

Gerry Martin

An Invisible Life
(1930-2004)

Gerry Martin was a modest and private person. If, as my grand-daughter Lily believes, he is playing ‘pass the parcel’ in heaven, the smile on his face as he unwraps a lovely microscope will not only be because of the pleasures ahead. He will be content that he left hardly any formal public traces of himself in this world.

A search on the internet reveals only two references to a Gerry Martin. One is to his collaboration with me, the other is a one-line reference to a Gerry Martin who worked for a firm called Eurotherm. Can these be the same person? To confuse us further, he was christened Trevor L. Martin, but at some point changed his name to Gerry, or Jerry (he signed his letters in both ways and when I asked him which it was, he said he did not mind).

To recover Gerry, we need to study his actions rather than his words, and then infer something about the man behind the deeds. I’m not sure he would be exactly pleased to hear the following account, but his immense tolerance and sense of humour will, I hope, lead him to forgive me

Personal and early career

Gerry was born in Alvechurch, near Birmingham, on 26th March 1930. His parents were George and Stella. His father did many jobs, but at the time of Gerry’s birth was working for Scammel Trucks.

Gerry early became fascinated in making things and after education at the local grammar school decided not to go to University but to become an apprentice in industry. Between eighteen and twenty-one he worked for Ether Industries, an engineering firm near Birmingham.

He then went to Chicago to spend nine months with Wheelco Instrument Company to improve manufacturing co-operation between the two companies. His diary and letters record that his US colleagues did not understand instrument making. On the other hand, they had some far more advanced ideas on company structure and organization.

He returned to England in May 1951. A certain Dick West had set up a company in the States to make temperature control systems, called West’s Instruments. West wanted to set up a branch in Europe and Gerry and Jim Hartnett (some sixteen years older than Gerry) were made respectively Managing Director and Chairman. The branch started in London but soon moved to one of the areas of highest unemployment in southern England, Worthing, Sussex, where it has remained.

The Eurotherm phenomenon

In 1965, with three other partners, Jim Hartnett (Chairman) Mike Somerville (technical director), and Jack Leonard (Sales Director), Gerry (Managing Director) set up Eurotherm Ltd, a control engineering company.

Gerry's share of the capital was raised by taking out mortgages on his house. Part of the assembly of machinery was done in his garage, garden shed and on the kitchen table, often with the assistance of Hilda his wife. It was touch and go at first. There were times when the children's shoes were unmended and when the family could not cash cheques. The firm had to become profitable within six months – and just managed to do so.

The firm began to prosper. Within four years the company had a turnover of £1m and a growth rate of 20 per cent and overtook all the competition. Gerry was setting up Eurotherm companies with local nationals all over the world. In the first five years companies were established in the United States, Germany, France and Switzerland. Hong Kong, Italy, Japan, Korea, Holland, Belgium and Austria followed.

When Eurotherm went to the Stock Exchange in 1978 the initial public offer was 82 times over-subscribed and the shareholders, including many of the staff who had been given shares in the company, became millionaires overnight.

What was Gerry's secret for success?

Why was Eurotherm so successful? The technical brilliance of some of the engineers, including Gerry, was one factor. But there is something more, and on walks along the sands near his beloved retreat in Cornwall, Gerry explained to me what was important to him.

Gerry felt that it was in the organization of firms, and above all their ability to attract and enthuse excellent people, that success lies. He would spend a huge amount of time interviewing and choosing really excellent staff – he reckons something like 40% of his time was spent on this activity. He would often spend days with a top applicant getting to know him before hiring him.

So he would aim to choose a very good engineer cum organizer and train him up within the firm, with a small group around him, and then encourage them to go off and found a sub-company.

The idea, in his words, was to set up subsidiaries which would 'rob' the parent company of their very best people. The sub-branch could count on support from the main company, and part of the profit would feed back into the parent company. The new company was given great freedom and encouraged to develop new projects. To Gerry's sadness, this idea did not continue down to the lower level, i.e. there was no replication of these sub-companies.

A combination of astute judgement, deep technical knowledge, enthusiasm, and trust in other people paid off. Numerous affiliated sub-companies were formed and the parent company also prospered. I asked what was the chief benefit the parent company received. Gerry said 'fun'.

The philosophy was also based on a developed sense of collaborative equality. There were no separate dining rooms for managers and staff, no separate uniforms. It was a team of equal players.

