

# *Footnotes*

## **Chapter One—The Problem**

1 Colin Wilson, *New Pathways in Psychology: Maslow and the Post-Freudian Revolution* (New York: Mentor, 1974), p. 12.

## **Chapter Two—Those We Leave Behind**

1 Jonathan Kozol, *Savage Inequalities* (New York: Crown, 1991), p. 149.

2 Kozol, pp. 26, 58, 68-69, 224, 231.

3 Kozol, p. 58.

4 Kozol, p. 118.

5 Gail Collins and Dan Collins, *The Millennium Book* (New York: Doubleday, 1991), p. 50.

6 Paul Hewitt (Lecturer), “*Conceptual Physics with Hewitt: Polarized Light and 3-D Viewing*,” (Addison-Wesley, 1987).

7 Tobias Dantzig, *Number: The Language of Science* (4th ed., rev.) (Garden City, New York: Doubleday, 1954), p. ix.

8 Arthur Fisher, “*Crisis in Education: Part One*,” *Popular Science*, August, 1992, p. 60.

9 Fisher, p. 60.

10 Fisher, p. 59.

11 Robert W. May, “*How Many Species Inhabit the Earth?*,” *Scientific American*, October 1992.

12 John W. Wright, General Editor, *The Universal Almanac* 1991 (Kansas City: Andrews and McMeel, 1990), p. 269.

13 John Allen Paulos, *Innumeracy: Mathematical Illiteracy and Its Consequences* (New York: Hill and Wang, 1988), p. 5.

14 Paulos, p. 122.

15 Ian Stewart, *Game, Set and Math: Enigmas and Conundrums* (London: Penguin, 1991), p. vii.

### Chapter Three—A Brief History of Mathematics

1 Graham Flegg, *Numbers: Their History and Meaning* (London: Andre Deutsch Limited, 1983), p. 41.

2 Tobias Dantzig, *Number: The Language of Science* (4th ed., rev.) (Garden City, New York: Doubleday, 1954), pp. 21-22.

3 Flegg, p. 45.

4 George Gamow, *One Two Three ... Infinity: Facts and Speculations of Science* (New York: Mentor, 1953), p. 15.

5 Flegg, p. 19.

6 Flegg, p. 36.

7 Petr Beckmann, *A History of Pi* (New York: St. Martin's, 1971), p. 23.

8 Beckmann, p. 23. See also: Dirk J. Struik, *A Concise History of Mathematics* (3rd ed., rev.) (New York: Dover, 1966), p. 20. Struik states there were 85 problems.

9 Flegg, p. 94.

10 Florian Cajori, "The Egyptians," in *Growth of Mathematics: From Counting to Calculus* ed. Robert W. Marks (New York: Bantam, 1964), p. 87.

11 Flegg, p. 60.

12 Cajori, p. 87.

13 Flegg, p. 252 and Cajori, p.81.

14 Cajori, p. 81.

15 Gail Collins and Dan Collins, *The Millennium Book* (New York: Doubleday, 1991), p. 62

16 John Perlin, *A Forest Journey: The Role of Wood in the Development of Civilization* (New York: Norton, 1989), p. 132.

17 Charles Van Doren, *A History of Knowledge: The Pivotal Events, People, and Achievements of World History* (New York: Ballantine, 1991), p. 10.

18 Norman Angell, *The Story of Money* (Garden City, New York: Garden City Publishing Company, Inc., 1929.), p. 31.

19 Angell, p. 36.

20 Elgin Groseclose, *Money and Man: A Survey of Monetary Experience* (New York: Frederick Ungar Publishing Co., 1961), p.16

21 Groseclose, p. 18.

22 Struik, p. 41.

23 Collins, p. 32.

24 Groseclose, p. 33.

25 Collins, p. 23.

26 Struik, p. 84.

27 Timothy Ferris, *Coming of Age in the Milky Way* (New York: Morrow, 1988), p. 56.

28 Daniel J. Boorstin, *The Discoverers* (New York: Vintage, 1985), p. 56.

29 Ferris, p. 22.

30 Boorstin, p. 230.

31 Boorstin, p. 49.

32 Dennis W. Richardson, *Evolution of an Electronic Funds Transfer System* (Cambridge, Massachusetts: Colonial Press Inc., 1970), p. 19.

