 | 1.92 | -30.33 |
| | 17.41 | -6.74 | -8.88 | -20.03 | 3.85 |
| $\mu_S(sw)$ | 10.05 | 5.14 | 23.37 | 23.68 | 11.47 |
| | -7.89 | 0.74 | 38.75 | -2.18 | -11.23 |
| | -11.67 | -2.32 | 24.10 | -2.80 | 21.89 |
| | 19.07 | -3.51 | 8.45 | 11.29 | 11.52 |
| $\sigma_S(sw)$ | 13.34 | 8.88 | 15.01 | 0.23 | -28.78 |
| | -11.80 | -5.89 | 15.85 | -3.08 | 34.88 |
| | -14.38 | 0.52 | 17.36 | -2.20 | -12.83 |
| | 19.28 | -1.82 | 0.31 | -20.17 | -1.81 |
| λ | 42.87 | 22.92 | 13.21 | 10.83 | 6.09 |
| | 42.93 | 23.33 | 12.35 | 9.10 | 8.00 |
| | 45.62 | 21.59 | 15.19 | 10.01 | 3.39 |
| | 39.22 | 26.43 | 21.05 | 6.73 | 3.38 |

TABLE S346. PCA formation TAG: $2\,$

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | -0.73 | -0.57 | -4.34 | 80.00 | -1.74 |
| (p.) | -0.43 | -24.40 | -1.51 | -46.75 | -2.23 |
| (i.) | 4.29 | -18.19 | -37.54 | 11.65 | 3.29 |
| (h.) | 1.93 | -25.40 | -5.60 | 32.45 | 10.51 |
| d | -0.44 | -42.38 | 3.83 | 0.53 | -0.17 |
| | -2.80 | -32.15 | 1.80 | 11.61 | -3.83 |
| | -3.59 | 32.07 | -4.67 | -2.86 | 1.67 |
| | 5.04 | 28.37 | 0.51 | 13.80 | 2.02 |
| s | -0.44 | -42.36 | 3.93 | -0.26 | -0.43 |
| | -3.01 | -30.08 | 4.93 | 24.57 | 4.65 |
| | -2.22 | 29.65 | -20.09 | 4.20 | 6.60 |
| | 5.44 | 27.80 | -1.32 | 16.44 | 3.12 |
| $\mu_S(p)$ | 17.62 | 2.58 | 12.81 | 0.97 | -26.22 |
| | -16.70 | 1.64 | -14.15 | 1.43 | -23.70 |
| | 15.60 | -0.83 | 0.48 | -13.35 | 20.63 |
| | -16.73 | 6.25 | 6.45 | -6.77 | 20.17 |
| $\sigma_S(p)$ | 17.71 | 1.97 | 15.64 | 3.33 | -14.42 |
| | -16.85 | 0.42 | -16.74 | 4.13 | -12.63 |
| | 15.18 | -0.34 | -5.08 | -18.12 | 15.16 |
| | -16.56 | 1.34 | 9.24 | 6.47 | -30.06 |
| $\mu_S(kw)$ | 19.37 | 0.12 | 0.46 | -1.04 | 15.87 |
| | -18.42 | 3.25 | -0.35 | -3.94 | 13.72 |
| | 15.83 | 3.69 | 7.52 | 0.66 | -10.98 |
| | -17.27 | 3.64 | 4.57 | 0.91 | 19.04 |
| $\sigma_S(kw)$ | 18.17 | 0.12 | 7.25 | 4.80 | 29.54 |
| | -17.43 | 0.74 | -7.15 | -2.02 | 26.91 |
| | 13.94 | 4.80 | -10.58 | -10.33 | -34.36 |
| | -15.39 | -0.87 | 16.27 | 12.65 | -3.09 |
| $\mu_S(sw)$ | 10.55 | -5.68 | -29.76 | -8.63 | -10.24 |
| | -9.93 | 4.85 | 31.14 | -1.79 | -12.05 |
| | 13.96 | 6.18 | 12.64 | 22.60 | 3.55 |
| | -10.53 | 1.96 | -28.75 | -4.59 | 2.76 |
| $\sigma_S(sw)$ | 14.97 | -4.21 | -21.98 | 0.44 | -1.36 |
| | -14.42 | 2.46 | 22.24 | -3.76 | 0.28 |
| | 15.40 | 4.27 | 1.39 | 16.24 | 3.76 |
| | -11.10 | 4.35 | -27.29 | 5.93 | -9.23 |
| λ | 45.15 | 22.24 | 14.59 | 11.12 | 3.87 |
| | 45.61 | 22.67 | 14.50 | 7.87 | 3.79 |
| | 52.92 | 21.70 | 10.11 | 7.30 | 4.06 |
| | 48.91 | 27.68 | 17.27 | 4.98 | 1.12 |

TABLE S347. PCA formation TAG: $3\,$

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | -2.83 | -0.79 | -1.02 | 67.62 | -8.72 |
| (p.) | -1.44 | 20.98 | 13.44 | 38.48 | 2.27 |
| (i.) | 5.17 | -6.53 | 5.29 | -56.82 | -8.27 |
| (h.) | 8.16 | -12.31 | 14.34 | 32.46 | -8.84 |
| d | -0.05 | -46.00 | -1.07 | -0.61 | -0.83 |
| | -3.88 | 31.22 | -6.48 | -8.70 | 3.05 |
| | -3.61 | 36.55 | -2.88 | -5.32 | -0.26 |
| | -10.65 | 3.06 | -21.67 | 12.39 | -4.05 |
| s | 0.00 | -45.98 | -0.86 | -1.48 | -1.82 |
| | -2.99 | 30.62 | -8.40 | -14.14 | 0.55 |
| | -3.28 | 36.63 | -1.92 | -7.77 | -0.79 |
| | -10.67 | 0.41 | -21.61 | 14.43 | 0.16 |
| $\mu_S(p)$ | -17.20 | 1.86 | -9.88 | -10.06 | -22.81 |
| | 16.15 | 0.69 | -8.49 | 2.50 | 24.68 |
| | 15.69 | 2.47 | -12.87 | 5.50 | -18.68 |
| | 14.39 | -6.30 | -9.67 | 9.15 | 29.64 |
| $\sigma_S(p)$ | -15.59 | -0.59 | 20.19 | -4.04 | -13.88 |
| | 16.14 | 1.27 | -14.36 | 7.64 | 1.33 |
| | 12.91 | 6.38 | 18.06 | 11.35 | -18.06 |
| | 13.20 | -11.72 | -13.26 | -8.37 | 0.10 |
| $\mu_S(kw)$ | -17.54 | 1.62 | -15.13 | -4.68 | -4.08 |
| | 16.16 | 2.00 | 8.89 | -5.14 | 20.83 |
| | 16.47 | 1.32 | -13.39 | 0.72 | -1.33 |
| | 14.44 | 11.83 | -5.86 | 6.85 | -16.64 |
| $\sigma_S(kw)$ | -16.58 | -0.33 | 18.64 | -1.64 | -1.20 |
| | 16.46 | 0.84 | -9.56 | 6.11 | -12.63 |
| | 14.22 | 5.29 | 17.64 | 6.45 | -5.66 |
| | 13.49 | -9.12 | -12.98 | -10.36 | -18.08 |
| $\mu_S(sw)$ | -14.10 | 0.15 | -23.85 | 2.53 | 13.04 |
| | 11.33 | 6.33 | 28.59 | -15.91 | -0.79 |
| | 14.48 | -0.02 | -17.51 | -3.43 | 10.06 |
| | 5.96 | 24.13 | -0.32 | 4.32 | -7.76 |
| $\sigma_S(sw)$ | -16.09 | -2.68 | 9.37 | 7.34 | 33.63 |
| | 15.45 | 6.05 | 1.79 | -1.39 | -33.86 |
| | 14.16 | 4.81 | 10.45 | -2.64 | 36.89 |
| | 9.05 | 21.12 | -0.28 | 1.67 | 14.73 |
| λ | 45.41 | 22.11 | 14.30 | 11.17 | 4.85 |
| | 51.03 | 22.84 | 9.55 | 8.36 | 4.21 |
| | 42.88 | 21.41 | 18.71 | 10.32 | 5.00 |
| | 42.70 | 25.28 | 21.66 | 5.56 | 2.69 |

