

(Note: This C.V. was originally compiled to conform to a University form, which, like most such institutional templates, is repetitive, clunky, and a little lacking in narrative verve. On the other hand, it is a C.V. and not an autobiography. (For that see my new book - Nov., 2015 – A Numerate Life.) More about me is available on my website at [www.math.temple.edu/paulos](http://www.math.temple.edu/paulos))

## **John Allen Paulos**

### **Curriculum Vitae – 2016**

#### **Education, Academic Position:**

##### Education:

Public Schools, Milwaukee; B.S., University of Wisconsin, Madison, 1967; M.S., University of Washington, 1968; U.S. Peace Corps, 1970; Ph. D. in mathematics, University of Wisconsin, Madison, 1974.

##### Doctoral Dissertation:

"Delta Closed Logics and the Interpolation Property"; 1974; Professor K. Jon Barwise.

##### Positions Held:

##### Temple University Mathematics Department:

1973, Assistant Professor, 1982, Associate Professor, 1987, Full Professor

##### Columbia University School of Journalism

2001, Visiting Professor

Nanyang Technological University, summer visitor, 2011-present

##### Awards:

**My books and expository writing as well as my public talks and columns led to my receiving the 2003 Award for promoting public understanding of science from the American Association for the Advancement of Science. (Previous winners include Carl Sagan, E. O. Wilson, and Anthony Fauci.)**

**I received the 2002 Faculty Creative Achievement Award from Temple University for my books and other writings.**

**My piece "Dyscalculia and Health Statistics" in *DISCOVER* magazine won the Folio Ovation Award for the best piece of commentary in any American magazine.**

**My books and expository writing as well as my public talks and columns also led to my receiving the 2013 Mathematics Communication Award from the Joint Policy Board of**

**Mathematics.** (Previous winners include Marcus du Sautoy, Steven Strogatz, and Sylvia Nasar.)

**My books, talks, and popular monthly columns have received various forms of recognition as indicated below.**

**An adaptation of my book, *A Mathematician Reads the Newspaper*, became a multi-part BBC series.**

**American Association for the Advancement of Science listed me as among the top 50 science “stars” (quote marks mine) on twitter**

**<http://news.sciencemag.org/scientific-community/2014/09/top-50-science-stars-twitter>**

**I was appointed a Fellow of the Secular Policy Institute, a DC think tank devoted to explaining the secular and scientific aspect of topical issues.**

### **Publications (Books):**

(Brief descriptions of the books here. See review excerpts near end of this C.V.)

Books Published:

1. *Mathematics and Humor*, University of Chicago Press, 1980. Paper, 1982. Japanese Translation, 1983, Dutch, 1990, Spanish, 1991, Italian, 1992.

(In *Mathematics and Humor* I i) explore the operations and structures common to humor and the formal sciences (logic, mathematics, and linguistics), ii) show how various notions from these sciences provide formal analogues for different sorts of jokes and joke schema, and iii) develop a mathematical model of jokes (joke schema) using ideas from "catastrophe theory". In accomplishing this I discuss self-reference, recursivity, axioms, logical levels, non-standard models, transformational grammar, and several "mathematical" (in an extended sense) ideas. Relevant psychological and philosophical matters are discussed and provide a matrix for both the technical development and for the jokes. There is no comparable study of the formal properties of humor.)

2. *I Think, Therefore I Laugh*, Columbia University Press, 1985. Paper, 1986. Spanish And French Translations, 1987. Dutch, 1990, German, 1992.

(*I Think, Therefore I Laugh* is intended to be, at least in part, an exemplification of a remark by Wittgenstein that a good and serious work in philosophy could be written which consisted entirely of jokes. If one understands the relevant philosophical point, one gets the joke (parable, story, puzzle). Humor and analytic philosophy resonate at even deeper levels (both evince a strong penchant for debunking, for example). I support this claim with the above-mentioned stories and jokes, some exposition on topics ranging from scientific induction

to the distinction between intentional and causal explanations, and the construction of imaginary dialogues between Bertrand Russell and Groucho Marx, Ludwig Wittgenstein and Lewis Carroll.)

3. *Innumeracy - Mathematical Illiteracy And Its Consequences*, Farrar, Straus, And Giroux (Hill And Wang Division), 1989. Paper, 1990. French, Italian, German, Chinese, Japanese, Spanish, Korean, Greek, Dutch, Finnish, And Swedish Translations, 1990-1991.  
**(Appeared on *New York Times* national bestsellers list for 18 weeks.)**

*(Innumeracy* is an examination of some of the consequences in everyday life of mathematical illiteracy. These consequences - confused personal decisions, muddled governmental policies, even an increased susceptibility to pseudoscience - are not as visible as are those of illiteracy or general cultural ignorance. Unlike the latter failings, however, innumeracy often afflicts intelligent, well-educated people, the kind of people who can understand the most complicated of legal discussions, the most nuanced of emotional interchanges, but whose eyes glaze over at the mere mention of a number or a probability. Topics addressed include stock scams, parapsychological claims, medical testing, insurance frauds, sports records, sex discrimination, coincidences and chance encounters.)

4. *Beyond Numeracy - Ruminations Of A Numbers Man*, Knopf, 1991. Paper, 1992. Italian, German, Dutch, British, Japanese Translations, 1992-1993.

*(Beyond Numeracy* is in part a dictionary, in part a collection of short mathematical essays, and in part the ruminations of a numbers man. Its three to five page entries range from summaries of whole disciplines (calculus, trigonometry, topology) to biographical and historical asides (Godel, Pythagoras, non-Euclidean geometry) to bits of mathematical or quasi-mathematical folklore (infinite sets, Platonic solids, Q.E.D.) well-known to mathematicians but not to the educated layman and laywoman. Occasionally, I include less conventional pieces - a review of a non-existent book, a stream-of-mathematical-consciousness car trip, brief discussions of humor or ethics. New areas are discussed (chaos and fractals, recursion, complexity) as well as more classical ones (conic sections, mathematical induction, prime numbers).

5. *A Mathematician Reads The Newspaper*, Basic Books, 1995. German, Dutch, Japanese, Spanish, 1996. Doubleday Paperback, 1996.

**Voted one of the 100 best non-fiction works of the century in a poll of 200,000 Random House readers.** (will refrain from deconstructing this "poll.") **Was briefly #1 on the Amazon list.**

*(A Mathematician Reads The Newspaper*, structured like the morning paper, investigates the mathematical angles of stories in the news and offers novel perspectives, questions, and ideas to coffee-drinkers, strap-hangers, policy-makers, gossip-mongers, bargain-hunters, trend-setters, and others who can't get along without their daily paper. Mathematical naivete can put such readers at a disadvantage in thinking about many issues in the news that may seem on the surface not to involve mathematics at all.

"Number stories" complement, deepen, and regularly undermine "people stories." The notions of probability and randomness can enhance articles on crime, health risks, or other societal obsessions. Logic and self-reference may help to clarify the hazards of celebrity and spin-doctoring. Business finance, the multiplication principle, and simple arithmetic point up consumer fallacies, electoral tricks, and sports myths. Chaos and non-linear dynamics suggest how difficult and frequently worthless economic and environmental prediction is. And mathematically pertinent notions from philosophy and psychology provide perspective on a variety of public issues. These ideas provide a revealing, albeit oblique slant on the traditional Who, What, Where, When, Why, and How of the journalist's craft.)

6. *Once Upon A Number*, 1998. Basic Books. German, Dutch, Spanish, Portuguese Translations.

**Chosen one of the best non-fiction books of 1998 by *Los Angeles Times*.**

(*Once Upon A Number* is about the gap between stories and statistics, or, to vary the alliteration, between narratives and numbers, or, more generally, between a personal agent-centered view of the world and an impersonal, scientific view of it. Our psychological worlds are egocentric (a little like those posters of New York or of some other city with the region's attractions in the foreground and the rest of the world crammed into the receding background) and trying to reconcile these parochial posters and self-conceptions with accurate maps, external complexities, and a kind of disembodied view from nowhere is another way of getting at what I attempt in the book. Like at least 62.212% of us, I've felt torn between stories and statistics and their very different logics and views of the world. I've always been struck, for example, by how frequently people feel that they've been wronged or aggrieved and how infrequently they feel that they've wronged or aggrieved someone else. How could we all be so Lake Wobegone above average?)

This led me to thinking not only about the differences between stories and statistics but also of differences between subjective viewpoint and objective probability, between informal discourse and logic, between meaning and information. The book that resulted, this book, is a mathematician's take on C.P. Snow's two cultures, the literary and the scientific, and is my attempt to bridge, or at least illuminate, the gap between them. The stress is on examples, vignettes, parables, stories, puzzles, and a few memoiristic segments. Topics include the Bible codes, the statistics of racism and stereotyping, twenty questions and "magical realism," the probability of Murphy's Law, the role of common knowledge in the stock market, information theory and literary criticism, and much more.)

