

Alexander Reid

Born 11.1.1941

Autobiographical life story

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Contents

1. Introduction
2. Wartime
3. Back in England
4. Earleywood School
5. Home
6. Winchester College
7. Cambridge University
8. Learning to Fly
9. HMS Albion at Sea
10. Far East
11. Portland
12. University College London
13. PhD, Joint Unit for Planning Research
14. British Telecom
15. Octagon
16. Royal College of Art
17. Acorn
18. Alert Publications
19. DEGW
20. Royal Institute of British Architects
21. Retirement
22. Desert Island
23. Family Life



A small selection of the unreasonable amount of clutter in the study at 79 Grantchester Meadows, Cambridge, in 2020. The banana slicer (top left) was made in response to a request from Philip as a child. He drew a sketch of a machine like a big fridge with a lot of dials and spouts and hidden mechanics which would slice bananas. Our realisation was cruder. The brass and mahogany were intended to evoke a Victorian contraption. The model Royal Navy helicopter is of the type (a Whirlwind) which I was flying when it crash landed and sank into Weymouth Bay. I have always liked model boats and robots.

1. Introduction

My father Philip was one of three children of Sir Arthur Reid and Imogen (née Beadon). My father had two sisters, Hilda and Lesley, neither of whom married. Sir Arthur, who had been educated at Harrow School and Trinity Hall, Cambridge, joined the Indian legal service, and rose to be Chief Justice of Lahore. His family, of Scottish professional descent, had served in the Indian Civil Service for several generations.



Dunster Castle.



Philip, Louisa, and Border Terrier Pippa, 1955.

My mother Louisa was one of four children of Henry and Dorothy Luttrell. She had two brothers, William and John, and two sisters, Elizabeth and Catherine. Her father Henry, who became Liberal Member of Parliament for Tavistock in Devon, was a younger son of the prominent Luttrell family whose ancestral home is Dunster Castle in Somerset.

The Luttrell family bought Dunster Castle and its estate in 1378. They were in continuous occupation until Geoffrey Luttrell gifted Dunster Castle to the National Trust in 1976. Louisa's mother Dorothy (née Wedderburn) was a member of a family which, like my father's, had strong Indian connections. Dorothy's father, Sir William Wedderburn (4th Baronet) served in the Indian Civil Service from 1859, becoming Judge of the High Court in Bombay. He retired as acting Chief Secretary to the Government of Bombay. He was one of the founders of the Indian National Congress, serving as its president in 1889 and 1910.

He served as Liberal Member of Parliament for Banffshire from 1893 to 1900. A two volume history of Dunster and the Mohun and Luttrell families, by Sir H.C.Maxwell Lyte, was published in 1909 by The St.Catherine's Press.

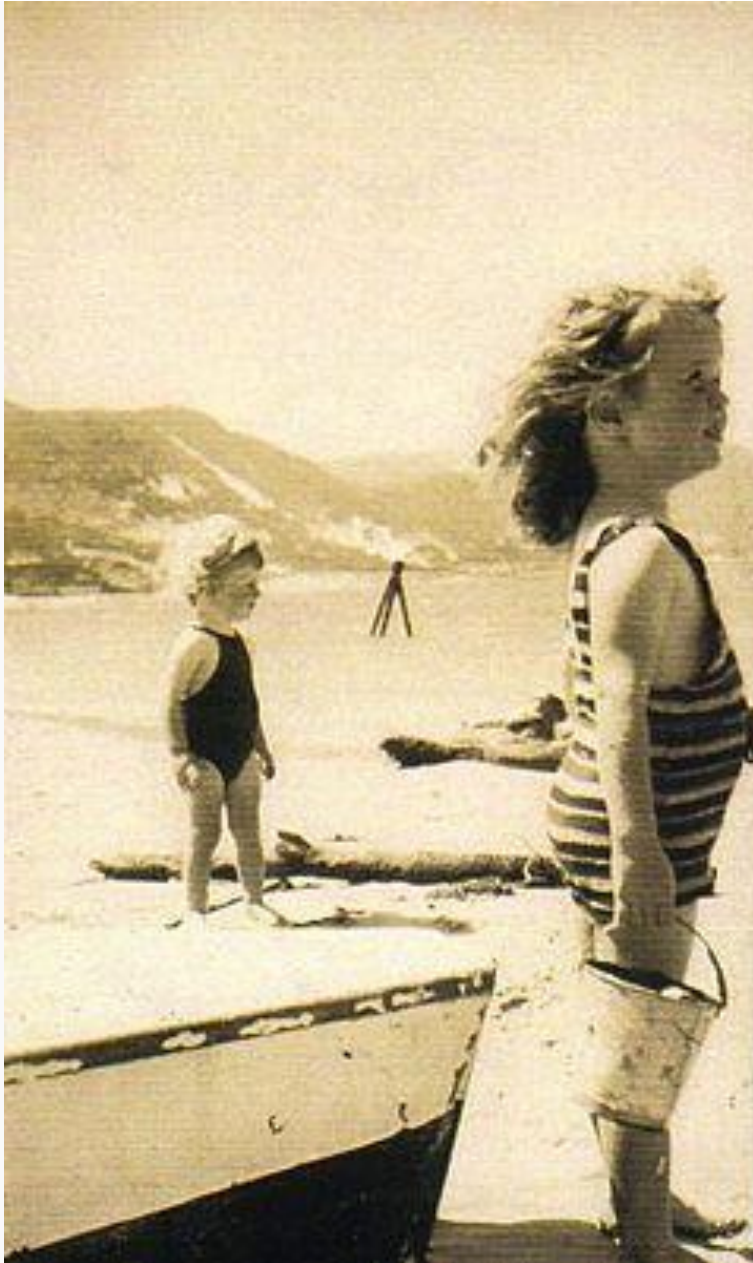
Sir William Wedderburn's baronetcy has a colourful history. John Wedderburn was an advocate who in 1704 was created 1st Baronet of Balindean in the County of Perth. The fifth Baronet, Sir John, was a Jacobite who fought against the English at the Battle of Culloden in 1746, where he was taken prisoner. The Battle of Culloden, which brought the Jacobite uprising to an end, was the last battle to be fought in mainland Britain.

Sir John was executed for treason, with his title and estates forfeited. His descendants continued to claim the title and in 1803 a new Wedderburn baronetcy was created to replace the one which had been forfeited.

Reaching back further in time, my relative J.W.Reid compiled in 1909 a Reid family tree (hung in a large frame on our top landing) which goes back 35 generations, and may be somewhat imaginative. The name at the top is Achaicus, alias Eocahan Fegusiana, sister to Hungus, alias Unust, King of the Picts. Six generations on we come to King Kenneth III, murdered in 994. Two more generations take us to Banquo, Thane of Lochaber, murdered by Macbeth in 1043.

2. Wartime

I was born on January 11th 1941 in Johore Bahru, Malaysia, during the Second World War. Johore Bahru is just across the straits from Singapore, where my father was serving as a gunnery officer in the Royal Navy. In January 1942, just weeks before Singapore fell to the Japanese, my mother was abruptly evacuated by sea to South Africa, with me and my two year old sister Griselda.



Griselda on beach in South Africa with Alex in background, in 1943.

My father was captured by the Japanese, and spent the next three years as a prisoner of war. One of my most treasured possessions is a nautical chess set, carved by hand as a present to my father by Capt. R.S.Herring MC, his friend and fellow prisoner in the Palembang Camp. My mother describes the two month sea journey from Singapore to South Africa as scary, with everyone ready to take to the open boats if torpedoed in the tropical seas. We had our shipwreck bags always ready and were

advised to include hats in them for fear of sunstroke. We all wore identity discs in case of separation.

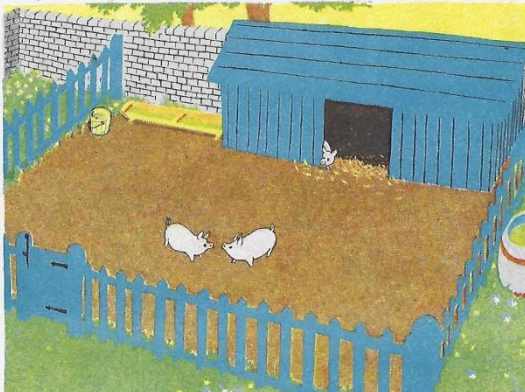
We spent two and a half years in South Africa, frequently moving to any temporary accommodation that was available. In August 1944 we set off on another sea voyage to wartime England. The ship did not travel in convoy, and the risk of being torpedoed by a German submarine was very real. At one port we passed, we picked up a shocked boatload of survivors from the ship ahead of us. The ship's tannoy issued alarming announcements: 'You are now in submarine infested waters. In case of anyone overboard the ship will be unable to stop'. We arrived safely in Liverpool, and made our way by train to Somerset.

3. Back in England



As page boy at Aunt Bet's wedding.

You would have known his farm the moment you saw it, because it was different from all the other farms in the country, being painted a



bright blue—every bit of it, from the roof to the pig-sty.

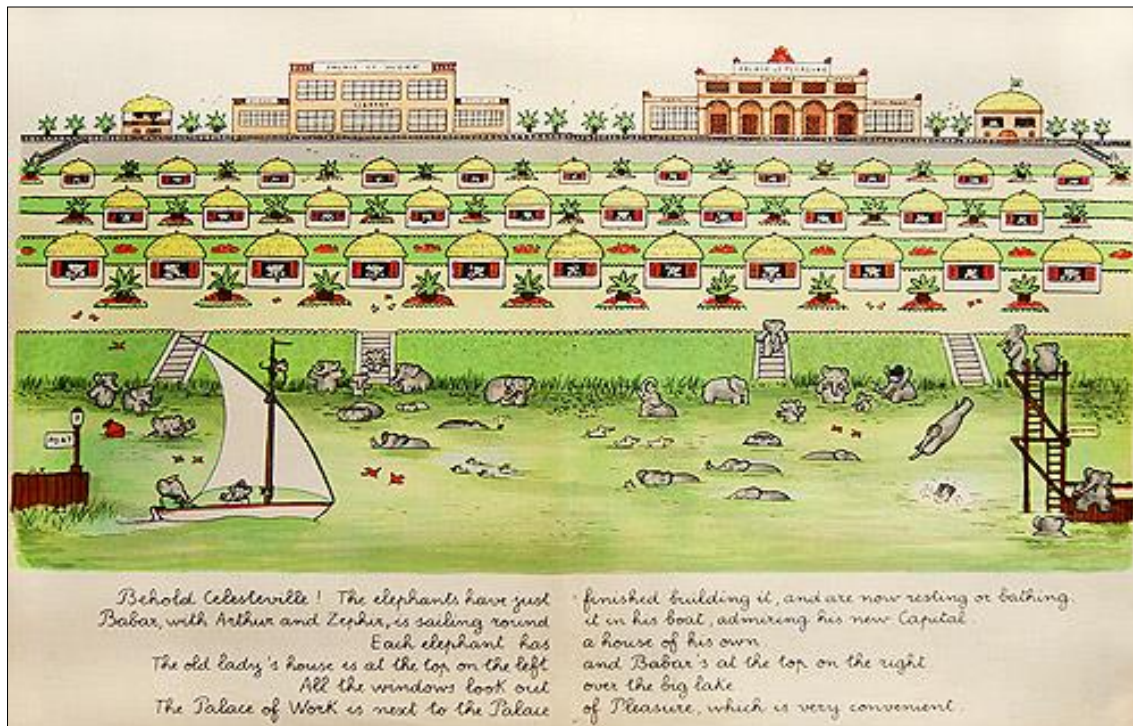
The Sylvanus farm before he went to sea.

My recollections between the ages of three and eight are hazy. I remember only my favourite books: Sylvanus Goes To Sea, and the Babar books.

Both had an architectural flavour, which may have had a long lasting influence. Sylvanus Goes to Sea, which had beautiful illustrations by Nicolas Bentley, was about a farmer, who appeared from his outfit to be operating in the early 19th century. As a child he had longed to go to sea, but his father insisted he take over the farm when he was twenty one.

Being a gentle character, he fell in with this plan. But, in homage to his dream, he painted everything in the farm sea blue. One day his dream overcame him, and he ran away to sea. But disaster ensued. His ship was wrecked on a rocky shore in a faraway land, and he was abandoned by the crew, who escaped in the lifeboat but forgot Sylvanus. Sylvanus just about survived on a diet of bananas until he was rescued.

He returned home, swore he would never go to sea again, and painted everything in his farm brown. I mused long on the pros and cons of adventure, and also developed an interest in paint colours.



My favourite illustration in the Babar books was the drawing of Babar's model city Celesteville. It was egalitarian, recreational, and had fine public buildings. Every elephant had a house of their own (you can see them enjoying the views from their sea-facing windows) and the water was alive with elephants having fun. I particularly liked the diving elephant, stretched out straight at 45 degrees.

The Old Lady's house (top left) was modest rather than grandiose, as was Babar and Celeste's house (top right). Both seem to be built to the same specifications as the public housing. Between them stood two imposing civic buildings - the Palace of Work and the Palace of Leisure. I stared at this drawing for a very long time.

My father returned from the Far East in late 1945, after the Japanese surrender. It was a time of great rejoicing for us all. We lived first in a cottage in the Somerset village of Bagborough, then moved to Gosport in Hampshire, and then to Bath.

My father was based at Admiralty offices which had been relocated during the war from London to Ensleigh, near Bath

I was a kilted pageboy at my aunt Elizabeth's wedding in 1945, and a year later started at Hermitage House school, where I evidently became a neat stitcher.

The Hermitage House School, Bath		
Name <u>Alexander Reid</u> Term <u>Spring</u> 1948		
Form <u>Lower I.A.</u> Age <u>10 1/2</u>		
Subject	General Remarks	Signature
Reading	Good. Alexander reads fluently, and shows some ability in tackling new words successfully.	M. M. C.
Writing	Generally good. He is apt to write too quickly and so spoil the style.	C. P. D.
Number	A very good term's work figures. need care.	C. P. D.
Story Work	Good keen work. Alexander makes sensible contributions to the lessons.	C. P. D.
Art	Alexander has made satisfactory progress in painting work & his sense of arrangement has improved.	J. K.
Craft	Has worked steadily & become a neat & even stitcher.	J. K.
Music	Alexander is interested and attentive, and has begun to develop good rhythmic sense.	M. M. C.
SINGING & BAND		C. P. D.
Gym.	Fair to very fair.	C. P. D.
Games	Good.	C. P. D.

Hermitage House school report.



Griselda, Granny Reid, Alex and Louisa at Bashfords, Bagborough, in 1944. The bench was later installed in the allotment at Bath. Hand tinted by my mother.

4. Earleywood School



Earleywood rugby team, Alex second left, bottom row. Mr Johnstone in charge.

My vivid memories begin with my arrival as a boarding pupil, aged eight, at Earleywood School, Ascot. Due to a mix-up at the department store where we had bought my uniform, I turned up with a large silver lion embroidered on my blue school cap. Earleywood had no silver lion, and my cap was swiftly swapped by Mrs Aldrich Blake, the headmaster's wife. This was the first of several occasions in my life where I have turned up at an important occasion wearing the wrong clothes.

Others include a May Ball at Trinity College, Cambridge, where I was the only man among the hundreds there who thought it a good idea to wear a white dinner jacket (together with a rented dress shirt whose sleeves were unaccountably a foot too long).

Years later there was a formal industry dinner at the Savoy Hotel in London where I found that I had failed to pack cufflinks, cummerbund, or the right shoes; I kept moving, hoping nobody would be able to focus on the details of my outfit.

I still have dreams in which I walk up to a podium to give an important speech, and realise that I am wearing no trousers.

