

1: Raymond Smullyan, 97, puzzle-creating logician - The Boston Globe

Raymond Merrill Smullyan (/ ɛ̃˘ s m ɛ̃œ l i ɛ̃™ n /; May 25, - February 6,) was an American mathematician, magician, concert pianist, logician, Taoist, and philosopher. Born in Far Rockaway, New York, his first career was stage magic.

Richard Feynman had also been born in Far Rockaway just months before Smullyan. In [1] he recounts his introduction to logical puzzles when he was six years old: In the morning my brother Emile ten years my senior came into my bedroom and said: Emile had fooled him by not fooling him! Smullyan writes [1]: As a young boy Smullyan loved both music and science and he was extremely talented musically. When he was twelve years old he won a gold medal in a piano competition and it looked as if he would make music his career. When Smullyan was thirteen years old his family moved to Manhattan. There he attended the Theodore Roosevelt High School in the Bronx, this school being chosen because it offered special music courses which would be well suited to his musical aims. However, the school did not in the end give Smullyan what he wanted. Yes, he was passionately interested in music but he had another passion and that was mathematics. He wanted to learn about groups, rings and fields, the foundations of mathematics and mathematical logic. This the Theodore Roosevelt High School did not give him so he left the school to study on his own. A few years of study certainly put him in a good position to sit the College Board examinations, which he did and entered Pacific College in Oregon. It looks as if he was totally confused at this stage of his life whether to study mathematics or music and even if he had sorted out this problem in his mind, he does not seem to have found that the conventional teaching methods in colleges and universities were to his liking. Returning to New York from San Francisco, Smullyan studied mathematics and logic on his own and it was at this time that he began to compose chess puzzles. Well in fact he had composed his first chess puzzle at age sixteen and it was the conventional type of chess puzzle "white to play and mate in two moves" [3]: I showed it to several of my older friends. One of them said This struck me as a fascinating idea, and I straightway set to work and composed a problem in retrograde analysis. Although Smullyan had not heard of retrograde analysis at this time, such a field of chess problems did exist. They were puzzles where one has to work backwards. For example a chess position would be given and a question mark would be on one of the squares. The problem would be to find what the missing piece was that has to be on that square. It sounds as if such a problem could not be solved, and this is exactly the type of problem that Smullyan liked. Problems which had a unique solution, yet looked quite impossible. During this spell in New York, Smullyan composed many chess problems in retrograde analysis and they later were used in his two books on the topic [2] and [3]. Studying mathematics and composing chess problems were not the only things he did in New York at this time, for he also learnt to do magic tricks, becoming a very good magician. In he returned to formal education entering the University of Wisconsin. After studying there for a year he moved to Chicago where he began to take courses at the university but gave up after only one semester. He continued to study on his own and earned his living teaching music in Roosevelt College in Chicago. He then returned to New York where he spent two years. During these years he earned money performing magic acts in nightclubs in Greenwich Village. In he returned to Chicago, took various courses at the university and performed his magic act around the town to earn his living. In fact his magic act was very popular and Smullyan, although basically a shy man, gave a wonderful amusing and entertaining act as Five Ace Merrill, with hilariously funny patter. However [1]: I decided to try getting a job as a salesman. I applied to a vacuum cleaner company By he was still in Chicago, undertaking graduate level research but still not having amassed the right number of credits for the award of a first degree. He now recommended Smullyan for a mathematics post at Dartmouth College, the liberal arts college in Hanover, New Hampshire. Smullyan had no formal qualifications at this time but was already working on mathematical research for future publications. He taught at Dartmouth College from until , being awarded his B. He had never completed sufficient courses to merit the award, but to make up the number Chicago credited him with a calculus course which he had never taken but was teaching. Smullyan published Languages in which self reference is possible in the Journal of Symbolic Logic in In the following year Undecidability and recursive inseparability appeared which proves two results on undecidability in arithmetic, one of which had

