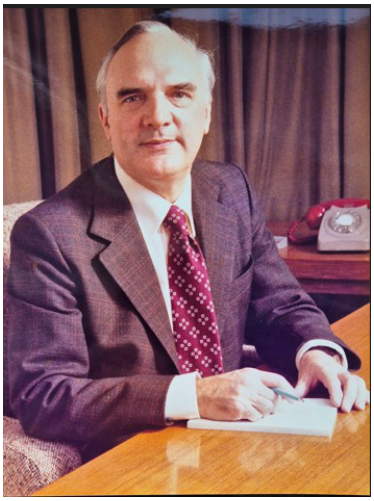
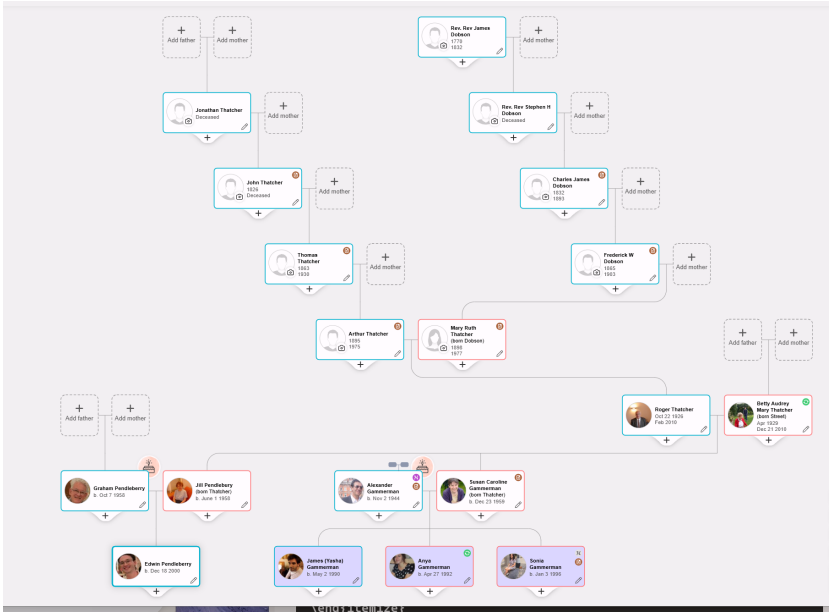
Roger Thatcher: my recollection

October 2026

Let's celebrate the centenary of a man who was both completely English and completely extraordinary.



Roger was born on 22 October 1926: son of Arthur and Mary Ruth, husband of Betty, father of Jill and Sue.



Dobson-Thatcher-Gammerman-Family-Tree

I first met Roger in Leningrad in June 1982. Sue and I had just married, and her parents arrived to meet at me. They were curious: a man somehow convinced their daughter to marry him and then to move to the USSR (that was Sue's intention to begin with).

We walked into the hotel and I met Roger. As usual, he wore a suit and tie, with a warm smile. A typical Englishman I thought. The one I was familiar with from various English-Irish-American novels. He started the conversation very simply: "How about a glass of Pimm's No.1? I brought it from London." That was Roger's diplomatic strategy: test the son-in-law with alcohol.

We started drinking Pimm's with lemonade and orange, and he asked about my work. When I told him about my work at the time related to the theory of information (Shannon's and Kullback) I saw him visibly relax. His daughter, he realised, had not married a charlatan. Maybe she made a mistake, and it would be better if she married a Frenchman, preferably from the South of France, living in a château on the Mediterranean, but certainly this fellow is not illiterate.

That evening set the tone for our friendship: science, humour, curiosity, and a huge amount of alcohol.

When I emigrated to England, Sue and I lived with Roger and Betty in New Malden. That's when I really got to know him. Our daily routine was simple: Roger returned from the office, we opened

the Gin, then over the dinner, drank many glasses of wine, and finally to conclude the evening, we drank Glenfiddich whisky and finished with Drambuie liqueur. Weekends were even more structured: G&T at lunchtime, wine in the afternoon, whisky in the evening. A perfectly balanced diet. Good for a healthy life!

But I quickly discovered that English had some rules. One morning, after a particularly enthusiastic Saturday night, I stepped downstairs with a monumental hangover. All I wanted was a "hair of the dog." Roger entered the room. I asked, "Shall we drink?" He looked at me and said, "Sanya, we must wait until noon. It isn't acceptable to drink before midday in this country." "Yes, I said", but I am from Russia, - and we are allowed to drink 24 hours". And poured some whisky in my glass. Roger hesitated a minute, and then did the same.

Roger was born into a modest family. His father, Arthur Thatcher, volunteered to serve in the Army during the 1st World War. But he said that he couldn't take other people's lives. Hence, he was sent to serve in a hospital. After his service, he met (at a dancing club) Mary Ruth Dobson, married her and they lived in Stockport, where Roger was born. Arthur was a clerk, but after the War went to an accountancy course, was the best in the class and got an accountancy qualification. Later, they went to Bournemouth - he had a better job there as an accountant.

Roger was sent to a good boarding school in Cambridge. During the 2nd World War, he was evacuated with his school to Scotland. In school, he found a friend – Kurt Schwartz – a Jewish boy who was sent by his parents to England when the Nazis took Austria (a part of the *Kindertransport*, an organised rescue effort that took place between 1938 and 1939). They stayed friends for the rest of their lives.