I have two other recurring dreams. One is that I am able to float about like a balloon, and demonstrate this at dinner parties. The other is that I save numerous lives by taking charge when an enormous chandelier threatens to collapse onto the audience in a crowded theatre.

Earleywood was a small, family-run boarding preparatory school, which my father had attended forty years earlier. Sergeant Buckle, the physical training instructor, was the one member of staff who taught us both.

Ted Aldrich Blake, the owner and headmaster, was a kindly man who treated the fifty boys in the school as an extended family.

My most memorable teacher was the inspirational Mr Johnson, who managed to get a lot of information into us, sometimes by throwing blackboard chalk across the room if you were not paying attention.



Earleywood School.

The main school building was an Edwardian house, set in parkland and with a small adjacent farm also owned by Ted Aldrich Blake.

Across the boundary there were woods, in which we could make tree houses by hammering planks into trees with four inch nails.

A respectable old people's home stood in its own grounds next door; we saw or heard little of them except during their summer garden party when a visiting brass band played patriotic tunes including Land of Hope and Glory.

A patriotic note was also struck by the zigzag marks of a filled-in trench in the parkland to the front of the main building. It was explained to us that this had been dug during the Second World War, in case of German invasion. The zigzags were so we could offer enfilade machine gun fire. It always seemed to me that the Germans could have come round the side.

There was a small panelled chapel in which we held frequent services. There was an open air swimming pool, a gym, and a carpentry shop in which I made an oak toast rack.

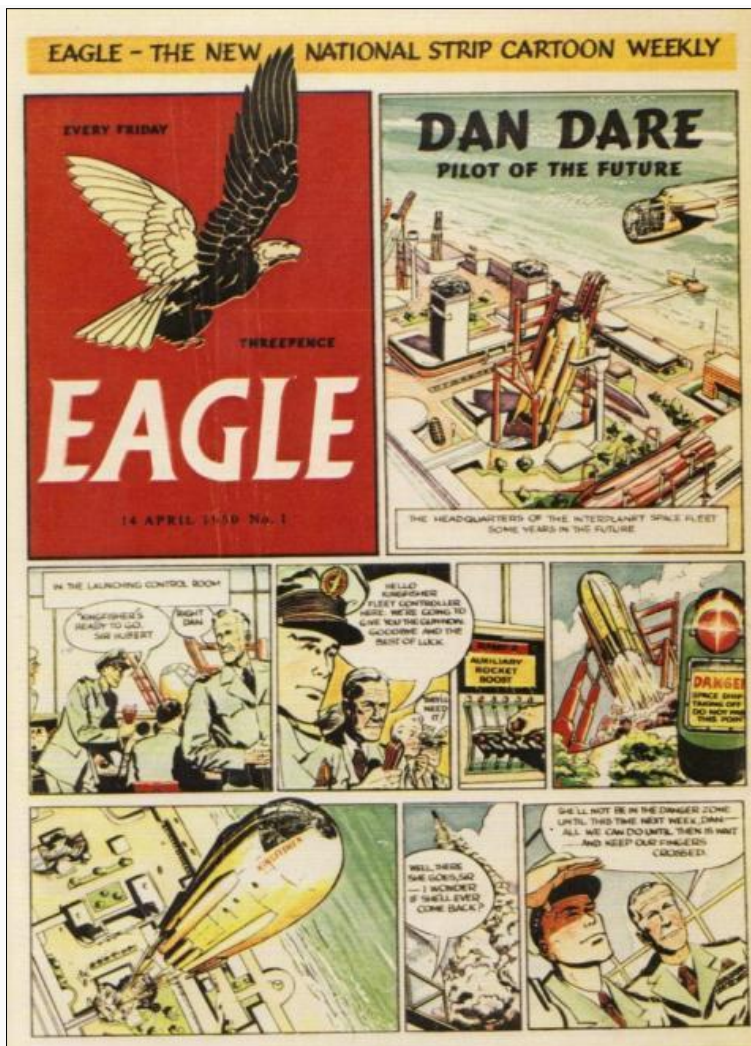
The school Prospectus included the following:

The School, especially designed and built for a modern Preparatory School, and since enlarged, is situated near Ascot on the well-known Bagshot Sands, in a high bracing locality amid the pines and heather.

The grounds (70 acres), include football and cricket fields, and a large kitchen garden which supplies the school with fruit and vegetables. The farm, belonging to the school, provides pure milk and cream.



First attempt at carpentry.



Eagle comic.

The ventilation and sanitation have been carefully planned by experts in accordance with the demands of modern hygiene. All the class rooms and living rooms face South. The ground falls away from the house in every direction.

The school buildings are lit throughout by electric light; they are heated by radiators. The water is supplied by the Egham Water Co.

In the opposite corner was the trussed figure of Roger Smith, Mr Frobisher's newly-engaged secretary, gagged and bound on the floor, official papers, documents and wills spread out beside, beyond, and under him.

Later, under cross-examination, Smith confessed to being the accomplice of Isaac Burton in murdering Mr Frobisher by hitting him on the head with a typewriter.

Other contents of The Earleywoodian included poems, jokes, crosswords, sports reports, and useful information on sign language, semaphore and conjuring tricks. Inspired by the Eagle comic, the centre spread would sometimes contain a cut-away drawing, for example of a submarine. I ended up producing most of the content, including a desperate call for contributions which began:

*If this paper does succeed,
(That it will, is what I hope),
You must supply our greatest need,
(Thus enabling us to cope).*

Some flavour of life at Earleywood is given in the two following letters written to my sister Griselda in 1954, when I was thirteen:

Dear Gris,

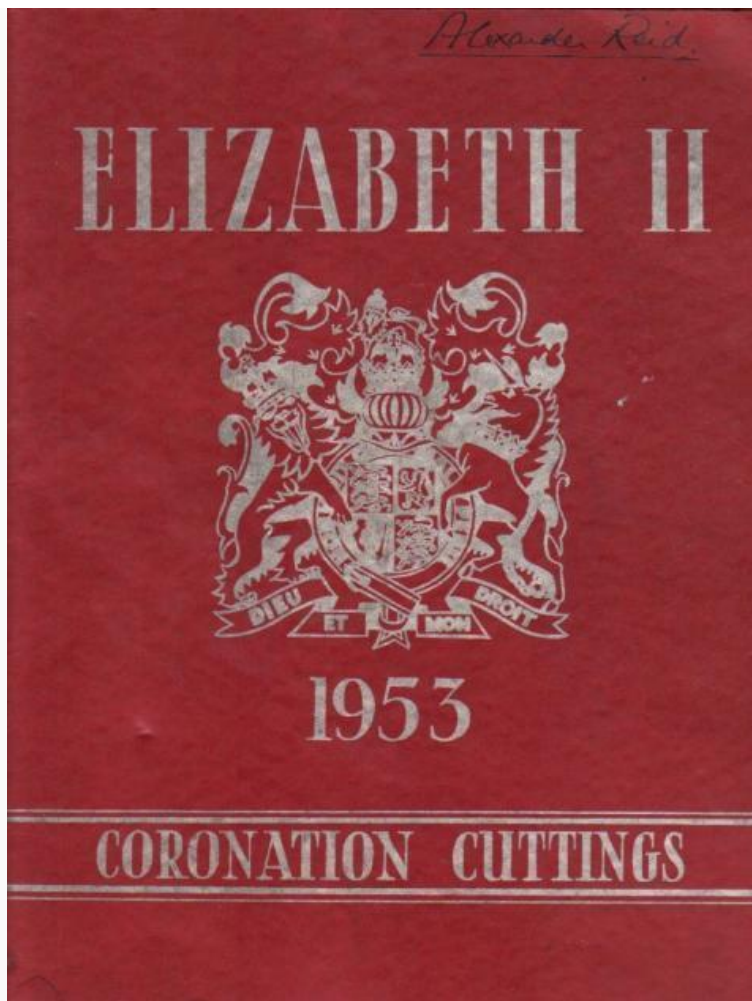
Thanks awfully for the two lovely long letters. I'm awfully sorry this is my first, but I'm awfully busy. We have been doing a lot with the new 'Earleywoodian Library Club'. Already we have made white paper jackets with the Club crest on for about thirty books. Several grown-ups have also taken out books - Matron, Nurse, Mr Townley, and Mr Johnson.

I have been making a survey of the school, which I am putting in the model exhibition. I have finished it now in rough. The school is such a funny shape that just to do the ground floor plan needed about !150! measurements with tape, indoors and out.

When Martineau left at the end of last term he gave as I think I told you a wireless to the captain's room. We have been having it on quite a lot. In the evenings we have been listening to some sponsored programmes on Radio Luxemburg, which are rather fun as its just like what it is in America.

A week from today is the first match. I hope that I will play right-half. It is a very nice day today and we will have a game of soccer. After break today, instead of doing lessons I marked out the soccer pitch which was rather fun. Mr Townley, the maths master who left the term before last when Mr Headley came, has come back, as Mr Headley is very ill.

Mr Townley has his degree, and now goes around in a long sweeping black gown, looking very like the assistant masters in my chess set! I gave the chess set [which I had made by turning wood on a lathe in the carpentry shop] to the captain's room the Monday before last, and everybody liked it very much. I am sorry that you never saw them. The captains, of which there are five, which is very unusual, are myself, Williams-Freeman, Dutton, Mason, and Phelps.



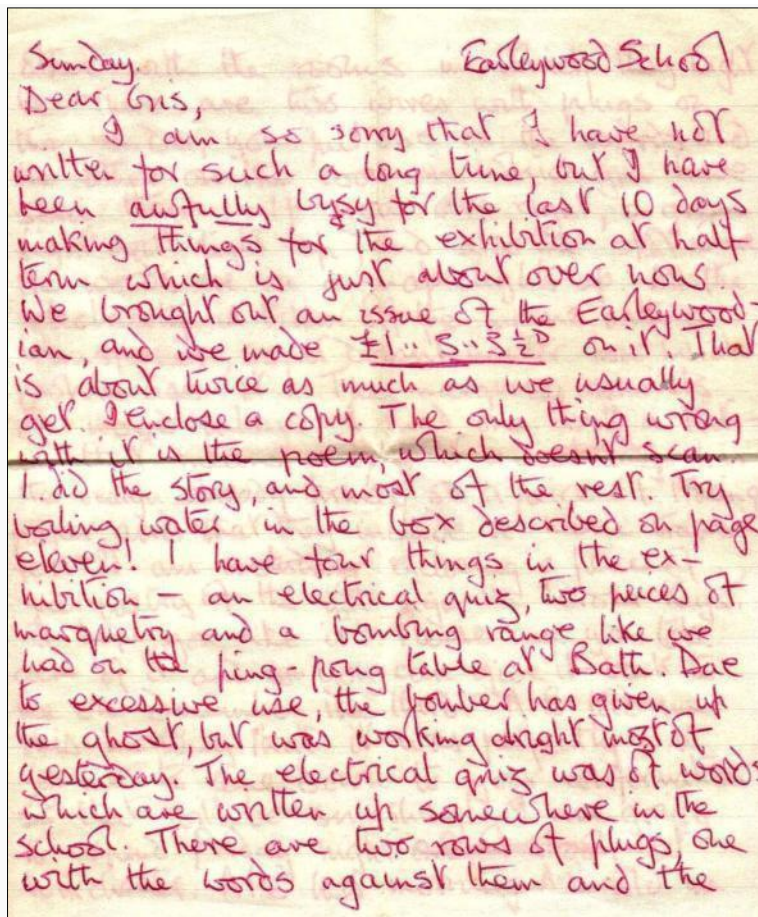
Alex's Earleywood coronation scrapbook.

Dear Gris,

I am so sorry that I have not written for such a long time, but I have been awfully busy for the last 10 days making things for the exhibition at half term. We brought out an issue of the Earleywoodian, and we made one pound, three shillings, and threepence halfpenny on it. That is about twice as much as we usually get. I enclose a copy. The only thing wrong with it is the poem, which doesn't scan. I did the story, and most of the rest. Try boiling water in the box described on page eleven!

I have four things in the exhibition - an electrical quiz, two pieces of marquetry and a bombing range like we had on the ping-pong table at Bath. Due to excessive use, the bomber has given up the ghost, but was working alright most of yesterday.

The electrical quiz was of words which are written up somewhere in the school. There are two rows of plugs, one with the words against them and the other with the rooms in which they might be. There are two wires with plugs on the ends, you put one on the words, and the other on the room in which you have seen them. If you are right, a green light will light up, and also the spot where the words are on a map lights up. All the electricity is taken off the mains with a transformer, so it doesn't matter how many people use it.



Letter from Alex to his sister Griselda. Until I was 14 my writing leaned backwards.

The marquetry consists of wood inlays. I am enclosing a piece of marquetry of the inn-sign the 'Cross Keys'. I hope you like it. This afternoon we played in the scout ground and let off lots of fireworks which were left over from yesterday evening. Then we had a fircone fight. It was all great fun.

Other cameo memories of my happy five years at Earleywood, from 1949 to 1954, include:

Cheesy Kraft's home movies

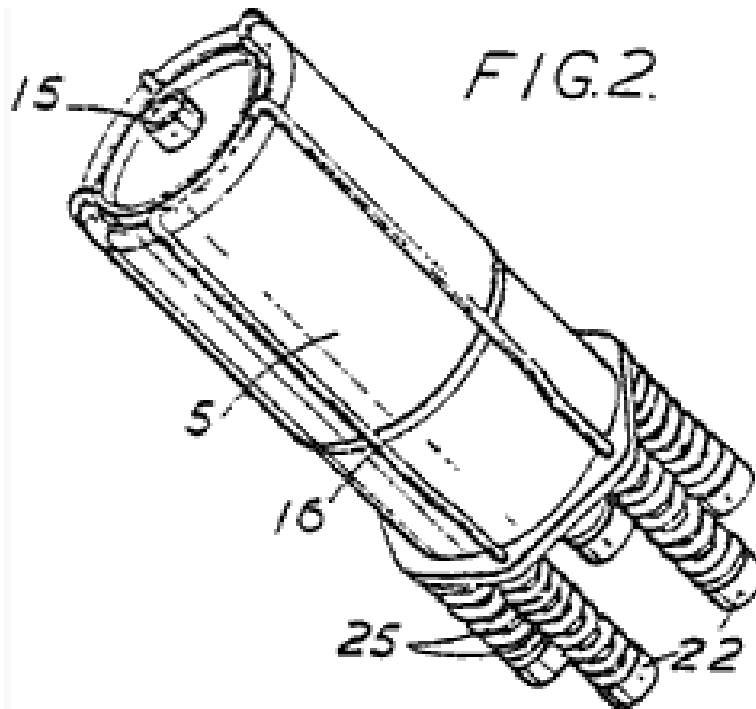
Mr Kraft (known as Cheesy) was an elderly member of the staff, who would occasionally offer to entertain us with showings of his silent black-and-white home movies. There being little alternative entertainment, such offers were eagerly accepted.

This despite the fact that we had seen all Cheesy Kraft's home movies several times before, and they consisted entirely of lingering shots of his relatives, dressed in what looked like Edwardian clothes, milling wordlessly around on a lawn.

The rocket that did not rise

My most ambitious model-making project was a balsa wood rocket, shaped like something out of a science fiction movie, painted in purple and gold, and driven by a Jetex engine. Jetex engines were small aluminium cylinders into which you inserted a solid fuel pellet and a fuse.

When assembled and lit they would go off with a great whoosh for about thirty seconds. They worked well on cars and boats, and I expected my rocket to rise until it was a speck in the sky.



Jetex engine of type used by Alex in his balsa wood rocket.