7. *A Mathematician Plays The Stock Market*, 2003, Basic Books. German, Dutch, Spanish, Portuguese, Chinese Translations.

**On the Businessweek bestsellers list, 2004.**

(*A Mathematician Plays The Stock Market's* primary purpose is to demonstrate what the tools of mathematics can tell us about the vagaries of the market. I use scenarios and stories rather than formulas and equations to examine problems, paradoxes, and puzzles associated with the market. Is it random? Is it efficient? Is there anything to technical analysis or fundamental analysis? How can you quantify risk? What are options and portfolio theory? What is the role of various psychological illusions? What are the most common scams? Does the normal bell-shaped curve describe the market's occasional extreme volatility? What about fractals, chaos, networks, and other non-standard tools? There isn't any explicit financial advice in the book, but tying it together and illustrating some of the concepts is my own disastrous experience with WorldCom.)

**8. Irreligion: A Mathematician Explains Why the Arguments for God Just Don't Add Up**, 2008, Farrar, Straus. German, Spanish, Italian Translations.

I've always found the various arguments for the existence of God that I've come across wanting. There is an inherent illogic to all of the arguments that I've never dealt with head-on. Here in *Irreligion* I've attempted to do so. My approach in the book is informal and brisk (at least I hope it is), not ceremonious and plodding (at least I hope it isn't). Interspersed among the arguments will be numerous asides on a variety of irreligious themes, ranging from the nature of miracles and creationist probability to cognitive illusions and prudential wagers. Beginning with a schematic outline of an argument, most chapters will briefly examine it and then present what I believe is a succinct deconstruction. The arguments considered range from what might be called the golden oldies of religious thought to those with a more contemporary beat. On the playlist are the first-cause argument, the argument from design, the ontological argument, arguments from faith and biblical codes, the argument from the anthropic principle, the moral universality argument, and others. These arguments overlap to an extent, but I've loosely categorized them in an order that seems somewhat natural.

**9. A Numerate Life – A Mathematician Explores the Vgaries of Life, His and Probably Yours**, Nov. 2015, Prometheus Press.

Employing intuitive ideas from mathematics, this quirky "meta-memoir" raises questions ABOUT OUR LIVES that most of us don't think to ask, but arguably should: What part of memory is reliable fact, what part creative embellishment? Which favorite presuppositions are unfounded, which statistically biased? By conjoining two opposing mindsets--the suspension of disbelief required in storytelling and the skepticism inherent IN the scientific method--bestselling mathematician John Allen Paulos has created an unusual hybrid, a composite of personal memories and mathematical approaches for re-evaluating them.

Entertaining vignettes from Paulos's biography abound--ranging from a bullying math teacher and a fabulous collection of baseball cards to romantic crushes, a grandmother's petty larceny, and his quite unintended role in getting George W. Bush elected President in 2000. These vignettes serve as springboards to many telling perspectives: simple arithmetic puts life-long habits in a dubious new light; higher dimensional geometry helps us see that we're all peculiar; nonlinear dynamics explains the narcissism of small differences cascading into very different siblings; logarithms and exponentials yield insight on why we tend to become bored and jaded as we age; and there are tricks and jokes, probability and coincidences, and much more.

More on the book is available at [http://johnallenpaulos.com/a\\_numerate\\_life.html](http://johnallenpaulos.com/a_numerate_life.html)

## Research Articles:

(See, in particular, number 3 and numbers 15 and 16.)

1. "A Model-Theoretic Semantics for Modal Logic," *Notre Dame Journal Of Formal Logic*, 1976.
2. "Non-Characterizability Of The Syntax Set," *Journal Of Symbolic Logic*, 1976.
3. **"Truth Tables And Inference Rules," With Hugues Leblanc and George Weaver, *Reports On Mathematical Logic*, 1977.**  
(Note: George Weaver co-authored a paper with Ralph Mckenzie, who co-authored a paper with Saharon Shelah, who co-authored a paper with Paul Erdos. This gives me an Erdos number of 4.)
4. "The Humor In Logic and the Logic of Humor" in *Proceedings Of The International Conference On Humor*, Wales, 1976, Pergamon Press, 1977.
5. "A Model-Theoretic Account Of Confirmation," *Notre Dame Journal Of Formal Logic*, 1979.
6. "Applications of Catastrophe Theory to Semantics: Ambiguity, Jokes, and Scientific Revolutions," *Manifold*, 1979.
7. **"A Model-Theoretic Explication Of The Theses Of Kuhn And Whorf," *Notre Dame Journal of Formal Logic*, 1981.**
8. "Probabilistic, Truth-Value And Standard Semantics," *Notre Dame Journal of Formal Logic*, 1982.
9. "Three Comments On Probabilistic Semantics," *CUNY Conference On Probabilistics Semantics*, Haven Press, 1983.
10. "Carnap Probability Assignments As Natural Averages," *Reports On Mathematical Logic*, 1986.
11. "History Of Numeration Systems," Commissioned by *International Encyclopedia of Communication*, Oxford University Press-University of Pennsylvania, 1988.
12. "On Coincidence and Meaning" *The Skeptical Inquirer*, 1991.
13. **"Dyscalculia," *Discover Magazine*, winner of a Folio Ovation Award, best commentary in an American magazine. 1994.**
14. "Random Acts of Finance," *The Nation*, 1995.

15. *After 1995 I wrote many other articles, reviews, and assorted pieces for various journals and periodicals (almost 200) that lie at the border between the scholarly and the popular. See the category below.*

16. *"WHO'S COUNTING" columns (more than 100) for ABCNEWS.COM: monthly articles from 1999 to the present. Widely read, the columns are archived at the following URL: <http://abcnews.go.com/Technology/WhosCounting/>*

### **Other Published Works (an incomplete list; I'm sure I've forgotten some):**

1. Review of *Nonsense* by Susan Stewart, Johns Hopkins University Press, in *Journal Of Aesthetics*, 1980.

2. Review Of *Subtle Is The Lord - The Science And Life of Albert Einstein* by Abraham Pais, Oxford University Press, In *Philadelphia Inquirer*, 1982.

3. Oped, "Carburetors and Computers," in *Philadelphia Inquirer*, 1984.

4. Review Of *Surely You're Joking, Mr. Feynman* by Richard Feynman, W.W. Norton, in *Philadelphia Inquirer*, 1985.

5. Review of *Metamagical Themas* by Douglas Hofstadter, Basic Books, in *Philadelphia Inquirer*, 1985.

6. Review of *From One To Zero - A Universal History Of Numbers* by Georges Ifrah, Viking Press, in *New York Times*, 1985.

**7. The "MY TURN" column (on mathematical illiteracy and its consequences) in Newsweek magazine, 1986.**

8. Review of *Death Of The Soul - From Descartes to The Computer* by William Barrett, Anchor/Doubleday, in *Newsday*, 1986.

9. Review of *The Cult Of Information: The Folklore of Computers and the True Art Of Thinking* by Theodore Roszak, Pantheon Press, in *Newsday*, 1986.

10. Review of *Was Einstein Right?* by Clifford Will, Basic Books, in *Philadelphia Inquirer*, 1986.

**11. Review of *Machinery of the Mind* by George Johnson, Times Books, in Philadelphia Inquirer, 1987.**

12. Review of *Mathenauts*, Edited by Rudy Rucker, Arbor House, in *Philadelphia Inquirer*, 1987.
13. Three Essays in *The TWA Ambassador*, 1986 - 1988.
14. **Review of *Reflections On Kurt Godel* by Hao Wang, MIT Press, in *Philadelphia Inquirer*, 1988.**
15. Review of *Archimedes' Revenge* by Paul Hoffman, W.W. Norton, in *Philadelphia Inquirer*, 1988.
16. Review of *Descartes' Dream - The World According To Mathematics* by Philip Davis and Reuben Hersh, Harcourt Brace Jovanovich, in *Philadelphia Inquirer*, 1988.
17. **"The Odds Are You're Innumerate," Front Page of the Sunday *New York Times* Book Review, 1989.**
18. Review of *Travels* by Michael Crichton, Knopf, in *Philadelphia Inquirer*, 1989.
19. Review of *Hortense Is Abducted* by Jacques Roubaud, Dalkey Archive, in *New York Times*, 1989.
20. **Review of *Technological Risk* by H.W. Lewis, W.W. Norton, in *New York Times*, 1990.**
21. "The S And L Tab," *New York Times* Oped, 1990.
22. ***The Man Who Knew Infinity*, by Kanigel, Scribners, *New York Times*, 1991.**
23. ***Fearful Symmetry*, by Stewart And Golubitsky, Blackwell, *The New York Times*, 1992.**
24. **"Math Moron Myths," *New York Times* Oped, 1991.**
25. Three Page *Business Week* Article on Innumeracy, 1991.
26. "Tsongerclintkinbro Wins," *New York Times* Oped Piece, 1992.
27. ***Pi In The Sky*, by John D. Barrow, Oxford University Press, in *New York Times*, 1992.**
28. *Number*, by John McLeish, Fawcett/Columbine, in *New York Times*, 1992.