TABLE S348. PCA formation TAG: $4\,$

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | 3.75 | -2.12 | 19.08 | -33.23 | 16.11 |
| (p.) | 12.54 | 9.46 | 13.18 | 5.57 | 31.40 |
| (i.) | -2.55 | 18.69 | 28.54 | -18.61 | 8.33 |
| (h.) | 4.52 | -28.20 | -3.72 | -32.72 | -4.44 |
| d | 6.79 | 29.19 | -6.58 | -6.58 | 0.10 |
| | 14.57 | 12.01 | 9.92 | -3.26 | -4.64 |
| | 6.75 | -25.87 | 1.55 | -11.60 | 9.39 |
| | -0.43 | 31.56 | -3.84 | -4.87 | -6.50 |
| s | 6.38 | 29.14 | -7.73 | -6.71 | -2.10 |
| | 13.33 | 11.58 | 10.73 | -2.10 | -26.38 |
| | 7.76 | -24.21 | 10.20 | -10.25 | -5.91 |
| | 0.28 | 30.16 | -0.73 | -27.44 | 5.11 |
| $\mu_S(p)$ | 10.88 | -14.83 | -19.37 | -11.20 | 0.69 |
| | 2.35 | -21.92 | 13.23 | 6.75 | -3.60 |
| | 14.37 | 2.96 | 6.27 | 13.96 | 10.26 |
| | -16.73 | -1.81 | -6.29 | -8.26 | -18.38 |
| $\sigma_S(p)$ | 14.66 | -6.09 | 5.50 | -5.13 | -23.96 |
| | 12.63 | -7.72 | -8.15 | 23.51 | 5.03 |
| | 14.00 | 1.26 | 13.69 | 9.06 | -13.83 |
| | -12.68 | -3.36 | -33.50 | -1.88 | 16.94 |
| $\mu_S(kw)$ | 12.98 | -10.92 | -16.87 | -4.16 | 13.98 |
| | 4.21 | -21.13 | 13.64 | -7.80 | -4.19 |
| | 14.74 | 4.19 | -2.65 | 3.80 | 19.31 |
| | -16.78 | -0.69 | 8.64 | -1.58 | -15.29 |
| $\sigma_S(kw)$ | 16.43 | -3.04 | 7.26 | 0.44 | -15.68 |
| | 15.62 | -5.95 | -11.19 | 11.56 | -4.12 |
| | 15.33 | 2.78 | 7.03 | 4.62 | -7.26 |
| | -17.04 | 0.51 | -9.36 | 7.84 | -5.76 |
| $\mu_S(sw)$ | 13.41 | 2.23 | 5.26 | 17.63 | 23.41 |
| | 10.43 | -7.58 | -5.63 | -28.27 | 14.07 |
| | 12.16 | 8.83 | -19.45 | -13.79 | 7.90 |
| | -15.12 | -3.12 | 21.60 | -11.15 | 16.41 |
| $\sigma_S(sw)$ | 14.71 | 2.45 | 12.34 | 14.93 | 3.96 |
| | 14.32 | -2.66 | -14.32 | -11.19 | -6.58 |
| | 12.34 | 11.20 | -10.60 | -14.30 | -17.81 |
| | -16.42 | -0.61 | 12.33 | 4.26 | 11.18 |
| λ | 41.98 | 21.53 | 14.63 | 9.46 | 8.87 |
| | 39.13 | 24.42 | 14.84 | 11.83 | 4.31 |
| | 55.43 | 20.66 | 9.56 | 7.86 | 3.91 |
| | 54.48 | 29.84 | 8.29 | 2.94 | 2.19 |

TABLE S349. PCA formation TAG: $5\,$

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | 1.04 | 3.05 | -14.78 | 52.20 | -0.80 |
| (p.) | -1.32 | -15.80 | -1.36 | -65.21 | -8.85 |
| (i.) | -0.05 | 16.06 | 14.10 | 38.32 | 3.66 |
| (h.) | 7.74 | -4.89 | 24.26 | 29.39 | -5.95 |
| d | -0.13 | 45.00 | -0.56 | -2.22 | -2.07 |
| | -2.25 | -37.35 | -1.17 | 6.86 | 41.71 |
| | 0.19 | -33.60 | 4.48 | 6.65 | 35.11 |
| | -12.56 | 5.15 | -18.09 | 21.41 | -9.33 |
| s | 0.01 | 44.97 | -1.23 | -2.77 | 1.59 |
| | -2.05 | -35.79 | 1.80 | 21.69 | -39.63 |
| | -1.43 | -31.85 | 10.00 | 7.02 | -34.32 |
| | -15.31 | 3.64 | -10.99 | 14.90 | 4.29 |
| $\mu_S(p)$ | 17.31 | -1.82 | -12.40 | -7.99 | -15.66 |
| | -16.44 | 2.26 | -14.99 | 1.66 | -1.07 |
| | -17.29 | 4.16 | 7.58 | -9.14 | 2.58 |
| | -15.23 | 1.34 | 11.36 | -9.98 | -13.97 |
| $\sigma_S(p)$ | 17.15 | -0.31 | -14.88 | -6.32 | 4.71 |
| | -16.61 | 1.22 | -15.53 | 1.62 | -1.05 |
| | -15.86 | 3.53 | 15.15 | -11.12 | 4.34 |
| | -16.14 | 0.22 | 8.54 | -8.19 | 7.74 |
| $\mu_S(kw)$ | 18.50 | -0.83 | -0.05 | -2.22 | -13.61 |
| | -17.61 | 2.96 | -2.18 | -0.26 | -1.22 |
| | -18.39 | -1.23 | -5.50 | 3.03 | 4.25 |
| | 6.34 | 26.22 | 0.26 | 6.14 | 15.95 |
| $\sigma_S(kw)$ | 17.94 | 0.01 | -9.04 | -4.03 | 16.16 |
| | -17.17 | 1.77 | -9.34 | 0.37 | 0.01 |
| | -17.11 | 2.25 | 10.94 | -3.06 | -0.27 |
| | -14.38 | 8.11 | 14.78 | 2.61 | 19.27 |
| $\mu_S(sw)$ | 12.70 | 2.63 | 26.84 | 13.21 | -19.28 |
| | -12.13 | 1.20 | 30.44 | -1.72 | -1.43 |
| | -13.74 | -4.99 | -19.27 | 11.38 | 3.88 |
| | 9.17 | 23.61 | -4.09 | -3.21 | 1.51 |
| $\sigma_S(sw)$ | 15.22 | 1.39 | 20.21 | 9.04 | 26.11 |
| | -14.42 | 1.66 | 23.19 | -0.60 | 5.03 |
| | -15.95 | -2.32 | -12.96 | 10.28 | -11.60 |
| | -3.13 | 26.83 | 7.62 | -4.17 | -21.99 |
| λ | 50.40 | 21.93 | 12.54 | 10.88 | 1.86 |
| | 51.35 | 20.02 | 12.27 | 10.43 | 2.65 |
| | 48.20 | 20.31 | 14.70 | 9.22 | 2.83 |
| | 49.26 | 27.56 | 13.56 | 6.68 | 1.30 |

