Frank Anscombe

Francis John "Frank" Anscombe (13 May 1918 – 17 October 2001) was an English statistician.

Born in <u>Hove</u> in England, Anscombe was educated at <u>Trinity</u> <u>College</u> at <u>Cambridge University</u>. After serving in the Second World War, he joined <u>Rothamsted Experimental Station</u> for two years before returning to Cambridge as a lecturer.

In experiments, Anscombe emphasized randomization in both the design and analysis phases. In the <u>design</u> phase, Anscombe argued that the experimenters should <u>randomize</u> the labels of <u>blocks</u>.^{[1][2]} In the <u>analysis</u> phase, Anscombe argued that the randomization plan should guide the analysis of data; Anscombe's approach has influenced <u>John Nelder</u> and <u>R. A. Bailey</u> in particular.

He moved to <u>Princeton University</u> in 1956, and in the same year he was elected as a <u>Fellow of the American Statistical Association</u>. [3] He became the founding chairman of the <u>statistics</u> department at Yale University in 1963. [4][5]

According to <u>David Cox</u>, his best-known work may be his 1961 account of formal properties of <u>residuals</u> in <u>linear regression</u>.^{[5][6]} His earlier suggestion for a <u>variance-stabilizing transformation</u> for Poisson data is often known as the Anscombe transform.^[7]

He later became interested in <u>statistical computing</u>, and stressed that "a computer should make both calculations *and* graphs", and illustrated the importance of graphing data with four data sets now known as <u>Anscombe's quartet</u>.^[8] He later published a textbook on statistical computing in APL.^[9]

In <u>economics</u> and <u>decision theory</u> he is best known for a 1963 paper with <u>Robert Aumann</u> which provides the standard basis for the theory of subjective probability.^[10]

He was <u>brother-in-law</u> to another well-known statistician, <u>John</u> Tukey of <u>Princeton University</u>; their wives were sisters.^[5]

Francis Anscombe



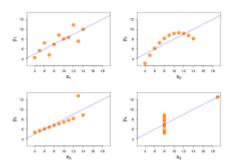
| CHESTON AND STREET | NAMED AND ASSOCIATION OF |
|--------------------|---|
| Born | 13 May 1918 Hove, East Sussex |
| Died | 17 October 2001 (aged 83) |
| Citizenship | United Kingdom |
| Alma mater | Trinity College, Cambridge |
| Known for | Analysis of residuals Anscombe's quartet Anscombe transform |
| Scientific career | |

Fields Statistician Institutions University of Cambridge Rothamsted Experimental Station Princeton University Yale University

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Anscombe illustrated the importance of graphing data with these four data sets.

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■ Frank Anscombe (https://www.genealogy.math.ndsu.nodak.edu/id.php?id=62936) at the Mathematics Genealogy Project

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