29. *Irrationality: The Enemy Within* by Stuart Sutherland, Constable, in *London Review of Books*, 1992.
30. "Guinier's Numbers Add Up," *Philadelphia Inquirer* Oped Piece, 1993.
31. *200% Of Nothing* by A.K. Dewdney, Wiley, in *Nature*, 1993.
32. Education Survey Review, *The New York Times*, 1993:  
*Public Education: An Autopsy* by Myron Lieberman  
 366pp. Cambridge, Mass: Harvard University Press.  
*The Book Of Virtues* Edited by William J. Bennett, 873 pp. New York: Simon And Schuster.  
*Miracle in East Harlem* by Sy Fliegel with James Macguire, 270pp. New York: Times Books.  
*Why Johnny Can't Tell Right From Wrong* by William K. Kilpatrick 349 pp. New York: Simon and Schuster.  
*Character First* by Joseph W. Gauld, 173 op. San Francisco: Institute for Contemporary Studies.  
*For The Children* by Madeline Cartwright and Michael D'orso, 257 Pp. New York: Doubleday.  
*Thinking About Our Kids* by Harold Howe II, 212pp. New York: The Free Press.  
*Head Start And Beyond* Edited by Edward Zigler and Sally Styfco  
 155 Pp. New Haven: Yale University Press.  
*Head Start: The Inside Story* by Edward Zigler and Susan Muenchow 274 Pp. New York: Basic Books.  
*The Children's Machine* by Seymour Papert, 234 pp. New York: Basic Books.  
*What Your Sixth Grader Needs To Know* Edited by E.D. Hirsch Jr., New York: Doubleday.  
*Voices Of Triumph* by the Editors of Time-Life Books, New York.
32. ***Is It Proved?* by Marilyn vos Savant in *New York Times*, 1993.**
33. *Failing At Fairness* by Myra and David Sadker in *New York Times*, 1994.
34. "Reading The News With Our Math Lenses On," *Christian Science Monitor*, Oped Piece, 1995.
35. "Conspiracies Add Up Like  $2 + 2 = 5$ ," *Philadelphia Inquirer* Oped Piece, 1995.
36. **"The Tyranny Of Ten," *New York Times* OpEd piece, 1995.**
37. **Pauling books reviewed, *New York Times*, 1995:**  
***Linus Pauling - A Life in Science and Politics* by Ted and Ben Goertzel. New York: Basic Books**

***Force Of Nature - The Life of Linus Pauling* by Thomas Hager. New York: Simon and Schuster.**

***Linus Pauling in His Own Words*, edited by Barbara Marinacci. New York: Simon & Schuster.**

38. "What 'Statisticide' Tells About the Simpson Case," *Philadelphia Inquirer* OpEd piece, 1995.

39. "Paradoxical Advice For Politicos," *Christian Science Monitor*, OpEd piece, 1996.

40. **"Dangerous Abstractions," *New York Times* Oped Piece, 1996.**

41. "Butterflies On The Street," *New York Times* Oped Piece, 1996.

42. ***Full House* by Stephen Jay Gould in *Washington Post*, 1996.**

43. ***The Measure Of Reality* by Alfred W. Crosby in *Los Angeles Times*, 1997.**

44. ***3001 - The Final Odyssey* by Arthur C. Clarke in *The New York Times*, 1997.**

45. "Once Upon a Time, There Was A Global Village, And Then One Day ...," *Philadelphia Inquirer* Oped Piece, 1997.

46. "Septuplets, Population, And Abortion," *Philadelphia Inquirer* Oped Piece, 1998.

47. **"The Universe, Ad Infinitum," *New York Times* Oped Piece, 1998.**

48. **"The Math Behind Race, Crime, And Sentencing Statistics," *Los Angeles Times* Oped Piece, 1998.**

49. **Math biographies reviewed in the *Los Angeles Times*, 1998.**

***My Brain Is Open* by Bruce Schechter, Simon and Schuster.**

***The Man Who Loved Only Numbers* by Paul Hoffman, Hyperion.**

***A Beautiful Mind* by Sylvia Nasar, Simon And Schuster.**

50. ***The Number Devil* by Hans Magnus Enzensberger in *New York Review Of Books*, 1999.**

51. *The Mathematical Brain* by Brian Butterworth in *London Review Of Books*, 1999.

52. **"WHO'S COUNTING" columns for ABCNEWS.COM: *monthly articles throughout 1999*. The columns are archived at the following URL: <http://abcnews.go.com/Technology/WhosCounting/>**

- \* From Y2K to PY2K - A Tale of Two Numbers
- \* Sex and Statistics
- \* Support for Alternative Science from Scotland
- \* Kosovo, Numbers, and Psychology
- \* From Society Pages to Media Empires
- \* Sexual Abuse, Meta-Analyses, and Effective Medicine
- \* Curse of the Kennedys?
- \* The Rich-Poor Gap Grows
- \* How Much to Save a Life?
- \* Average Riches, Likely Poverty
- \* Coda to the Bible Codes
- \* Across the Web in 19 Clicks

53. **Editorials and Opeds for the *Philadelphia Daily News*, weekly throughout 1999.**

54. "Smart Machines, Foolish People," *Wall Street Journal* Oped, 1999.

55. "After A Crash, Fear Overtakes Logic," *New York Times* Oped, 1999.

56. "Math Myopia," *Forbes Magazine*, 2000.

57. "Decimals: A Fraction Of The Trouble," *Wall Street Journal* OpEd, 2000.

58. "An Excess Of Excellence," *Wall Street Journal*, OpEd, 2000

59. **"WHO'S COUNTING" columns for ABCNEWS.COM: monthly articles throughout 2000. The columns are archived at the following URL: <http://abcnews.go.com/Technology/WhosCounting/>**

- \* Statistical Ties and Coin Flips
- \* Why Fuzzy Math Makes Sense in Politics
- \* Why Behavior Overshadows Statistics
- \* The Math of Political Platforms
- \* Costs For AIDS in Africa
- \* Math vs. Miracles
- \* Winning at Losing Games
- \* The Ups and Downs of Rankings
- \* Prove a Theorem, Win \$1,000,000!
- \* Science Quiz for Presidential Candidates
- \* The Economics of Fickleness
- \* Bad Systems, Not Bad Medicine

60. Editorials and Opeds for the *Philadelphia Daily News*, weekly throughout 2000.

61. **"We're Measuring Bacteria With A Yardstick," *New York Times* Oped, 2000.**

62. ***Where Does Mathematics Come From* by George Lakoff And Rafael Nunez In *The American Scholar*, 2001.**

63. **"WHO'S COUNTING" columns for ABCNEWS.COM: monthly articles throughout 2001. The columns are archived at the following URL: <http://abcnews.go.com/Technology/WhosCounting/>**

- \* Could You Solve This \$1 Million Hat Trick?
- \* Drug Hoarding and 'Prisoner's Dilemma'
- \* In Tragedy, the Nonsense of Numbers

- \* Exploring the Mathematical Brain
- \* The Placebo Effect in Politics
- \* Do SAT Scores Really Predict Success?
- \* The Paradox of Averages
- \* An American Prophet
- \* Monk's 'Startling' Math Discovery
- \* Do Concealed Guns Reduce Crime?
- \* The Math of Confused Eyewitnesses
- \* Seeking Order in Randomness

64. Editorials and Opeds for the *Philadelphia Daily News*, ***Weekly Throughout 2001***.

65. "How To Find A Trend When None Exist," *New York Times* Oped, 2001.

66. ***The Dream Machine* by Malcolm Waldrop in *New York Times*, 2001.**

67. **"WHO'S COUNTING" columns for ABCNEWS.COM: *monthly articles throughout 2002*. The columns are archived at the following URL: <http://abcnews.go.com/Technology/WhosCounting/>**

- \* Probability and Risk in the News
- \* The 9-11 Lottery Coincidence
- \* Weighing the Risks of Hormone Therapy
- \* Modest Proposals for Safer Road Journeys
- \* A New Kind of Science
- \* Late Biologist Gould Used Math to Clarify Arguments
- \* Topology and the Million-Dollar Poincare Conjecture
- \* It's How Votes Get Counted That Counts
- \* Math Theory Offers Way to Detect Cooked Books
- \* How Math Is Rooted in Metaphors
- \* Numbers Reveal Gravity of Obesity Problem

68. Editorials and Opeds for the *Philadelphia Daily News*, ***Weekly Throughout 2002***.

69. **"Do The Math: Rooting Out Terrorists Is Tricky Business" in *Sunday Los Angeles Times*, 2003.**

70. **"WHO'S COUNTING" columns for ABCNEWS.COM: *monthly articles throughout 2003*. The columns are archived at the following URL: <http://abcnews.go.com/Technology/WhosCounting/>**

- \* Brain Teasers on Lying Politicians
- \* Probabilities Can Mislead in Politics and Baseball
- \* 'Bright' Movement Fights for the Non-Religious

- \* Tough Puzzles to Start the School Year
- \* Behavioral Puzzles in Business and Diplomacy
- \* Mathematical Oddities in Affirmative Action
- \* From Enrico Fermi to Bill Bennett
- \* How We Guess What Others Will Do
- \* Lanchester's Law: Too Few American Soldiers?
- \* Calculating Support for a War in Iraq
- \* Mathematical Solutions for Maintaining Privacy
- \* Privacy and Terrorists

71. "Is Insider Trading So Bad?" in *Forbes Magazine*, 2003.