The launch took place on the cricket field. Dozens of boys gathered round at a safe distance, waiting for the rocket to take to the skies. I lit the fuse. Disappointingly, the rocket just sat there in a vertical position for the full thirty seconds of the Jetex burn, with a lot of whooshing but no vertical movement. It then fell over.

Bishop alert

The visit of the local Bishop to officiate at one of our Sunday chapel services was a big day for Ted Aldrich Blake, and provided an electrical opportunity. I was much interested in low voltage electricity, and had a set of bulb holders, switches, batteries, and buzzers. They came in useful because Ted Aldrich Blake wanted the organ to strike up just before the Bishop entered the chapel. The problem was how to signal to the organist that the Bishop was approaching.

I volunteered to install a bulb holder beside the organ, connected by wires running the length of the chapel to a switch in the outer vestibule. Aldrich Blake fell in with this unlikely scheme, and I was excused from chapel in order to man the switch in the vestibule. When the great moment came I threw the switch, the light lit, and the organ blared.

When I bit my knee

We had to make our own amusements, and one of these was to hang from the first floor landing by our hands, then let go and land - bending one's knees - onto the floor below. This worked well until one time I bent my knees rather too much. My

mouth was open, and I bit my knee deeply. I reported to Matron, who had not previously had to deal with a boy biting his own knee.

My brief religious conversion

My proudest possession at Earleywood was a black portable typewriter, given to me as a present by my aunts Hilda and Lesley.



Portable typewriter like Alex's.

But one terrible day, while I was typing away, the printing end of the H key (about the size of a pea) flew off the typewriter and disappeared, who knows where, into the cluttered classroom. A fingertip search yielded nothing. Without the H key the typewriter was useless; it just produced a smudge instead of every H.

Having tried all else, I decided to try the power of prayer. I went upstairs to my dormitory, knelt down beside my bed, pressed my hands together very tightly, and prayed like anything to find the H key.

I went back downstairs, and started looking. Instantly I found the H key, behind someone's tuck box. Instantly, I was converted. But my religious phase was brief.

A few days later there was something else I very much wanted, such as a place in the cricket team. I went upstairs and prayed with great confidence. No luck. Disillusion. Other prayers over the next few weeks, aimed at other objectives, were equally fruitless. Perhaps I was asking for too much.

Our secret weapon Lundberg

Lundberg was from Sweden. He did not shine in lessons, but he was very large. One reason he was so large was that he was about two years older than the rest of us, and seemed to stay on at the school indefinitely.

This may have been because he was a crucial asset when it came to sports matches against other schools. Being a very small school, we would have faced hopeless odds if it had not been for Lundberg. We would arrive at away matches in a

minibus, and us tiny boys with squeaky voices would pile out to the derision of the home team.

Then to gasps of astonishment Lundberg would unfold himself from the bus and draw himself up to his full enormous height. It was like Hannibal producing his elephants.

Cold baths

For moral or medical reasons, or simply to wake us up, we were required to take a cold bath every morning. This involved standing naked in a shivering queue outside the bathroom, then stepping forward one at a time and briefly plunging full length into the cold bath. Rather like parachuting.

Liquid currency

Life was not all hard. In contrast to the rigours of the cold baths each boy was given one boiled sweet, wrapped in a twist of cellophane, after lunch every day. In the same way that cigarettes become a currency in prison, these boiled sweets became our informal currency.

If someone wanted to borrow someone else's football boots, or get help with his work, payment would be made in sweets. I did well in this primitive economy because my grasp of maths was a marketable commodity, but I got my comeuppance.

Having like Shylock accumulated a substantial hoard of boiled sweets, I decided that they were at risk of theft and should be placed in a safe place. I sealed them inside a large biscuit tin, wrapping it around with many layers of sellotape.

I then crept out unobserved, over the boundary fence, into the woods. There, in a carefully calculated spot, I dug a hole and buried the tin. I spread leaves over the disturbed earth. I felt financially secure for life.



But it was not to be. A few days later I crept off into the woods to make a withdrawal. I dug the tin up, and opened it only to find that due to the cold or the damp all the boiled sweets had dissolved into a thin syrup of no commercial value.

Radio Luxembourg

I had bought by mail order a kit for a crystal radio set, which came with dark brown bakelite headphones, of the kind used by spies in the Second World War. It was a huge success. It required no batteries, and you wiggled a knob to pick up a signal. I very much enjoyed listening to popular music on Radio Luxembourg, under the bedclothes after lights out.



Never ending stories

An alternative to listening to Radio Luxembourg after lights out was to listen to a never ending story, told by one of the other boys in the dormitory. Some were extraordinarily good at this, making up interminable adventure stories, full of people riding motorbikes, capturing burglars, and clinging to the undersides of railway trains. After this had been going on for about half an hour, the narrator would ask 'Is anyone still awake?'. If even one person was still awake, he would continue. Then when all were asleep he would go to sleep himself, and take up the story the next evening.

A parting chess set

As a leaving present to Earleywood I used my lathe to produce a chess set. The pieces were intended to represent members of the school - Headmaster as King, Headmaster's wife as Queen, and the boys as pawns. As a lathe can only produce things which are rotationally symmetrical, the resemblances were weak and had to be explained.

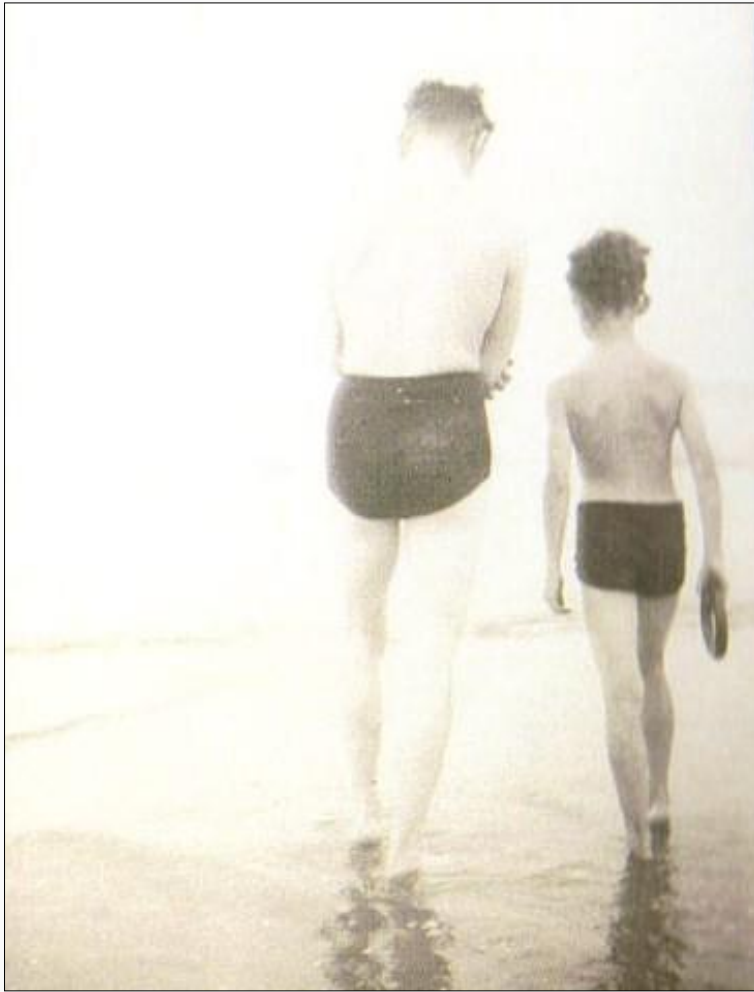
5. Home



Griselda and Alex at Royal Crescent, Bath.



Playing French cricket at Royal Crescent, Bath.



My father and I walking on the beach at St.Briac, Brittany.

Throughout my time at Earleywood we lived in our rented top floor flat at 30, Royal Crescent, Bath. A magnificent crescent-shaped terrace of thirty grand houses, the Royal Crescent was designed by John Wood the Younger, and was built between 1767 and 1774. Recollections of Bath include the arrival of a large crew to make a film based on the Scarlet Pimpernel story. Called *The Elusive Pimpernel*, it was released in 1951 and starred David Niven, Margaret Leighton, and Cyril Cusack.



We had the top flat in the left hand building in the Royal Crescent. There was no lift.

One striking feature of their visit was that the large cast iron lamp posts around the Royal Crescent were uprooted and removed, with a crane, for the duration of the filming. They were apparently not of the correct period. Also red carpet was laid up

the front steps of our house, which was decked out to receive visitors (in horse drawn carriages) to a fashionable ball.

We had an allotment in the parkland below the Royal Crescent. Part of this had been turned over to allotments during the Second World War, but has now been returned to grass. We had a rather grand white painted garden bench in it, brought from a previous house. My mother grew (and we ate) very large sweet corn plants, along with other vegetables.

I had an O Gauge Hornby clockwork train set, which monopolised the dining room. I fitted a battery and bulb into the engine, and much enjoyed switching all the lights out and seeing it crank round the track in the dark, with forward pointing beam. It was like an American freight train roaring across the prairie.



A Hornby O Gauge clockwork engine

I also got by mail order an electro-magnet, which I found very exciting. I rigged up a model aeroplane in the sitting room, which could swoosh down two inclined wires carrying low voltage electricity. A piece of metal, simulating a bomb, was gripped under the model aeroplane by the electro-magnet. This could be remotely released to hit a model ship by switching off the electrical supply to the wires.

My aunt Hilda was an author. I imagined authors had ideas in the middle of the night which they needed to write down. So I constructed a notepad with a small lightbulb attached, and a groove into which one could slide a pencil. When you removed the pencil two copper conductors connected and the light came on. It was not clear how you would see to withdraw the pencil.

Another electrical project was the illuminated jelly at my tenth birthday party. My long-suffering mother agreed to cast a green jelly with a small inverted glass tumbler embedded into the base. I wired up a low voltage bulb holder and we secreted a pair of wires away to a concealed transformer and switch by the skirting board. Because the jelly was not entirely transparent, the electrical works could not be seen. Imagine the surprise of my small guests when the lights were switched out, and the jelly suddenly glowed brilliantly and greenly from within!

I wanted to learn to touch type when I was about eleven, and my mother (who was keen to see us have a go at anything) enrolled me in a three week course in a

secretarial college in the town. The other pupils seemed like grown-up ladies, but were probably about seventeen. We tapped away to music, to help our rhythm. My mother also arranged for me to spend some weeks as a juvenile apprentice in a metal working shop in the basement of a terrace in the town. They taught me to do exciting things, including operating a metal lathe, where the cutting bit had to be cooled with a constant stream of a white liquid that looked like milk. It sizzled fiercely, and curls of metal came off in twirly shapes. I made, as a present for my father, a turned brass pencil holder in the shape of a naval shell.

I was also keen on conjuring, and was taught conjuring tricks (and 'patter') by Mr Donovan, a member of the Magic Circle who lived in the Royal Crescent. Later, when I had children of my own, the conjuring came in useful at birthday parties. I also learned from a conjuring book a mnemonic technique for remembering long lists of objects (up to 40) and developed this into a technique for remembering the order of a pack of cards.

At weekends we would go out to the countryside in the car, and all get out to do what my mother called 'deep breaths'. This involved standing in a row, usually on an exposed hillside, drawing in and blowing out enormous breaths. We would also picnic in all weather conditions, on a check blanket, with soup served from a green wide-mouthed Thermos.

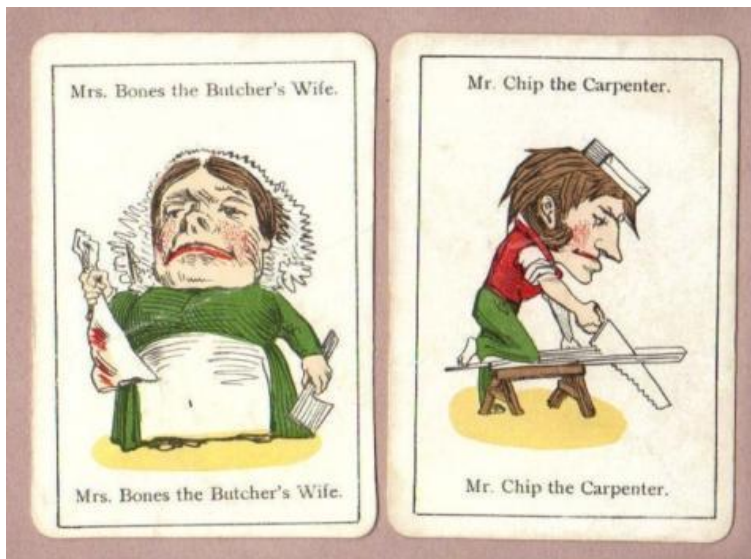


Vintage wide-mouthed Thermos flasks have become collector's items on Ebay.

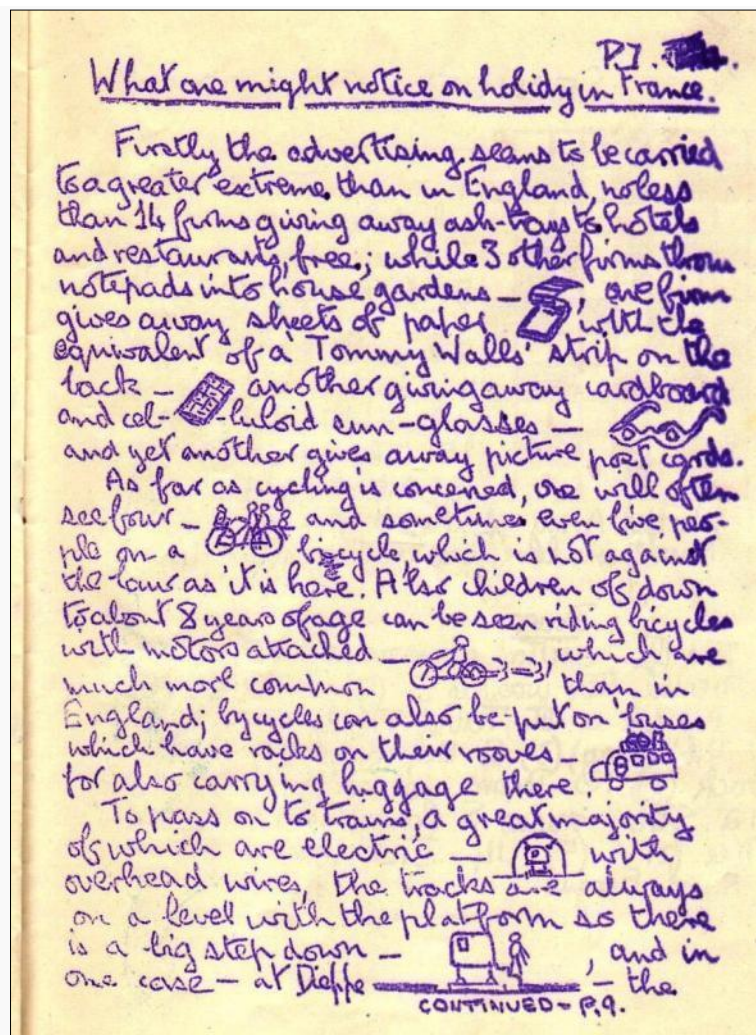
Several times a year I would visit London to stay with my paternal grandmother, Lady Reid. She and her two unmarried daughters Hilda and Lesley lived in a tall Victorian terrace house at 46 Tedworth Square, Chelsea, leased from the Cadogan Estate. Hilda and Lesley indulgently took me all over London on the top of double decker buses.