TABLE S350. PCA formation TAG: $6\,$

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | -4.98 | 5.46 | -36.95 | -21.21 | -2.44 |
| (p.) | 5.95 | 23.39 | -7.46 | -38.40 | -13.41 |
| (i.) | 7.45 | -18.42 | 0.87 | -33.92 | 6.69 |
| (h.) | 7.33 | -15.38 | 15.25 | -12.58 | -14.46 |
| d | -2.25 | -33.45 | 1.14 | -7.10 | 3.56 |
| | 3.25 | 28.30 | 2.77 | 6.54 | 39.92 |
| | -7.11 | 23.70 | 1.44 | -6.43 | -7.87 |
| | -9.02 | 14.24 | -15.11 | 12.33 | -7.76 |
| s | -1.57 | -33.58 | 2.93 | -6.70 | -6.79 |
| | 2.99 | 27.00 | 6.02 | 26.79 | -29.93 |
| | -3.75 | 23.10 | 5.58 | -16.29 | 21.01 |
| | -9.00 | 12.35 | -6.19 | -33.10 | -13.35 |
| $\mu_S(p)$ | -14.56 | 7.69 | 14.24 | -10.39 | -28.27 |
| | 14.01 | -4.22 | 19.68 | -5.31 | -4.43 |
| | -13.95 | -8.38 | 12.27 | 8.83 | 17.34 |
| | 12.40 | -2.03 | -19.11 | 3.55 | -12.89 |
| $\sigma_S(p)$ | -13.27 | 6.81 | 16.72 | -18.22 | 19.81 |
| | 13.77 | -4.05 | 21.58 | -4.72 | 3.90 |
| | -10.78 | -5.83 | 21.28 | -7.40 | -12.81 |
| | 7.14 | -13.99 | -18.69 | -1.89 | -0.84 |
| $\mu_S(kw)$ | -16.25 | -0.77 | -3.90 | 10.09 | -14.40 |
| | 15.28 | -4.08 | -9.44 | 3.05 | -2.55 |
| | -15.03 | -8.26 | -10.72 | 6.51 | 14.26 |
| | 15.23 | 9.29 | 6.46 | 8.81 | -14.28 |
| $\sigma_S(kw)$ | -16.71 | 2.96 | 5.46 | -1.01 | 10.24 |
| | 15.67 | -4.47 | 2.05 | 1.53 | 3.07 |
| | -15.85 | -4.80 | 12.24 | -2.89 | -7.61 |
| | 16.07 | -1.92 | -9.33 | -12.51 | 11.27 |
| $\mu_S(sw)$ | -14.41 | -6.36 | -11.96 | 16.92 | 3.47 |
| | 13.86 | -2.71 | -21.08 | 8.80 | 2.66 |
| | -12.04 | -4.52 | -20.83 | -3.67 | -1.76 |
| | 12.02 | 14.90 | 8.68 | 5.10 | -7.49 |
| $\sigma_S(sw)$ | -16.01 | -2.93 | -6.71 | 8.37 | 11.02 |
| | 15.22 | -1.77 | -9.92 | 4.86 | 0.14 |
| | -14.03 | 2.99 | -14.78 | -14.05 | -10.65 |
| | 11.79 | 15.91 | 1.18 | -10.13 | 17.66 |
| λ | 53.79 | 21.89 | 10.95 | 8.82 | 1.68 |
| | 58.05 | 25.60 | 8.27 | 4.36 | 1.76 |
| | 40.89 | 23.19 | 19.46 | 6.76 | 4.57 |
| | 41.64 | 29.17 | 19.90 | 6.96 | 1.42 |

TABLE S351. PCA formation TAG: $7\,$

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | 1.14 | 5.26 | 75.00 | 0.31 | -0.40 |
| (p.) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (i.) | -4.23 | 7.28 | -3.50 | -52.43 | 11.23 |
| (h.) | -11.67 | 3.12 | 27.96 | 12.90 | -5.10 |
| d | 1.75 | 40.68 | -3.89 | 1.58 | 2.41 |
| | -1.56 | -45.38 | -0.08 | -0.28 | -43.96 |
| | -4.94 | -30.10 | 6.54 | -6.75 | -2.00 |
| | 15.45 | 5.06 | -12.46 | 2.31 | -12.93 |
| s | 1.84 | 40.60 | -6.40 | 0.30 | 1.76 |
| | -1.37 | -45.43 | 0.22 | 2.75 | 43.76 |
| | -4.94 | -30.22 | 6.14 | -6.77 | 0.42 |
| | 16.93 | -1.34 | -1.18 | 3.32 | -5.74 |
| $\mu_S(p)$ | 16.28 | -3.64 | -5.44 | -11.17 | 5.89 |
| | -16.54 | 0.72 | 11.54 | 4.00 | -4.61 |
| | -13.72 | 8.08 | 16.73 | 2.38 | 10.99 |
| | 14.58 | 0.37 | 10.27 | 21.50 | -9.37 |
| $\sigma_S(p)$ | 16.29 | 0.00 | -1.53 | -18.16 | -13.87 |
| | -16.76 | -0.41 | 8.30 | -16.18 | 4.24 |
| | -13.97 | 7.53 | 18.10 | 4.63 | 8.31 |
| | 16.01 | -7.70 | 7.03 | 2.19 | 7.16 |
| $\mu_S(kw)$ | 15.89 | -3.84 | 1.33 | -4.31 | 31.61 |
| | -15.90 | 3.94 | 20.45 | 22.13 | -0.87 |
| | -16.80 | 3.11 | -9.28 | -5.71 | -21.25 |
| | -3.99 | -22.77 | -8.67 | 22.08 | 10.82 |
| $\sigma_S(kw)$ | 15.88 | 1.93 | 3.73 | -14.32 | -10.71 |
| | -16.28 | 0.70 | 8.82 | -20.22 | 1.86 |
| | -17.23 | 5.62 | 3.33 | 2.51 | -17.96 |
| | 10.58 | -17.93 | 9.97 | -11.62 | 17.07 |
| $\mu_S(sw)$ | 15.33 | -2.94 | 0.24 | 28.57 | 10.08 |
| | -15.79 | 2.00 | -22.39 | 22.88 | 0.27 |
| | -11.04 | -3.99 | -21.98 | 1.56 | 2.76 |
| | -10.75 | -18.47 | -12.66 | 7.28 | -11.41 |
| $\sigma_S(sw)$ | 15.61 | -1.12 | -2.43 | 21.27 | -23.28 |
| | -15.79 | 1.43 | -28.20 | -11.54 | -0.44 |
| | -13.14 | -4.08 | -14.40 | 17.26 | 25.07 |
| | 0.04 | -23.24 | 9.81 | -16.80 | -20.40 |
| λ | 54.34 | 21.98 | 11.07 | 5.31 | 3.39 |
| | 64.56 | 22.70 | 4.53 | 3.14 | 2.25 |
| | 37.71 | 21.18 | 19.49 | 11.08 | 4.43 |
| | 51.99 | 25.69 | 9.71 | 7.18 | 4.97 |