72. "Mathematicians For Martha" in July 7, 2003 *Wall Street Journal* Oped.

73. "All Investors Are Liars" in September 2, 2003 *Wall Street Journal* Oped

74. *American Sucker* by David Denby, reviewed in *Los Angeles Times*, 2004.

**75. *Infinity And More* by David Foster Wallace, reviewed in *The American Scholar*, 2004.**

76. "Elect Candidate With A Mind For Math" in February 18, 2004 *Philadelphia Inquirer*

77. "Numbers And Healthcare" in *Saving Lives By The Millions*, Johns Hopkins Bloomberg School of Public Health publication, 2004.

**78. "WHO'S COUNTING" columns for ABCNEWS.COM: *monthly articles throughout 2004. The columns are archived at the following URL: <http://abcnews.go.com/Technology/WhosCounting/>***

- \* Misleading Numbers in the News
- \* Complexity, Randomness and Impossible Tasks
- \* Commentary: How to Prevent Nuclear Terror
- \* Math Model Predicts a Bush Win
- \* Why People Vote Like Their Neighbors
- \* Imagining a Hit Thriller With Number 'e'
- \* Psychology Offers Insight Into War
- \* How to Calculate Chances of Doomsday
- \* Gibson's Film Disregards Hazy Historical Fact
- \* Infinity: Novelist's Math, Physicist's Drama
- \* Why Adam Is Younger Than Eve
- \* A Proposed Math Quiz for Presidential Candidates

79. **Columns for the UK GUARDIAN: *monthly pieces throughout the 2nd half of 2004.*** The columns are archived at the following URL:

**[http://search.guardian.co.uk/search97cgi/s97networkr.cgi?QueryText=John+Allen+Paulos&Action=Search&Collection=archive\\_artifact&ResultTemplate=Archive\\_Artifact.hts&SortSpec=VdkPublicationDate+Desc](http://search.guardian.co.uk/search97cgi/s97networkr.cgi?QueryText=John+Allen+Paulos&Action=Search&Collection=archive_artifact&ResultTemplate=Archive_Artifact.hts&SortSpec=VdkPublicationDate+Desc)**

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The vital statistics of war, December 16 2004

Travelling in Indochina recently after reading reports of civilian deaths in Iraq since March last year, I naturally thought of civilian deaths during the war in Vietnam. Estimates of the number of Vietnamese killed in the Indochinese war vary considerably

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X = not a whole lot, November 18 2004

George Bush's election has generated far too many ill-founded conclusions about the US electorate. Despite Bush's assertions to the contrary, the voters certainly did not give him a mandate to further "traditional moral values"

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Just say no, no, no, October 21 2004

Nuclear terrorism is a horrifying possibility, but it needn't be a paralysing one. That's the message of a new book, Nuclear Terrorism: The ultimate preventable catastrophe, by Graham Allison. He begins by sketching a realistic scenario in which

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e-number crunching, September 30 2004

The base of the natural logarithm and truly one of the most important numbers in all of mathematics, the number e, is approximately 2.71828182845904 (approximately because its decimal expansion continues without repetition). Despite lacking an impressive symbol

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Regarding Henry, August 19 2004

In recent years the US electorate has become highly polarised. Large contiguous regions of the country (the red states) favour the Republicans, other large contiguous regions favour the Democrats (the blue states), and relatively small regions in between

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The formula for 'success', July 22 2004

Might a discovery about the connectivity of the internet have relevance to power and wealth disparities in the world? A couple of years ago, Albert-Laszló Barabasi, a physicist at Notre Dame University, and two associates published a paper maintaining

80. **"Exit Polls Remain A Mystery" in November 24, 2004 *Philadelphia Inquirer***

81. "My Lowest Ebb(Ers)" *Wall Street Journal*, 2005

82. *The Road To Reality* by Roger Penrose Reviewed In The Los Angeles Times, 2005

83. **"WHO'S COUNTING" columns for ABCNEWS.COM: *monthly articles throughout 2005.*** The columns are archived at the following URL:

<http://abcnews.go.com/Technology/WhosCounting/>

- \* Knowledge Can Be Powerful: The Nobel Prize in Economics, the Stock Market and Subterranean Information Processing
- \* Who's Counting: Abortion Through the Looking Glass
- \* Risks and Rewards
- \* Complexity and Intelligent Design
- \* Why Medical Studies Are Often Wrong
- \* A Book With a Theory of Everything?
- \* What Numbers Reveal -- From Sumo Wrestlers to Professors  
How Numbers Can Suggest Fishy Business
- \* Who's Counting: Math in Narratives
- \* Why We're Not Giants
- \* Who's Counting: Google Made Surreal
- \* Accounting for Lower Girls' Math Scores
- \* Who's Counting: Double Deficits

84. Columns for the UK GUARDIAN: *monthly pieces throughout 2005*. The columns are archived at the following URL:

[http://search.guardian.co.uk/search97cgi/s97networkr.cgi?QueryText=John+Allen+Paulos&Action=Search&Collection=archive\\_artifact&ResultTemplate=Archive\\_Artifact.htm&SortSpec=VdkPublicationDate+Desc](http://search.guardian.co.uk/search97cgi/s97networkr.cgi?QueryText=John+Allen+Paulos&Action=Search&Collection=archive_artifact&ResultTemplate=Archive_Artifact.htm&SortSpec=VdkPublicationDate+Desc)

#

The mousetrap, September 08 2005

The theory of intelligent design, the purportedly more scientific descendant of creation science, rejects Darwin's theory of evolution as being unable to explain the complexity of life. How, ask its supporters, can biological phenomena such as the clotting of blood

#

Healthy skepticism, August 04 2005

How many times have you heard people exclaim something like, "First they tell us this is good or bad for us, and then they tell us just the opposite"? In case you need more confirmation of the iffiness of many health studies, Dr John Ioannidis

#

It's all a matter of B-C-A, May 12 2005

Mathematicians often come at issues obliquely. Consider elections. Instead of focusing on allegations of racism or of dishonesty, they're more likely to discuss polls, election theory and what-if scenarios.

#

Beyond the fringe, April 14 2005

The Ouvroir de Littérature Potentielle (Workshop of Potential Literature), Oulipo for short, was the name of a small group of primarily French writers, mathematicians and academics devoted to exploring mathematical and combinatorial techniques in literature

#

The spice of life, February 17 2005

Apple Computer's new iPod Shuffle allows you to hear a random shuffling or reordering of your favourite songs on your digital music player. It claims that if you listen to, say, your 100 favourite songs in shuffle mode, each one will play once and only once

85. "A Mathematician Explores The Gap Between Stories And Statistics, Logic And Language" In *Proceedings Of The Mykonos Conference On Mathematics And Narrative*, 2006.

**86. "WHO'S COUNTING" columns for ABCNEWS.COM: *monthly articles throughout 2006*. The columns are archived at the following URL:**  
**<http://abcnews.go.com/Technology/WhosCounting/>**

- \* Who's Counting: The Monty Hall Problem  
Game Shows, a Variant Puzzle and a General Question
- \* Who's Counting: Which 'Experts' Make Better Political Predictions?
- \* Who's Counting: Hacking Diebold Voting Machines
- \* What's Wrong With Creationist Probability?
- \* It's Mean to Ignore the Median
- \* Who's Counting: Cheney's One Percent Doctrine
- \* Jesus' Descendants Plus Sexual Predators and Home Run Records
- \* Who's Counting: Sexonomics -- Prostitutes' Incomes
- \* Who's Counting: Distrusting Atheists
- \* Who's Counting: New Blogs, New Songs and News Stories
- \* Of Wiretaps, Google Searches and Handguns
- \* Who's Counting: Flu Deaths, Iraqi Dead Numbers Skewed

**87. "WHO'S COUNTING" columns for ABCNEWS.COM: *monthly articles throughout 2007*. The columns are archived at the following URL:**  
**<http://abcnews.go.com/Technology/WhosCounting/>**

- \* Solutions for 'Sicko' Health Care Holes?
- \* Can't Pick One Candidate? Vote for Many
- \* Borat, Colbert and Our Loopy Selves  
Book says our own reality is complicated and multilayered.
- \* An Inconvenient Puzzle: Global Warming and ... Genies?
- \* Who's Counting: A Card Trick and a Religious Hoax
- \* Who's Counting: Pictures, Statistics and Genocide
- \* How Iraq Trillion Could Have Been Spent
- \* Who's Counting: Health, Wealth and Happiness

**88. "WHO'S COUNTING" columns for ABCNEWS.COM: *monthly articles throughout 2008*. The columns are archived at the following URL:**  
**<http://abcnews.go.com/Technology/WhosCounting/>**

- \* God, Science, and an Unbeliever's Utopia
- \* Putting Candidates' Religion to the Test

- \* War, Spying, and Party Game Delusions
- \* 2008 Election: Religion, Simulations, and Prediction
- \* Math Hits the News ... Sinks the Markets
- \* Financial Rescue? The Math Is Fuzzy

89. "Surveys and Atheists: 1 + 1 = Millions," Los Angeles Times OpEd, 2008.