We also played Happy Families; I liked Mr Chip the Carpenter, but found Mrs Bone the Butcher's Wife rather alarming. On one of my visits they mentioned their difficulty in removing the tight foil caps from milk bottles. This was during my lathe phase, and on the next visit I brought them as a present a device I had turned out of wood. It was a biscuit-sized disk which was flat on one side, and had on the other side an upstanding centre designed to fit the inside radius of the top of a milk

bottle. You pressed this onto the top of the bottle, and the foil cap then lifted off easily.



Happy Families.



My article on 'What one might notice on holiday in France' from the Earleywoodian.

Most summers we would go by ferry to Brittany for a seaside holiday in France. One of these trips provided material for the following travel article in the *Earleywoodian*, written when I was twelve. Its tone accords with the Englishman's traditional polite surprise at the strange ways of foreigners.

What one might notice on holiday in France.

Firstly, the advertising seems to be carried to a greater extreme than in England, no less that 14 firms giving away ash-trays to hotels and restaurants free, while 3 other firms throw notepads into house gardens, one firm gives away sheets of paper with the equivalent of a Tommy Walls strip on the back, another giving away cardboard and celluloid sun-glasses, and yet another gives away picture post cards.

As far as cycling is concerned, one will often see four, and sometimes even five, people on a bicycle, which is not against the law as it is here. Also children of down to about 8 years of age can be seen riding bicycles with motors attached, which are much more common than in England; bicycles can also be put on buses which have racks on their rooves, for also carrying luggage there.

To pass on to trains, a great majority of which are electric with overhead wires, the tracks are always on a level with the platform so there is a big step down, and in our case at Dieppe the tracks actually go through the ordinary streets. In Paris the Metro Underground is not nearly as deep as it is in London therefore one sees many places where the tracks are uncovered. Also one might be surprised to hear that a journey of one stage costs exactly the same as a long one.

Two highlights of our time in Bath were the Festival of Britain exhibition in 1951, and the coronation of Queen Elizabeth II in 1953.

At the Festival of Britain I particularly enjoyed the Skylon and the Dome of Discovery. A simple but gripping exhibit within the Dome of Discovery was a large white panel, about twenty feet square, with a million black dots neatly arranged on it in rows. I stared at this for a long time, never having seen a million of anything before.





The remarkable Skylon was 300 feet high and lit up at night.



Guide to the Battersea Pleasure Gardens, part of the Festival of Britain.

The coronation involved much preparation, including the compilation of loyal scrapbooks which were specially printed and sold for the purpose.



My scrapbook contains carefully pasted cuttings of the Royal couple, the Crown Jewels, and the street decorations. We watched the parade from my father's club, the United Service Club in Pall Mall. I remember cheering myself hoarse in a patriotic frenzy.



Procession route, 1953.

6. Winchester College

I arrived as new boy at Winchester College in January 1955, having won a scholarship. In a severely meritocratic way, the College pinned up on the notice board in the entrance gateway a list of the scholars in the order of the entry examination marks. Top of the list was James Sabben Clare, who went on to become Headmaster at the College. I scraped in at number 11 in a list of 12.

We were referred to as 'new men' rather than 'new boys', because Winchester College has its strange private language, known as Notions. My book of Winchester College Notions, published in 1910, contains several hundred definitions. These include:

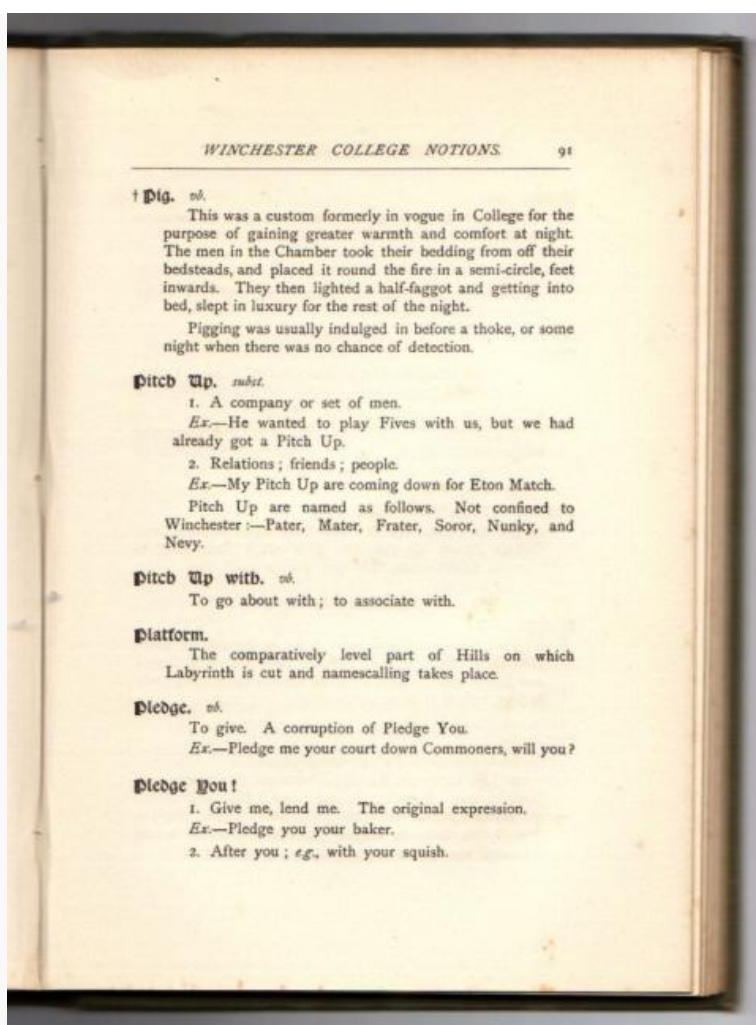
Abroad. Sufficiently recovered to leave the sick room.

Adam and Eve. A stream flowing from Birley's corner through Dalmatia, rejoining New Barge immediately below First Pot.

Apple Pie Day. The Thursday after the first Tuesday in Sealing Week, when College men got apple pies. On this day, which is always a Hatch Thoke, College Six play Commoner Six.

Bake. To lounge.

Batmugger. A wooden instrument used for oiling bats.



Page from book of Winchester College Notions, published by P&G Wells, 1901.

We were expected to learn this language in our first term, and were given an examination by the prefects. It is described in a letter to my sister Griselda:

Last night we had notions examina, which is an examination for the new men. It is held in the upstairs chambers, and there are lots of cucumber sandwiches, jelly, blackberries, hot sausages, soup and cider. The festivities stop around half past eleven, but the extra hour in bed this morning makes up for lost sleep.

Griselda was on an exchange in Paris with a family called Lehideux, with whom I had already stayed, and later in the letter I ask her to buy something for me:

I wonder if you could possibly get me a record?? I will pay you back when I see you next. It is the 45 rpm 7 inch, 'Cha Cha Cha No.2' with Enriquo Jorren's band. On the shiny cover (which is red and yellow) there is a cat grinning from ear to ear playing a tom-tom.

Several of the boys had classical records, which were played in the chambers. I remember going into a record shop in town to buy my first record and asking the advice of the young lady assistant. She was most helpful and recommended Mozart's Concerto for Flute and Harp in C Major, which I bought and much enjoyed. I was curious to discover that the orchestra included a glass harmonica - an instrument which, I later discovered, was invented by Benjamin Franklin.

I had a less happy retail experience twenty years later when I went into a classical record shop in Cambridge to buy tapes for my first car audio system. I said I wanted about five, perhaps by Beethoven, Bach, Mozart, Brahms, or Tchaikovsky. I asked the assistant (who clearly preferred discussing with aficionados the finer differences between various recordings) which works he would recommend. He icily directed me to the racks of cassettes, saying 'I think you will find them all perfectly satisfactory'.

The advantages of being a scholar, or 'College man' were that the fees were much reduced, and you lived in the beautiful medieval part of the school, known as College, in a tolerant community. The other boys, known as 'Commoners' lived in 'Houses' where prowess at sports and normality ruled the day. In College, by contrast, diversity was tolerated. Many College men had consuming, even obsessive hobbies. One collected leaves. Another memorised most of the UK railway timetable.

We were regarded by the Commoners as rather odd, not least because we were required to wear every day a most peculiar outfit. This consisted of a white shirt with detachable starched collar, black tie, black long-sleeved waistcoat, grey trousers, and a flowing black gown with puff sleeves.

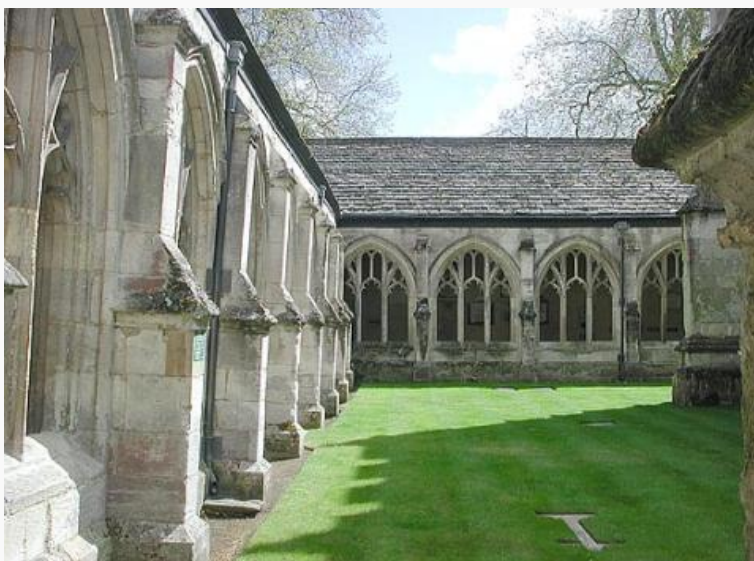
This feeling of being regarded as a curiosity took some getting used to. The sensation came flooding back fifty years later when I attended an Old Wykehamist dinner held at the Jockey Club in Newmarket - near my home in Cambridge. Most of the attendees appeared to be large landowners, much into country sports. I introduced myself to one of them. When he looked at my name badge, and saw I had been in College, he called out to his friends, saying 'Look! look! here's a College man. Come and see. I always wondered what happened to them!'



Outfit worn by scholars.



A courtyard at Winchester College.



The old cloisters.

I count myself enormously lucky to have spent five years at Winchester. The College stands in wonderful grounds to the south of the city, with huge ancient trees, a river running along the boundary, water meadows beyond, and views of St.Catherine' Hill. The teachers were excellent, and every kind of extra-curricular activity was available.



Toyes in one of the College Chambers. A mixture of ages.

The days were a busy mix of chapel services, classroom, meals, active afternoons, and evenings spent in the Chambers, around the College court. Each Chamber was a large room shared by about ten boys of all ages. Around the edge of the room were 'Toyes' which were open-sided wooden cubicles with a desk, a wall light, shelves, and cupboards. On one side of the room was a large stone fireplace with a coal fire burning in it. In the centre of the room was a big table, with newspapers on it, and chairs around. It was all extremely cosy and congenial. You could quietly sit in your cubicle, doing some work, or writing home, while keeping an ear open to the general conversation. Toasting forks were available, and cans of baked beans could be heated up in a saucepan of water on the open fire. Once one exploded because someone had forgotten to puncture it.

The dormitories operated on a similar principle of mixing all ages. The bathrooms were most unusual. There were three or four of these, alongside the dormitories on the first floor of the College court. The bathrooms were about twenty feet square, had a threshold about six inches high over which you had to step to get in, and were floored in waterproof terrazzo, with a central drain. Pairs of hot and cold taps were arranged around the wall. There were no fixed baths as such. Instead there were portable metal baths, known as Bidets. In shape, these were like a frying pan without a handle, about three feet in diameter and about a foot deep. You would get undressed in an adjacent changing room, then drag a Bidet over to some taps, and fill it up. You took your bath in it, then when you were finished you simply tipped the Bidet up and the water went all over the floor. Occasionally, and illicitly, we would block the outlet and flood the whole bathroom with a few inches of water; you could then float around in the empty Bidets, using them as boats.

College men ate in the medieval dining hall. It was on the first floor adjacent to the Chapel in the College court, and was approached by a wide flight of stone steps.

Two curious features of the dining hall were the square wooden boards we used instead of plates, and the coal fired stove in the centre of the room. It radiated a lot of heat, but it also served as a means of producing toast for breakfast. In a feudal process, the boys in the most junior year had to gather before breakfast every morning at the foot of the stone steps (while the more senior years were still getting up), each armed with a toasting fork. As the chapel clock struck the hour, all would rush up the steps, grab a piece of bread, and start toasting. The reason for the rush was that the first to the fire got the choice toasting spot at the centre of the fire. The last had to make do with the edge of the fire, where it was practically impossible to toast anything. The iron rule was that your first piece of toast went to the most senior boy in your chamber. The second to the second most senior, and so on. The toaster was last in this pecking order, and seldom got any toast.



Roof of Winchester College chapel.

The chapel services were numerous and pleasant, with much stained glass, oak pews, and hearty singing. Every morning, seven days a week, there was a service for the whole school in the main Chapel. Then every evening the College men had evening prayers in a tiny and delightful small chapel, called Chantry, placed in the centre of a medieval cloister adjacent to the main chapel. It had a first floor library above it, reached via a stone spiral staircase in the corner.

In the classroom we had to specialise quite early into one of three streams: Classics, Science & Maths, and Humanities. I found it difficult to choose between Science & Maths and the Humanities. I ended up doing Science & Maths, taking Physics, Mathematics, and Higher Mathematics as my A-level subjects.

The housemaster in charge of College, known as the 'Second Master' was the fiercely intelligent linguist and historian Tom Howarth, who had been a junior staff officer under Montgomery in the Second World War. He later went on to be the High Master at St.Paul's School, and later a fellow of Magdalene College, Cambridge. While at Magdalene he wrote a book on Cambridge Between Two Wars, published by Collins in 1978. The assistant master in College was David Lutyens. We thought him extremely good looking, and were much impressed when

he left teaching in 1959 to become a newsreader on ITV, the first commercial television channel.

Extra curricular activities included pottery and carpentry, where I made a miniature oak table; it now serves as something to stand my computer on beside my desk. I also made a gramophone with record changer, buying the parts and making up a wooden case covered in simulated leather. I reported on progress (and on the Suez crisis) in a letter to my sister Griselda:

I have bought yesterday a sheet of that punched metal to put in front of the loudspeaker on my gramophone. I am now waiting for the rexide to cover it in. Mummy is trying to get some in London. The Suez crisis is causing a lot of interest and discussion here. Last night most of the school went to a debate on it in School. Four dons made speeches, two for two against the government, and then questions were asked from the audience. It was very interesting, and clarified my picture of the situation quite a lot. Work is going well. In History we are doing the Industrial Revolution - you know, Crompton's Mule, Arkwright, Cartwright etc.