been suggested by Bernays. By the time the second of these articles appeared, Smullyan was at Princeton University working under Alonzo Church for his doctorate. He entered in and was awarded his Ph. D. Appointed to a post at Princeton in 1951, he worked there until 1955. He published several mathematical articles during this period. Exact separation of recursively enumerable sets within theories written jointly with Hilary Putnam was published in 1958 while Smullyan also published Theories with effectively inseparable nuclei in that year and then in the three papers Extended canonical systems; Elementary formal systems; and Monadic elementary formal systems. In 1961 he also published the monograph Theory of formal systems published by Princeton University Press. Kreisel, reviewing the book says that it gives: All the well-known results on r . In 1962, when Smullyan was a graduate student at Princeton he showed some of his chess puzzles to a fellow graduate student who [2]: In fact this graduate student sent one of the puzzles to his father in England who in turn sent it to the Manchester Guardian and the newspaper published it. The Guardian had not known who the author was and, when Smullyan contacted them, they were pleased to acknowledge his authorship and to publish more of his chess problems. The puzzle books present to the general public an enjoyable introduction to some of the deepest ideas in the foundations of mathematics. For example the book [1] is described on the cover as follows: Martin Gardner described this book in Scientific American as: In his puzzle book [4] Smullyan writes that he gives: It is no harder to understand than algebra or geometry, and it is so rewarding! We have mentioned one of his books on mathematical logic above. He published another text First-order logic in 1965. This book combines elegance with clear, detailed exposition; a good student should be able to read it almost without a teacher. Smullyan explains in the Preface that he has written the book: A standard one-semester course in mathematical logic is more than enough for the understanding of this volume. This book was the first of a series of texts which appeared in quick succession. In 1966 he published Recursion theory for metamathematics which is a sequel to his text described above. A third volume in the series Diagonalization and self-reference was published in 1967 and presents a very difficult topic in such a way as to make it both understandable and enjoyable. In 1968 Smullyan co-authored with Melvin Fitting Set theory and the continuum problem. Plotkin, reviewing this book writes: The authors write with admirable lucidity. There are some truly charming set pieces on countability and uncountability and on mathematical induction. The reader can feel the authorial will striving for elegance of presentation and completeness. Ray has always been episodic in his work. He will get interested in something and more or less abandon everything else. He wrote an essay at one point and then, for the next couple of years, there was this enormous stream of essays. After the essay stage he started doing puzzles. For the next two or three years everything was puzzles. They were finding their way into all of his work. Mothner [5] writes: I watched him teach a graduate level logic course, as he lurched to the blackboard where he writes in a serviceable hand and in complete sentences and paced about his desk, fidgeting and chuckling. He would break into a small sibilant laugh at problems that seemed to leave his students more confused than amused. Before the class began, he tried to warm up the group, tossing out some simple puzzles. Finally let us mention that he has one further hobby, namely astronomy. He loves observing through his telescope, and he ground the six inch mirror himself.

2: The Godelian Puzzle Book: Puzzles, Paradoxes and Proofs - Raymond M. Smullyan - Google Books

Raymond Smullyan: The Merry Prankster Raymond Smullyan (), mathematician, logician, magician, creator of extraordinary puzzles, philosopher, pianist, and man of many parts. The first Dover book by Raymond Smullyan was *First-Order Logic* ().

Life[edit] Born in Far Rockaway, New York to Eastern European Jewish parents originally spelling their name as Schmulian , Raymond showed musical talent from a young age, winning a gold medal in a piano competition when he was aged 14. He left to study on his own as the school did not offer similar courses in mathematics. He was also an amateur astronomer, using a six-inch reflecting telescope for which he ground the mirror. Logic problems[edit] Many of his logic problems are extensions of classic puzzles. Knights and Knaves involves knights who always tell the truth and knaves who always lie. This is based on a story of two doors and two guards, one who lies and one who tells the truth. One door leads to heaven and one to hell, and the puzzle is to find out which door leads to heaven by asking one of the guards a question. One way to do this is to ask, "Which door would the other guard say leads to hell? This idea was famously used in the film *Labyrinth*. In more complex puzzles, he introduces characters who may lie or tell the truth referred to as "normals" , and furthermore instead of answering "yes" or "no", use words which mean "yes" or "no", but the reader does not know which word means which. The puzzle known as " the hardest logic puzzle ever " is based on these characters and themes. In his *Transylvania* puzzles, half of the inhabitants are insane, and believe only false things, whereas the other half are sane and believe only true things. In addition, humans always tell the truth, and vampires always lie. And *mutatis mutandis* for humans. Thus everything said by a sane human or an insane vampire is true, while everything said by an insane human or a sane vampire is false. The equivalent theorem is that for any formal system S , there exists a mathematical statement that can be interpreted as "This statement is not provable in formal system S ". If the system S is consistent, neither the statement nor its opposite will be provable in it. See also *Doxastic logic*. Then, through a series of increasingly harder challenges, he and the reader begin to understand the principles in question. Finally the novella culminates in *Inspector Craig* and the reader solving the crime, utilizing the mathematical and logical principles learned. *Inspector Craig* generally does not learn the formal theory in question, and Smullyan usually reserves a few chapters after the *Inspector Craig* adventure to illuminate the analogy for the reader. *Inspector Craig* gets his name from William Craig. His book *To Mock a Mockingbird* is a recreational introduction to the subject of combinatory logic. Apart from writing about and teaching logic, Smullyan released a recording of his favorite baroque keyboard and classical piano pieces by composers such as Bach , Scarlatti , and Schubert. Some recordings are available on the Piano Society website, along with the video "Rambles, Reflections, Music and Readings". He has also written an autobiography titled *Some Interesting Memories*:

3: What Is the Name Of This Book? by Smullyan, Raymond M

ThriftBooks sells millions of used books at the lowest everyday prices. We personally assess every book's quality and offer rare, out-of-print treasures. We deliver the joy of reading in 100% recycled packaging with free standard shipping on U.S. orders over \$

