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of Illustrations; Part II Who Cares for Gravity; 15. The Chromosome in Its Organization and Activity Follows Its Own Path - It Does Not Obey Gravity, Randomness, Selection or Magnetism
16. Definition of Gravity - Newton's Laws Are Good for Planets and Apples
17. What Is a Force - The Four Fundamental Forces; 18. Newton's Laws Do Not Apply in Quantum Mechanics; 19. Not All Bodies Fall When Unsupported; 20. The Ascent of Sap in Trees-Another Unexplained Phenomenon; 21. An Unknown Process Decides Which Cells Are Going to Grow in the Direction of Gravity and Which Are Going to Counteract It; 22. Physicists Construct Antigravity Devices that Oblige Frogs and Plants to Float
23. Atoms Hide Many Properties that May Disclose the Mechanisms Behind Living Processes - Liquid Helium Can Build a Fountain Ejecting Itself Out of a Flask
24. Levitation in Metals - What Was Impossible Became Possible; 25. Animals, like Plants, Have Created Devices that Counteract Gravity; 26. In Giraffes the Distance between the Heart and the Head Is Over Two Meters; 27. No Chromosome Obeys Newton's Laws - In Their Movements Chromosomes Bypass Gravity; 28. Chromosomes Move in All Directions of the Mariner's Compass
29. It Is the Programmed Pattern of the Organism that Decides the Direction of Movement

Sommario/riassunto

When examined carefully at the molecular level, the chromosome turns out to have created its own private world full of tricks, back door exits and novel solutions. This "folly" makes it an untamed innovator. Geneticists have been bewildered for decades. What kind of creature was actually the chromosome? Was it plastic, changing by innumerable rearrangements and mutations all the time; or was it a rigid structure which has preserved its basic organisation and functions since the dawn of the cell? It is this conflicting state that seems to be at the base of its "folly". Perplexed by this behavior