This philosophy certainly reflects Gerry's modest and unassuming character, as shown later in his life in his unostentatious life style. Workers were given shares in the company and there was a sense of making useful things as part of a collaborative team, a sense of fulfilment in a job well done.

His method also involved binding his team together by trust. Jack Leonard recalls that 'There was no clocking in – people were trusted to arrive on time'. In many discussions about the ethics of business, Gerry made it clear that he trusted his co-workers and seldom found evidence of corruption, disenchantment or cynicism in the business world he inhabited.

Philanthropist and Academic Networker

Although Gerry had decided not to go to University, it is clear that from the beginning he was filled with that curiosity about the world which is the basis of all intellectual activity. Until the age of 48 when Eurotherm went public, and he retired from the company, he applied this to the building up of the company and the invention and making of useful things.

That he seems early on to have felt that there was another career he would like to follow is indicated by the fact that three years after the founding of Eurotherm, in 1968, as the company began to prosper, he created the 'Renaissance Trust' which would make it possible to support the study , in his language, 'the causes of achievement'.

The funds, in the form of some shares in Eurotherm, amounted to a considerable sum when the Company went public, and for the next twenty-five years he used this money with great skill and tact to inaugurate and support numerous different intellectual ventures.

One part of this venture was to improve the public understanding of science and technology by supporting various museums of the history of science. When he was three years old and ill in bed with mastitis, his doctor gave him a small microscope (a Culpepper). Ever after Gerry was fascinated in scientific instruments and became a world authority on microscopes. With colleagues all over the world he built up one of the finest collections of scientific instruments in the world, and he was widely regarded as not only a collector but expert.

He helped the Whipple Museum of the History of Science in Cambridge and the History of Science in Oxford and the Science Museum in London in numerous ways. He financed exhibitions, bought equipment, gave from his own collections, endowed positions, paid for feasibility studies.

Another part of his creative encouragement of academic networking was a five-year project, from 1990-5, called 'The Achievement Project'. This consisted of various strands. There were annual symposia on topics such as 'What is achievement' and

‘Creativity and its Measurement’, several of them giving rise to published collections of papers. There was a well-funded project funded on ‘The Growth of a Skilled Workforce in London, c.1400-1750’.

There were a series of ‘Museum Seminars’ at the Museum of London and the Science Museum’. There were a number of network group meetings on topics such as ‘Geographies of Innovation’ which brought together scholars from all over the world .

The activities continued to be funded by Gerry even after the Achievement Project officially ended in 1995, organized very creatively by Professor Patrick O’Brien in seminars and conferences on a wide range of topics. Gerry was also actively involved, and provided some of the funding, for five successful seminars at King’s College, Cambridge from 1993 onwards on the comparison of scientific and technical progress in Europe and Eastern Asia. Gerry’s contribution to the last seminar was filmed and will soon be available on the web.

Gerry also provided bursaries for several Ph.D. students and gave private grants to a number of academics. He funded and was an active member of a series of seminars and an international conference on epistemology run by the physicist Professor John Ziman. He supported work in ‘cognitive science’ and computing science over many years at the Universities of Sussex and Birmingham.

What was particularly remarkable about this philanthropy was not only its scale and diversity, across the hard sciences, psychology, history and anthropology, but the way in which the money was given and Gerry’s involvement. The nearest one can find as an analogy was a Renaissance patron, deeply interested in what was being done, involved and supportive, yet always careful to avoid any sense of pressure or obligation on the part of the recipients.

He supported risky and innovative projects which would otherwise not have been funded. He made it clear that the excitement was in the chase, that ‘Mad Pursuit’ as Crick calls the hunt for DNA, rather than the apparent ‘success’ or ‘failure’ of a project.

Often Gerry would sit at the back of meetings and only occasionally interject with a profound comment. He would look distinctly embarrassed when he was thanked. This, with the roll-call of his donations, might give an impression that he was a passive funder of other’s work. In fact, very often the themes to be pursued and the ideas for projects would come from discussions with him.

Nor was he only concerned to fund intellectual activities. He and Hilda gave generously to a charity to relieve poverty and deprivation in the third world. He gave donations to develop a Medical Research Library in Sussex, to hospitals in India and Palestine, to victims of torture, and to many others. They were all made anonymously.

And they often involved effort on his part. One story illustrates this. After diagnosis of cancer he sought out a not yet established department of cancer research in Sussex University, the head of which came out to see him. They discussed microscopy

requirements, and he hobbled out to his shed to demonstrate his precious high powered research microscope to her, and then donated it to the department.