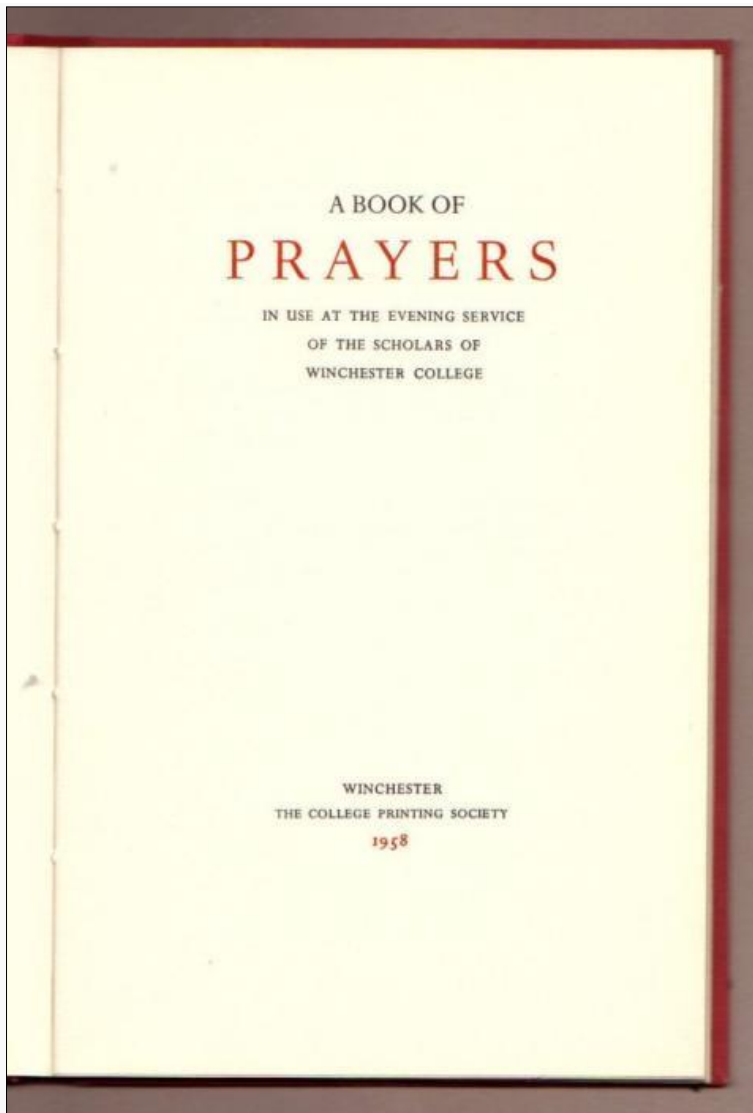
Gramophone, like the one made by Alex.

My two main extra-curricular ventures both took place in my penultimate year at Winchester, 1958. Both were joint ventures with my good friend Philip Steadman, who also went on to read Architecture at Cambridge. The first was the setting up of a Printing Society, whose largest project was a book of prayers for use at evening prayers. The second was the production of a satirical summer magazine called Three Short Legs.

Winchester College Printing Society

Phil Steadman and I set up the Printing Society to take advantage of the bequest of equipment by an Old Wykehamist who was a keen amateur printer. Two enormous

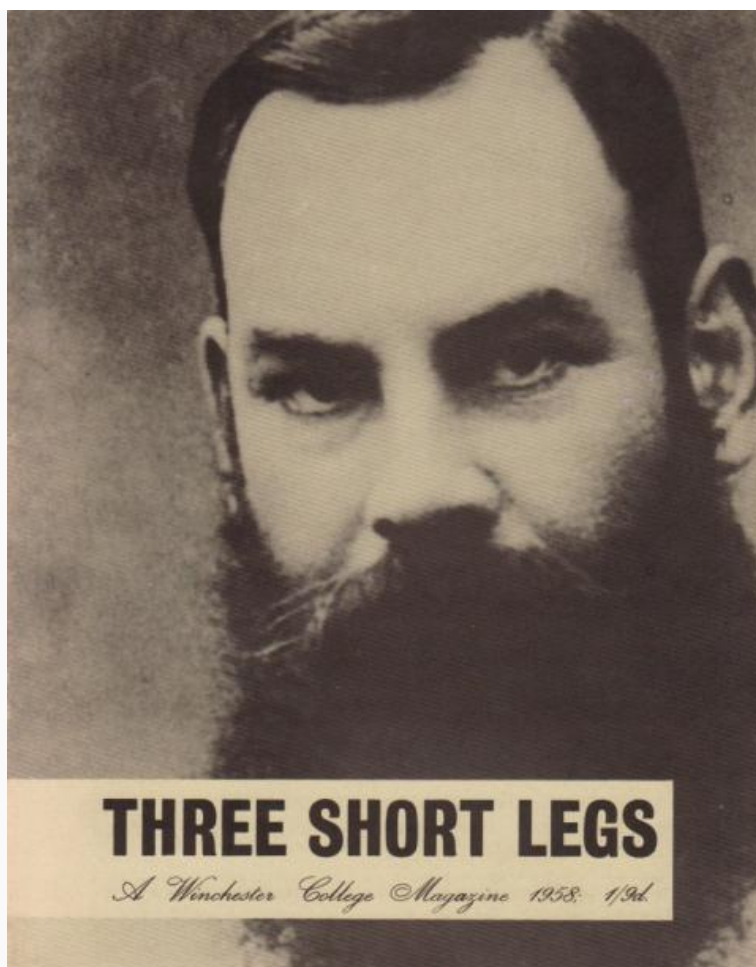
cast iron, treadle operated, rotary printing presses, and a lethal guillotine, arrived in the art building. They were accompanied by numerous trays of moveable type. Phil and I volunteered to take charge of this and were assigned a large room for the purpose. We fitted this out with workbenches and shelving, and set about learning (by trial and error) how to compose type and operate printing presses. We started out printing headed stationery, and small invitations for personal or school events. The number of boys joining the Printing Society grew, probably because it offered, to the less sporty boys, a legitimate alternative to afternoon games. We organised the members into a strict hierarchy. Only Phil Steadman and I operated the printing presses. This was probably just as well, because their rotary momentum was huge. Their jaws opened and closed quickly and relentlessly. At each opening you had to remove one sheet of paper and drop another into exactly the right position. You could easily have crushed a hand if you had got your timing wrong. The next layer of boys were assigned to composing the type; picking up the type from the right little compartment, and stacking it into something called a Composing Stick. The third and most lowly layer of boys were assigned to sorting the type back into the trays after it had been used.



Title page of book of prayers printed by Winchester College Printing Society, 1958.

The great project of the Printing Society was the production of a 30-page book of prayers for use in the scholars' evening services. The previous edition had run out of print, and the College agreed to commission us to produce a replacement. The project was a joint effort of the 21 members of the Printing Society. It was a major undertaking, with all the hand typesetting, and with each page having to be printed four times (in red and black on each side). The first word of each prayer was in red. We chose for the text 14 point Perpetua type, designed by Eric Gill, with van Krimpen's Romulus type for the 36 point initial letter of each prayer. The books were professionally bound in red cloth or leather, with the title stamped in gold.

Three Short Legs



Cover of Three Short Legs magazine.

The Three Short Legs magazine was produced as a one-off summer publication, to be sold at the annual Eton against Winchester cricket match. The name is derived from an obscure cricketing term. The editors were myself, Phil Steadman, and John King, with a master (Count Nicholas Sollohub) pressed into service as minder. It contained no less than 60 paid display advertisements, mostly full or half page. We wrote off to local and national companies, and somehow persuaded them to cough up. As well as local firms, they included household names such as Austin Reed, the Royal Navy, Thomas Cook, Barclays Bank, and the Oxford University Press. The venture turned a profit, and I was able to buy an Olivetti portable typewriter (for £25) out of my share.

The contents included anonymous attempts at parody and humour, a contribution from the Punch author H.F.Ellis (which began 'The advantages of being very bad at cricket are not always clearly understood. '), a crossword, and two articles on the traditionalist design of the new school hall. One article, by Andor Gomme, criticised the scheme, describing the building as 'a severe disappointment'. The other article, in defence of the design, was by its architect Peter Shephard.

The best piece was a rumination on proverbs by Phil Steadman, entitled 'It will be seen in the frying of the eggs'. The opening section follows:

The scientists have missed it; it has lain hidden in a cobwebbed tome; it has escaped their notice - the proverb. It alone has evaded the searching ray of the scientific method, has survived into this our marvellous mechanical age, a revered and musty oracle, soon to be struck down by ruthless men in white coats. But perhaps in some vast, clinical, impersonal building (should it be an 'establishment'?) the proverbs are even now fighting a losing battle; out-numbered, unarmed, they are falling prey to bespectacled monsters whose weapons are test-tubes and balances. Can we imagine the scene as each proverb in turn comes for trial into the spotless laboratory that is science's courtroom?



Phil Steadman grew up to be a professor.

"Call the first proverb."

Down from his dusty home among once-handsome volumes bound in red morocco creeps the shrivelled emaciated thing.

"State your case."

"A horse stumbles that has four legs."

A low murmur goes round the laboratory. The experiment begins - horse after horse, black, white, piebald, thin, small, large - cart-horses and elegant ponies parade past the committee. The little proverb weeps silently in a corner as horse after horse fails to stumble, and prances along in perfect step.

The judge puts on the black cap and judgement is passed.

"Call the next proverb." Down from his rice-paper home jumps a yellow-faced, slit-eyed proverb and bows low.

"Honorable sirs: beg to recite honourable proverb; a fog cannot be dispelled with a fan." (A lamentable lack of the Canute spirit here, one can't help thinking.)

The jury deliberates;

... a small fog ... an enormous fan ... absurd generalization ...

And so it goes on.

My own contributions to Three Short Legs have not stood the test of time so well. One was a three page commentary on school events parodying Time Magazine. It included a review of a recent school play which started:

Oedipus Tyrannus (Sophocles) is another stringy, unshaven utterance of the tragedy muse. Action plunges into long backlog of all the old works - curses, prophecies, plagues and riddles. Biggest riddle is to sort out where we come in.

and ended:

Audience, chorus, shuffle off in tears. Nicholas J. Richardson gives Oedipus punch, feeling, is handicapped by loose dialogue, heavy scripting. A. Patrick Minford [later to become a famous professor of economics], playing opposite Richardson, wheels out a spirited performance. Rest of cast carry along a script that lacks impact. Chorus of moaning oldsters palled, but took everything that author Sophocles gave them.



Olivetti Lettera 22 bought with proceeds of Three Short Legs magazine.

Acting as Lady Macbeth

[illegible]

Lady Macbeth: Alexander Reid.

Sailing on the Hamble



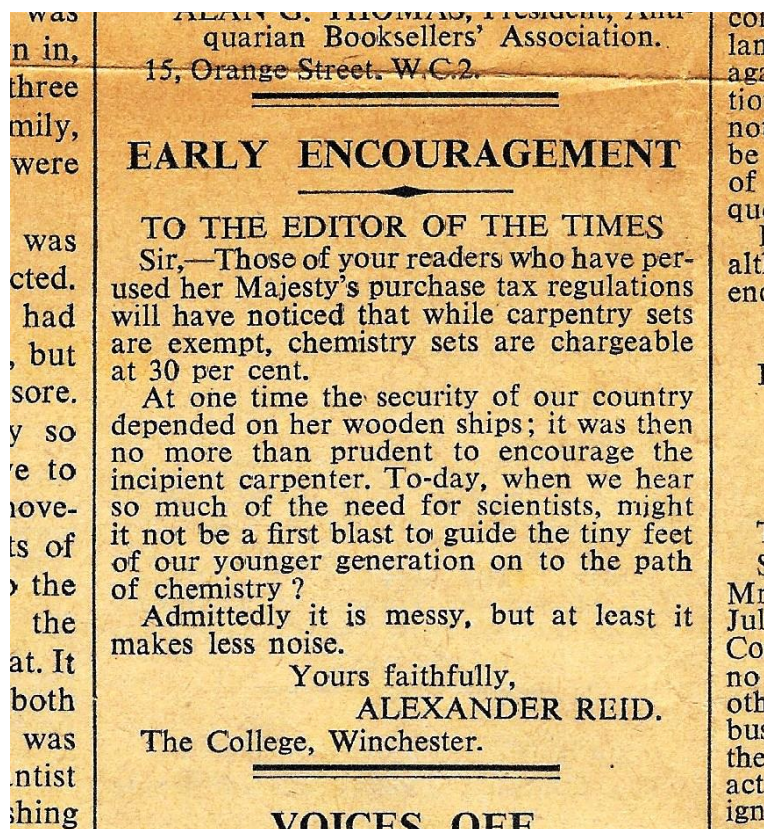
Firefly dinghies under sail.

39

pulleys, and relative motion) by drawing pictures of sailing boats on the blackboard. The College kept Firefly dinghies at the boatyard of Fairey Marine.

We would sail around in the Hamble, and sometimes venture across to Cowes in the Isle of Wight, taking care to avoid the enormous ships heading to or from Southampton. We greatly enjoyed it, and came back windswept and smelling of salt.

Writing to The Times



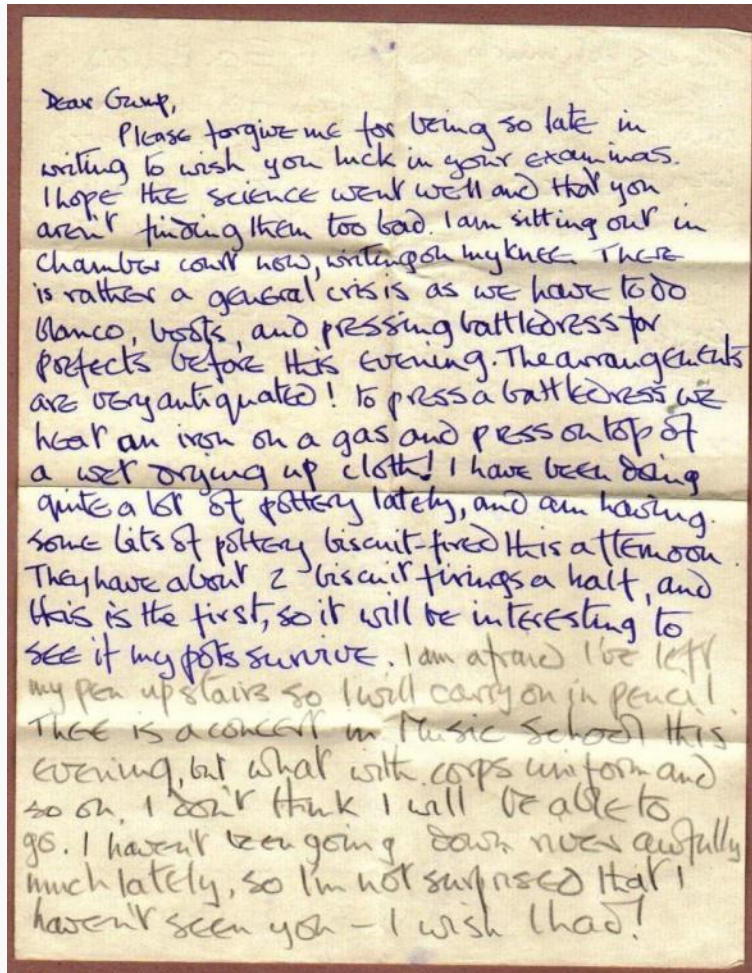
I somehow came across the Purchase Tax regulations, and was interested to see that carpentry sets were exempt, whereas chemistry sets were not. I wrote a letter to The Times suggesting that both should be exempt. I argued that while in the days of wooden ships the nation's security might have depended on carpentry it was more likely today to depend on science. The letter was published on 11th July 1958.

Battle Drill

My strangest memory of Winchester is something called Battle Drill. We did it in the College Cadet Force as part of our military training. We also did parade ground drill. For that we wore shiny boots and neat battledress uniforms which we pressed using solid irons heated on a gas ring. Battle Drill was quite different.

Everything about it was absurd. We dressed in sloppy denim uniforms, which were three sizes too big. Battle Drill took place not on a tarmac parade ground, but on the sports fields. Instead of marching around like proper soldiers, in Battle Drill you had to hold your rifle up horizontally in front of you in a position called the High Port.

It was as if you were wading chest-deep through an imaginary swamp. You also had to lift your knees up very high, as if stepping over the high grass of the veldt. The whole effect was ridiculous. Every so often you had to stop, and the boy in front had to shout out 'Observe!'. Then on you went. On another command, you had to prance off, knees lifted high, to gather round the boy playing the role of leader.



Letter from Alex to his sister Griselda about pressing battledress..

