BENFORD'S LAW FROM 1881 TO 2006:

A BIBLIOGRAPHY

EDITED BY

WERNER HÜRLIMANN

Feldstrasse 145 CH-8004 Zürich

E-mail: <u>whurlimann@bluewin.ch</u>
Homepage: <u>www.geocities.com/hurlimann53</u>

July 5, 2006

- *Adhikari, A.K.* (1969). Some results on the distribution of the most significant digit. Sankhya, Ser. B, no. 31, 413-420.
- Adhikari, A.K. and B.D. Sarkar (1968). Distributions of most significant digit in certain functions whose arguments are random variables. Sankhya, Ser. B, no. 30, 47-58.
- *Aggarwal, R.* (2005). Persitent puzzles in international finance and economics. The Economic and Social Review 35(3), 241-250.
- Aggarwal, R. and B.M. Lucey (2005). Psycological barriers in gold prices? IIIS Discussion Paper No. 53.
- Albrecht, C. C. and W. S. Albrecht, et al. (2001). Conducting a Pro-Active Fraud Audit: A Case Study. The Journal of Forensic Accounting II: 203-218.
- Albrecht, W.S. and C.C. Albrecht (2002). Root out financial deception. Journal of Accountancy 193(4), 30-34.
- Allaart, P.C. (1997). An invariant-sum characterization of Benford's law. Journal of Applied Probability 34, 288-291.
- Allan, J. and S. Bhattacharya (2002). A short note on financial data set detection using neutrosophic probability. Proceedings of the first international conference on neutrosophy, neutrosophic logic, neutrosophic set, neutrosophic probability and statistics, University of New Mexico, 75-80.
- Amershi, A.H. and E.H. Feroz (2000). The occurrence of Fibanocci numbers in time series of financial accounting ratios. Anomalies or indicators of firm survival, bankruptcy and fraud? An exploratory study. Managerial Finance 26(11), 5-20.
- Antonioni, G. (1991). On the notion of uniform distribution mod 1. Fibonacci Quarterly 29, 230-234.
- Antonioni, G., Grecos G. and K. Nagasaka (2005). Benford's law revisited. Submitted.
- *Arita*, *M*. (2005). Scale-freeness and biological networks. The Journal of Biochemestry 138(1), 1-4.
- Armstrong, J.S. (2000). Extrapolation for time-series and cross-sectional data. Principles of Forecasting: a Handbook for Researchers and Practitioners. Kluwer Publishers.
- Ashcraft, M.H. and K.S. Christy (1995). The Frequency of Arithmetic Facts in Elementary Texts: Addition and Multiplication in Grades 1-6. Journal for Research in Mathematics Education 26(5), 396-421.
- *Baer, M.B.* (2006). Renyi to Renyi Source Coding under Siege. Accepted to ISIT 2006. http://arxiv.org/abs/cs.IT/06050699.
- Baer, M.B. (2006). Prefix coding under Siege. http://arxiv.org/abs/cs.IT/0602067.
- *Bakan P.* (1960). Response tendencies in attempts to generate random binary series. American Journal of Psychology 73: 127-131.
- Barlow, J. L. and Bareiss, E. H. (1985). On Roundoff Error Distributions in Floating Point and Logarithmic Arithmetic. *Computing* 34, 325-347.
- *Becker, P.* (1982). Patterns in listings of failure-rate and MTTF values and listings of other data. IEEE Transactions on Reliability R-31, 132-134.
- *Benford, F.* (1938). The law of anomalous numbers. Proceedings of the American Philosophical Society 78, 551-572.
- Berger, A., Bunimovich, L.A. and T.P. Hill (2005). One-dimensional dynamical systems and Benford's law. Transactions of the American Mathematical Society 357(1), 197-219.
- Berger, A. (2001). Chaos and Chance. De Gruyter, Berlin and New York.
- Berger, A. (2003). Benford's law in power-like nonautonomous dynamical systems. Preprint, Vienna University of Technology.
- *Berger*, A. (2004). Dynamics and digits: on the ubiquity of Benford's law. Preprint, Vienna University of Technology.
- Berger, A. (2005). Multi-dimensional dynamical systems and Benford's law. Discrete and Continuous Dynamical Systems 13(1), 219-237.

- Berger, A. and T.P. Hill (2005). A characterization of Newton maps. Preprint.
- Berger, A. and T.P. Hill (2006). Newton's method obeys Benford's law. American Mathematical Monthly, forthcoming.
- Berton, L. (1995) He's Got Their Number: Scholar Uses Math to Foil Financial Fraud. The Wall Street Journal, July 10.
- *Bhattacharya*, S. (2002). From Kautilya to Benford Trends in Forensic and Investigative Accounting. 9th World Congress of Accounting Historians, Deakin University.
- Bhattacharya, S., Kumar K. and F. Smarandache (2005). Conditional probability of actually detecting a financial fraud a neutrosophic extension to Benford's law. International Journal of Applied Mathematics 17(1), 7-14.
- Bhattacharyya, P., Chatterjee A. and B.K. Chakrabarti (2005). A common origin of the power law distributions in models of market and earthquake. http://arxiv.org/abs/physics/0510038.
- Blackwell, D. and M.A. Girshick (1954). Theory of Games and Statistical Decisions. J. Wiley, 74 (Problem 2.7.2).
- Bogomolny, A. (2004). Zipf's law, Benford's law. http://www.cut-th-knot.org.
- *Bolton, R.J. and D.J. Hand* (1999). Statistical Fraud Detection: a review. Statistical Science 17(3), 235-255.
- *Boyle, J.* (1994). An application of Fourier series to the most significant digit problem. American Mathematical Monthly 101, 879-886.
- Brady, W.G. (1978). More on Benford's law. Fibonacci Quarterly 16, 51-52.
- *Brown, J. and R. Duncan* (1970). Modulo one uniform distribution of the sequence of logarithms of certain recursive sequences. Fibonacci Quarterly 8, 482-486.
- *Brown, P. and J. Mitchell* (2004). Culture and stock price clustering: evidence from the peoples' republic of China. Preprint.
- *Brown, R.J.C.* (2005). Benford's law and the screening of analytical data: the case of pollutant concentrations in ambient air. The Analyst 130, 1280-1285.
- *Browne, M.W.* (1998). Following Benford's law, or looking out for no. 1. New York Times, August 4, 1998.
- Brunell, T.L. and A. Glazer (2001). Rational response to irrational attitudes: the level of the gasoline tax in the United States. Journal of Policy Analysis and Management 20(4), 761-764.
- Buck, B., Merchant, A. and S. Perez (1993). An illustration of Benford's first digit law using alpha decay half lives. European Journal of Physics 14, 59-63.
- Bumby, R. and E. Ellentuck (1969). Finitely additive measures and the first digit problem. Fundamenta Mathematicae 65, 33-42.
- Burke, J. and E. Kincanon (1991). Benford's law and physical constants: the distribution of initial digits. American Journal of Physics 59, 952.
- *Burke*, *S.D.* (2001). Bariers in U.S. Benchmark bond yields. Preprint, The University of British Columbia, Vancouver.
- Busta, B. and R. Sundheim (1992). Tax return numbers tend to obey Benford's law. Center for Business Research Working Paper No. W93-106-94, St. Cloud State University, St. Cloud, Minnesota.
- Busta, B. and R. Weinberg (1998). Using Benford's law and neural networks as a review procedure. Managerial Auditing Journal 13(6), 356-366.
- Buyse, M. et al. (1999). The role of biostatistics in the prevention, detection and treatment of fraud in clinical trials. Statistics in Medicine 18(24), 3435-3451.
- Caneghem, T.V. (2004). The impact of audit quality on earnings rounding-up behaviour: some UK evidence. European Accounting Review 13(4), 771-786.
- *Canessa*, *E.* (2003). Theory of analogous force on number sets. To appear in Physica A. http://arxiv.org/abs/cond-mat/0307703.