Thinker and intellectual collaborator

Gerry was always curious about how the modern world has developed, and in particular the role of technology and science. Over the years he read widely, talked to leading experts, amassed a useful library, and thought deeply. As Patrick Reade writes in the *Independent* obituary, ‘The breadth of his personal knowledge in subjects unrelated to arcane advanced electronics was breathtaking – he could, without reference to texts, converse at length on the changes and advances over one century in microbiology or metallurgy or the history of art or the encumbrances to the development of science in early medieval China or Japan.’

He started with a core of simple and central ideas. That the foundation of life was material. That we can only understand our world if we keep referring to this physical base. That the shifting of atoms, as he called it, is the fundamental feature of this world. That progress only occurs through the exchange of ideas, through networks and collaboration. That there are many obstacles and traps, but they can be overcome. That history moves in Donald Campbell’s Darwinian phrase by ‘blind variation and selective retention’.

But while he came back again and again to these ideas, he was also flexible and open-minded in his journey. Starting with electronics and engineering, he moved to economics and psychology (creativity theory). In the last ten years we spent most time on social structures, ideas and political systems. He became obsessed by the conditions for democracy. It was possible to discuss everything with him and he effortlessly encompassed such great thinkers as Montesquieu, Tocqueville, Adam Smith and Yukichi Fukuzawa. He was in the best tradition of the self-taught, enquiring, mind who had learnt to learn at an early age and through energy, application and high intelligence, mastered many fields.

His ‘Renaissance Trust’ was aptly named, for the essence of the Renaissance was that in people such as Leonardo da Vinci it was still possible to combine the arts and the sciences, to unite the practical making and doing of things, with abstract speculation. Gerry was a true Renaissance man.

Gerry did not find it easy to write, though when he did so his thoughts were always worth taking seriously. So only a few fragments of his writing survive, a number of which are now on the web.

In **The Glass Bathyscaphe; How Glass Changed the World**, which we wrote together, Gerry encapsulated many of his most important ideas. Probably the most original, and a really significant advance in our understanding of how the world changed, was based on his combined expertise as a deep thinker who invented things, an engineer who designed things and an industrialist who mass produced and sold things. This idea explains how science, or as he preferred to call it in John Ziman’s term ‘reliable knowledge’, technology and economics move work in a productive triangle and change our world. Gerry’s most recent work is an article on glass and its effects to be published in *Science*.

To conclude...

Gerry was an enthusiastic maker and collector of things. He had a barn full of ancient Samurai armour, swords, lathes, tools. He would go out and build things for friends and family. He was very good at this, though it sometimes led him into trouble. He rigged up such a hugely powerful searchlight in his garden that the police were called after Gatwick Airport, some 30 miles away, recorded that it was confusing pilots who mistook it for the airport landing approach light.

I remember an ingenious microscope which he made in a remote village in the Himalayas. He then proceeded to lift up small children to peer through it and gain their first amazed sight of microscopic objects. You will be able to share this moment, and Gerry dancing to shamanic drums, in due course on the web.

Not only were his shed and barns filled with objects, but when he opened the back of his car, the large boot was always full of boxes, books, snake serum, flip-charts, a host of things he had collected and was working on. As we went for our numerous walks he would suddenly bend down and pick up a stone or piece of metal and intently examine it before adding it to his treasure trove.

So a few of the bits that are Gerry Martin stand before us. Yet he remained almost invisible and the only wider recognition I know of is the Honorary Degree he received from Sussex University. His humility and reticence was remarkable. So was his immensely loving and close relationship with Hilda, Louise and Tim and his beloved grand-children Megan, Rosy, William and Jo.

I observed him with children when he accompanied Sarah and I to Nepal in 1992 and I noticed then, something which I saw many times, that like Einstein he retained that child-like sense of wonder at the world which is the essence of greatness.

And, of course, he is not dead. He enriched all those around him and as in Auden's words on Freud, he is now 'a whole climate of opinion'. Many minds and lives have been seeded by his care and insights. Here are just three.

The historian of science Steven Shapin's book is aptly dedicated to 'T.L.Martin, Gent', for he was a true gentleman. The eminent sinologist Professor Mark Elvin wrote to me of Gerry that 'He was a strangely original and engaging person, and possessed of a great generosity and sweetness of disposition'. And the economic historian Professor Patrick O'Brien comments 'In death he remains as inspiring as he was in life. He is one of the most remarkable men it has been my privilege to count as a friend'. All of which my wife and many of you, I know, will also feel.

Alan Macfarlane