When all were arrived, he would shout out to the first boy: 'Rations!', and the first boy had to shout back 'No!'. Then the leader had to shout out 'Ammunition!' to the second boy, who had to shout back 'No!'. Then the leader had to shout out 'Rendezvous!' to the third boy, who had to shout back 'No!'. So it went on. We assumed this ritual had mutated from a procedure on which your life would have depended in the Boer War.

Templeknowe & Greenhill

While I was at Winchester College, my sister Griselda was also in Winchester, boarding at St. Swithuns school. My father's job had moved from Bath to London in 1953; we rented a flat at Morpeth Mansions, off Victoria Street. We then moved to Kent, and up to Kirkintilloch, near Glasgow, for my father's last job in charge of a gunnery proofing range. My memories of the Morpeth Mansions flat are that it had

an open outside lift serving the kitchen window, which I once travelled up in, and that my mother decided to change the look of the flat.



Templeknowe.

This involved wallpapering my bedroom in a very Festival of Britain red wallpaper, and painting everything in the kitchen (table, chairs, cupboards, bread bin, walls) in a warm tomato soup colour. She also bought her first electric cake mixer; a man came to the flat to demonstrate it by making a Victoria Sponge.



Greenhill.

During this time my father inherited a substantial house in the Scottish borders from his childless cousin Herbert Eckford. Herbert had emigrated to Canada as teenager before the First World War, and had made his fortune in the wild frontier town of Calgary, in Alberta. Key to this was a stake in Calgary's principal brewery. Herbert returned to Scotland, and set himself up in style.

The house, called Templeknowe, was near St. Boswells, in Roxburghshire. It was in the Scottish baronial style, with a turret, battlements, and stabling for 12 horses. We

used it for holidays for a few years, but my parents sold it in 1958, when they bought Greenhill, a Georgian house in the village of Thorncombe, near Chard in Dorset. My parents were 57 and 51, but Greenhill was, apart from Templeknowe, the first house they had owned.

A curious footnote

I was passing through Winchester some twenty years later, and James Sabben-Clare (now Headmaster at Winchester College) and his wife Mary kindly invited me to lunch. On my way to their house I popped into a small supermarket to buy something. The lady at the check-out handed me my change, then reached under her desk, said 'This is your free basketwork parrot', and handed me said parrot. She explained it was part of a loyalty scheme. On arrival at the Sabben-Clares I discovered that it was James' birthday, and gave him the parrot. It was green, and the top half came off, so you could keep things in it.

7. Cambridge University



Wren Library, Trinity College.

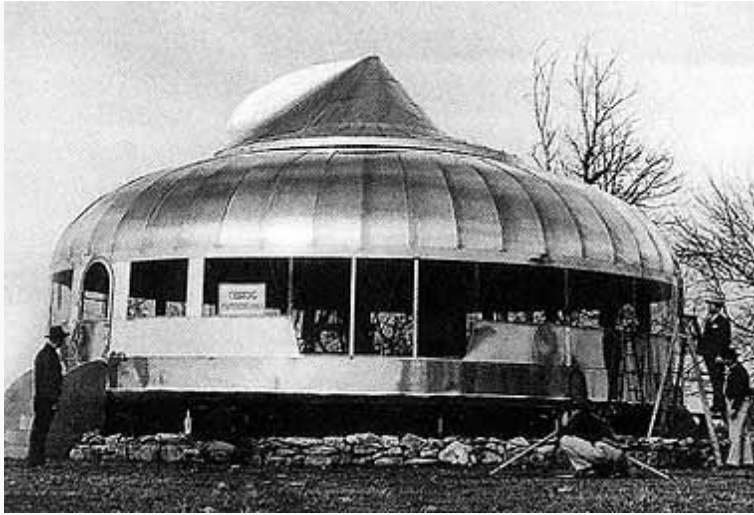
After a severe illness in my last summer term at Winchester, which followed an emergency appendix operation, I went up to Trinity College Cambridge to read architecture in October 1959.

I was in the first cohort to miss National Service. About half my contemporaries had done National Service, so were two or three years older (and about ten years more experienced). A letter home, two weeks after I started at Cambridge, exudes breathless enthusiasm:

I am really enjoying myself enormously (don't think I'm trying to put a good face on things), and what I enjoy most of all is the architecture! All the dons are very good, and the lectures so far (2) have been extremely interesting. We each have a table in the studio and have had to buy some (I am very sorry to say) expensive equipment, e.g. adjustable protractors and a vast T square. Luckily I managed to get some things second hand. The drawing board with ebony edge I got for £5 instead of £8. Everything else, however, including sketch books, notebooks, exercise books, paper, pencils, ink etc etc etc is all on the house.

I have bought a very good bicycle for £2 from the cycle attendant. I had to get new brake blocks and a bell at woolworths, but well worth it. I have booked the morning coat outfit. Should I wear a hat? Please let me know immed. as I have to give them notice for the hat. I have joined several societies: the Architecture society, the Arts society, the Film society, and the Conservative Association. Let me know about the hat. If I don't hear I shall assume no hat.

My interest in design had been triggered by the study of typography into which I was led by my printing activities at Winchester College, and by a Buckminster Fuller lecture in London to which my mother took me as a teenager. The lecture, which took place at the Royal Institute of British Architects, lasted more than three hours. During the question period I asked the great man why, when all his designs were so revolutionary, did he wear a conventional suit. He replied that people took unconventional ideas more seriously if presented by someone in a suit.



Buckminster Fuller's Dymaxion House.

I took to architecture like a duck to water, and much of my life during my three years at Cambridge revolved around the studios in the Department of Architecture in Scroope Terrace. Fitzbillies was conveniently placed about half way between Trinity College and Scroope Terrace, and I would call in for a sausage roll or a Chelsea bun depending on the time of day.



Fitzbillies.

We were hugely committed to the subject, and most of us worked very long hours, sometimes late into the night or all night. There were two explanations for this enthusiasm.

Firstly, it was immensely invigorating to be released from the passive learning of school into the active process of coming forward with one's own ideas.

Secondly the teachers, particularly our year tutor Sandy Wilson and the head of school Leslie Martin, were truly inspirational. We hung on their words, and shared with them a worship of the leading masters of the modern movement: Le Corbusier, Mies van der Rohe, Frank Lloyd Wright, and Alvar Aalto. Leslie Martin kindly extended to students an open invitation for tea every Sunday at his splendid home/office, a converted mill in Little Shelford.

It was full of modern paintings and sculpture, given to him by his friends over the years. These included Henry Moore, Barbara Hepworth, and Ben Nicholson. I also worked in his office as a junior draughtsman during two vacations. One task was a meticulous ink drawing of his residential building for Caius College in West Road, Cambridge.

Leslie Martin had been Chief Architect at the London County Council, and was responsible for the design of the Royal Festival Hall. He transformed the Cambridge University Department of Architecture, which had previously been sleepy and backward looking.



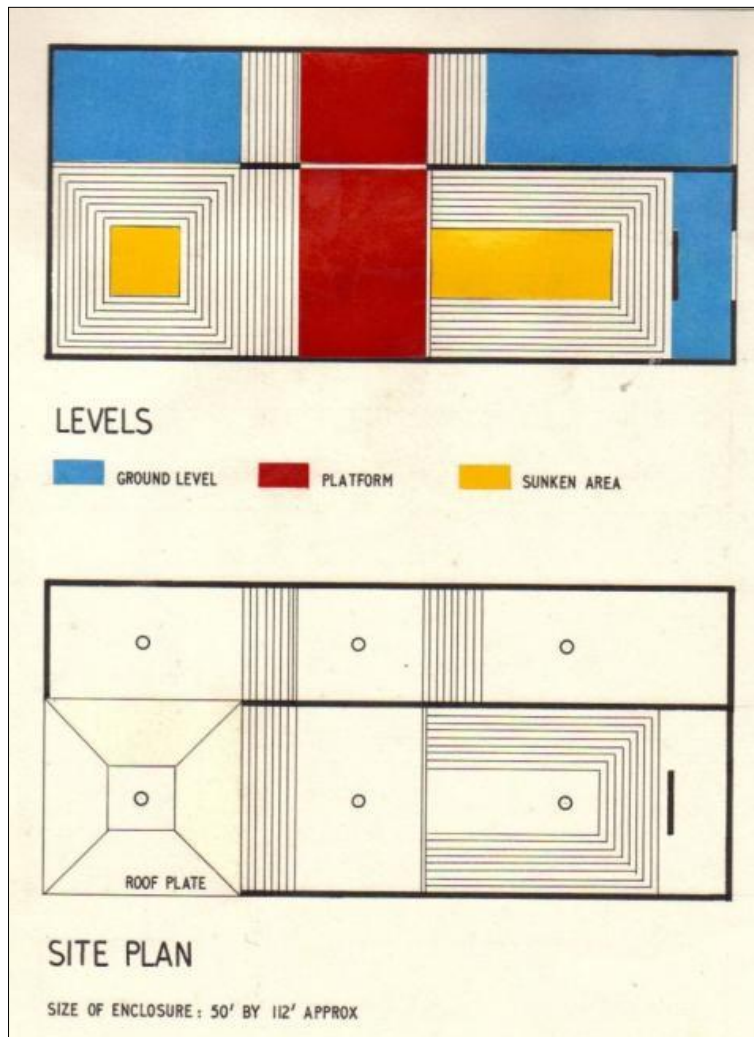
Royal Festival Hall architects: Peter Moro, Leslie Martin, Robert Matthew, Edwin Williams.

Each term was a succession of design projects, carried out at drawing boards in the studio, and presented for open criticism at 'crits' undertaken by visiting teachers. In our first weeks we were asked to design a record sleeve, then a house within a redundant squash court, and a sculpture court. The sculpture court was to occupy the area of a tennis court; it was to hold six sculptures; it was to contain two levels, and a roofed area. My scheme, for which I made an intricate balsa wood model now lost, was severely geometrical. It received embarrassingly lavish praise in the 'crit' from the architectural theorist Colin Rowe. The way a 'crit' worked was that all the students in the year pinned their work up on the wall, and gather in the room. An important visiting critic would then walk round commenting – publicly – on each student's work. Not for the faint hearted.

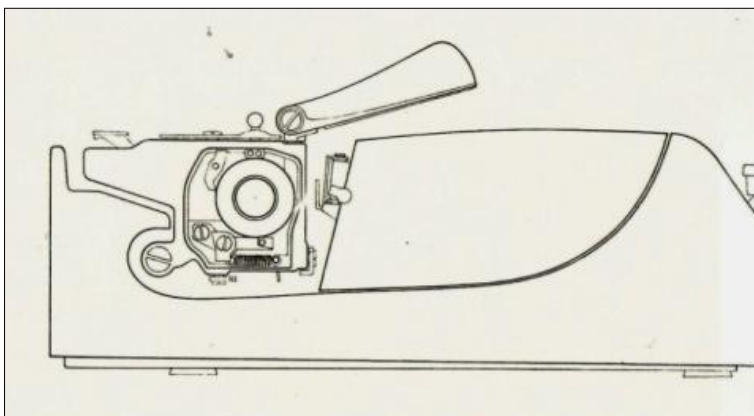


Villa Savoye, by our hero, Le Corbusier.

Sadly, I don't think I ever did anything as good as the Sculpture Court again. Looking back on it, there was a central paradox in the way we were taught. We were encouraged to reject old ways, and to think for ourselves. One of the reasons we all admired the heroes of the modern movement was that they had rejected the earlier orthodoxies and had come up with radically new design ideas.



Sculpture Court project.



Measured drawing of typewriter.

Technical drawing showing a side profile of a car parked in a garage. The drawing includes dimensions for the car and the garage structure. Key dimensions are labeled as follows:

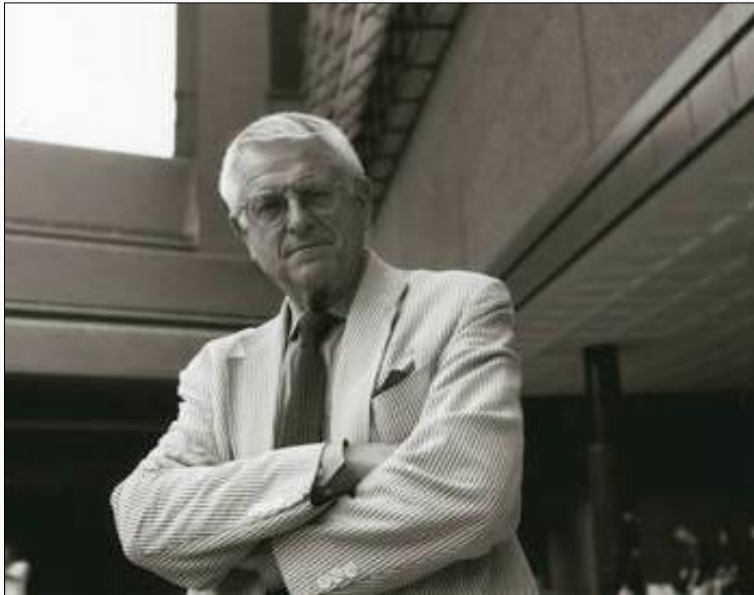
- Garage Structure:**
 - Garage width (between pillars): 8.3
 - Garage height (from floor to top of arch): 7.6
 - Garage depth (from front wall to back wall): 6.6
 - Garage pillar width: 0.9
 - Garage pillar height: 5.10
 - Garage pillar top width: 2.0
- Car Dimensions:**
 - Car width: 2.3
 - Car height: 3.6
 - Car wheelbase: 11.6
 - Car front overhang: 3.6

Technical drawing of a swimming pool layout. The pool is elongated with rounded ends. Key dimensions and labels include:

- Overall length: 7.6
- Overall width: 4.5
- Inner length: 5.0
- Inner width: 1.1
- Left circular feature: Radius 0.8, diameter 1.6, labeled 'A'.
- Right circular feature: Radius 1.2, diameter 2.4, labeled 'C'.
- Angle at right circular feature: 33°
- Top width dimension: 0.6
- Bottom width dimension: 2.3
- Right side dimension: 8.9

A stylized line drawing of a modern interior space, possibly a living room or office. The scene is composed of several vertical sections. On the left, there are hanging garments and a stack of books. The central section features a large, empty rectangular frame, likely representing a television or a large mirror, with various objects like bottles and a small lamp on the shelves below it. To the right of this central section is a large, dark rectangular area, possibly a doorway or a large screen. Further right, there are shelves filled with books and other items, including what looks like a record player or a similar electronic device. The overall style is minimalist and architectural, using clean lines to define the space and its contents.

48



Sandy Wilson.

My first signs of insubordination came when we were asked to do a measured drawing. Being enthusiastic about industrial design rather than classical architecture, I did a meticulous measured drawing of the plan and elevation of an Olivetti portable typewriter.

My real clash with the orthodoxy came when we were asked to design a motel for a roadside site between Cambridge and Trumpington. Reflecting the transient nature of road travel, and influenced by the work of Buckminster Fuller, I produced a design consisting of a string of spherical pre-fabricated plastic pods, which clipped together like popper beads. There were three types: an eating pod, a bath pod, and a bed pod. These could be combined in various combinations. Pods could be added or removed in response to seasonal or long term changes in demand. In the bath unit the bath and basin were all moulded into the pod, as in Buckminster Fuller's Dymaxion bathroom. There were a couple of pods at the end for a caretaker, who could send guests breakfast through a pneumatic tube. It was described thus:

A motel is a service station for the body. Eat. Wash. Sleep. Sleep. Wash. Eat.