- Carslaw, C. (1988) Anomalies in Income Numbers: Evidence of Goal Oriented Behavior. The Accounting Review LXIII, No. 2, 321-327.
- *Chapanis*, A. (1953). Random-number guessing behavior. The American Psychologist 8: 332.
- Chernoff, H. (1981). How to beat the Massachusetts numbers game. Math. Intel. 3: 166-172.
- Cho, M.J., Eltinge, J.L. and D. Swanson (2003). Inferential methods to identify possible interviewer fraud using leading digit preference patterns and design effect matrices. Proceedings of the American Statistical Association.
- Christensen, J.A. and J.R. Byington (2003). The computer: an essential fraud detection tool. Journal of Corporate Accounting & Finance 14(5), 23-27.
- Cigler, J. (1964). Methods of summability and uniform distribution mod 1. Compositio Mathematicae 16, 44-51.
- Cigler, J. and G. Heimberg (1961). Neuere Entwicklungen der Theorie der Gleichverteilung. Jahresbericht der Deutschen Mathematiker Vereinigung 64, 1-50.
- *Cohen, D.* (1976). An explanation of the first digit phenomenon. Journal of Combinatorial Theory, Ser. A 20, 367-370.
- *Cohen, D. and T. Katz* (1984). Prime numbers and the first digit phenomenon. Journal of Number Theory 18, 261-268.
- Cong, L. and Z. Li (2004). On Wilson's theorem and Polignac conjecture. http://arxiv.org/abs/math.NT/0408018.
- Cleary, R. and J.C. Thibodeau (2005). Applying digital analysis using Benford's law to detect fraud: the dangers of type I errors. Auditing: a Journal of Practice & Theory 24, 77-81.
- Crumbley, L.D. (2002). The Big R. An Internal Auditing Action Adventure. IAA books.
- *Dallacasa, F. and V. Dallacasa* (2006). Temporal behaviour of stock data from Benford's law. 5th Int. Conference APLIMAT, Slovak University of Technology, Bratislava.
- Das, S. and H. Zhang (2001). The stock market's under-reaction to rounding-up in EPS. Preprint.
- Davis, B. (1976). Some remarks on initial digits. Fibonacci Quarterly 14, 13-14.
- *Deakin, M.A.B.* (1993). Another derivation of Benford's law. Australian Mathematical Society Gazette 20, 162-163.
- Debreceny, R., Lee S.-L., Neo, W. and J. Shuling Toh (2005). Employing generalized audit software in the financial services sector: challenges and opportunities. Managerial Auditing Journal 20(6), 605-618.
- De Ceuster, M.J.K., Dhaene, G. and T. Schatteman (1998). On the hypothesis of psychological barriers in stock markets and Benford's law. Journal of Empirical Finance 5(3), 263-279.
- *De Marchi, S. and J.T. Hamilton* (2006). Assessing the accuracy of self-reported data: an evaluation of the toxics release inventory. Journal of Risk and Uncertainty 32, 57-76.
- *Diaconis*, *P*. (1977). The distribution of leading digits and uniform distribution mod 1. Annals of Probability 5, 72-81.
- Diaconis, P. and D. Freedman (1979). On rounding percentages. Journal of the Ameican. Staistical. Association 74, 359--364.
- *Diaconis*, *P.* (2002). G.H. Hardy and Probability??? Bulletin of the London Mathematical Society 34, 385-402.
- *Dickinson, J.R.* (2002). A universal mathematical law criterion for algorithmic validity. Developments in Business Simulation and Experiential Learning 29, 29-33.
- Diekmann, A. (2002). Sources of bias and quality of data in social science research. Institute of Technology Assessment (ITA) Working Paper No. ITA-02-04. Available at SSRN: http://ssrn.com/abstract=518402.
- *Diekmann, A.* (2005). Not the first digit! Using Benford's law to detect fraudulent scientific data. Preprint ETHZ.