TABLE S352. PCA formation TAG: $8\,$

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|-------|--------|--------|--------|--------|
| cc | 3.19 | -3.67 | 9.50 | -54.34 | -3.29 |
| (p.) | 5.89 | 20.68 | 3.89 | 40.77 | 5.56 |
| (i.) | -6.10 | 16.87 | -9.18 | 41.57 | -1.26 |
| (h.) | 5.46 | 22.62 | 9.77 | 22.59 | 2.09 |
| d | 1.55 | 37.46 | -3.42 | -4.69 | -0.32 |
| | 5.71 | 26.30 | 3.01 | -5.39 | -9.62 |
| | 7.73 | -20.34 | 9.26 | 14.78 | -10.73 |
| | -8.58 | -20.26 | 2.78 | 10.87 | 9.85 |
| s | 0.99 | 37.46 | -4.41 | -2.59 | -3.26 |
| | 6.51 | 23.19 | -4.79 | -28.10 | -4.02 |
| | 7.50 | -20.47 | 5.10 | 21.98 | 12.19 |
| | -8.44 | -20.38 | 1.06 | 12.71 | -4.60 |
| $\mu_S(p)$ | 15.86 | -5.86 | -11.64 | 1.90 | -36.25 |
| | 14.58 | -7.81 | 13.39 | -1.81 | -14.36 |
| | 13.05 | 10.17 | 6.52 | -0.59 | 35.03 |
| | 13.51 | -2.35 | -13.92 | 9.49 | 19.54 |
| $\sigma_S(p)$ | 16.93 | -4.51 | -15.74 | -5.18 | 7.90 |
| | 14.53 | -5.48 | 16.49 | -2.73 | -4.10 |
| | 13.16 | 11.89 | 12.61 | 2.43 | -9.59 |
| | 11.58 | -8.49 | 42.31 | -0.72 | 8.52 |
| $\mu_S(kw)$ | 17.33 | 0.20 | 8.99 | 11.92 | -5.01 |
| | 13.72 | -8.75 | -14.04 | 8.47 | -15.61 |
| | 15.27 | 3.52 | -5.84 | -5.31 | 1.47 |
| | 13.32 | -6.43 | 2.59 | -6.60 | -24.68 |
| $\sigma_S(kw)$ | 16.83 | -2.07 | -10.68 | -3.60 | 32.51 |
| | 15.91 | -5.40 | 6.98 | -0.03 | 6.86 |
| | 13.40 | 10.58 | 11.08 | 2.39 | -21.73 |
| | 12.97 | -6.85 | -3.32 | 17.30 | -15.46 |
| $\mu_S(sw)$ | 11.45 | 4.99 | 25.09 | 12.63 | 6.48 |
| | 8.58 | -1.90 | -30.52 | 4.71 | -6.83 |
| | 11.16 | -4.71 | -23.26 | -5.84 | -7.55 |
| | 13.24 | -5.07 | -2.45 | -16.59 | 11.06 |
| $\sigma_S(sw)$ | 15.88 | 3.78 | 10.53 | -3.15 | -4.98 |
| | 14.55 | -0.48 | -6.89 | -7.99 | 33.04 |
| | 12.62 | -1.46 | -17.16 | 5.11 | 0.46 |
| | 12.90 | -7.55 | -21.81 | 3.13 | 4.21 |
| λ | 43.30 | 22.39 | 13.62 | 10.97 | 4.40 |
| | 48.21 | 23.14 | 14.02 | 6.57 | 3.82 |
| | 49.77 | 24.03 | 11.84 | 6.18 | 3.17 |
| | 67.81 | 25.52 | 3.20 | 3.05 | 0.37 |

TABLE S353. PCA formation TAG: $9\,$

| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | PC1 | PC2 | PC3 | PC4 | PC5 |
|---|----------------|-------|--------|--------|--------|--------|
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 1 | | | | | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | | l | | |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | | 1 | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | (h.) | | | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | d | 6.81 | -33.15 | 1.07 | -1.30 | 2.24 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 3.24 | 33.43 | -5.20 | -6.53 | -1.05 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 6.58 | 30.89 | -0.46 | 6.92 | 0.85 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | | 18.37 | 9.05 | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | s | 6.61 | -33.26 | 1.78 | -1.97 | 2.78 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 2.88 | 33.00 | -3.70 | -14.98 | -0.72 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 6.94 | 30.00 | -4.07 | 9.90 | -0.49 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | -9.18 | 10.28 | 18.35 | 13.31 | 4.14 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\mu_S(p)$ | 12.19 | 8.16 | 19.17 | -9.24 | 14.55 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | 0.60 | 19.59 | -7.59 | 11.03 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 12.70 | -4.78 | -18.11 | -6.76 | -17.90 |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 18.50 | 5.31 | 7.02 | -6.14 | 20.99 |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | $\sigma_S(p)$ | 12.63 | 5.89 | 21.27 | -12.09 | -1.66 |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | 13.34 | 0.75 | 22.05 | -9.22 | 2.03 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 13.52 | -3.66 | -19.03 | -13.02 | 2.81 |
| 15.95 -5.68 -11.06 -1.22 19.99 15.62 -5.59 10.63 4.00 -18.43 10.43 -13.30 14.03 -13.01 1.11 | | 18.10 | 7.73 | 3.34 | 12.09 | 4.21 |
| 15.62 -5.59 10.63 4.00 -18.43 10.43 -13.30 14.03 -13.01 1.11 | $\mu_S(kw)$ | 14.73 | 7.20 | -12.09 | -3.38 | 17.92 |
| 10.43 -13.30 14.03 -13.01 1.11 | | 15.95 | -5.68 | -11.06 | -1.22 | 19.99 |
| | | 15.62 | -5.59 | 10.63 | 4.00 | -18.43 |
| $\sigma_{\alpha}(h_{20})$ 16 01 4 73 3 60 2 10 10 40 | | 10.43 | -13.30 | 14.03 | -13.01 | 1.11 |
| US(NW) 10.01 4.75 3.09 -2.16 -16.46 | $\sigma_S(kw)$ | 16.01 | 4.73 | 3.69 | -2.18 | -18.48 |
| | | 17.35 | -4.44 | 1.87 | -1.26 | -19.81 |
| 16.35 -6.41 -4.47 -3.79 17.61 | | 16.35 | -6.41 | -4.47 | -3.79 | 17.61 |
| | | 18.66 | 0.89 | 8.79 | 3.51 | -26.02 |
| $\mu_S(sw)$ 12.33 4.60 -21.69 -0.20 13.53 | $\mu_S(sw)$ | 12.33 | 4.60 | -21.69 | | |
| | | 13.41 | -4.46 | -19.48 | 1.00 | 16.20 |
| | | 12.98 | -3.21 | 20.65 | 5.53 | -13.95 |
| -3.85 -19.23 10.32 -5.19 16.35 | | -3.85 | -19.23 | 10.32 | -5.19 | 16.35 |
| $\sigma_S(sw)$ 14.00 2.04 -12.05 5.13 -24.62 | $\sigma_S(sw)$ | 14.00 | 2.04 | -12.05 | 5.13 | -24.62 |
| 15.02 -3.93 -11.05 4.62 -25.70 | | 15.02 | -3.93 | -11.05 | 4.62 | -25.70 |
| | | 14.12 | -3.78 | 12.05 | 1.20 | 25.90 |
| -5.21 -18.54 10.64 7.19 -14.74 | | -5.21 | -18.54 | 10.64 | 7.19 | -14.74 |
| λ | λ | 42.73 | 20.62 | 16.22 | 10.43 | 6.12 |
| 39.47 20.74 17.50 9.71 7.19 | | 1 | | l | | |
| 43.21 19.87 15.92 10.13 6.06 | | | | ı | | |
| 36.54 32.05 22.26 6.69 1.36 | | | | | | |