The motel consists of three different types of unit. The first is primarily for eating in, the second is primarily for washing in, and the third is given over entirely to the bed. Each unit is approximately 7'6" by 7'6" by 7'6". Large enough to stretch and reach and jump in; small enough to be easily prefabricated and transported. The motel does not try to disengage itself from the road; it clings to it. A car pulls into the motel as a car pulls into a lay by. It points always in the same direction. It is not forced into ungainly and unnatural manoeuvres.

I adopted an equally unorthodox approach to a project for new student rooms at Jesus College. In deference to conservationist constraints, and on the principle that most students only used their rooms to sleep in, I designed a single storey windowless building hidden behind an ancient wall. The drawings of the fitted furniture, in the style of an engineering blueprint, were remarkably detailed.

Unfortunately these schemes did not find favour with the visiting examiners, and I was severely marked down, resulting in a 3rd class grade for my second year (after a 1st in my first year). I produced more conventional work in my third year, and ended up with a 2(ii) grade overall. But whatever the ups and downs of my marks, I loved every minute of architecture at Cambridge.

Close friends in the same year included Richard MacCormac, Robin Webster (an accomplished cartoonist), Robin Spence, Sumet Jumsai and Dominic Michaelis.

Richard MacCormac went on to have a distinguished career. He established the firm of MacCormac, Jamieson and Prichard, won numerous RIBA Awards for his buildings, became a Fellow of the Royal Academy and President of the RIBA, and was knighted in 2001.



Richard MacCormac.

Robin Webster and Robin Spence hit the headlines by winning, in their twenties, a huge and prestigious competition to design a new parliamentary building on Bridge Street, opposite Big Ben. Unfortunately, after much publicity and several years of work, the project was abandoned. Years later a parliamentary building did get built on the site, but it was designed by Sir Michael Hopkins. Both continued to practise, and Robin Webster later became head of the school of architecture at The Robert Gordon University, Aberdeen.

Sumet Jumsai was from Bangkok, and returned there to lecture and build up his practice. One of his most notable buildings is the Robot Building, Bangkok, for the Bank of Asia. It is 20 storey building in the shape of a robot, complete with two large round eyes. It was selected by the Museum of Contemporary Art, Los Angeles, as one of the 50 seminal buildings of the 20th century.

Dominic Michaelis went on to qualify as an engineer as well as an architect. He and his architect son are currently in the news with proposals to build floating eco islands in warm climates around the world.

In the year ahead of me was Peter Carolin, who later worked with Sandy Wilson on the design of the new British Library at Kings Cross. He edited Architectural Design journal, and became head of the school of architecture at Cambridge. He is now, in retirement, a neighbour and friend here in Cambridge.



Robin Spence (left) and Robin Webster (right) with The Minister for Housing and Construction. Their proposed parliamentary building was completely open to the public throughout the ground floor.



Robot Building, Bangkok, by Sumet Jumsai.

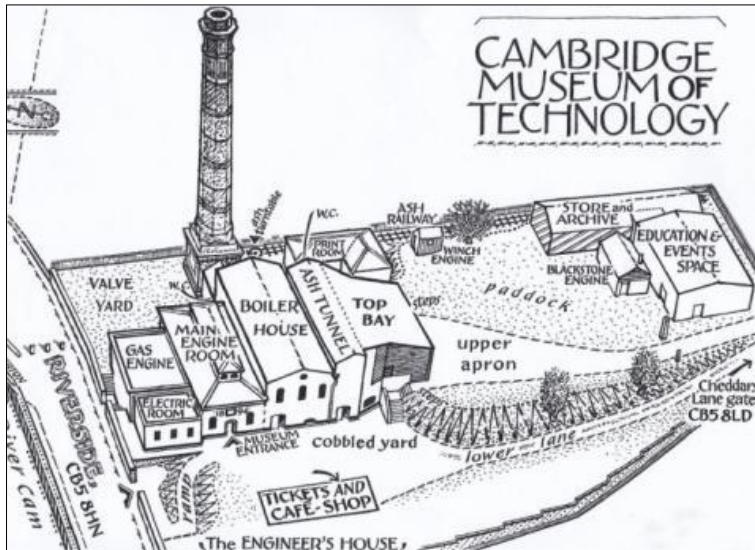
Phil Steadman was in the year behind me. He turned to research rather than architecture, at Cambridge, the Open University, and University College London, where he is now a professor.

I should also mention Jon Harris. A scholar at Winchester College in Phil Steadman's year, he read history of art at Cambridge, and went on to be a professional artist and art teacher. He has lived in Green Street, in the middle of Cambridge, for more than thirty years; he knows and loves the architecture of the city more than anyone I know. His beautifully annotated pen and ink drawings of places of interest are truly remarkable.

University friends not studying architecture included Simon Lister and Colin Perry (both of whom went on to do an MBA at INSEAD in Fontainebleau), Malcolm Cockburn and Roger Garside. Simon, who read engineering, spent most of his career working as a transport expert for the consultants Arthur D Little in Boston and London. Colin spent his career in industry, including as Managing Director of the Birmingham Mint. Malcolm worked as a civil engineer, then took over the running of his family farm in Dorset. Roger joined the Foreign Office, and wrote an authoritative book on 'China After Mao'.



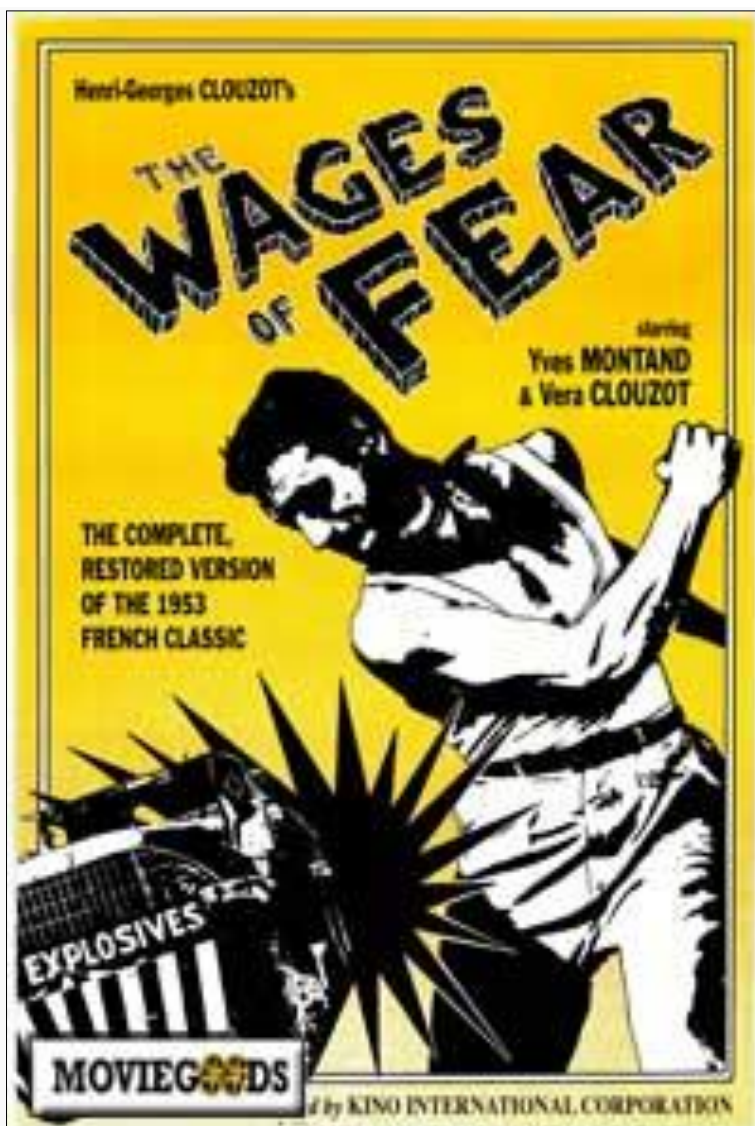
Portrait of Jon Harris by Louise Riley Smith.



A beautiful drawing by Jon Harris.

Other cameo memories of my time at Cambridge include:

The world of cinema



The Arts Cinema in Market Passage, now converted to a bistro bar, ran a subscription cinema club every Sunday in term, with screenings at 2.30pm, 5.30pm, and 8.30pm. You would book for an entire term at one of these times, and enjoy an excellent series of classic films.

They were generally in black and white, sometimes in French with sub-titles. They merge in memory into a flickering collage of Alec Guinness, Jaques Tati, Orson Welles, Gregory Peck, Brigitte Bardot, Audrey Hepburn, Alfred Hitchcock, Humphrey Bogart, Fred Astaire, and the Marx Brothers.

Two scenes that are seared into my memory are one from 'The Wages of Fear' in which a lorry driver sinks into a quagmire so that eventually only his outstretched hand is seen; and a murder mystery in a spooky house in which a drowned corpse rises up terrifyingly from a bath.

I tried to get into film-making by joining the university film society. I reported on a Sunday afternoon in his room to the senior undergraduate who ran the society. I was most impressed to find him ensconced in bed with a beautiful young lady. This chimed with my fantasies about show business. Only slightly annoyed by the interruption, he handed me an editing machine and a cardboard box full of curly film clippings. He asked me to make something of the material.

Back in my own rooms I spooled through the clippings. They consisted of shots of a respectable looking middle-aged man repeatedly walking in and out of a suburban bungalow, and getting in and out of a car. There were no other characters. I decided to build my masterpiece around the theme of 'Setting off for a day at the office'. I carefully glued the strips of film together in logical order, so that the man first came out of the door, then walked down the path, then opened the gate, then closed the gate behind him, then got into his car, and then drove off. I took the finished work back to the film society supremo. He ran it through a projector, gave it the thumbs down, and offered me no further work. I think he had been hoping for something more bizarre.

Braun salesman



Braun fan heater designed by Dieter Rams. Now probably a collector's item.

Like the rest of the school of architecture, I was a fan of the Bauhaus, and an admirer of the clean geometrical products designed for Braun by Dieter Rams of the Ulm design school (the spiritual successor of the Bauhaus). I bought a beautiful rectangular Braun cylinder fan heater, which I treated as a useful work of art. I was so taken with it that, in an entrepreneurial and evangelical spirit, I made an arrangement with a Cambridge electrical retailer to sell these heaters on commission to fellow undergraduates, like an Avon lady.

The open road

I bought a 50cc BSA motorbike in 1960, when I was nineteen. My first outing was on the A10, which runs long and straight through flat country towards Ely. It was unbelievably exhilarating; I was probably only doing about 35 mph, but it felt supersonic.

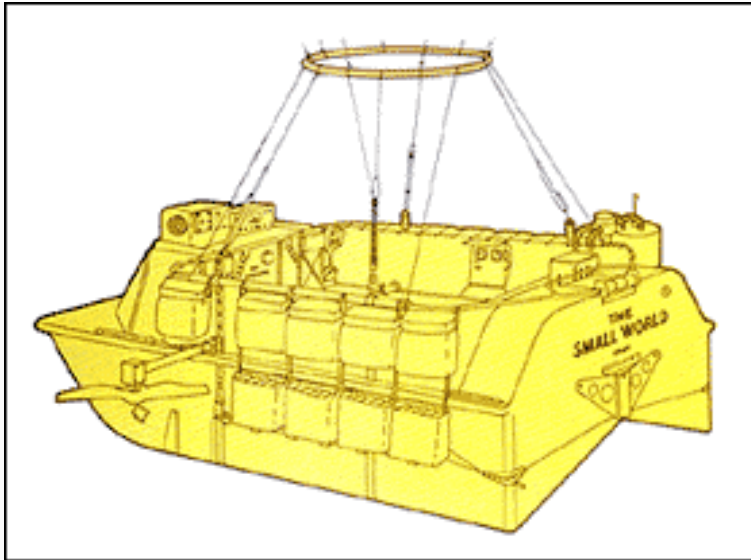


BMW Isetta bubble car.

My next purchase was an Isetta bubble car. It was the first car produced by BMW, was spherical, and had a single door on the front which had the steering wheel attached. Three people could squeeze onto a bench seat. I had seen it parked in a nearby street, and put a note under the windscreen wiper asking if it was for sale. It was, the vendor being Tim Eiloart. Tim had just founded the Cambridge Consultants consultancy, as an agency selling the time of University academics to industry. It grew into a substantial company with hundreds of staff and several spin-outs. Tim's other distinction is that he had, in 1958, taken part in an attempt to fly across the Atlantic in a hot air balloon. The following account of this adventure is from the Balloons Over Britain website:

The Atlantic Ocean was the greatest challenge in ballooning history for many years. A group of 4 British balloonists, Colin Mudie, his wife Rosemary, Bushy Eiloart and his son Tim, planned to take on the Atlantic crossing, using their experience as sailors. They decided to take an east to west route, leaving from Tenerife heading towards a central location on the east coast of the United States.

They had a basket specifically built for the journey. It was made from reinforced polystyrene and measured 15ft x 8ft.



Small World gondola.

It had to be a strong, sturdy structure to make sure it would be able to withstand the impact if they fell to the sea at any point throughout the flight. They named their vessel Small World. It took off on December 12, 1958 and travelled a mighty 1200 nautical miles, breaking all existing balloon duration records. Unfortunately, the 4 were caught in a ferocious storm and their attempt was brought to an early close. However, they completed their journey (another 1,450 miles) in the custom made gondola.



1933 MG J2 sports car.

In 1961 I swapped my Isetta bubble car for a 1933 J2 MG sports car. The vendor pointed out that there was no speedometer, but said that you could tell when you reached 60 mph because the car would begin to shake to pieces. He also threw in a plastic macintosh, saying I would need this if it rained. I asked if the hood leaked. He said it did, but that the bigger problem was the large holes in the floor through

which water would come up into the car. The plastic macintosh was to wrap your legs in. I sold the car in due course to my fellow undergraduate Henry Scrope. In 1962 I bought another J2 MG for £17 from a scrap yard in Royston, did some rudimentary work on it, and sold it on to a wealthy undergraduate for £110. I applied the profit to the purchase of my Rolex chronometer watch.



Rolex Oyster chronometer

Outside term, my main university memories are of four foreign travels:

French Romanesque architecture



Cloister of St. Trophime at Arles.

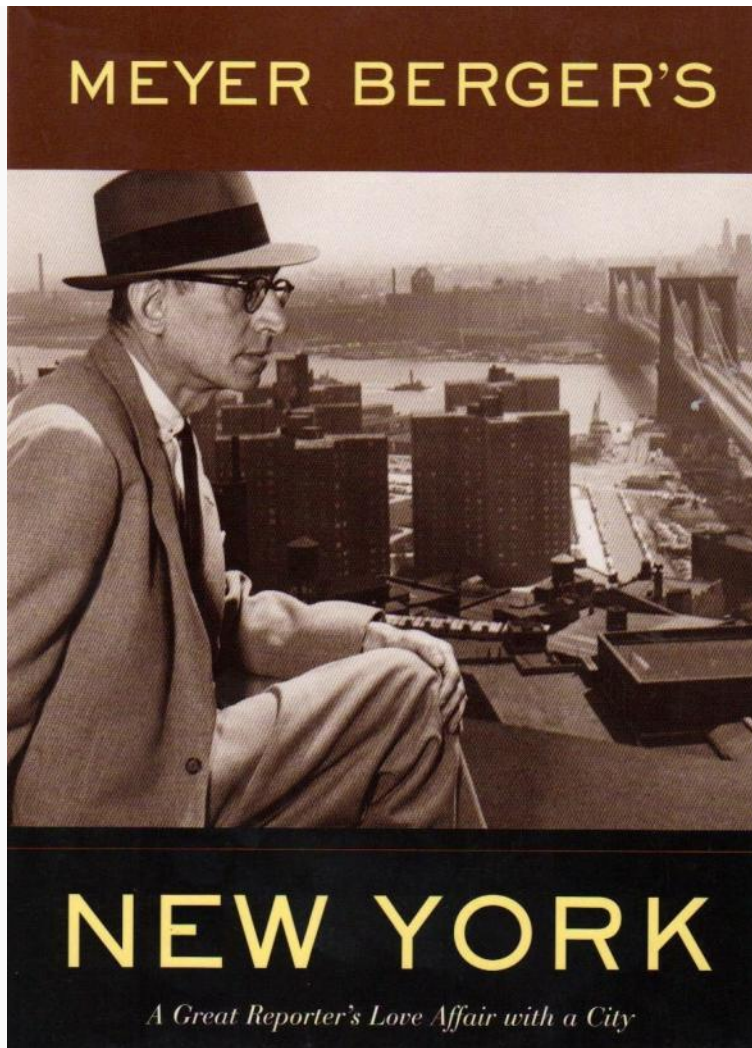
My indulgent parents accompanied me on an architectural study trip to Romanesque cathedrals in 1962. My mother was a voracious sightseer, but I my father must have got very bored as we traipsed round one ancient building after another, in Angers, Poitiers, Perigueux, Beynac, Cahors, Moissac, Auch, Toulouse, Carcassonne, Arles, Avignon, Valence, Cluny and Beaune.