- *Doepp, M. and G. Edelmann* (2003). Klinische Evaluation der Häufigkeitsverteilungsanalyse biologischer Daten. Erfahrungsheilkunde.
- *Dominguez, M.P. and J.D.A. Burguillo* (1999). El primer digito significativo. Revista Epsilon de la S.A.E.M. Thales, No. 45, Vol. 15(3), 339-351.
- *Dorogovtsev, S.N., Mendes, J.F.F. and J.G. Oliveira* (2006). Frequency of occurrence of numbers in the World Wide Web. Physica A 360, 548. http://arxiv.org/abs/physics/0504185.
- *Doucouliagos, C.* (2004). Number preference in Australian stocks. Applied Financial Economics 14(1), 43-54.
- *Doucouliagos*, *C.* (2005). Price exhaustion and number preference: time and price confluence in Australian stock prices. The European Journal of Finance 11(3), 207-221.
- *Drake*, *P.D. and M.J. Nigrini* (2000). Computer assisted analytical procedures using Benford's law. Journal of Accounting Education 18, 127-146.
- *Drmota, M. and R.F. Tichy* (1997). Sequences, Discrepancies and Applications. Lecture Notes in Mathematics 1651, 276.
- Dubinsky, B. (2001). Math formula fights fraud. Legal Times, vol. XXIV(9).
- *Duncan, R.L.* (1967). An application of uniform distribution to Fibonacci numbers. Fibonacci Quarterly 5, 137-140.
- Duncan, R.L. (1969). A note on the initial digit problem. Fibonacci Quarterly 7(5), 474-475.
- *Duran, J.P.* (1974). Almost-convergence, summability and ergodicity. Canadian Journal of Mathematics 26, 372-387.
- Durtschi, C., Hillison, W. and C. Pacini (2004). The effective use of Benford's law to assist in detecting fraud in accounting data. Journal of Forensic Accounting 1524-5586/Vol. V, 17-34.
- *Engel, H.-A. and C. Leuenberger* (2003). Benford's law for exponential random variables. Statistics and Probability Letters 63(4), 361-365.
- Ettredge, M.L. and R.P. Srivastava (1999). Using digital analysis to enhance data integrity. Issues in Accounting Education 14(4), 675-690.
- Feldstein, A. and R. Goodman (1976). Convergence estimates for the distribution of trailing digits. Journal of the ACM 23(2), 287-297.
- Feldstein, A. and P.R. Turner (1986). Overflow, underflow and severe loss of significance in floating-point addition and substruction. IMA J. on Numerical Analysis 6, 241-251.
- *Feller*, W. (1971). An Introduction to Probability Theory and Its Applications (2nd ed.), vol. II. J. Wiley, 63.
- *Fairthorne, R.A.* (1969). Empirical hyperbolic distributions (Bradford-Zipf-Mandelbrot) for bibliometric description and prediction. Journal of Documentation 61(2), 171-193.
- *Filipponi, P.* (1994). F_n and L_n cannot have the same initial digit. Pi Mu Epsilon Journal 10.1, 5-6.
- Filipponi, P. and R. Menicocci (1995). Some probabilistic aspects of the terminal digits of Fibonacci. Fibonacci Quarterly 33, 325-331.
- *Fiorito, G., Musmeci, R. and M. Strano* (1993). Uniform distribution and applications to a class of recurring series. Matematiche (Catania) 48, 123-133.
- *Flehinger*, *B.-J.* (1966). On the probability that a random integer has initial digit A. American Mathematical Monthly 73, 1056-1061.
- Florack, L. (1999). Visual representations embodying spacetime structure. University Utrecht.
- *Franel, J.* (1917). A propos des tables de logarithmes. Festschrift der Naturforschenden Gesellschaft in Zürich Vierteljahrsschrift 62, 286-295.
- *Friedberg, S.H.* (1984). The distribution of first digits. College Mathematical Journal 15(2), 120-125.
- *Fuchs, A. and G. Letta* (1994). Le problème du premier chiffre décimal pour les nombres premiers. Rend. Acad. Naz. Sci. Detta XL 18, 81-87.

- Furlan, L.V. (1948). Das Harmoniegesetz der Statistik: Eine Untersuchung über die metrische Interdependenz der sozialen Erscheinungen. Basel, Verlag für Recht und Gesellschaft A-G, xiii:504.
- Furry, W.H. and H. Hurwitz (1945). Distribution of numbers and distribution of significant figures. Nature 155, 52-53.
- Garcia-Berthou, E. and C. Alcaraz (2004). Incongruence between test statistics and P values in medical papers. BMC Medical Research Methodology 4(13).
- *Geiringer*, *H.* (1948). Review of L.V. Furlan's book. Journal of the American Statistical Association 43, 325-328.
- Gelman, A. and D. Nolan (2002). Teaching Statistics: a bag of tricks. Oxford University Press.
- Gent, I. and T. Walsh (2001). Benford's law. Preprint.
- *Geusebroek, J.-M. and A.W.M. Smeulders* (2002). A physical explanation for natural image statistics. Proceedings of the 2nd International Workshop on Texture.
- Geyer, C.L. and P.P. Williamson (2004). Detecting fraud in data sets using Benford's law. Communications in Statistics: Simulation and Computation 33(1), 229-246.
- Giles, D.E. (2006). Benford's law and naturally occurring prices in certain ebaY auctions. Econometrics Working Paper EWP0505, University of Victoria, Department of Economics. Forthcoming in Applied Economics Letters.
- *Gini*, *C*. (1957). Sulla frequenza delle cifre iniziali die numeri osservati. Bull. Inst. Internat. Stat., 29th session, vol. 35, 2ème Livraison, 57-76.
- Good, I.J. (1965). Letter to the Editor. The American Statistician 19, 43.
- Good, I.J. (1986). Some statistical applications of Poisson's work. Statistical Science 1(2), 157-170.
- *Goto, K.* (1992). Some examples of Benford sequences. Mathematical Journal of the Okayama University 34, 225-232.
- Gottwald, G.A. and M. Nicol (2002). On the nature of Benford's law. Physica A: Statistical Mechanics and iits Applications 303(3-4), 387-396.
- Goutsmit, S.A. and W.H. Furry (1944). Significant figures of numbers in statistical tables. Nature 154, 800-801.
- Goutsmit, S.A. (1977). Pitfalls in elementary probability. Proceedings of the American Philosophical Society 121(2), 188-189.
- Green, B. P. and J. H. Choi (1997). Assessing the risk of management fraud through neural network technology. Auditing: A Journal of Practice and Theory Vol. 16, No. 1 (Spring): 14 28.
- Green, L. (1998). Numerology for accountants. Journal of Accountancy.
- *Grekos, G. and R. Giuliano-Antonini* (2003). Regular sets and conditional density: an extension of Benford's law. Journées Arithmétiques XXIII, Graz, July 6-12, 2003.
- *Griffiths, T.L. and M.L. Kalish* (2002). A multidimensional scaling approach to mental multiplication. Memory & Cognition 30(1), 97-106.
- Guillou, A. and P. Hall (2001). A diagnostic for selecting the threshold in extreme value analysis. Journal of the Royal Statistical Society, Series B, vol. 63(2), 293-305.
- *Haber*, *S.* (1983). Parameters for integrating periodic functions of several variables. Mathematics of Computation 41, no. 163, 115-129.
- Hamming, R. (1976). On the distribution of numbers. Bell Syst. Tech. J. 49, 1609-1625.
- Havil, J. (2003). Benford's Law. §14.2 in <u>Gamma: Exploring Euler's Constant.</u> Princeton, NJ: Princeton University Press, pp. 145-155.
- Herrmann, D. and W.B. Thomas (2005). Rounding of analyst forecasts. The Accounting Review 80(3), 805-823.
- *Herzel, A.* (1957). Sulla distribuzione delle cifre iniziali die numeri statistici. Atti della XV e XVI Riunione. Societa Italiana di Statistica, Rome.