**90. "WHO'S COUNTING" columns for ABCNEWS.COM: *monthly articles throughout 2009*. The columns are archived at the following URL: <http://abcnews.go.com/Technology/WhosCounting/>**

- \* Test Yourself: Which Tabloid Heds Actually True?
- \* Number Games: Misleading Nos. in the News
- \* Nudging: How To Get People To Do Right
- \* Watch Your Tongue! Irish Ban Blasphemy
- \* Bad Things in Threes? It Doesn't Add Up
- \* A Cancer Drug From Sunny Thailand
- \* Problem With Drug Studies: The Patients?
- \* Seduce Me With ... Logic?
- \* Stimulus Psych 101: Economics vs. Politics
- \* Imp in a Bottle: It's More Than Madoff
- \* Now Boarding: A Better Way to Load a Plane

91. The Numerati by Stephen Baker, reviewed in Philadelphia Inquirer, 2008.

92. Lewis Carroll in Numberland, reviewed in New York Times, 2009.

93. Mammogram Math, original essay appearing in the New York Times Magazine, 2009.

94. Metric Mania, original essay appearing in New York Times Magazine, 2010.

95. Review of biography of Grigori Perelman by Masha Gessen in New York Review of Books, 2010.

96. Review of Proofiness by Charles Seife in Washington Post, 2010.

97. Original Essay, Stories versus Statistics, in New York Times, 2010.

98. A continuation of my monthly Who's Counting columns for ABCNews.com.

**99. Scientific American columns in 2011:**

**The Math behind Screening Tests, December 31**

**Bigger Plates, More Food—Or Is It the Other Way Around?, November 9**

**No X-aggeration: How Companies Can Gather Information and Still Preserve Privacy, May 30**

**Why You're Probably Less Popular Than Your Friends, January 20**

**Animal Instincts: Are Creatures Better Than Us at Computation?, January 13**

100. New York Times review of The Theory That Would Not Die (on Bayes' theorem) by Sharon McGrayne, August 5, 2011.

101. New York Times OpEd, "Who's Winning Republican Race? Everybody," on election theory applied to Republican primary, November, 10, 2011.

A few more columns and articles, 2012. Among them:

102. Cancer By the Numbers, Project Syndicate, April 2012, Straits Times and dozens of newspapers worldwide: <http://www.straitstimes.com/microsites/global-perspectives/story/john-allen-paulos-cancer-the-numbers>

103. Mathematical Oddities of the Electoral College, AbcNews.com, Who's Counting, June, 2012: <http://abcnews.go.com/Technology/mitt-romney-barack-obama-win-eleven-votes-electoral/story?id=16470327#.UDoYLFmRSw>

104. Why Don't Americans Elect Scientists, Campaign Stops, New York Times, February 13, 2012: <http://campaignstops.blogs.nytimes.com/2012/02/13/why-dont-americans-elect-scientists/>

105. Review of Nate Silver's The Signal and the Noise in the Washington Post, 2012.

106. Introduction to the Penguin edition of Flatland, 2013.

107. Review of Infinitesimal, a Look at a 16<sup>th</sup> Century Math Battle in the New York Times, 2014 <http://www.nytimes.com/2014/04/08/science/infinitesimal-looks-at-an-historic-math-battle.html>

108. My essay on the Mathematics of Romantic Crushes in the New York Times, 2014 <http://www.nytimes.com/2014/04/08/science/infinitesimal-looks-at-an-historic-math-battle.html>

109. Does the Declaration of Independence Guarantee Happiness? For Math Awareness Month 2014 <http://www.mathaware.org/mam/2014/calendar/declaration.html>

110. My new book, A Mathematician Explores Biography, His and Probably Yours, finished in 2014, will be published in 2015 by Prometheus Press and (in other countries as well.) Its table of contents is here:

A Mathematician Explores Biography,  
His and Probably Yours

**Introduction –What It’s All About**

**Chapter One - Bully Teacher, Childhood Math**

Some Early Estimates, Speculations

Pedagogy, Vanquishing Blowhards and Opponents, Monopoly  
Of Mothers and Collecting Baseball Cards

A Further Note on Math, Humor, and My Education

**Chapter Two - Bias, Biography, and Why We’re All a Bit Far-out and Bizarre**

Bias and Mindsets, Statistics and Biography

Despite Normal Appearances, We’re All Strange

Misapplications of Mathematics to Everyday Life - a Caveat

**Chapter Three - Ambition vs. Nihilism**

Infinity, Sets, and Immortality

Selves and Absurdity

The Story of “I” - Neurons, Hallucinations, and Godel

**Chapter Four - Life's Shifting Shapes**

Primitive Math, Life Trajectories, and Curve Fitting

The Quincunx of Life and My Unintended Role in Getting George Bush Elected President

Biographies and the Texas Sharpshooter

**Chapter Five - Moving Toward the Unexpected Middle**

A Few Touchstone Memories

Lunch, Goodnight, and My Parents - Milwaukee in the 50’s

Logic, Jokes, and Adult Life as an Unexpected Punch Line

Memories and Benford's Law

**Chapter Six - Pivots - Past to Present**

Kovalevsky, Prediction, and My Grandmother's Petty Larceny

Turning Points, Acadia to Kenya

Past Accomplishments vs. Present Potential

**Chapter Seven - Romance Among Trans-Humans and Us Cis-Humans**

Roboromance and the End of Biography

Choosing a Spouse, Meeting My Wife, Sheila

Romantic Crushes, Bayesian Statistics, and Life

Domestic Math: Toilet Seats, Up or Down; Movies, Early or Late

**Chapter Eight - Chances Are That Chances Are**

If Only ... Probability and Coincidences, Good, Bad and Ugly

Innumeracy, A Mathematician Reads the Newspaper, and Their Aftermath

**Chapter Nine - Life in the Era of Numbers and Networks**

How Many Emails, Where Did We Buy That - The Quantified Life

A Twitterish Approach to Biography

Scale and Predictability

**Chapter Ten - My Stock Loss, Hypocrisy, and a Card Trick**

My Stock Loss and a Few Pitfalls of Narrative Logic

One Cheer for Hypocrisy

Kruskal's Card Trick and Common Denouements

**Chapter Eleven - Biographies: Verstehen or Superficial**

Consciousness, Biographies, and Shmata

Leah and Daniel, My Grandsons and I

Gompertz' Law of Human Mortality and Lifespan

More on A Numerate Life is available here: [http://johnallenpaulos.com/a\\_numerate\\_life.html](http://johnallenpaulos.com/a_numerate_life.html)

111. “How Math Can Defeat Bullies,” The Atlantic, July 2015

<http://www.theatlantic.com/technology/archive/2015/07/how-math-can-defeat-bullies/397061/>

112. The Bush Presidency was My Fault –n Salon, Nov. 2015

[http://www.salon.com/2015/11/29/the\\_bush\\_presidency\\_was\\_my\\_fault\\_i\\_am\\_so\\_sorry\\_my\\_work\\_stopped\\_the\\_florida\\_recount/](http://www.salon.com/2015/11/29/the_bush_presidency_was_my_fault_i_am_so_sorry_my_work_stopped_the_florida_recount/)

113. The Mathematical Case for Hypocrisy in Slate, November, 2015

[http://www.slate.com/articles/health\\_and\\_science/science/2015/11/the\\_mathematical\\_case\\_for\\_hypocrisy.html](http://www.slate.com/articles/health_and_science/science/2015/11/the_mathematical_case_for_hypocrisy.html)

### **Papers Presented and Invited Addresses:**

I've given scores and scores if not hundreds of public lectures and keynote addresses on my books and other topics in virtually every major city in this country as well many foreign cities, including London, Amsterdam, Heidleberg, Barcelona, Sao Paolo, Haifa, Hong Kong, and Singapore. In particular, I've spoken to audiences from the Smithsonian (three times) to Harvard's Nieman Journalism Fellows and Hasty Pudding Club, from NASA, the National Academy of Sciences, and the American Association for the Advancement of Science to colleges and universities (including commencement assemblies at the Universities of Wisconsin and South Carolina), from mathematics conferences and associations to libraries, and from newspapers such as USA Today and the Washington Post to business and financial forums. (Not mentioned here are talks given at standard mathematics and philosophy conferences.)