Smullyan was a serious mathematician, with the publications and the doctorate to prove it. But his greatest legacy might be the devilishly clever logic puzzles he devised, presenting them in books or just in casual conversation. Advertisement He was also a character. With his long white hair and beard, Dr. He hated exercise and loved steak and eggs. He studied Eastern religion. He told corny jokes and performed close-up magic to anyone near him. He played the piano with passion and talent into his 90s. A career in music had been derailed by tendinitis when he was a young man. Get Fast Forward in your inbox: A look at the news and events shaping the day ahead, delivered every weekday. Sign Up Thank you for signing up! Smullyan saw beauty in the puzzles he created, seemingly nonstop, over the decades, and viewed them as tools to spread the gospel of mathematics. Given a triangle with two equal sides, are two of the angles necessarily equal? Why, or why not? He offered a statement that, in the way he framed it, could only result in a kiss from her. Smullyan, said the clarity of his puzzles could unveil the beauty of math to those who could not previously grasp it. Smullyan to the Oxford logician Charles Dodgson, who also was an author better known by his pen name, Lewis Carroll. Smullyan wrote, Alice thinks to herself about how confusing, yet remarkably logical, Humpty Dumpty is. Raymond Merrill Smullyan was born in Queens, N. His father, Isidore, was a businessman; his mother, the former Rosina Freedman, a homemaker. His education was peripatetic and eclectic. He created chess puzzles that were more concerned about moves that had been made than the ones that should be made. He put together a magic act, and performed under the stage name Five-Ace Merrill at nightclubs like the Pump Room in Chicago, where he worked for tips. His philosophy of teaching was a little puzzling. But, he added, the effect of his apparent lenience was that many students worked harder in his course than in any other.

4: Raymond Smullyan - Wikipedia

*Forever Undecided: A Puzzle Guide to Godel (Oxford paperbacks) [Raymond M. Smullyan] on www.enganchecubano.com *FREE* shipping on qualifying offers. This book provides an introduction to Kurt Godel's theorems through a collection of puzzles interspersed with an account of symbolic logic.*

5: Theory of Formal Systems - Raymond M. Smullyan, Smullyan Raymond M - Google Books

Raymond M. Smullyan "a celebrated mathematician, logician, magician, and author" presents a logical labyrinth of more than increasingly complex problems. The puzzles delve into Gdel's u If you're intrigued by puzzles and paradoxes, these mind-bending logic puzzles, riddles, and diversions will thrill you with challenges to your powers of reason and common sense.

6: Smullyan biography

Raymond Smullyan: The Merry Prankster Raymond Smullyan (), mathematician, logician, magician, creator of extraordinary puzzles, philosopher, pianist, and man of many parts.

7: Smullyan, Raymond M. [WorldCat Identities]

Created by the celebrated logician Raymond Smullyan, the puzzles require no background in formal logic and will delight readers of all ages. The two-part selection of puzzles and paradoxes begins with examinations of the nature of infinity and some curious systems related to Gdel's theorem.

8: The Gödelian Puzzle Book: Puzzles, Paradoxes and Proofs by Raymond M. Smullyan

The puzzling and paradoxical worlds of Raymond Smullyan By Ira Mothner Whether he is teaching logic to his students or giving brain teasers to his readers, there is more.

9: What Is the Name of This Book? by Raymond M. Smullyan

Raymond Smullyan, Puzzle-Creating Logician, Dies at 97 Image Raymond Smullyan, who died this past week, taught math and philosophy at Lehman College in the Bronx in the s.

Identification guide to freshwater tropical fish Be your own estate agent Premier Street Map of Birmingham The Canadian Church Missionary Association in connection with / Mdcats reconduct paper 2017 I. The Beloveds Voice 107 The new pratt book Teaching Kids the Basics of Liturgy Savage worlds ultima forsan Monster buys a pet Love the Least of My Children Tertullians enumerations. Indo pak history hassan nisar How to buy stocks the smart way Computer science and the new small computer K.L. Ratzlaff The battle of adwa book Authenticity, identity, and tradition among the Hui. Reel 1217. Pemiscot (part), Platte, Perry, Pettis (part). V. 6. Lord of the Nile Drawings by Canaletto Timber, Tourists, and Temples Lecture notes for constitutional law Essentials of the human brain V. 22 United States history. Pt. 2 The Rainbow Connection From Scotland to Canada Construction Documents Services, 2007 Edition Capgemini placement papers 2017 with answers Procyclicality of Financial Systems in Asia The human papilloma virus (HPV) infections and genital warts Pcs for dummies 12th edition How to Groom A Shetland Sheepdog Perfectly Effective practices in early childhood education building a foundation Introduction by Piers Anthony. Mexicos early inhabitants Kaldor theory of distribution Global marketing management changes new challenges and strategies Post-Sputnik educational reform era: to dream the impossible dream Progress in comparative endocrinology Diffusion in Solids (Materials Science Forum, Volume 1)