- *Hassan, B.* (2002). Assessing data authencity with Benford's law. Information Systems Control Journal 6.
- Hassan, B. (2003). Examining data accuracy and authenticity with leading digit frequency analysis. Industrial Management & Data Systems 103(2), 121-125.
- Higham, N.J. (2002). Accuracy and stability of numerical algorithms, 2nd edition, Society for Industrial and Applied Mathematics, Philadelphia.
- *Hill, T.P.* (1988). Random-number guessing and the first digit phenomenon. Psychological Reports 62: 967-971.
- *Hill, T.P.* (1995a). Base-invariance implies Benford's law. Proceedings of the American Mathematical Society 123, 887-895.
- Hill, T.P. (1995b). The significant-digit phenomenon. Amer. Math. Monthly 102, 322-326.
- *Hill, T.P.* (1995c). A statistical derivation of the significant-digit law. Statistical Science 10, 354-363.
- Hill, T.P. (1996). A note on distributions of true versus fabricated data. Preprint.
- Hill, T.P. (1997). Benford's law. Encyclopedia of Mathematics Supplement, vol. 1, 102.
- Hill, T.P. (1998). The first digit phenomenon. The American Scientist 10(4), 354-363.
- *Hill, T.P.* (1999a). Le premier chiffre significatif fait sa loi. La Recherche Hors Série, no. 2, 72-76.
- *Hill, T.P.* (1999b). La primera cifra significativa dicta su ley. Mundo Cientifico num. 199 (marzo), 56-59.
- Hill, T.P. (1999c). The difficulty of faking data. Chance 26, 8-13.
- Hill, T.P. (2002). Recent applications of Benford's law. Conference, Leiden University.
- Hill, T.P. and K. Schürger (2005). Regularity of digits and significant digits of random variables. Journal of Stochastic Processes and their Applications 115, 1723-1743.
- *Hlawka, E.* (1983). Gleichverteilung und das Konvergenzverhalten von Potenzreihen am Rande des Konvergenzkreises. Manuscr. Math. 44, 231-263.
- *Hoare, G.T.Q. and E. Wright* (1986). The distribution of first significant digits. Math. Gazette 70, 34-37.
- *Hobza, T. and I. Vajda* (2001). On the Newcomb-Benford law in models of statistical data. Revista Matematica Complutense XIV(2), 407-420.
- *Horst, D. van der* (2002). Spatial targeting of multi-purpose forestry. PhD Thesis, University of Aberdeen.
- Hoyle, D.C., Rattray, M., Jupp, R. and A. Brass (2002). Making sense of microarray data distributions. Bioinformatics 18(4), 576-584.
- Hürlimann, W. (2003). A generalized Benford law and its application. Advances and Applications in Statistics 3(3), 217-228.
- Hürlimann, W. (2004). Integer powers and Benford's law. International Journal of Pure and Applied Mathematics 11(1), 39-46.
- Hürlimann, W. (2006). Generalizing Benford's law using power laws: application to integer sequences. Preprint http://arxiv.org.
- *Ide, K.D. and D. Sornette* (2002). Oscillatory finite-time singularities in finance, population and rupture. Physica A 307(1-2), 63-106. http://arxiv.org/abs/cond-mat/0106047.
- *Irmay, S.* (1997). The relationship between Zipf's law and the distribution of first digits. Journal of Applied Statistics 24(4), 383-394.
- *Iyengar, S.S., Rajagopal, A.K. and V.R.R. Uppuluri* (1983). String patterns of leading digits. Applied Mathematics and Computation 12(4), 321-337.
- *Jager, H. and P. Liardet* (1988). Distribution arithmétiques des dénominateurs de convergents de fractions continues. Indagationes Mathematicae 50, 181-197.
- Jamain, A. (2001). Benford's Law. Master Thesis. Imperial College of London and ENSIMAG.
- Jansen, C.J.M. and M.M.W. Pollman (2001). On round numbers: pragmatic aspects of

- numerical expressions. Journal of Quantitative Linguistics 8(3), 187-201.
- Janvresse, E. and T. de la Rue (2004). From uniform distribution to Benford's law. Journal of Applied Probability 41(4), 1203-1210.
- *Jech*, *T*. (1992). The logarithmic distribution of leading digits and finitely additive measures. Discrete Mathematics 108, 53-57.
- *Jolion, J.-M.* (2001). Images and Benford's law. Journal of Mathematical Imaging and Vision 14(1), 73-81.
- *Jolissaint*, *P.* (2005). Loi de Benford, relations de recurrence et suites équidistribuées. Preprint Université de Neuchâtel, paul.jolissaint@unine.ch.
- Judge, G. And L. Schechter (2006). Detecting problems in survey data using Benford's law. Preprint.
- *Juncosa, M.L.* (1971). Statistical concepts in computations in computational mathematics. Naval Research Logistics Quarterly 18, 239-241.
- Kanemitsu, S., Nagasaka, K., Rauzy, G. and J.-S. Shiue (1988). On Benford's law: the first digit problem. Lecture Notes in Mathematics 1299, 158-169.
- *Katz, T. and D. Cohen* (1986). The first digit property for exponential sequences is independent of the underlying distribution. Fibonacci Quarterly 24(1), 2-7.
- *Kinney, W.R., Jr.* (1978). ARIMA and regression in analytical review: An empirical test. Accounting Review, Vol. 53, (January): 48-60.
- Kinnunen, J. and M. Koskela (2002). Who is miss world in cosmetic earnings management? An analysis of small upward rounding of net income numbers among 18 countries. Available at http://ssrn.com/abstract=292806.
- *Kisets*, *D.* (2006). Informational optimality of decimal numeration system. Academic Open Internet Journal, vol. 6.
- *Klebanov, L. and A. Yakovlev* (2006). Treating expression levels of different genes as a sample in microarray data analysis: is it worth a risk? Statistical Applications in Genetics and Molecular Biology 5(1), Article 9.
- *Knechel, W.* (1986). A simulation study of the relative effectiveness of alternative analytical review procedures. Decision Sciences Vol. 17: 376-394.
- *Knechel, W.* (1988). The effectiveness of statistical analytical review as a substantive auditing procedure: A simulation analysis. The Accounting Review Vol. 63, No. 1 (January): 74 95.
- *Knuth, D.* (1969). The Art of Computer Programming, vol. 2, 219-229. (2nd ed.). Addison-Wesley, Reading, MA, 239-249. (3rd ed.) (1998), 254-262.
- *Knudsen, T.* (2001). Zipf's law for cities and beyond: the case of Denmark. The American Journal of Economics and Sociology 60(1), 123.
- *Kochanski, G.* (2004). MAP estimation of continuous parameters, leading to estimating probabilities of unseen things. Preprint.
- *Kollath-Romano, P.* (2004). On the distribution of significant digits in numbers. Preprint, Rensselaer Polytechnic Institute.
- Komulainen T. (2003). Self-similarity and power laws. Session 10, Laboratory of Process Control and Automation, Helsinki University of Technology.
- Konheim, A.G. (1965). Mantissa distribution. Mathematics of Computation 19, 143-144.
- Konishi, T. (2004). Three-parameter lognormal distribution ubiquitously found in cDNA microarray data and its application to parametric data treatment. BMC Bioinformatics 5:5.
- *Kontorovich, A.V. and S.J. Miller* (2005). Benford's law, values of L-functions and the 3x+1 problem. Acta Arithmetica 120, 269-297. http://arxiv.org/abs/math.NT/0412003.
- *Koskivaara, E.* (2004). Artificial neural networks in analytical review procedures. Managerial Auditing Journal 19(2), 191-223.
- Kozlov, V.V. (2005). Weighted averages, uniform distribution, and strict ergodicity. Russian