In 2015, I spoke at the Museum of Mathematics in New York, and in July at the Aspen Ideas Festival in Colorado, and at the TAM skeptics' conference in Las Vegas

In June of 2016 I gave a week-long course entitle From Numbers to Narratives at the UIMP in Santander Spain: <http://www.uimp.es/uxxiconsultas/ficheros/7/35084JAPaulos.pdf>

### **Sample of Groups Addressed by John Allen Paulos**

**(Some Testimonials Below)**

- Nanyang Technological University, Singapore
- National Aeronautics and Space Administration
- Rohm and Haas
- Johnson and Johnson
- Wharton School of Business
- National University of Singapore
- Haifa University
- DuPont
- Goldman Sachs
- Ohio State University
- University of Florida
- Carnegie Institution
- Nicholas Applegate Investments
- European Molecular Biology Labs
- Trial Lawyers of America
- National Academy of Science
- Washington Post
- National Institutes of Health
- American Mathematical Society
- Thales and Friends (Greece)
- New Jersey Hospital Association
- AT&T Bell Labs
- American Institute of Mathematics
- Associated Press
- Susquehanna Investment Group

- Medill School of Journalism
- Brooklyn College
- Environmental Protection Agency
- Goodyear Tire
- Chicago Quantitative Alliance
- National Council of Teachers of Mathematics
- USA Today
- Harvard Nieman Fellows
- Columbia School of Journalism\*
- Universities of Wisconsin and South Carolina (commencement speaker)
- Boston Area Investors
- West Point
- Philadelphia Athenaeum
- Johns Hopkins
- Pennsylvania Society of Actuaries
- Minneapolis Health Care
- Smithsonian Institution (thrice)
- American Association for the Advancement of Science
- New York Investors Forum
- Bell South
- Brigham Young University
- Hebrew University
- Duke University
- Pennsylvania Education Association
- American Society of Newspaper Editors
- California Institute of Technology

## Sample Testimonials for Addresses

John Allen Paulos is a phenomenon in the world of mathematics and entertainment. An impressive mathematician, he is also a published author and quite a showman. I first saw Paulos' name in the summer of 1995, while searching a bookstore for a mathematician, who could capture the attention of not only math teachers, but of science and technology teachers as well as a more general audience. When I picked up "A Mathematician Reads the Newspaper," I knew I had found my man. Paulos first spoke to Tandy Technology Scholars in 1996 at the National Council of Mathematics Teachers annual meeting in San Diego. Since an overflow crowd filled the ballroom, we opened the doors to the second ballroom where we had standing room only! Back by popular demand, Paulos was the keynote speaker in 2000 at NCTM and for the Radio Shack National Teacher Awards 10th anniversary. He not only filled the Great Hall at Navy Pier in Chicago; he did it at the 9 a.m. opening event. I'm a public relations person, so math is not right up my alley, but I have read all of Paulos' books and even understand some of them. You will not only be entertained by John Allen Paulos, you will learn some fascinating new ways to view the world. -- Kaye E Thornton, Past Executive Director, Tandy Radio Shack Scholar and Teacher Awards

Professor Paulos takes what seems to be everyday decision making for all of us, and looks at it in a new light. He shows how many things that we do without thinking can be proven to be irrational using simple mathematics. His books have been very enlightening, and his speech allowed us to hear these thoughts in his own words. Professor Paulos was a delight to listen to, and anybody interested in proper decision making should listen to him speak. -- Jason Rockland, Education Director, Susquehanna Investments Group

Teamed with an equally witty and wise intellectual heavyweight, Nobel laureate Leon Lederman, John Allen Paulos provided Medill School of Journalism students and other members of the Northwestern University community with a detailed dissection of the press's (mis)use of math. Thoroughly entertaining and enlightening. He even looked like a math professor should look. -- Loren Ghiglione, Dean of Medill School of Journalism, Northwestern University

Professor John Allen Paulos served as a last-minute replacement for the governor of Pennsylvania at the Pennsylvania State Education Association statewide conference a few years ago. As keynote speaker, addressing an audience of hundreds of teachers from across the state, Paulos inspired, enlightened, and entertained them with his philosophical and practical viewpoints on education, numeracy, and life in general. -- Bonnie Squires, former Assistant Executive Director, Pennsylvania State Education Association (current title: President, Squires Consulting)

Do your eyes glaze over when confronted with dizzying statistics in the newspapers? Do you know the difference between a million and a billion? If you feel ill-equipped to weigh up the numbers bandied about by economists, journalists and financiers, help is at hand in the form of mathematician, John Allen Paulos. Professor Paulos captivated listeners to BBC's Radio 4 in a series of Talks entitled, 'A Mathematician Reads The Newspapers' with his blend of rigorous intellect and pure entertainment. This was maths that changed the way you saw the world, maths

that was accessible, smart and funny all at the same time. -- Teresa Watkins, producer, BBC television and radio

Paulos' talk was a very informative and entertaining random walk through some of the topical issues facing educators, investors, and, indeed, all concerned citizens. A perfect keynote speech - funny, useful, and thought-provoking.-- Dan Cardell, Chicago Quantitative Alliance

- **Columbia School of Journalism - During the 2001-2002 academic year I was a visiting professor at the Columbia University Graduate School of Journalism and designed a course on quantitative literacy for journalists that, the school hopes, will become a national model.**
- \* Taught a short course on Probability and the Odds at Nanyang Technological University in Singapore during the spring of 2010 and 2011.

## Teaching:

### Courses Taught:

Most of the basic undergraduate courses. They include calculus, differential equations, applied analysis, abstract and linear algebra, probability and statistics, and mathematical logic.

A long-standing course and popular on Quantitative Literacy, sometimes to classes of 300.

Graduate courses in mathematical logic, recursion theory, model theory, philosophy of mathematics, and stochastic processes.

### Teaching Awards:

I'm a popular teacher and my classes are always full. Interpreting teaching loosely to pertain to writing and speaking as well as to classroom teaching, I include my keynote speeches at a large variety of educational associations and at numerous colleges and universities; invitations to write on education generally and on math and journalistic education in particular; recognition as an engaging and informative author and speaker; many informal student testimonials.

**As mentioned, I received the 2002 Faculty Creative Achievement Award from Temple for my books and other writings**, which are not unrelated to teaching.

Also not teaching in the conventional sense, my expository and other writing led to my receiving, again as mentioned, **the 2003 Award for promoting the public understanding of science from the American Association for the Advancement of Science** as well as **the 2013 Mathematics Communication Award from the Joint Policy Board for Mathematics**.

### Independent Study Courses:

Through the years I've given a number of reading courses on mathematical logic, set theory, and on topics in probability.

I've been a member of the Ph. D. committee of 6 students in philosophy, 4 in mathematics, 1 in education.

## Publicity (quite partial list):

My writings (the books, reviews, articles, monthly columns, and OpEds mentioned above) and the attention they've attracted constitute a kind of public service. So do the many invited speeches I've made, the numerous newspaper citations and interviews I've given, and the television and radio shows on which I've appeared. A small sample of this publicity, whose dates range between 1979 and 2005, appear below.

\* Full page review of *Math and Humor* in *New York Times* book review (the first of several significant reviews of almost all of my books in the *Times* and elsewhere; **see below for a selection of excerpts from the books' reviews**);

\* Very favorable reviews of *Innumeracy* in *Time Magazine*, in the *New York Times* (2), *Time Magazine*, *Business Week*, *Chicago Tribune*, *Christian Science Monitor*, *La Times*, *Boston Globe*, *Washington Post*, etc;

\* Likewise for *Beyond Numeracy* in *Wall Street Journal*, *London Times Literary Supplement*, *Washington Post*, Etc;

\* *Innumeracy* an alternate selection of the Book-of-the-Month Club, a main selection of the Quality Paperback Book Club, chosen by three other clubs, translated into eleven foreign languages, and on the *New York Times* **national bestseller list for eighteen weeks**; *Beyond Numeracy* also an alternate selection of the Book-of-the-month Club, a very strong seller, and translated into five foreign languages;

\* *A Mathematician Reads The Newspaper* was an even stronger seller than its predecessor (*Beyond Numeracy*) and made the *New York Times* business bestseller list and for several weeks **was #1 on the Amazon online bestseller list**;

\* Comparably favorable and even more numerous reviews of *A Mathematician Reads The Newspaper*;

\* *Once Upon A Number* was chosen as **one of the best books of 1998 by the Los Angeles Times**;

\* Long discussion of my work in *The Chronicle Of Higher Education* and the *American Math Monthly*;

\* Two reviews of my book *Irreligion* as well as numerous other reviews and blog postings;

\* A good deal of national television, including the *Today Show*, *The Macneil-Lehrer News Hour*, *The David Letterman Show*, 20-20, *The CBS Morning News* And *CBS Evening News*;