TABLE S354. PCA formation TAG: 10

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | 1.56 | 5.55 | 5.27 | 66.36 | 4.43 |
| (p.) | 2.07 | 21.29 | -3.09 | -16.58 | -30.47 |
| (i.) | 3.53 | -5.95 | -6.72 | 51.70 | 8.40 |
| (h.) | 9.65 | -14.73 | 3.26 | 14.54 | 27.15 |
| d | 3.28 | 39.23 | -2.42 | -3.75 | 1.71 |
| | 2.31 | 29.69 | -4.90 | 7.49 | 10.16 |
| | 6.23 | 18.94 | 16.55 | 7.89 | -1.65 |
| | -10.34 | 13.75 | -14.11 | 5.08 | 9.43 |
| s | 2.89 | 39.14 | -2.73 | -6.53 | 2.19 |
| | 2.30 | 29.95 | -4.12 | 6.71 | 9.55 |
| | 6.37 | 19.06 | 16.00 | 10.14 | -1.42 |
| | -9.80 | 13.47 | -14.84 | 6.58 | 13.35 |
| $\mu_S(p)$ | 11.87 | -6.88 | -23.79 | 0.56 | 19.99 |
| | -12.99 | -3.75 | -21.38 | 18.20 | -12.48 |
| | 8.32 | -18.13 | 13.89 | 6.33 | -6.38 |
| | 10.80 | -6.99 | -19.67 | 0.26 | 6.55 |
| $\sigma_S(p)$ | 11.31 | -0.30 | -25.29 | 10.55 | -14.13 |
| | -10.90 | -0.79 | -27.98 | -9.77 | 8.49 |
| | 10.21 | -14.05 | 15.44 | -6.84 | 12.95 |
| | 8.72 | -6.76 | -21.47 | 2.17 | -16.46 |
| $\mu_S(kw)$ | 19.19 | -6.59 | -2.36 | -5.99 | 11.85 |
| | -19.64 | 0.08 | -0.64 | 7.86 | -7.62 |
| | 17.95 | -8.73 | 0.93 | -2.42 | -16.55 |
| | 14.15 | 7.50 | -7.33 | -20.52 | 6.85 |
| $\sigma_S(kw)$ | 17.26 | -1.70 | 1.16 | 0.48 | -24.22 |
| | -17.26 | 1.60 | -1.20 | -18.84 | 10.50 |
| | 16.92 | 2.12 | -4.56 | -13.03 | 22.97 |
| | 13.31 | 10.62 | -1.67 | 19.42 | -11.12 |
| $\mu_S(sw)$ | 15.36 | -0.55 | 19.90 | -4.40 | 14.27 |
| | -14.96 | 6.19 | 21.48 | 9.07 | -5.17 |
| | 15.77 | 4.76 | -12.12 | 0.29 | -20.25 |
| | 12.34 | 12.79 | 7.28 | -15.30 | 8.15 |
| $\sigma_S(sw)$ | 17.31 | -0.06 | 17.07 | -1.37 | -7.20 |
| | -17.57 | 6.65 | 15.22 | -5.48 | 5.55 |
| | 14.70 | 8.27 | -13.80 | -1.36 | 9.42 |
| | 10.89 | 13.38 | 10.37 | 16.12 | -0.94 |
| λ | 36.91 | 22.07 | 16.02 | 11.02 | 7.75 |
| | 37.77 | 25.85 | 14.81 | 8.29 | 7.11 |
| | 33.74 | 23.23 | 20.12 | 10.67 | 6.77 |
| | 40.07 | 27.24 | 20.10 | 6.53 | 3.68 |
| | 40.07 | 21.24 | 20.10 | 0.55 | 3.08 |

TABLE S355. PCA formation TAG: 11

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | 1.74 | -5.84 | 65.45 | 6.54 | 3.46 |
| (p.) | 3.05 | 25.91 | 7.04 | -39.20 | 10.92 |
| (i.) | 1.35 | -26.58 | -3.04 | 3.88 | -35.98 |
| (h.) | 2.27 | -23.40 | 3.92 | -12.98 | -28.77 |
| d | 0.10 | 42.02 | 5.14 | -1.82 | 1.50 |
| | 3.32 | 29.28 | -1.98 | 10.23 | -39.13 |
| | 1.83 | 32.21 | 2.09 | 3.62 | -7.14 |
| | -5.09 | 23.42 | -4.82 | -7.66 | -9.70 |
| s | -0.04 | 42.02 | 4.95 | -2.16 | -0.13 |
| | 2.74 | 28.28 | -5.42 | 24.82 | 30.04 |
| | 7.35 | 26.09 | -6.26 | 6.55 | -24.35 |
| | -6.60 | 22.02 | -7.16 | -12.32 | -13.95 |
| $\mu_S(p)$ | -17.34 | -1.71 | 4.10 | -15.96 | 1.19 |
| | -15.74 | 3.23 | 14.81 | 4.88 | -0.02 |
| | 15.63 | -5.86 | 0.09 | 24.68 | 7.62 |
| | 15.40 | -0.94 | -4.59 | -32.59 | 14.96 |
| $\sigma_S(p)$ | -17.38 | -1.36 | 5.97 | -14.74 | -6.97 |
| | -15.67 | 3.41 | 15.09 | 5.31 | 0.87 |
| | 17.15 | -3.69 | -13.40 | 11.91 | 6.62 |
| | 7.74 | -6.02 | -31.84 | 4.42 | 0.57 |
| $\mu_S(kw)$ | -18.27 | -0.95 | 0.88 | -4.05 | 8.04 |
| | -16.65 | 2.86 | 3.53 | -1.13 | -0.64 |
| | 16.59 | -3.00 | 19.25 | 1.41 | 2.91 |
| | 15.63 | 8.27 | 11.89 | 5.48 | -13.92 |
| $\sigma_S(kw)$ | -18.07 | -0.56 | 3.46 | -3.57 | -12.16 |
| | -16.55 | 3.22 | 4.94 | 1.25 | 2.21 |
| | 14.75 | -1.62 | -16.46 | -16.91 | 5.60 |
| | 15.20 | 4.13 | -16.01 | 15.95 | -6.89 |
| $\mu_S(sw)$ | -14.48 | 1.75 | -6.80 | 20.55 | 37.57 |
| | -14.11 | 1.25 | -18.61 | -10.02 | -9.51 |
| | 10.28 | 0.13 | 31.23 | -9.05 | -5.14 |
| | 14.61 | 6.98 | 18.02 | 6.20 | 6.47 |
| $\sigma_S(sw)$ | -12.58 | 3.79 | -3.24 | 30.61 | -28.98 |
| | -12.16 | 2.55 | -28.57 | -3.14 | 6.65 |
| | 15.05 | 0.82 | -8.18 | -21.99 | -4.65 |
| | 17.46 | 4.84 | 1.76 | -2.40 | -4.77 |
| λ | 52.62 | 22.25 | 11.00 | 9.38 | 3.81 |
| | 55.49 | 24.96 | 9.41 | 5.22 | 2.45 |
| | 40.88 | 22.21 | 14.41 | 9.27 | 7.13 |
| | 47.58 | 31.76 | 15.15 | 4.19 | 1.22 |