- Mathematical Surveys 60(6), 1121-1146.
- *Kreifelts*, *Th.* (1973). Optimale Wahl für eine Gleitkomma-Arithmetik. Computing 11(4), 353-363.
- Kreiner, W.A. (2002). First digit law. Preprint, Universität Ulm.
- Kreiner, W.A. (2003). On the Newcomb-Benford law. Z. Naturforschung 58a, 618-622.
- *Kuipers, L. and J.-S. Shiue* (1973). Remark on a paper by Duncan and Brown, etc. Fibonacci Quarterly 11, 292-294.
- Kuipers, L. and H. Niederreiter (1973). Uniform Distribution of Sequences. J. Wiley.
- *Kulikova, A.A. and Y.V. Prokhorov* (2005). Completely asymmetric stable laws and Benford's law. Theory of Probability and its Application 49(1), 163-169.
- *Kumar, K. and S. Bhattacharya* (2002). Benford's law and its application in financial fraud detection. Advances in Financial Planning and Forecasting 11, 57-70.
- Kunoff, S. (1987). N! has the first digit property. Fibonacci Quarterly 25, 365-367.
- *Lagarias, J.C. and K. Soundararajan* (2005). Benford's law for the 3x+1 function. http://arxiv.org/abs/math.NT/0509175.
- Laherrère, J. (1996). Distributions de type "fractal parabolique" dans la Nature. Comptes Rendus de l 'Académie des Sciences 322, Série II a, no. 7, 535-541.
- *Lebiere, Ch.* (1999). The dynamics of cognition: an ACT-R model of cognitive arithmetic. Kognitionswissenschaft 8(1), 5-19.
- *Leemis, L.M., Schmeier, B.W. and D.L. Evans* (2000). Survival distributions satisfying Benford's law. The American Statistician 54(3), 1-6.
- *Lei*, *S.*, *Smith*, *M.* and *G.* Succi (2000). Empirical investigation of a novel approach to check the integrity of software engineering measuring processes. The 22nd International Conference on Software Engineering, Limerick, Ireland.
- Leibon, G. (2004). Google numbers. Chance News 13.03. www.dartmouth.edu/.
- *Ley, E.* (1996). On the peculiar distribution of the U.S. Stock Indices Digits. The American Statistician 50(4), 311-313.
- Ley, E. and H. Varian (1994). Are there psychological barriers in the Dow-Jones index? Applied Financial Economics 4, 217-224.
- Leydesdorff, L. and S. Bensman (2006). Classification and power laws: the logarithmic transformation. Journal of the American Society for Information Science and Technology. Forthcoming.
- *Li*, *Z.*, *Cong L. and H. Wang* (2004). Discussion on Benford's law and its application. http://arxiv.org/abs/math.ST/0408057.
- Lindsay, D.H., Foote, P.S., Campbell, A. and D.R. Reilly (2004). Detecting fraud in the data using automatic intervention detection. Fraud Magazine. A Publication of the Association of Certified Fraud Examiners, January/February 2004.
- Livio, M. (2002). The Golden Ratio: The Story of Phi, the World's Most Astonishing Number. New York: Broadway Books, pp. 232-236.
- Loebbecke, J.K. and P.J. Steinbart (1987). An investigation of the use of preliminary analytical review to provide substantive audit evidence. Auditing: A Journal of Practice and Theory Vol. 6, No. 2 (Spring): 74 86.
- Logan, J.L. and S.A. Goudsmit (1978). The first digit phenomenon. Proceedings of the American Philosophical Society 122(4), 193-197.
- Lowe, T., Murphy, S. and J. Hayward (1999). The first digit law. Preprint.
- *Lu, F. and J.E. Boritz* (2006). Building a case for fraud using Benford's law with reinforcement learning. Uncertainty in Artificial Intelligence: Proceedings of the 22nd Conference. Submitted.
- *Lu, F., Boritz J.E. and H.D. Covvey* (2006). Adaptive fraud detection using Benford's law. Appears in Advances in Artificial Intelligence: 19th Conference of the Canadian Society for Computational Studies of Intelligence.