### Chapter Four—Numbers for the Nineties

1 Philip J. Davis and Reuben Hersh, *The Mathematical Experience* (Boston: Houghton Mifflin Company, 1981), p. 98.

2 Theodore Modis, *Predictions* (New York: Simon and Schuster, 1992), p. 30. See also: Charles Panati, *Panati's Extraordinary Endings of Practically Everything and Everybody* (New York: Harper and Row, 1989), p. 172.

- 3 Modis, p. 30.
- 4 Samuel Glasstone, *Sourcebook on the Space Sciences* (Princeton, New Jersey: Van Nostrand, 1965), p. 814.
- 5 Lester R. Brown, Christopher Flavin, and Hal Kane, *Vital Signs 1992: The Trends That Are Shaping Our Future* (New York: Norton, 1992), p. 80.
- 6 John W. Wright, General Editor, *The Universal Almanac 1991* (Kansas City: Andrews and McMeel, 1990), p. 281.
- 7 Brown, p. 80.
- 8 Wright, p. 281.
- 9 John Robbins, "Realities for the 90's" excerpted from (Walpole, New Hampshire: Stillpoint, 1987), p.4.
- 10 Alan Durning, *How Much Is Enough?* (New York: Norton, 1992), p. 71.
- 11 Durning, p. 72.
- 12 Brown, p. 71.
- 13 John Feltman, Editor, *Prevention Magazine's Giant Book of Health Facts* (New York: Rodale, 1991), p. 115.
- 14 George J. Demko with Jerome Agel and Eugene Boe, *Why in the World: Adventures in Geography* (New York: Doubleday, 1992), p. 125
- 15 Durning, p. 95.
- 16 Durning, p. 76.
- 17 Brown, pp. 44-47.
- 18 Demko, p. 385.
- 19 United States Department of Agriculture, *Agricultural Statistics 1992*, (Washington D.C.: Government Printing Office), p. 341.
- 20 United States Department of Health and Human Services, "Facts About Blood Cholesterol," (Washington D.C.: Government Printing Office, October 1990), pp. 12-13.
- 21 Demko, p. 386.
- 22 Wright, p. 307.
- 23 Demko, p. 166.
- 24 Geoffrey Lean, Don Hinrichsen, and Adam Markham, *Atlas of*

- the Environment* (New York: Prentice Hall Press, 1990), p. 20.
- 25 Demko, p. 25.
- 26 Durning, p. 26.
- 27 Lean, p. 44.
- 28 Demko, p. 166.
- 29 Robbins, "Realities for the 90's," p. 4.
- 30 Catherine Lerza and Michael Jacobson, *Food for People, Not for Profit: A Sourcebook on the Food Crisis* (New York: Ballantine, 1975), pp. 235-236.
- 31 Robbins, "Realities for the 90's," p. 5. (Robbins's calculation predicts 100,000,000.)
- 32 Robbins, "Realities for the 90's," p. 5.
- 33 Robbins, "Realities for the 90's," p. 5.
- 34 Robbins, "Realities for the 90's," p. 5.
- 35 Robbins, "Realities for the 90's," p. 5.
- 36 John W. Firor, "Global Heating: The Greenhouse Effect," *Louisiana Conservationist*, January/February 1989.
- 37 Brown, p. 60.
- 38 World Resources Institute, *Environmental Almanac* (New York: Houghton Mifflin, 1991), p. 277.
- 39 World Resources Institute, p. 140.
- 40 Lean, p. 96.
- 41 Lean, p. 93.
- 42 World Resources Institute, p. 279.
- 43 Robert M. May, "How Many Species Inhabit the Earth?," *Scientific American*, October 1992.
- 44 World Resources Institute, p. 285.
- 45 Al Gore, *Earth in the Balance: Ecology and the Human Spirit* (New York: Houghton Mifflin, 1992), p. 139.
- 46 Wright, p. 226.
- 47 World Resources Institute, p. 285.
- 48 World Resources Institute, p. 281.
- 49 Consumer Reports, "Wasted Healthcare Dollars," July 1992, p. 436.