TABLE S356. PCA formation TAG: 12

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | -3.62 | -12.16 | -6.65 | -45.17 | -12.88 |
| (p.) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (i.) | -3.39 | 12.26 | 22.07 | -41.04 | -11.48 |
| (h.) | -4.31 | 20.51 | -19.85 | 16.68 | 1.88 |
| d | 1.94 | -21.03 | 15.72 | 0.47 | 2.11 |
| | -6.01 | -24.68 | -16.11 | -7.72 | 36.50 |
| | 6.52 | -26.41 | 12.27 | 3.74 | -1.83 |
| | -8.45 | -20.23 | 7.69 | -4.97 | 10.27 |
| s | 1.78 | -19.83 | 17.35 | 5.27 | 4.85 |
| | -5.58 | -24.78 | -16.97 | -1.40 | -36.24 |
| | 4.51 | -28.31 | 10.84 | -5.34 | -4.35 |
| | -9.49 | -19.00 | 7.95 | 14.11 | -9.53 |
| $\mu_S(p)$ | -19.52 | 6.00 | 10.60 | 4.15 | -13.06 |
| | 19.18 | -4.63 | 0.93 | -2.32 | 6.49 |
| | -17.61 | -2.32 | 5.08 | 4.08 | 6.31 |
| | 15.73 | -4.01 | -2.09 | -3.85 | -8.60 |
| $\sigma_S(p)$ | -21.23 | -3.24 | -4.29 | -2.68 | 12.71 |
| | 18.80 | -7.25 | 2.54 | 1.48 | -3.31 |
| | -17.57 | -3.39 | 4.78 | 4.00 | 7.18 |
| | 15.64 | -4.67 | -2.67 | -2.79 | 3.40 |
| $\mu_S(kw)$ | -19.13 | 5.59 | 10.52 | 5.59 | -15.53 |
| | 19.16 | -4.81 | 2.35 | -4.19 | 4.13 |
| | -17.70 | -3.60 | 2.36 | -0.96 | 8.85 |
| | 15.90 | -1.90 | 0.41 | -7.05 | 26.55 |
| $\sigma_S(kw)$ | -21.45 | -3.21 | -4.12 | -1.97 | 11.78 |
| | 18.81 | -7.07 | 3.25 | 0.48 | -6.74 |
| | -17.61 | -3.60 | 4.30 | 3.97 | 6.36 |
| | 15.65 | -4.62 | -2.47 | -0.08 | -27.05 |
| $\mu_S(sw)$ | 1.41 | -14.84 | -14.26 | 22.85 | -21.07 |
| | -6.81 | -10.81 | 31.42 | -40.09 | -3.22 |
| | -1.46 | -13.17 | -23.44 | -36.72 | 15.38 |
| | -5.37 | 17.63 | 25.40 | -23.64 | -7.96 |
| $\sigma_S(sw)$ | -9.90 | -14.10 | -16.50 | 11.86 | 5.99 |
| | -5.65 | -15.96 | 26.43 | 42.32 | 3.36 |
| | -13.62 | -6.95 | -14.88 | -0.16 | -38.25 |
| | 9.47 | 7.44 | 31.47 | 26.84 | 4.75 |
| λ | 37.34 | 25.99 | 16.81 | 9.30 | 7.44 |
| | 51.77 | 26.09 | 14.90 | 5.89 | 0.78 |
| | 51.78 | 20.32 | 17.33 | 6.81 | 2.55 |
| | 56.14 | 30.24 | 12.91 | 0.72 | 0.00 |

TABLE S357. PCA formation TAG: 13

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | 3.37 | -0.83 | 14.09 | -5.03 | 50.06 |
| (p.) | 6.59 | 18.29 | 5.66 | 1.19 | -43.88 |
| (i.) | 1.55 | -15.43 | -4.53 | -47.39 | 8.47 |
| (h.) | 0.25 | 16.55 | 26.28 | 5.71 | -22.06 |
| d | 2.41 | 35.29 | -6.31 | 1.07 | 4.24 |
| | 5.17 | 23.45 | 6.52 | 6.20 | 12.08 |
| | -5.17 | 28.11 | 6.67 | -9.29 | -1.11 |
| | -1.59 | -20.58 | -0.50 | 12.37 | -6.42 |
| s | 2.25 | 35.20 | -6.82 | 0.87 | 3.89 |
| | 4.93 | 22.39 | 6.91 | 6.32 | 23.09 |
| | -4.64 | 27.37 | 5.49 | -17.64 | 3.79 |
| | -2.91 | -20.03 | 3.75 | 15.60 | -7.98 |
| $\mu_S(p)$ | 12.35 | -9.98 | -22.74 | -1.34 | 10.31 |
| | 10.86 | -13.37 | 18.00 | 9.03 | -2.47 |
| | -14.03 | -10.67 | 13.54 | -1.81 | -15.84 |
| | 15.97 | 8.53 | -19.11 | 1.89 | -18.20 |
| $\sigma_S(p)$ | 14.84 | -2.43 | 1.42 | 27.12 | 1.03 |
| | 14.16 | -4.35 | -11.17 | 20.39 | 4.89 |
| | -13.41 | -7.72 | 18.65 | 0.28 | 6.70 |
| | 3.84 | 17.07 | -10.10 | 28.32 | 13.58 |
| $\mu_S(kw)$ | 18.50 | -7.21 | -14.65 | -8.89 | 3.62 |
| | 16.47 | -11.28 | 13.86 | 0.18 | 1.40 |
| | -17.25 | -0.49 | -8.34 | -5.86 | -17.38 |
| | -18.67 | 5.35 | 0.71 | 12.64 | -2.68 |
| $\sigma_S(kw)$ | 17.50 | 1.03 | 10.30 | 18.81 | -4.58 |
| | 15.68 | -0.98 | -17.20 | 9.82 | -3.98 |
| | -17.64 | -5.46 | 6.36 | 3.61 | 14.76 |
| | -18.80 | 6.15 | 10.02 | -5.27 | 10.27 |
| $\mu_S(sw)$ | 14.84 | 1.38 | 4.34 | -26.90 | -7.44 |
| | 13.51 | -0.72 | 6.12 | -26.19 | 6.81 |
| | -12.50 | 2.83 | -20.90 | -3.03 | -10.19 |
| | -20.01 | -0.57 | -9.21 | 6.98 | -7.86 |
| $\sigma_S(sw)$ | 13.93 | 6.65 | 19.32 | -9.98 | -14.83 |
| | 12.62 | 5.17 | -14.55 | -20.68 | 1.40 |
| | -13.81 | 1.91 | -15.50 | 11.09 | 21.77 |
| | -17.96 | 5.18 | -20.33 | -11.21 | -10.95 |
| λ | 30.28 | 22.42 | 17.44 | 14.70 | 9.91 |
| | 29.33 | 28.15 | 16.18 | 14.62 | 5.93 |
| | 39.06 | 22.65 | 18.04 | 9.82 | 5.13 |
| | 41.94 | 37.89 | 7.28 | 5.14 | 3.99 |