- \* I've also been the **answer to a question on the television show *Jeopardy***;
- \* National radio, including *NPR's Fresh Air*, *NPR's Science Friday* (Three Times), *The Larry King Show*, various *A&E Specials*; and more than one hundred local radio (*WHYY*, in particular) and TV interviews, many of the former by telephone.
- \* Very positive reviews of *A Mathematician Plays The Stock Market* in *The Wall Street Journal*, *Los Angeles Times*, *New York Observer*, *Washington Post*, and the *Financial Times* as well as a whole new spate of television and radio appearances;
- \* Profiles and articles about me and my work in *People* magazine, *USA Today*, *Philadelphia* magazine, *Omni* magazine, *Editor And Publisher*, *Worth*, and many other magazines, newspapers, and journals;
- \* Various other pieces including *New York Times* Book Notes columns, article on front page of *The New York Times* Sunday Book Review, long article in *Publisher's Weekly*, survey article on education for the *New York Times* book review, the lead piece on math education for the *Washington Post*, etc.;
- \* Frequently quoted in articles in periodicals ranging from the *New York Times* (on math education, statistics and the media, risk assessment, public policy, the bible codes, coincidences, the lottery, etc.) to *Popular Science*, from the *Journal Of The American Medical Association* and the *Philadelphia Inquirer* to the *Reader's Digest* and *The Wall Street Journal*; from a *Washington Post* profile to a cover story on me in *WISCONSIN ALUMNI* magazines;
- \* Brief citations and quotes too numerous to mention;
- \* Many of my OpEd's from the *New York Times* and other periodicals, book reviews, and articles have attracted much attention and been widely discussed;
- \* **Four-part radio series on the BBC based on *A Mathematician Reads The Newspaper***;
- \* Talk to Nieman Journalism Fellows at Harvard, *USA Today*, *Washington Post*, and to American Society of Newspaper Editors in Washington,
- \* My extended appearance on *Slate* magazine's Breakfast Club and article about my piece on William Safire's OpEd handicapping presidential candidates, also on *Slate* (2002);
- \* A featured appearance on C-Span's Book Notes as well as an appearance on a number of BBC shows including Melvyn Bragg's for *Once Upon A Number* and *A Mathematician Plays The Stock Market*;

\* As mentioned, personal appearances and lectures in virtually every major city in the country and many abroad;

\* **Who's Counting, my ABCNews.com monthly column devoted to the numerical aspects of stories in the news; the column, whose back pieces are archived, receives a huge number of hits from this country as well as from abroad;**

\* **My UK Guardian columns over the last two years;**

\* My 2000 election media appearances: Interviews with NPR marketplace (national), NPR Marty Moss-Coane (local); NPR (Boston); three ABCNews.com pieces on the election, one Daily News OpEd; a NY Times OpEd, "We're Measuring Bacteria With a Yardstick" (syndicated nationwide); mentions in the NYT Magazine; the New Yorker; Boston Globe OpEds (Goodman and Gould); television appearances on ABC's 20/20, PBS's Lehrer News Hour, NBC Nightly News, and a dozen radio interviews; Jeff Greenfield's characterization of my remarks (regarding the margin of error being greater than the margin of victory) as the wisest on the whole election.

\* In connection with the above, my remarks were cited by the Florida Supreme Court in their deliberations about a state-wide recount;

\* My 2004 election commentary, including a frequently cited piece in the Philadelphia Inquirer on the discrepancy between the election results and the exit polls (<http://www.math.temple.edu/~paulos/exit.html> );

\* I was chosen by Philadelphia Magazine as one of the city's "76 Smartest Philadelphians;" I'll again refrain from my usual gimlet-eyed scrutiny of such a claim.

\* My name was up in lights on Times Square in August, 2005, regarding a column I wrote for ABCNews. Com on a JAMA study about the frequent reversals of health advice

\* I have been on the editorial boards of the *Skeptical Inquirer*, the *Journal Of Humor Research*, and the *Philadelphia Daily News*, and, as mentioned, my piece "Dyscalculia and Health Statistics" in *Discover* magazine won the Folio Ovation Award for the best piece of commentary in any American magazine; I am (or have been) a member of The Mathematical Association of America (MAA), The Association for Symbolic Logic (ASL), The American Statistical Association (ASA), The Society for Exact Philosophy (SEP), Philadelphia Writers Organization (PWO), and the Authors' Guild;

\* **My presence on the net, including, in particular, my personal web page at [www.math.temple.edu/~paulos](http://www.math.temple.edu/~paulos); more than 65,000 google mentions (repetitious, of course);**

\* A slew of recent media appearances on a variety of issues, including **being asked, oddly enough, to come up with an alternative Pledge of Allegiance by the Washington Post:** ([http://www.washingtonpost.com/wp-srv/opinion/2005/pledge/altpledge\\_paulos.html](http://www.washingtonpost.com/wp-srv/opinion/2005/pledge/altpledge_paulos.html));.

**\* This sort of presence on blogs, in newspapers and magazines, and before audiences all over the country (too numerous to list) and world has continued through 2011.**

**Taught a short course on Probability and the Odds at Nanyang Technological University in Singapore during the spring of 2010 and 2011.**

### **Excerpts from Reviews of My Books**

(These are amazingly wonderful, if I may be allowed a gasconade.)

#### *Innumeracy*

"Our society would be unimaginably different if the average person truly understood the ideas in this marvelous and important book." Douglas Hofstadter --- author of Godel, Escher, and Bach.

"This elegant survival manual is brief, witty, and full of practical applications." Stefan Kanfer -- Time Magazine.

"Like carrying on a conversation with an engaging, articulate math whiz who easily shifts from the profound to the funny." Christopher Farrell --- Business Week.

"Paulos makes numbers, probability, and statistics perform like so many trained seals for the reader's entertainment and enlightenment." Jon Van --- Chicago Tribune.

"The innumerate will surely profit from this entertaining book." Morris Kline --- New York Times Book Review.

"This admirable little book is only 135 pages long. You can read it in 2 hours. Chances are that they could be among the most enlightening and even profitable 120 minutes you ever spent." Henry Kisor --- Chicago Sun-Times.

"The world, as seen by Paulos, is less mysterious, yet somehow more elegant, less magical, yet more wonderful. So many apparently strange events do, in fact, become all the more magnificent in their not-so-fearful symmetry. Arthur Salm --- San Diego Tribune.

"He takes us a couple of steps closer to numeracy, and it is all in all an enlightening place to be." Christopher Lehman-Haupt --- New York Times.

"One wonders why no one ever explained it this way before." Sheila Tobias --- author of Overcoming Anxiety.

"Innumeracy would improve the quality of thinking of virtually anyone." Isaac Asimov.

### *A Mathematician Plays The Stock Market*

"Investors would do well to heed his entertaining, frequently counterintuitive, always useful bean-counting methodology. A first-rate exploration into the math of the market: heuristic numeracy at its best." - Kirkus Reviews

"A funny, insightful little volume" ... "Playful and informative, Paulos's book will be appreciated by investors with a sense of humor." - Publishers Weekly.

"Paulos is the real McCoy, and his newest offering, "A Mathematician Plays the Stock Market," is a double-chocolate nougat of a book - a rich, densely packed delight. It is also rueful, funny and disarmingly personal." - Kai Maristed, Los Angeles Times.

"Well, Mr. Paulos lost his mad money and more, but he deserves to recoup some of it with "A Mathematician Plays the Stock Market." If the book were just an extended autobiographical anecdote -- author gets into scrape, comes through humbled but OK -- it would be of finite interest. But Mr. Paulos, who teaches mathematics at Temple, has a knack for making technical concepts clear and entertaining, as he has shown in earlier books like "Innumeracy." Here, with his usual light touch, he lays out the mathematical ideas behind the market, cutting back and forth between the lessons of theory and his own misadventures in practice." - Jim Holt, Wall Street Journal

"Throughout this wide-ranging survey, the writing is spirited, funny and clear. Mr. Paulos is continually imaginative in finding apt metaphors and anecdotes for the mechanics he dissects..." - Andrew Rosenheim, New York Observer.