- *Lu, F. and J.E. Boritz* (2005). Detecting fraud in health insurance data: learning to model incomplete Benford's law distributions. 16th European Conference on Machine Learning, 633-640.
- Lu, T., Costello, C.M., Croucher, P.J.P., Häsler, R., Deuschl, G. and S. Schreiber (2005). Can Zipf's law be adapted to normalize microarrays? BMC Bioinformatics 6:37.
- *Lucey, B.M.* (2002). Psychological barriers in gold prices? Preprint, School of Business Studies, Trinity College, University of Dublin.
- Macon, N. and L. Moser (1950). On the distribution of first digits of powers. Scripta Mathematica 16, 290-291.
- Manaris, B., Romero, J., Machado, P., Krehbiel, D., Hirzel, T., Pharr, W. and, R.B. Davis (2005). Zipf's law, music classification, and aesthetics. Computer Musical Journal 29(1), 55-69.
- Manaris, B., Pellicoro, L., Pothering, G. and H. Hodges (2006). Investigating esperanto's statistical proportions relative to other languages using neural networks and Zipf's law. Proceeding (502) Artificial Intelligence and Applications. Acta Press.
- Matkovic, K., Neumann, L., Neumann, A., Psik, T. and W. Purgathofer (2005). Global contrast factor: a new approach to image contrast. In: Computational Aesthetics in Graphics, Visualization and Imaging. The Eurographics Association.
- *Matthews*, *R*. (1999). The Power of One. New Scientist 163, July 10, 26-30. http://www.newscientist.com/ns/19990710/thepowerof.html.
- *McKee*, *T.E.* (2006). Increase your fraud auditing effectiveness by being unpredictable! Managerial Auditing Journal 21(2), 224-231.
- *McMinn*, *D*. (2003). Fibonacci Lucas numbers and moon-sun cycles. www.davidmcminn.com/pages/fiblucas.htm.
- *Mendez, P.F. and F. Ordonez* (2005). Scaling laws from statistical data and dimensional analysis. Journal of Applied Mechanics.
- Miller, S.J. (2004). Some thoughts on Benford's law. Preprint.
- *Miller, S.J. and R. Takloo-Bighash* (2005). The philosophy of square root cancellation. From: An Invitation to Modern Number Theory.
- *Miller, S.J. and M.J. Nigrini* (2006). Differences between independent variables and almost Benford behaviour. Arxiv preprint math.PR/0601344 at www.arxiv.org.
- *Mitchell, J.* (2001). Clustering and psychological barriers: the importance of numbers. Journal of Futures Markets 21(5), 395-428.
- Müller, M. (2003). Anwendungsmöglichkeiten der Ziffernanalyse in der Prüfungspraxis mit Schwerpunkt auf Benford's Law. Diplomarbeit Wirtschaftsuniversität, Österreich.
- Murphy, J., Baxter, R., Eyerman, J., Cunningham, D. and J. Kennet (2004). A system for detecting invertiewer falsification. RTI International at 59th Annual AAPOR Conference, Phoenix, Arizona.
- Moon, P. (1936). The Scientific Basis of Illuminating Engineering. McGraw Hill, 420 ff.
- *Morters, P.* (2001). Benford's Gesetz über die Verteilung der Ziffern. Habilitationsvorlesung. Kaiserslauten und Bath.
- Nagasaka, K. (1984). On Benford's law. Annals of the Institute of Mathematics 36, 337-352.
- Nagasaka, K. and J.S. Shiue (1987). Tsukuba Journal of Mathematics 11, 341-351.
- Nagasaka, K., Kanemitsu, S. and J.S. Shiue (199?). Benford's law: The logarithmic law of first digit. Journal of Number Theory 51, 361-391.
- Nagasaka, K. (2005). Benford's law with different basis. Journées Arithmétiques XXIV, Marseilles, July 4-8, 2005.
- *Neuringer*, *A.* (1986). Can people behave "randomly"? the role of feedback. Journal of Experimental Psychology 115: 62-75.
- *Newcomb*, *S.* (1881). Note on the frequency of use of the different digits in natural numbers. American Journal of Mathematics 4, 39-40.

- Nguyen, H.T., Kreinovich, V. and L. Longpre (2003). Dirty pages of logarithm tables, lifetime of the universe, and subjective (fuzzy) probabilities on finite and infinite intervals. The 12th IEE International Conference on Fuzzy Systems. FUZZ'03. Fuzzy Systems 1, 67-73.
- *Niederreiter, H. and W. Philipp* (1973). Berry-Esseen bounds and a theorem of Erdös and Turàn on uniform distribution mod 1. Duke Mathematical Journal 40, 633-649.
- Nigrini, M. J. (1992). The Detection of Income Tax Evasion Through an Analysis of Digital Frequencies. Ph.D. thesis. Cincinnati, OH: University of Cincinnati.
- *Nigrini, M. J.* (1994). Using digital frequencies to detect fraud. The White Paper (apr/may) 3-6.
- *Nigrini, M.* (1996). A taxpayer compliance application of Benford's law. Journal of the American Taxation Association 1, 72-91.
- Nigrini, M. J. (1997). Digital Analysis Tests and Statistics. Allen, Texas: The Nigrini Institute, Inc. Mark_Nigrini@classic.msn.com
- Nigrini, M.J. (1999a). I've got your number. Journal of Accountancy 187, 79-83.
- Nigrini, M.J. (1999b). Adding value with digital analysis. The Internal Auditor 56(1), 21-23.
- Nigrini, M.J. (1999c). Peculiar patterns of first digits. IEEE Potentials 18(2), 24-27.
- Nigrini, M.J. (2000a). Digital Analysis Using Benford's Law: Tests Statistics for Auditors. Vancouver, Canada: Global Audit Publications.
- Nigrini, M.J. (2000b). Continuous Auditing. Preprint.
- Nigrini, M.J. and L. Mittermaier (1997). The use of Benford's law as an aid in analytical procedures. Auditing: A Journal of Practice and Theory 16(2), 52-67.
- *Nigrini, M.J.. and S.J. Miller* (2006). Benford's law applied to hydrology data results and relevance to other geophysical data. Preprint.
- Niskanen, J. and M. Keloharju (2000). Earnings cosmetics in a tax-driven accounting environment: evidence from Finnish public firms. European Accounting Review 9(3), 443-452.
- *Pavlov*, A.I. (1981). On the distribution mod one and Benford's law. Izv. Akad. Nauk 45, 760-774.
- *Pavlov*, A.I. (1982). On the distribution of fractional parts and Benford's law. Izvestiya: Mathematics 19(1), 65-77.
- *Patil, S.A. and V.R.R. Uppulari* (1986). The distribution of first j digits. College Mathematical Journal 17(3), 240-243.
- Paulos, J.A. (2004). A mathematician plays the stock market. Basic Books.
- *Peter, M.* (2003). The asymptotic distribution of elements in automatic sequences. Theoretical Computer Science 301(1-3), 285-312.
- Peters, J. (1981). An equivalent form of Benford's law. Fibonacci Quarterly 19(1), 74-76.
- *Pietronero, L., Tosatti, E., Tosatti, V. and A. Vespignani* (2001). Explaining the uneven distribution of numbers in nature. Physica A, 293, 297-304.
- *Pinkham, R.S.* (1961). On the distribution of first significant digits. Annals of Mathematical Statistics 32, 1223-1230.
- Poincaré, H. (1912). Calcul des Probabilités. Gauthier-Villars, Paris, 313-320.
- Popescu, I.-I. (2002). On the Lavelette's nonlinear Zipf's law. Web Preprint.
- *Posch*, *P.N.* (2004a). Ziffernanalyse in der Fälschungsaufspürung. Benford's Gesetz und Steuererklärungen in Theorie und Praxis.
- *Posch, P.N.* (2004b). A survey on sequences and distribution functions satisfying Benford's law. Working paper.
- *Posch, P.N. and W.A. Kreiner* (2005). A general approach to digital analysis exemplified by stock market indices. Working paper.
- Radev, D.R. (2004). Weakly supervised graph-based methods for classification. Preprint.
- Raftopoulou, P., Koubarakis, M., Stergiou, K. and P. Triantafillou (2005). Fair resource