TABLE S358. PCA formation TAG: 14

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | -0.65 | 2.34 | -17.64 | -39.91 | -14.50 |
| (p.) | 0.66 | 22.62 | 7.03 | 7.51 | 37.42 |
| (i.) | -2.47 | 22.30 | 3.90 | -46.18 | 6.24 |
| (h.) | 5.69 | -18.79 | 15.33 | 3.54 | 25.68 |
| d | -3.66 | 26.39 | 11.69 | -5.22 | -3.32 |
| | 3.09 | 25.53 | 6.56 | -7.37 | -9.81 |
| | 1.43 | -32.67 | 0.61 | -8.96 | 6.33 |
| | -4.08 | 20.11 | -11.96 | -7.39 | 17.22 |
| s | -3.56 | 25.82 | 13.53 | -3.53 | -3.32 |
| | 4.49 | 24.63 | 4.99 | -2.29 | -23.59 |
| | -0.14 | -30.88 | -3.13 | -23.75 | -0.29 |
| | 2.35 | 20.60 | 2.66 | -15.49 | 15.37 |
| $\mu_S(p)$ | -17.80 | -9.37 | 9.29 | -1.67 | -12.36 |
| | 19.29 | -4.23 | 11.20 | -8.49 | 4.11 |
| | -15.79 | 3.44 | -17.47 | 3.40 | 10.18 |
| | 12.38 | 8.36 | 28.97 | -20.99 | -12.64 |
| $\sigma_S(p)$ | -19.29 | -6.00 | 5.59 | -7.40 | 8.05 |
| | 20.58 | -4.51 | 7.40 | 4.97 | -4.19 |
| | -16.08 | 0.66 | -18.20 | -0.10 | -2.94 |
| | -1.32 | 16.99 | 14.09 | 36.37 | -0.61 |
| $\mu_S(kw)$ | -19.97 | -4.25 | -0.15 | 8.62 | -13.07 |
| | 20.78 | -3.16 | -1.63 | -11.50 | 8.24 |
| | -18.07 | -2.22 | 9.44 | 4.47 | 19.71 |
| | 19.15 | -2.65 | -2.16 | 0.33 | 9.40 |
| $\sigma_S(kw)$ | -19.63 | -0.95 | -2.03 | -6.23 | 15.08 |
| | 19.96 | -2.09 | -3.10 | 13.86 | -2.72 |
| | -18.75 | -3.09 | -7.79 | -3.78 | -12.56 |
| | 18.06 | 6.27 | 0.43 | 14.89 | 2.11 |
| $\mu_S(sw)$ | -6.57 | 10.68 | -20.04 | 27.33 | -13.31 |
| | 4.27 | 5.26 | -30.48 | -22.46 | 6.28 |
| | -13.23 | -2.57 | 22.94 | 6.37 | 12.69 |
| | 18.87 | -3.13 | -9.47 | 0.59 | 3.60 |
| $\sigma_S(sw)$ | -8.88 | 14.20 | -20.05 | 0.09 | 16.98 |
| | 6.87 | 7.97 | -27.61 | 21.55 | -3.64 |
| | -14.05 | -2.17 | 16.52 | -2.98 | -29.05 |
| | 18.12 | 3.09 | -14.92 | 0.40 | -13.38 |
| λ | 37.68 | 23.49 | 15.46 | 10.81 | 7.19 |
| | 38.32 | 25.31 | 14.87 | 8.99 | 5.61 |
| | 39.11 | 23.65 | 16.74 | 8.12 | 6.02 |
| | 46.70 | 37.34 | 7.41 | 6.07 | 2.25 |

TABLE S359. PCA formation TAG: 15

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | 3.10 | 5.80 | 6.18 | 52.36 | -10.50 |
| (p.) | 1.25 | 19.07 | 8.13 | 34.07 | 17.43 |
| (i.) | -2.77 | 6.61 | 7.50 | -49.27 | 12.41 |
| (h.) | -2.27 | 18.74 | 1.94 | -41.01 | 9.17 |
| d | 2.53 | 29.13 | -8.56 | -3.62 | -2.44 |
| | 0.74 | 34.52 | 0.35 | -7.54 | -6.88 |
| | -6.00 | -32.64 | -5.55 | -1.38 | 1.86 |
| | 7.88 | -24.54 | -5.40 | -12.36 | 1.33 |
| s | 2.20 | 28.72 | -9.79 | -4.42 | -3.35 |
| | 1.39 | 34.23 | -0.88 | -8.78 | -7.38 |
| | -6.10 | -32.53 | -0.20 | -4.81 | 8.19 |
| | 7.51 | -23.96 | -5.84 | -16.67 | 2.59 |
| $\mu_S(p)$ | 16.41 | -9.42 | -12.19 | -1.71 | -10.11 |
| | 19.12 | -0.65 | -14.23 | 6.02 | -4.37 |
| | -14.84 | 5.43 | 10.17 | 12.89 | 17.35 |
| | -14.42 | -7.10 | 13.68 | 4.61 | 14.34 |
| $\sigma_S(p)$ | 15.92 | -7.27 | -15.94 | 6.59 | 4.05 |
| | 18.59 | 1.76 | -16.65 | 0.01 | 5.44 |
| | -11.78 | -0.83 | 23.52 | 9.79 | -1.36 |
| | -7.44 | -11.05 | 22.62 | -4.92 | 5.79 |
| $\mu_S(kw)$ | 17.43 | -2.08 | 7.28 | -12.19 | -17.29 |
| | 18.70 | -5.25 | 6.12 | 8.88 | -15.19 |
| | -15.30 | 9.95 | -13.14 | 4.64 | 12.17 |
| | -17.33 | -5.59 | -6.89 | 2.50 | 7.46 |
| $\sigma_S(kw)$ | 18.16 | -2.04 | -4.45 | 5.39 | 14.70 |
| | 19.92 | 0.43 | -2.82 | -7.97 | 10.59 |
| | -15.24 | 2.30 | 11.81 | -2.41 | -15.78 |
| | -15.46 | -5.93 | 9.11 | -9.45 | -25.23 |
| $\mu_S(sw)$ | 12.06 | 6.67 | 21.00 | -11.26 | -11.38 |
| | 9.88 | -3.46 | 28.35 | 6.45 | -14.36 |
| | -13.97 | 9.07 | -19.32 | 1.46 | 5.35 |
| | -13.69 | -2.03 | -17.56 | 2.23 | 17.95 |
| $\sigma_S(sw)$ | 12.19 | 8.87 | 14.62 | 2.45 | 26.18 |
| | 10.41 | 0.64 | 22.47 | -20.28 | 18.36 |
| | -14.01 | -0.64 | -8.79 | -13.35 | -25.52 |
| | -13.99 | -1.07 | -16.97 | -6.25 | -16.14 |
| λ | 39.02 | 22.88 | 15.95 | 10.83 | 7.56 |
| | 39.29 | 23.65 | 16.27 | 9.24 | 8.08 |
| | 40.52 | 20.21 | 15.49 | 11.15 | 6.67 |
| | 42.29 | 23.53 | 20.17 | 8.25 | 3.50 |