Roger excelled in mathematics at school, and earned a place at St John's College, Cambridge in October 1944. He loved pure maths, number theory, but he realised that there was only one lectureship in number theory in the whole of Britain. So Roger, with typical pragmatism, switched to statistics and economics. Britain gained a statistician; number theory lost a devotee.

It was the time when Cambridge had many great scientists at the time – among them, Harold Jeffreys, a statistician; Paul Dirac, a physicist; John Maynard Keynes, an economist - obviously, a great time to study there.

Roger met Betty on a train journey to Cambridge. They married, and she became the quiet force behind his success. Without Betty, Roger's life would have been brilliant, but with her, it was brilliant and organised.

After serving in the Navy, Roger began his career at British Gas in Liverpool, then rose through the Civil Service, serving at Admiralty and the Ministry of Labour and other posts until he became Registrar General for England and Wales. In 1981 he organised and oversaw a census [5] that was amazingly cheap financially (£1 per person), short (20 questions), and astonishingly accurate (only 0.45% missed). It remains a record that statisticians still admire — and envy.

But Roger's mind was never confined just to his job. He belonged to very rare species: the universal researcher. He published in statistics, demography, number theory, machine learning, general relativity, cosmology, quantum mechanics, archaeology and even inventory control.

If he found something interesting, he studied it. Then developed some original ideas related to the subject. Then, he published it (often after several rejections by journals); they are always suspicious about new ideas (as I learned well myself during my career at the University).

Like his science heroes from the ancient world, he was a universal scientist. He could easily make valuable contributions to any mathematical or physical science. The first example that comes to mind was Archimedes, who was, perhaps, the greatest scientist of the classical age and a "universal scientist" or polymath.

- **Roger solved the classical duration of play problem, following Bernoulli and de Moivre.**
- **He found five integers such that every pair sums to a perfect square [2] - because he thought it would be fun. (Here are examples:** $n = 2 : \{3, 6\} \rightarrow 3 + 6 = 9 = 3^2$**; or** $n = 3 : \{4, 21, 60\} \rightarrow 4 + 21 = 25 = 5^2, 4 + 60 = 64 = 8^2, 21 + 60 = 81 = 9^2$**).**
- **He clarified Laplace's rule of succession [1].**
- **And he wrote a paper on Friedmann's correction to Einstein's equations [?], which he handed to me casually one evening, as if everyone wrote papers on cosmology after dinner.**

The Royal Statistical Society will publish an article in their *Significance* **magazine devoted to Roger.**

In fact, he was a typical Englishman of the last century: respected very much an amateur who is as good as a professional.

His late life adventure was demography. With two professors and a UN demographer, he built the largest database of validated deaths at ages 80+: they assembled about 32 million records. Today, the

Kannisto-Thatcher Database is used worldwide [6]. It will outlive all of us.

In December this year, the French Institute for Demographic Studies (Institut national d'études démographiques, INED), in Paris, is setting up the "Thatcher Centenary Symposium" with a wide number of participants from Europe, USA, Canada, Australia, Japan and many other countries.

And then there was the question that made him famous outside academia: How many people have ever lived on Earth? Roger's answer - 60 billion — was presented at the International Statistical Institute in 1983 and still appears in popular science books [4]. My son once found it in "Why Don't Penguins' Feet Freeze?" and was astonished to discover that the answer came from his own grandfather.

After retiring, Roger joined the U3A in Kingston. He founded a science and philosophy group. His gave several talks: Do Animals Think?, Evolution and Morality, Free Will.

He ended one talk with the story of a centenarian who said, "I'm very happy - I've just managed to get my daughter into an old folk's home." That was Roger: sharp, warm, and mischievous.

We travelled together: several times to France (Carnac and Toulouse), where Betty looked at prehistoric sites; to Stonehenge at dawn to see the Sunrise and Solstice; and watched a Lunar Eclipse through his telescope in his garden. We wrote papers, argued about AI, drank wine in Brittany, and discussed quantum mechanics in New Malden.

Roger loved life. He embraced it fully, joyfully, and with wonder. He was humble, modest, brilliant, and funny. He was a great man—and a great friend.

Thank you for letting me share my recollection of Roger Thatcher: a man who lived many lives, mastered many sciences, and never drank before noon.

Well - almost never.

References

[1] **Thatcher A.R. Relationships between Bayesian and confidence limits for predictions. J Roy Statist Soc (B), 1964, 26, 176-192. Discussion on pp 192-210.**

[2] Thatcher AR. Five integers which sum in pairs to squares. The Mathematical Gazette. 1978;62(419):25–29.

[3] Thatcher AR. Newtonian cosmology and Friedman's equation. European Journal of Physics. 1982;3(4):202–205.

[4] Thatcher AR. How many people have ever lived on earth?; 44th Session of the International Statistical Institute; September 1983; Madrid. 1983. pp. 841–843. Contributed papers 2.

[5] Thatcher A.R. The 1981 census of population in England and Wales. J Roy Statist Soc (A), 1984, 147, 222-232.

[6] Thatcher AR, Kannisto V, Vaupel JW. The force of mortality at ages 80 to 120. Odense: Odense University Press; 1998. (Monographs on Population Ageing, 5).