

IN MEMORIAM

ALONZO CHURCH (1903 – 1995)

Alonzo Church, who was one of the pioneers of mathematical logic in the “post-*Principia*” era, died in Hudson, Ohio on Friday, 11 August, 1995 following a serious illness. He was born in Washington, D.C. on 14 June 1903.

Church received his undergraduate education, his masters degree, and his doctorate in mathematics from Princeton University. His doctoral thesis on the axiom of choice was written under the direction of Oswald Veblen; he received his doctorate in 1927. (Willam Aspray discusses Church at pp. 62–63 in “Oswald Veblen and the Origins of Mathematical Logic at Princeton,” in Thomas Drucker (editor), *Perspectives on the History of Mathematical Logic* (Boston/Basel/Berlin, Birkhäuser, 1991), 54–70.)

Church’s graduate course in logic, taught in the mathematics department of Princeton University in the fall semester of 1931, was (by some accounts, *q.v.* e.g. Quine, p. 83, *The Time of My Life* (Cambridge, Mass./ London, MIT Press, 1985)) the first such course taught in the United States. He gave a series of four lectures on “Elementary Topics in Mathematical Logic” which were given at the Galois Institute of Mathematics of Long Island University in 1940–41. It is evident from the manuscript of these lectures that Church was presenting the most up-to-date introductory survey of mathematical logic while using the lectures as an introduction to mathematics from the standpoint of Gödel-Von Neumann-Bermays set theory. His classic *Introduction to Mathematical Logic* is well known, as are his work on the λ -calculus, and such results as Church’s thesis.

In history of mathematical logic, his contributions included *A Bibliography of Symbolic Logic (1666 – 1935)* (1936; 1984). Under his direction, the *Journal of Symbolic Logic* in its early years made a concerted effort to include everything of possible interest to logicians in its reviews section, and he recruited historians of mathematics such as Jean van Heijenoort (who established contact with Church at the Cornell Summer Institute in Symbolic Logic in 1957) to contribute reviews even of obscure and little-known works, such, for example, as Joseph Bocheński’s paper “*Spitzfindigkeit*” written for the privately published

Festgabe an die Schweizerkatholiken ((Freiberg, Universitätsverlag, 1954) and intended to be merely a sardonic and humorous mockery of classical arguments against formal logic. Additional evidence of Church's interest in history are found in such of his papers as "Comparison of Russell's Resolution of the Semantical Antinomies with that of Tarski" (*Journal of Symbolic Logic* 41 (1976), 747–760) and "Schröder's Anticipation of the Simple Theory of Types" (*Erkenntnis* 10 (1976), 407–411). This last paper was originally scheduled to appear in *Erkenntnis* in 1939, but fell victim to the outbreak of World War II; it may very well set the all-time record for the most long-delayed publication in the history of logic. Willard Van Orman Quine compared van Heijenoort's work in history of mathematical logic to that of Church, declaring that "van Heijenoort's monumental source book *From Frege to Gödel* [. . .] was a contribution to mathematical logic that was perhaps second only, as editorial contributions go, to what Alonzo Church contributed in molding the *Journal of Symbolic Logic*."

Church was instrumental in the growth and development of the Association for Symbolic Logic and of the *Journal of Symbolic Logic*, of which he served as editor from its founding until 1979, and in the development of mathematical logic as an independent field of study within mathematics. Writing about the *Journal of Symbolic Logic* on the "Early History of the Association for Symbolic Logic" (*Journal of Symbolic Logic* 27 (1962), 255–258), C. J. Ducasse and Haskell B. Curry noted (p. 257) that it was "Alonzo Church, whose invaluable labors through the years on the Editorial Board of the Journal have contributed so largely to its success."

Quine described Church as having "something glandular" about him; he was "big-boned . . . , deliberate in speech and movement, keen on detail, strong on tradition, and drawn to history and to logic" (Quine *ibid.*, 243).

George Brown wrote:

From: 76372.1272@compuserve.com (George W. Brown)

Subject: Re: Alonzo Church

Date: Wed, 23 Aug 1995 23:13:04 GMT

I had contact with Church around 1938, when I was a graduate student of Wilks. Since I had a background in logic

from Quine, Church had me do some reviewing for the *Journal for Symbolic Logic*.

For me it was an exciting period in my young life. The Institute for Advanced study was still in Fine Hall, leading to close personal contact with v[on] Neumann and Gödel, for example.

The Editor

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UCLA PHILOSOPHER, MATHEMATICIAN

ALONZO CHURCH

DEAD AT 92

(Forwarded from: Kaplan, David)

Alonzo Church, one of the great philosophers and mathematicians of the 20th century, died Aug. 11 at the age of 92.

“Alonzo Church was one of the very few scholars of his time about whom we can be certain that his name and his work will still be known 200 years from now,” said David Kaplan, professor of philosophy at UCLA. “All of us, faculty as well as students, learned from him. My own research has been profoundly affected by his work.

“The rigor of his intellect was awe-inspiring” Kaplan added. “Yet despite his awesome intellect, he was always good-humored and patient with students.”

Church came to UCLA at the age of 64, after he had retired from Princeton University, where he had been since his undergraduate days in the 1920s. He began teaching in 1929 as an assistant professor of mathematics and philosophy at Princeton. He left in 1967 because he was approaching that university’s mandatory retirement age. “I did not

Alonzo Church was an American logician and professor at Princeton University who was an early pioneer of theoretical computer science. He is best known for his development, in 1934, of the so-called lambda calculus, a model of computation, and his discovery, in 1936, of an "undecidable problem" within it. This result preceded Alan Turing's famous work on the halting problem, which also pointed out the existence of a problem unsolvable by mechanical means. Church and Turing then showed that the lambda calculus and the Turing machine, which is used in the halting problem, are equivalent. Author:Alonzo Church. From Wikisource. Jump to navigation Jump to search. †Author Index: Ch. Alonzo Church (1903–1995). sister projects: Wikipedia article, Wikidata item. American mathematician and logician known for lambda calculus and the Church-Turing Thesis. 2702622Q92741Alonzo ChurchAlonzoChurchChurch,_Alonzo. American mathematician and logician known for lambda calculus and the Church-Turing Thesis. Alonzo Church - 1936 - Journal of Symbolic Logic 1 (1):40-41. Logic, Meaning, and Computation: Essays in Memory of Alonzo Church. Alonzo Church, C. Anthony Anderson & Michael Zelány (eds.) - 2001 - Kluwer Academic Publishers. Alonzo Church:His Life, His Work and Some of His Miracles. Mañ Manzano - 1997 - History and Philosophy of Logic 18 (4):211-232. The Very Possibility of Language: A Sermon on the Consequences of Missing Church. George L. Kline - 1991 - Review of Metaphysics 45 (1):217 -. In Memoriam, John Niemeyer Findlay (1903–1987). Errol E. Harris - 1988 - The Owl of Minerva 19 (2):252-253. Alonzo Church and the Reviews. H. B. Enderton - 1998 - Bulletin of Symbolic Logic 4 (2):172-180. Analytics.