TABLE S360. PCA formation TAG: 16

| | PC1 | PC2 | PC3 | PC4 | PC5 |
|----------------|--------|--------|--------|--------|--------|
| cc | -2.92 | -7.41 | -1.46 | 67.69 | 0.05 |
| (p.) | -4.31 | -16.96 | 16.50 | 2.58 | -36.42 |
| (i.) | -6.57 | 17.76 | -10.81 | 35.78 | 10.10 |
| (h.) | -5.43 | 19.38 | 16.26 | -6.60 | -5.22 |
| d | -3.88 | -31.95 | 6.90 | -2.59 | 3.24 |
| | -7.21 | -19.34 | 6.27 | 1.21 | 22.20 |
| | 3.37 | -30.11 | -2.92 | 7.89 | 4.98 |
| | 9.82 | -19.60 | 8.28 | -8.05 | 3.24 |
| s | -2.58 | -31.65 | 7.92 | -11.93 | 4.01 |
| | -9.48 | -18.42 | 4.07 | -1.34 | 14.63 |
| | 2.47 | -29.54 | -1.97 | 12.11 | 9.25 |
| | 8.63 | -19.71 | 10.64 | -11.79 | 6.51 |
| $\mu_S(p)$ | -11.31 | 11.17 | 22.97 | 2.11 | 19.96 |
| | -10.65 | -4.46 | -24.52 | 20.22 | -6.23 |
| | 15.87 | 9.27 | 8.29 | -2.47 | 12.11 |
| | -13.82 | -3.05 | 0.50 | -22.40 | -12.13 |
| $\sigma_S(p)$ | -11.20 | 7.28 | 25.68 | 3.14 | -16.64 |
| | -10.79 | -6.05 | -23.45 | -19.65 | -7.30 |
| | 15.52 | 3.21 | 16.60 | 3.90 | 7.32 |
| | -14.03 | 0.30 | 15.91 | -8.96 | 5.22 |
| $\mu_S(kw)$ | -16.49 | 4.46 | -7.95 | -2.49 | 23.64 |
| | -13.90 | 8.57 | 3.00 | 25.24 | -0.09 |
| | 14.65 | 3.23 | -16.41 | -7.02 | 18.64 |
| | -13.88 | -2.93 | -10.89 | -0.89 | 25.96 |
| $\sigma_S(kw)$ | -17.65 | 1.44 | -0.96 | -5.29 | -15.44 |
| | -14.86 | 8.29 | -0.04 | -14.56 | -6.29 |
| | 16.07 | 2.62 | 10.55 | 12.12 | -2.02 |
| | -13.33 | -8.20 | 12.18 | 15.33 | 11.86 |
| $\mu_S(sw)$ | -16.63 | -1.01 | -15.77 | -1.44 | 3.40 |
| | -14.13 | 9.34 | 12.54 | 2.70 | 4.30 |
| | 10.76 | 2.67 | -25.98 | -8.24 | -0.87 |
| | -11.12 | -11.10 | -19.40 | -7.60 | -8.99 |
| $\sigma_S(sw)$ | -17.33 | -3.63 | -10.39 | -3.32 | -13.62 |
| | -14.66 | 8.57 | 9.61 | -12.50 | 2.54 |
| | 14.71 | -1.60 | -6.47 | 10.47 | -34.69 |
| | -9.94 | -15.73 | 5.95 | 18.38 | -20.87 |
| λ | 41.84 | 21.92 | 14.33 | 10.78 | 6.12 |
| | 44.48 | 24.98 | 13.88 | 6.33 | 4.86 |
| | 42.46 | 23.91 | 16.07 | 7.14 | 5.46 |
| | 49.26 | 25.87 | 9.83 | 6.19 | 4.62 |

TABLE S361. PCA formation TAG: 17

SII. HISTOGRAMS OF EXISTENT AND INCIDENT WORDS

See subsection IV L, and Figures S1-S5 for discussion and directions.

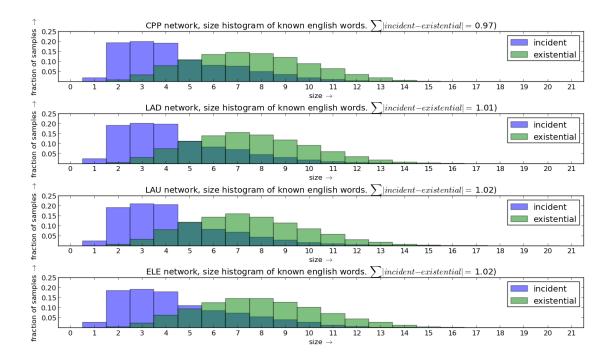


FIG. S1. Size of words that are known in English. Crossing of incident and existential sizes is around 5 (Figure S2 shows a shift to length 6-7 when consider only non stopwords). Words with three letters have maximum incidence, while most words have 7 letters. See subsection IVL for discussion and directions.

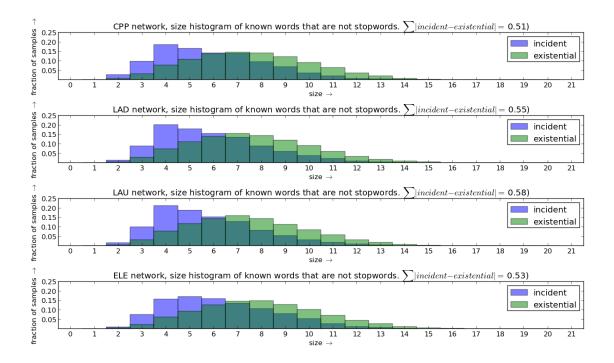


FIG. S2. Size of words that are known in English and are not stopwords. Crossing of incident and existential sizes is around 6-7 (figure S1 shows a shift to length 5 when considered stopwords). In this case, words with 4 letters have maximum incidence, while most words still have 7 letters. Exception for ELE, which exhibits maximum incidence of words with 5 letters and most words having 8 letters, which might be associated with ELE network typology discussed in tables ?? and . See subsection IV L for discussion and directions.

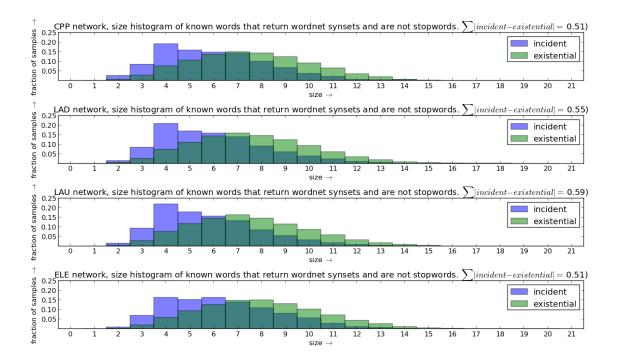


FIG. S3. Size of words that are known, are not stopwords and have synsets. Resembles figure S2. Stopword sizes histogram are in figure S4. Differences suggests ≈ 0.5 might be constant. LAD and LAU exquisite vocabulary (GNU/Linux, programming, sound/signal processing, music) might be responsible for higher difference of distributions. See subsection IV L for discussion and directions. See subsection IV L for discussion and directions.

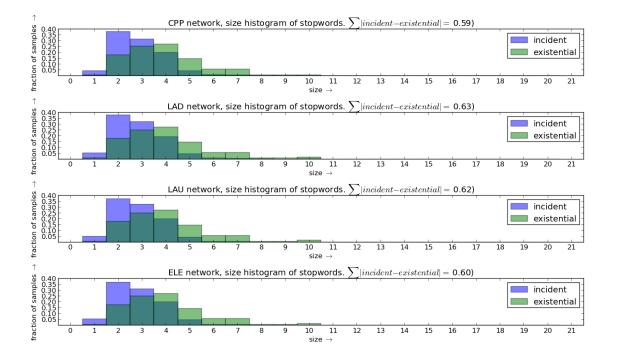


FIG. S4. Size histogram of stopwords. Stopwords with two letters are the most frequent, while most of them have four letters. Differences in distribution seem stable around ≈ 0.6 . See subsection IV L for discussion and directions.

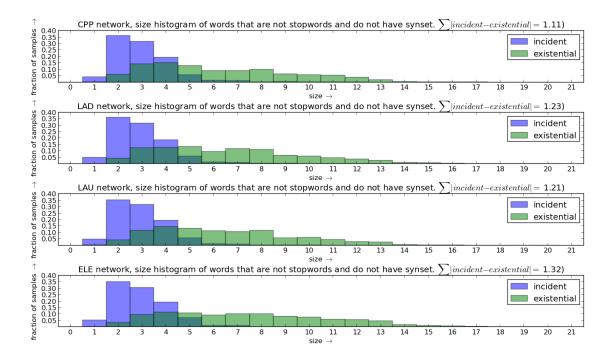


FIG. S5. Size histogram of known English words that are not stopwords and do not return synsets. Differences in distribution suggests less stable behavior, with high incidence of few words high number of existing words with many letters. Observe difference ≥ 1 , as observed only with all known words, but even higher. See subsection IVL for discussion and directions.