"John Allen Paulos is a genius at translating the arcane and complex for the rest of us in ways that go down as easily, and enjoyably, as vanilla ice cream. ... His tour of the literature takes in all the paradoxes, fallacies and theories about markets, skillfully blending the math and economics and, most important, the psychology of it all. You won't come away with any surefire investment strategy, but you will understand why anyone who purports to have one almost certainly doesn't. This book should be required reading for anyone opening a brokerage account." - Steve Pearlstein, Washington Post

### *Beyond Numeracy*

If you've ever wanted to recapture that sense of near-mystical rapture, there is no better place than this book, and no more humane and enthusiastic mentor than John Allen Paulos, who does for mathematics what *The Joy of Sex* did for the boudoir interface. .... Paulos painstakingly presents even the most recondite ideas in concrete, easily visualizable terms. .... But Paulos's principal genius lies in the recognition that many of those humans are "unknowing mathophiles" who "have been thinking math all their lives without realizing it." For those, for anyone, who ever sat rapt at the austere beauty of a proof and later wondered where the wonder went, it's here. Curt Suplee --- Washington Post

This is a book full of details, but its real aim seems to be to convey not any specific fact so much as a style, even a spirit. A book of the spirit should be deeply personal, so Paulos has chosen his format wisely. .... P.B. and J.S. Medawar compiled a sometimes cranky, sometimes brilliant survey of biology called *Aristotle to Zoos* in this format, and *Beyond Numeracy*, though not as magisterial, can hold its own as the mathematical equivalent. .... this inviting book shows that those of us who aren't in touch with that realm are the poorer for it. David Berreby --- Philadelphia Inquirer

His brief essays are arranged alphabetically by topic, and as with one of its precursors, Voltaire's *Philosophical Dictionary*, it makes for an often jolly little book. ... If there is much to take issue with in *Beyond Numeracy*, there is also much to be amused and enlightened by. The lore has it that when Pythagoras discovered his great theorem on right triangles, he was so transported that he sacrificed 100 head of oxen to the gods as a token of gratitude. On this scale, Mr. Paulos's book is surely worth an ox or two. Jim Holt --- Wall Street Journal

Maybe there is a royal road to mathematics, after all. If so, Paulos is motoring on it in the driver's seat with this wide-ranging book .... Paulos tells it like the gifted teacher he is, combining mathematical lore with asides on culture and personalities .... And on and on in what one would like to see become an infinite series. --- Kirkus Reviews

"Beyond Numeracy will undoubtedly entertain and educate many people and open up for them the mysterious and closed book - the book of the universe, as Galileo had it - of mathematics." Brian Rotman --- London Times Literary Supplement.

### *A Mathematician Reads The Newspaper*

But the dirty secret about the media's contribution to American "Innumeracy," first examined in a delightful book by that title by John Allen Paulos, is about to be revealed in his sequel, "A Mathematician Reads the Newspaper." Max Frankel --- New York Times.

This is press criticism, but not of the usual kind .... This is press criticism of the sort that George Orwell had in mind when he observed that what's important isn't news, and what's news isn't important. .... This is a subversive book. Paulos argues that the world is so complex that it cannot be accurately described, much less manipulated. .... a wise and thoughtful book, which skewers much of what everyone knows to be true. Lee Dembart --- Los Angeles Times.

Even better, Paulos' wit and humor - admirably displayed in *Innumeracy* - are in top form. His irreverent and pointed comments entertain as well as educate. Though Paulos writes about a bewildering number of topics, he has something fresh and interesting to say about each. Charles Seife --- Philadelphia Inquirer.

It would be great to have John Allen Paulos living next door. Every morning when you read the paper and came across some story that didn't seem quite right - that had the faint odor of

illogic hovering about it - you could just lean out the window and shout, "Jack! Get the hell over here!"..... Paulos, who wrote the bestseller *Innumeracy* (the mathematical equivalent of illiteracy), has now written a fun, spunky, wise little book that would be helpful to both the consumers of the news and its purveyors. Joel Achenbach --- *Washington Post*.

Although the combination of math and newspapers sounds uniquely unappetizing, John Allen Paulos creates a truly thought-provoking book from that mixture. *USA Today* --- Best Bet

As intriguing as these examples may be, Paulos' book is much more than an assortment of helpful hints for news readers. As a lifelong fan of newspapers, Paulos provides a wide-ranging collection of musings on mathematics, the media and life itself. *Chicago Tribune*, Jon Van.

In his new book, the mathematician John Allen Paulos continues his witty crusade against mathematical illiteracy ..... Mr. Paulos's little essay explaining the Banzhaf power index and how it relates to Lani Guinier's ideas about empowering minorities is itself worth the price of the book. Richard Bernstein --- *New York Times*.

... this book should be mandatory reading for every journalist - as well as the readers, viewers and former tutors they supposedly serve. Robert Matthews --- *The New Scientist*.

To the rescue comes our hero John Allen Paulos, that mysterious masked mathematician on a white horse, with his new book, "A Mathematician Reads the Newspaper." ...If paranoia could be cured by math, Paulos would be the Jonas Salk of the disease. His dissection of conspiracy theories is delicious. Molly Ivins --- syndicated columnist.

Paulos uses his considerable talents and a breezy style to discuss many ways to apply simple, or at least simply explained, mathematics and logic to analyze the contents of the newspaper. ... the book is a compendium of unusually sound advice, which, if widely read and understood, could improve a lot more for us than the way we read the newspaper. *Journal of the American Medical Association*.

"A Mathematician Reads the Newspaper" is irresistible. Rudy Rucker --- *Scientific American*.

This book will bring a great deal of pleasure to many - as it did to the reviewer. It is full of fun, full of information, full of insights. Peter Hilton -- *American Mathematics Monthly*.

### ***Once Upon A Number***

John Allen Paulos is one of the greatest mathematical storytellers of all time, one of those rare individuals who can so beautifully use the medium of story to communicate math and statistics. In this pathbreaking and immensely entertaining work, he also does the reverse: he uses the medium of math (and statistics) to tell us about the medium of story. Each of his insights and

one-liners is great and together they offer a profound, new view of the relation between math and stories. -- Doron Zeilberger, winner, 1998 Steele prize in mathematics

Around the relations between formal mathematics and informal narrative, Paulos has woven a rich tapestry of jokes, paradoxes, logic, probability, statistics, semantics, philosophy and other wonders. One never knows what delightful surprise is coming next. You will learn a lot from this entertaining yet far from superficial book. -- Martin Gardner, science author and former Scientific American columnist

Paulos' goal is nothing less than lofty. He hopes to reconcile the personal aspect of human life, which refers to the stories we tell and live by, and the impersonal, which is essentially mathematical, statistical and scientific. Literature and science, he says, share an uneasy complementarity, a complementarity Paulos explores in this collection of linked essays. ... Both delightful and wise, this little book cries out to be kept close at hand, to be looked into from time to time, to be treasured as an old friend. -- Anthony Day, Los Angeles Times

The idea that the mathematician is essentially concerned with the same questions as the novelist - and for that matter, the secretary and the accountant - is intriguing and strangely comforting. That Paulos pulls it off without veering too far into the technical - or careening into the patronizing - is a testament to the success of his book. -- Heather Chaplin, Salon online magazine

A stimulating discussion of the benefits and pitfalls of applying mathematical reasoning to stories and everyday life. -- Gregory Chaitin, Author of The Limits of Mathematics

Popularizers of mathematics often rely on a standard collection of tried and trusted tales to illustrate particular topics painlessly, and anyone who regularly reads books on the subject will have had the experience of encountering the same old stories again and again. These stories are often so delightful that we do not mind being reminded of them, but one of Paulos' great strengths is his ability to invent new stories or at least add new twists to old ones. -- Simon Singh, Scientific American

### ***I Think, Therefore I Laugh***

Paulos is brilliant at capturing difficult ideas in a memorable joke. I've never laughed so much while thinking so hard. -- Brian Butterworth, author of What Counts: How Every Brain Is Hardwired for Math.

If, like me, you find fun in logical conundrums and absurdities, you will find plenty [here]. On the other hand, if you're of the type that finds people like Paulos and me tedious, you should look into his book anyway, just to see what you've been missing. -- Ted Cohen, author of Jokes: Philosophical Thoughts on Joking Matters.

## *Mathematics And Humor*

Mathematics and Humor is an original, sophisticated, and scholarly treatment of the logic and mathematics of humor. --Joseph Ercolano, Library Journal.

Many scholars nowadays write seriously about the ludicrous. Some merely manage to be dull. A few - like Paulos - are brilliant in an odd endeavor. -- Harvey Mindess, Los Angeles Times.

***Irreligion: A Mathematician Explains Why the Arguments for God Just Don't Add Up***

Readable and concise, with moments of great logical rigour and dry wit. New Scientist

Few of the recent books on atheism have been worth reading just for wit and style, but this is one of them: Paulos is truly funny. Publishers Weekly

Paulos's latest offering is a slim but explosive volume whose title is self-explanatory, Toronto Star

John Allen Paulos has done us all a great service. Irreligion is an elegant and timely response to the manifold ignorance that still goes by the name of 'faith' in the 21st century. Sam Harris

He is as sure-footed as a tiger as he prowls through the theocratic landscape pouncing on sloppy thinking. To a large extent he succeeds in demolishing the arguments of believers. Raleigh Durham News and Observer.

Writing in clear, direct prose, Mr. Paulos shows how even everyday references to purpose and intention can be easily reformulated in scientific, nonpurposive terms. New York Times

Irreligion will, I'm confident, take a distinguished place in what one might call the canonical literature of the New Atheism. Norm Levitt in Skeptic Magazine

... refutations of twelve arguments for the existence of God ... [presented] with verve, a robust prose, and a very welcome sense of humor." 3 Quarks Daily

He has, thank Someone, considerable wit. ... Reasoned, cool and concise - a good-natured primer for infidels. Kirkus Review

## **and Future Plans ...**

Ambitious, varied, and secret.