THOMAS LANCASTER WREN

J. W. ARCHBOLD

Thomas Lancaster Wren, born on 18th April, 1889, was the son of Thomas and Amy Elizabeth Wren; his father was a schoolmaster.

He attended Latymer Upper School from 1896 to 1908. He was admitted to St. John's College, Cambridge, first as pensioner and then as foundation scholar in 1908; he was a Wrangler in Part II of the Mathematical Tripos in 1911 and a Rayleigh prizeman in 1913.

He was a Fellow of St. John's from 1913 to 1919 and a College lecturer from October 1914 to November 1915 and from February to June 1919; he was also Assistant in Mathematics at Bedford College London for the session 1913–14.

He came to University College London in 1919 as Reader in Geometry and held this post until his retirement in 1954. He was a member of the Professional Board from 1913 to 1954 and College representative for the United Westminster Schools from 1931 to 1961. In the University of London, he was Chairman of the Board of Studies in Mathematics from 1951 to 1954.

He was admitted to this Society in 1914 and was a member of Council from 1928 to 1933 and Vice-President from 1931 to 1933.

After being in the Officers Training Corps at Cambridge, Wren joined the Army in 1915 and was later attached to the Anti-Aircraft Experimental Section, Ministry of Muntions, where, under A. V. Hill, he belonged to a distinguished body of mathematicians (including W. E. H. Berwick, W. R. Dean, R. H. Fowler, E. A. Milne, S. Pollard, and H. W. Richmond). Wren's conversation frequently indicated the stimulating contacts that he made at this time. During the 1939–45 war, he moved with the mathematics department of University College to Bangor; here much of the administrative work fell to him, the Head of the department, G. B. Jeffery, then having duties as Pro-Provost.

Although geometry was not to everyone's taste, Wren's enthusiastic exposition of projective geometry attracted a number of good students. His detailed knowledge of the subject almost invariably gave rise to examination questions which concluded exhaustingly with " Show, further, that ..... ". Although he wrote voluminous lecture notes, none of these found their way into a book of his own (perhaps he felt that H. F. Baker was saying everything in *Principles of geometry*). However, it should be recorded that L. N. G. Filon dedicated the second edition of his *Introduction to projective geometry* to Wren, acknowledging that without Wren's friendly and unselfish help he could never have accomplished his task.

Wren contributed largely to the establishment of projective geometry as a principal subject of undergraduate study in college and university, thus preparing the way for others to widen the scope of geometry and to take account of the related rapid

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advances in algebra. A joint seminar, established by J. G. Semple and Wren and held alternately at King's and University Colleges, promoted the exchange of such ideas.

Wren's published work, though small in quantity, indicates his interests. In **1,** repeated applications of a birational space transformation are used to investigate the existence of certain surfaces of order n with an $(n-1)$-ple or $(n-2)$-ple line and of curves of order n with an $(n-1)$-point secant, and finally there is an investigation into sets of lines derived from a figure of n ($\leqslant 6$) lines having a common transversal.

The short note **2** and the paper **3** illustrate Wren's passion for purely geometric (as distinct from algebraic) argument, often with delightful effect. At that time, the usual basic hypotheses amounted to the choice of a complex ground field: the abandonment of this limitation has since led to interesting new ideas.

In **4,** he investigates those sets of 27 points on a given plane cubic curve which can arise as the intersection with the plane of the 27 lines on some cubic surface through the curve. It emerges that, given any six points on the curve and six lines in space, through these points and having suitable incidences, every cubic surface through the curve and the six lines determines the same set of 27 points.

To his colleagues and students, Wren was kind, unassuming, and helpful. In the Common Room, we discovered his skill with *The Times* crossword puzzles and his detailed knowledge of railway and other communications; matches and an overfilled pipe always seemed to complete the scene. Those of us who knew him more closely were aware of his love of the countryside and of his devoted family life with his two sisters, one of whom survives him. After a long period when he ceased to be able to move about easily but remained otherwise as alert as ever, Wren died on 14th July, 1972. By his will, the College received a handsome legacy.

The preparation of this notice owes much to the generous help of others in regard to details, particularly to the Master of St. John's College, Cambridge, Mr. H. Kestelman, Professor A. C. Offord, and Dr. Constance M. Rigby.

1. " Some applications of the two-three birational space transformation ", *Proc. London Math. Soc.* 15 (1916), 144–65.

2. (With H. P. Hudson) " Involutory point-pairs in the quadro-quadric Cremona space transformation ", *ibid.*, 24 (1926), xxviii, xxix.

3. " The correspondence between lines in threefold space and points of a quadric fourfold in fivefold space, established by a geometrical construction ", *Proc. Cambridge Philos. Soc.*, 23 (1926), 386–90.

4. " The sets of 27 points in which a plane cubic curve is met by the lines on cubic surfaces ", *J. London Math. Soc.*, 6 (1931), 16–22.