- 50 Consumer Reports, p. 439.  
 51 Wright, p. 262.  
 52 Owen Ullmann and Karen Schneider, "Wealthy will lose, low-income people with jobs will win," *The Times-Picayune* [New Orleans], February 18, 1993, p. A-6, col. 6.  
 53 Tom Mashberg, "U.S. awakens to debt nightmare," *The Times-Picayune* [New Orleans], November 7, 1992, p. A-1, A-6.  
 54 Alfred J. Watkins, *Red ink II* (Lanham, Maryland: Hamilton Press, 1988), p. 14.  
 55 Mashberg, p. A-6.  
 56 President Clinton's first speech to Congress  
 57 Mashberg, p. A-1.

### Chapter Five—Nuts and Bolts

- 1 Tax Foundation, *Facts and Figures on Government Finance 1992* (Washington, D.C.: Government Printing Office, 1992), p. 93.  
 2 John Robbins, "Realities for the 90's," excerpted from *Diet for a New America* (Walpole, New Hampshire: Stillpoint, 1987), p. 6.  
 3 Lester R. Brown, Christopher Flavin, and Hal Kane, *Vital Signs 1992: The Trends That Are Shaping Our Future* (New York: Norton, 1992), p. 77.  
 4 Ted Williams, "The Last Bluefin Hunt," *Audubon* July-August 1992, p. 15.  
 5 Brown, p. 77.

### Chapter Six—Three Problems—Diet, Inflation, and Taxes

- 1 John Robbins, *Diet for a New America* (Walpole, New Hampshire: Stillpoint, 1987), p. 263.  
 2 Robbins, pp. 250-251.  
 3 Diane Duston, "Food labels must tell all, stricter U.S. standards say," *The Times-Picayune* [New Orleans], December 3, 1992, p. A-4.

- 4 John Robbins, (Host), "Diet for a New America Your Health, Your Planet," (*lifeguides* KCET Video, 1991)  
 5 United States Department of Health and Human Services, "Facts About Blood Cholesterol," (Washington D.C.: Government Printing Office, October 1990), p. 2.  
 6 Clarence Wilbur *Taber*, *Taber's Cyclopedic Medical Dictionary* (14th ed.) (Philadelphia: F. A. Davis, 1981), p. 219.  
 7 *Taber*, p. 219.  
 8 John Merline, "Clinton's New War On Drugs," *Investor's Business Daily* [Los Angeles], February 18, 1993, p. 2, col. 4.  
 9 Merline, p. 2, col. 5.  
 10 Merline, p. 2, col. 5.  
 11 John W. Wright, General Editor, *The Universal Almanac 1991* (Kansas City, Missouri: Andrews and McMeel, 1990), p. 271.  
 12 Wright, p. 271.  
 13 Wright, p. 272.  
 14 Wright, p. 272.  
 15 World Resources Institute, *Environmental Almanac* (New York: Houghton Mifflin, 1991), p. 66.  
 16 Wright, p. 276.  
 17 *World Resources Institute*, p. 67.  
 18 Wright, p. 274.  
 19 World Resources Institute, pp. 65-66.  
 20 World Resources Institute, p. 65.  
 21 Wright, p. 272.

### Chapter Seven—Beyond Arithmetic

- 1 Morris Kline, *Mathematics: The Loss of Certainty* (New York: Oxford University Press, 1980), pp. 124-126.  
 2 Dirk J. Struik, *A Concise History of Mathematics* (3rd ed., rev.) (New York: Dover, 1966), pp. 102-103.  
 3 John Robbins, *Diet for a New America* (Walpole, New Hampshire: Stillpoint, 1987), p. 263.

## Chapter Eight—When Linearity Isn't Enough

1 Robert Ornstein and Paul Ehrlich, *New World New Mind: A Brilliantly Original Guide to Changing the Way We Think About the Future* (New York: Simon and Schuster, 1989), pp. 74-75.

2 Theodore Modis, *Predictions* (New York: Simon and Schuster, 1992), p. 17.

3 Modis, p. 63.

4 Modis, p. 64.

5 Modis, p. 242.

6 Modis, pp. 73-74.