- allocation in a simple multi-agent setting: search algorithms and experimental evaluation. Preprint.
- *Raimi, R.A.* (1969a). On the distribution of first significant digits. American Mathematical Monthly 76, 342-348.
- Raimi, R.A. (1969b). The peculiar distribution of first digits. Scientific American, 109-120.
- Raimi, R.A. (1976). The first digit problem. American Mathematical Monthly 83, 521-538.
- *Raimi, R.A.* (1985). The first digit phenomenon again. Proceedings of the American Philosophical Society 129, 211-219.
- *Rodriguez, R.J.* (2004). First significant digit patterns from uniform distributions. The American Statistician 58(1), 64-71.
- Rose, A.M. and J.M Rose (2003). Turn Excel into a financial sleuth: an easy-to-use digital analysis tool can red-flag irregularities. Journal of Accountancy 196.
- *Rosenkrantz, R.D.* (1979). Inference, Method and Decision: Towards a Bayesian Philosophy of Science. Journal of the American Statistical Association 74(367), 740-741.
- Rousseau, R. (2005). Robert Fairthorne and the empirical power laws. Journal of Documentation 61(2), 194-202.
- Salsburg, D. (1997) Digit Preferences in the Bible. Chance 10, No. 4, 46-48.
- Sandron, F. and S.R. Hayford (2002). Do populations conform to the law of anomalous numbers? Population 57(4/5), 755-761.
- Sandron, F. (2002). Les populations suivent-elles la loi des nombres anomaux? Population (French Edition) 57(4/5), 761-768.
- Sarkar, B.P. (1973). An observation on the significant digits of the binomial coefficients and factorials. Sankhya Ser. B, 35, 363-364.
- Saville, A. (2004). Sorry, wrong number. How accounting data are wrong and how the numbers can be fixed. Preprint.
- Schäfer, Ch., Schräpler, J.-P., Müller, K.-R. and G.G. Wagner (2005). Automatic identification of faked and fraudulent interviews in the German SOEP. Schmollers Jahrbuch, Journal of Applied Social Science Studies, vol. 125, 183-193.
- Schatte, P. (1973). Zur Verteilung der Mantisse in der Gleitkommadarstellung einer Zufallsgröße. Z. Angew. Math. Mech. 53, 553-565.
- Schatte, P. (1981). On random variables with logarithmic mantissa distribution relative to several bases. Elektron. Informationsverarbeiting Kybernetik 17, 293-295.
- Schatte, P. (1983a). On the asymptotic uniform distribution of sums reduced mod 1. Math. Nachr. 115, 257-281.
- Schatte, P. (1983b). On H_{∞} -summability and the uniform distribution of sequences. Math. Nachr. 113, 237-243.
- Schatte, P. (1984). On the asymptotic logarithmic distribution of the floating-point mantissas of sums. Math. Nachr. 127.
- Schatte, P. (1987). Some estimates of the H_{∞} -uniform distribution. Monatshefte für Mathematik 103, 233-240.
- Schatte, P. (1988a). On mantissa distributions in computing and Benford's law. Journal of Information Processing and Cybernetics 24, 443-455.
- Schatte, P. (1988b). On the uniform distribution of certain sequences and Benford's law. Math. Nachr. 136, 271-273.
- Schatte, P. (1988c). On a law of the iterated logarithm for sums mod 1 with application to Benford's law. Probability Theory and Related Fields 77, 167-178.
- Schatte, P. (1988d). On a uniform law of the iterated logarithm for sums mod 1 and Benford's law. Lithuanian Mathematical Journal 31(1), 133-142.
- Schatte, P. (1989). On measures of uniformly distributed sequences and Benford's law. Monatshefte für Mathematik 107, 245-256.
- Schatte, P. (1990). On Benford's law for continued fractions. Math. Nachr. 148, 137-144.

- Schatte, P. (1991). On a uniform law of the iterated logarithm for sums mod 1 and Benford's law. Lith. Math. J. 31, 133-142.
- Schatte, P. (1998). On Benford's law to variable base. Statistics and Probability Letters 37, 391-397.
- Schatte, P. and Nagasaka, K. (1991). A note on Benford's law for second order linear recurrences with periodical coefficients. Z. Anal. Anwend. 10, 251-254.
- Schilling, M.F. (1992). Sequential partitioning. American Math. Monthly 99(9), 846-855.
- *Schmidt, R. and R. Lacher* (1984). Probabilistic repeatability among some irrationals. College Mathematics Journal 15(4), 330-332.
- Schräpler, J.-P. and G.G. Wagner (2003). Identification, characteristics and impact of faked interviews in surveys. IZA Discussion paper no. 969.
- Scorse, J. (2000). Does being a "top 10" worst polluter affect facility environmental releases? Evidence from the U.S. release inventory. Preprint.
- Scott, P. and E. Wilkins (1999). Evaluating data mining procedures: techniques for generating artificial data sets. Information and Software Technology. Special Issue on Data Mining 41(9), 579-589.
- Scott, P. and M. Fasli (2001). Benford's law: an empirical investigation and a novel explanation.
- Scott, S.K., Barnard, P.J. and J. May (2001). Specifying executive representations and processes in number generation tasks. The Quarterly Journal of Experimental Psychology: Section A, 54(3), 641-664.
- Seaman, R.S. (2002). Benford's law and and background field errors in data assimilation. Preprint, Bureau of Meteorology Research Centre, Melbourne, Australia.
- Sebastiani, P., Gussoni, E., Kohane, I.S. and M.F. Ramoni (2003). Statistical challenges in functional genomics. Statistical Science 18(1), 33-70.
- Sentance, W.A. (1973). A further analysis of Benford's law. Fibonacci Quarterly 11, 490-494.
- Shaik, J.M. (2005). E-commerce impact: emerging technology electronic auditing. Managerial Auditing Journal 20(4), 408-421.
- Shallit, J. (2003). What this country needs i san 18C Piece. Preprint, Department of Computer Science, University of Waterloo.
- *Shenton, L.R.* (1968). Periodicity and density of modified Fibonacci sequences. Fibonacci Quarterly 6, 109-116.
- *Shragga*, *I.* (1997). The relationship between Zipf's law and the distribution of first digits. Journal of Applied Statistics 24(4), 383-394.
- Skousen, C.J., Guan, L. and T.S. Wetzel (2004). Anomalies and unusual patterns in reported earnings: Japanese managers round earnings. Journal of International Financial Management & Accounting 15(3), 212.
- *Slijepcevic*, *S.* (1988). A note on initial digits of recurrence sequences. Fibonacci Quarterly 36, 305-308.
- Sloane, N. J. A. (2003). Sequences <u>A055439</u>, <u>A055440</u>, <u>A055441</u>, and <u>A055442</u> in: The On-Line Encyclopedia of Integer Sequences. http://www.research.att.com/~njas/sequences/.
- Smith, Stephen W. (2004). An explanation of Benford's law.
- Snyder, M., Curry, J. and A. Dougherty (2001). Stochastic aspects of one-dimensional discrete dynamical systems: Benford's law. Phyxical Review E 64, 1-5.
- Sornette, D. (2002). Why stock markets crash: critical events in complex financial systems. Princeton University Press.
- Sporring, J. (1997). A prior of saliency based pruning algorithms. Preprint, Department of Computer Science, University of Copenhagen.
- *Stadje, W.* (2005). Asymptotic properties of digit sequences of random numbers. Mathematische Nachrichten 278(10), 1209-1229.

- Sundheim, R. and B. Busta (1993). Fibonacci numbers tend to obey benford's law: an extension of Wlodarski and Sentance. Working Paper, St. Cloud State University, St. Cloud, Minnesota.
- Sury, B. (1993). Fractional parts of log p and a digit function. Exp. Math. 11, 381-384.
- Suryanarayana, D. (1981). Note on the functional equation S(m,n)F[n/(m,n)]=F(n)h[n/(m,n)]. Aequationes Mahematicae 23(1), 123-124.
- Swanson, D., Cho M. and J. Eltinge (2003). Detecting possibly fraudulent or error-prone survey data using Benford's law. Proceedings of the American Statistical Association, Section on Survey Research Methods.
- *Taylor, R.N., McEntegart, D.J. and E.C. Stillman* (2002). Statstical techniques to detect fraud and other data irregularities in clinical questionnaire data. Drug Information Journal 36, 115-125.
- *Thomas, J.K.* (1989). Unusual patterns in reported earnings. The Accounting Review LXIV(4), 773-787.
- *Thorp, E. and R. Whitley* (1971). Poincaré's conjecture and the distribution of digits in logarithm tables. Computational Mathematics 23, 233-250.
- *Tichy*, *R.F.* (1985a). Gleichverteilung und zahlentheoretische Ungleichungen II. Anz. Österr. Akad. Wiss., 95-99.
- *Tichy, R.F.* (1985b). Uniform distribution and diophantine inequalities. Monatsh. Math. 99, 147-152.
- *Tichy, R.F.* (1987a). Gleichverteilung zum Summierungsverfahren H_{∞} . Math. Nachr. 131, 119-125.
- *Tichy, R.F.* (1987b). Statistische Resultate über computergerechte Darstellungen von Zahlen. Anz. Österr. Akad. Wiss., 1-8.
- *Tijms, H.* (2004). Understanding Probability: Chance Rules in Everyday Life. Cambridge University Press.
- *Tolle, C., Budzien, J. and R. LaViolette* (2000). Do dynamical systems follow Benford's law? Chaos 10, 331-337.
- *Too*, *Y.H.* (1992). On the uniform distribution modulo one of some log-like sequences. Proc. Japan Acad. A 68, 269-272.
- *Tsao*, *N*. (1974). On the distributions of significant digits and roundoff errors. Communications of the Association for Computing Machinery 17, 269-271.
- *Tsuji, M.* (1952). On the uniform distribution of numbers mod 1. Journal of the Mathematical Society of Japan 4, 313-322.
- *Tune*, *G*. (1964). Response preferences: a review of some relevant literature. Psychological Bulletin 61 (4): 286 302.
- *Turner, P.R.* (1982). The distribution of leading significant digits. IMA Journal on Numerical Analysis 2, 407-412.
- Turner, P.R. (1984). Further results on l.s.d. IMA Journal on Numerical Analysis 4, 225-231.
- *Turner, P.R.* (1987). The distribution of l.s.d. and its implications for computer design. The Mathematical Gazette 71 (march), 26-31.
- *Vardi, I.* (1999). Premiers chiffres significatifs et nombres algébriques. Comptes rendus de l'Académie des sciences, Série I 328, 749-754.
- Varian, H.R. (1972). Benford's law. The American Statistician 26, 65-66.
- *Vogt*, *W*. (2000). Benford's Gesetz : Steuer- und Budgetsündern auf der Spur Zahlen lügen nichts. Schweizer Versicherung 9, 27-29.
- Wallace, W.A. (2002). Assessing the quality of data used for benchmarking and decision-making. The Journal of Government Financial Management 51(3), 16-22.
- Wallis, W.A. and H.V. Roberts (1957). Statistics: A New Approach. The Free Press, Gencoe, Illinois.
- Walthoe, J., Hunt R. and M. Pearson (1999). Looking out for number one. Plus Magazine,

- University of Cambridge, September 1999.
- Washington, L.C. (1981). Benford's law for Fibonacci and Lucas numbers. Fibonacci Quarterly 19, 175-177.
- Weaver, W. and L. Luck (1963). The Theory of Probability. Doubleday Anchor Series, New York, 270-277.
- *Webb*, *W.* (1975). Distribution of the first digits of Fibonacci numbers. Fibonacci Quarterly 13, 334-336.
- Weidenmier, M.L. and T.L. Herron (2004). Selecting an audit software package for classroom use. Journal of Information System 18(1), 95-110.
- Weisstein, Eric W. (1999). Benford's Law. From <u>MathWorld</u>--A Wolfram Web Resource. http://mathworld.wolfram.com/BenfordsLaw.html
- Weyl, H. (1916). Über die Gleichverteilung von Zahlen mod Eins. Mathematische Annalen 77, 313-352.
- Whitney, R.E. (1972). Initial digits for the sequence of primes. American Mathematical Monthly 79, 150-152.
- Whittaker, J.V. (1983). On scale-invariant distributions. SIAM Journal on Applied Mathematics 43(2), 257-267.
- Williamson, J. (2002). Random probability functions. Preprint.
- Włodarski, J. (1971). Fibonacci and Lucas Numbers tend to obey Benford's law. Fibonacci Quarterly 9, 87-88.
- *York, D.* (2000). Auditing technique–Benford's law. Accountancy (July)126, Issue 1283: 126. *Yuan, Y.* (1984). On the least Q-order of convergence of variable metric algorithm.
 - IMA Journal of Numerical Analysis 4(2), 233-239.
- Ylvisaker, D. (1977). Test resistance. J. of the American Statistical Association 72, 551-556.
- Zhipeng Li, L.C. (2004). On Wilson's theorem and Polignac conjecture. http://arxiv.org/abs/math.NT/0408018.