We stayed in pensions, and had to fill up the car radiator frequently. The following extract is from a high-faluting essay on Romanesque architecture, written on my return:

French Romanesque architecture is indubitably centrifugal and diverse; indeed one may be forgiven for thinking that had its complexity not been shot through with the unifying influences of Burgundian monasticism and Spanish pilgrimage, we would do better to consider it as a group of separate styles.

New York

My first visit to New York, in 1961, was an eye opener. I shall never forget the sheer throbbing, hissing, thunderous energy of Manhattan. I stayed in a cheap hotel near the Empire State Building, and saw the sights. I have been a lifelong fan of New York City ever since, my three favourite books about it being Meyer Berger's 'New York: A Great Reporter's Love Affair with a City', Jan Morris' 'Manhattan '45', and James Thurber's 'The Years with Ross'. I also devour the New Yorker magazine every week.



Meyer Berger's wonderfully affectionate pieces about New York in the New York Times

Touring with Shakespeare

In the summer vacation of 1960 I secured a very small part in a touring university production of 'As You Like It'. The undergraduate director was the energetic and versatile Michael Deakin, who went on into a career in film and television. His versatility was needed, because at each of the performances across France and Switzerland at least one of the actors would be missing - on account of a missed train, a broken down car, or an emotional crisis. Deakin would step in to replace the

missing actor, male or female. In some cases he had to replace two or more actors who appeared in the same scene.

Another hazard of the tour was the risk to the lute. This priceless instrument was used to accompany the 'Hey Nonny Nonny' moments in the play. It had been lent by the Fitzwilliam Museum. Unfortunately the lutist was given to roaming the bars of the neighbourhood, with lute, after each performance. He would spend most of the next day trying to locate it.



PhotoDisc, Inc.

Three of the other bit part players were, like myself, were studying architecture. We did the journey in a Mini, and made architectural detours between performances. One of these was to Le Corbusier's famous chapel at Ronchamp.



Le Corbusier's chapel at Ronchamps.

To Jerusalem and back

In May 1961, over a spaghetti bolognaise, Colin Perry told me that he had bought a motorbike with the idea of driving it to Istanbul during the summer vacation. He suggested I join him, which I was pleased to do. I bought my 50cc BSA motorbike, and booked a test. Unfortunately I failed. You could not drive abroad with a provisional licence, and no re-test was available until months later. Luckily for me a member of another expedition (to refugee camps in Jordan by Land Rover) had failed his exams and could not go. So we merged the two ventures. I travelled in the Land Rover with Tony and two others, and Colin rode ahead on his motorbike.



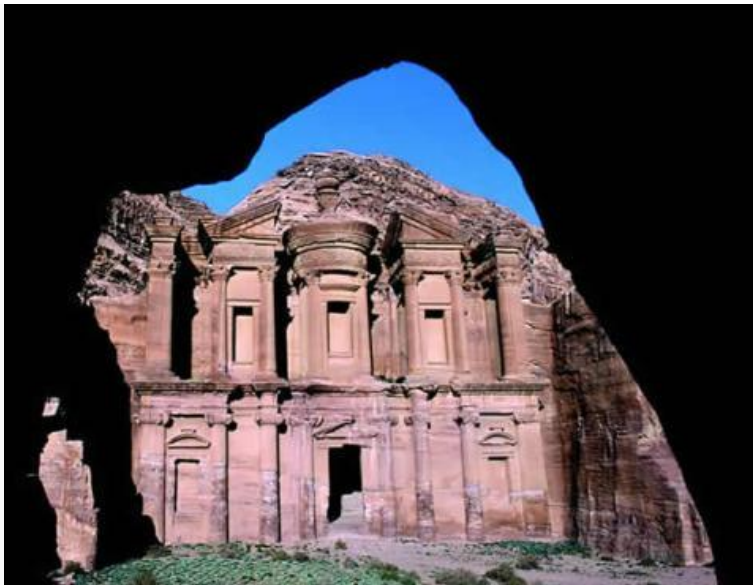
Long wheelbase Land Rover.

We had everything you could want in the Land Rover, including sunhats, refrigerator, mosquito nets, snake-proof tent, lettuce shaker, toilet paper, tinned food, a collapsable Calor gas stove, and an economy drum of orange processed cheese. Colin's motorbike gave up the ghost in Ankara, and from there to Jerusalem we squeezed five into the Land Rover.

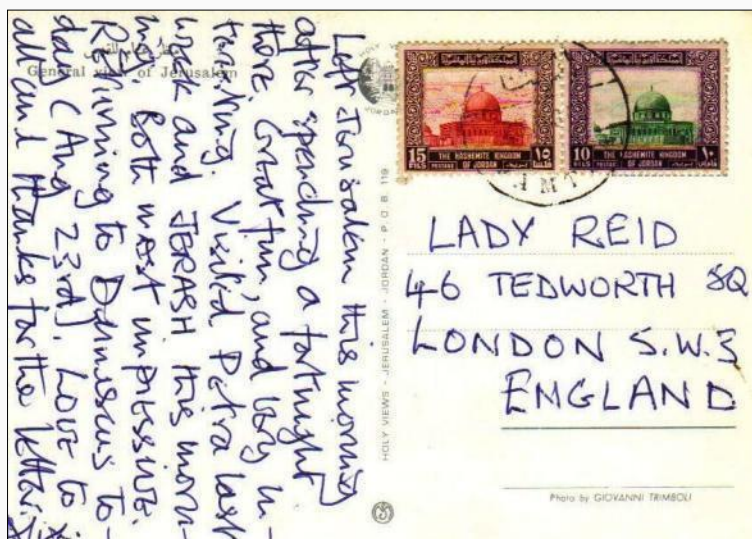


Crac de Chevaliers.

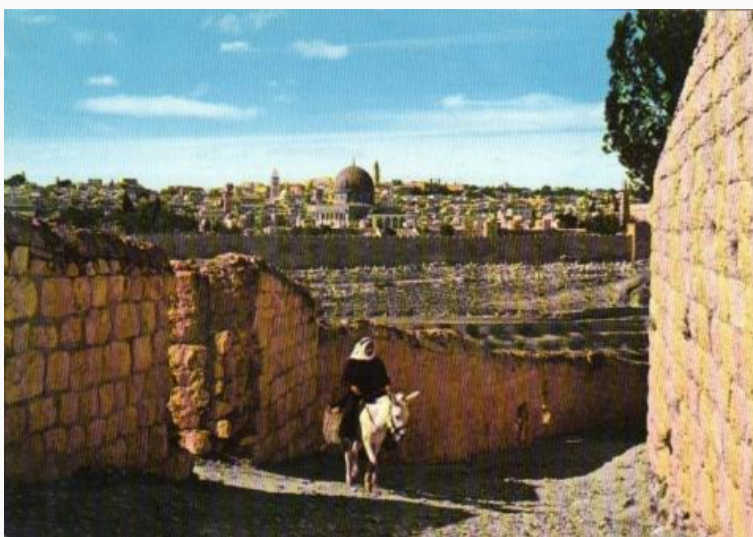
Vivid memories of the trip include Venice, the bustle of Istanbul, the dome of the Hagia Sophia Mosque, the Crac des Chevalier crusader castle, Jerusalem, Petra, and the heat, the dust and the rutted roads. Colin went in front because he quite often came off his motorbike, and we would then rescue him. One of our party, Richard Warren, was a medical student, who brought his medical kit. His studies had not yet got to the stage of operating on humans, and he hoped to have the chance at least to inject Colin, and ideally to carry out a minor amputation. When Colin came off his motorbike, however badly he was hurt he would always find the strength to shout out 'Keep Richard away from me!'.



Petra.



Postcard sent by Alex to his Reid Grandmother from Jerusalem, 1966.



Jordan

In a letter home I described a sighting of President Tito in Yugoslavia:

There were tremendous preparations, all the schoolchildren out with little paper flags, innumerable policemen marshalling the crowds. Big slogans across the road, and large flags from public buildings. It turned out that a political delegation from the Sudan was coming along with Tito.

This was great excitement, as Tito is everywhere in Yugoslavia. His photograph in every restaurant and shop window, Tito whitewashed on cottage walls and cut into the stone on the hillsides.

The procession eventually arrived, preceded by wailing police cars, army lorries, and ambulances. Sinister men on motor bikes dressed in black leather with white holsters shot by. Finally large black American cars began to appear, followed by an arrowhead of motor cyclists. Tito and the Sudanese Prime Minister sailed by in a shiny black Rolls Royce.

and our arrival in Jerusalem:

I must confess I was considerably disappointed with the first sight of Jerusalem, which for some reason I had expected to be perched on top of a sheer rocky eminence. In fact it seemed to hug the top of a gentle hill. However once inside the city itself one could hardly be disappointed.

The little narrow winding streets, with steps every few yards, and bright busy little shops on either side. Awnings to keep out the sun over the narrow streets, and where the streets are wider, wires strung across the street at first floor level like clothes lines, with cloth screens hung on them which can be adjusted as the sun moves across the sky.

At about midday the squatting peasants selling plums, grapes, prickly pears and all sorts of other produce get up and shift across to the other side of the street to get the shade.

Tony Fearnough came from a Sheffield steel-making family. Local firms had contributed supplies for the expedition, including a large quantity of scissors. The idea was that we could give these out as gifts from the city of Sheffield, but the weight did rather slow us down.

On our return journey we spent two nights Budapest, still under Communist rule. In order to get a visa you had to buy coupons entitling you to sleep and eat in a grand but dilapidated hotel. We felt we must use up all our coupons. This involved eating a lot of large meals in the hotel restaurant. For each dish the menu had two prices - with or without a gypsy violinist. The only way we could get through the coupons was to order music with everything.

Space does not allow descriptions of the time we camped in a convent in Beirut, how we towed some Germans through a Turkish river, or how we had to roll the spare wheel into our hotel lobby in Istanbul on account of the thieves.



Music with everything.

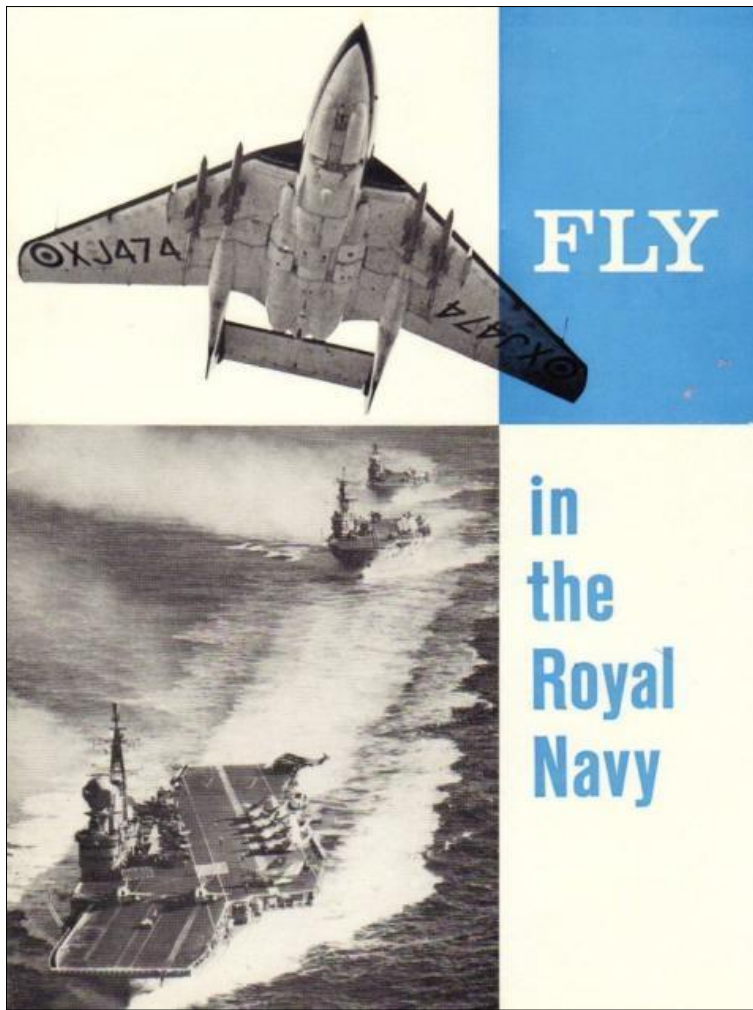
A curious footnote

A curious footnote to my time as an undergraduate at Cambridge occurred when, fifteen years later, I attended a ceremony to collect my MA. This simply required a prescribed passage of time after getting one's BA, and the payment of a small sum. On the way back from the Senate House to Trinity College I walked alongside the other mature graduand, both of us proudly clutching our scrolls.

He explained he had come from Esher, and went on to say that it was a pleasant area except that the recent arrival of Hitler and his entourage had driven up house prices and had resulted in long queues in the shops.

Arriving at Trinity, I took aside our host, the Senior Tutor, and mentioned this. "Oh!", said the senior tutor, "I wondered if you would notice. Fact is, he's on day release from a mental hospital. When we got his application we weren't quite sure what to do and consulted the Statutes. They say the graduand must of good character, but there is no requirement to be of sound mind."

8. Learning to Fly



Recruiting leaflet.

After Cambridge I decided that instead of continuing my architectural studies I would take a break and apply for a five year Short Service Commission as a helicopter pilot in the Royal Navy. Having been a weedy swot at school, I wanted to prove that I was capable of doing something manly and dangerous.

Dartmouth



Britannia Royal Naval College, Dartmouth.

Our first six months of officer training was at the Britannia Royal Naval College in the Devon fishing village of Dartmouth. Part of the induction in the first few days was to queue up in the gym to spend a few minutes with one of the chaplains who were stationed in side rooms.

We were marshalled into separate queues for the Church of England, Roman Catholic, and Free Church chaplains. As I joined the Church of England queue, I noticed one of the cadets going up, in an embarrassed way, to the Chief Petty Officer in charge and explaining that he was agnostic. Quick as a flash the Chief Petty Officer replied 'Fall in with the Church of England'.

TERM. 1	DATE	TYPE OF BOAT	CAPACITY AND DURATION	REMARKS	TERM. 1
igners vs. my light	18/10/62	Whaler	crew 2 hrs.	Pulling back from Brittain at the end of a class PLX. We were all Blakes and pulled in shifts. We had several times to leap out waist deep in water, knee deep in mud to push wind to tide ebbing	

Dartmouth Boatwork Log Book.

There was a great deal of fresh air and physical exercise. Sailing and rowing in the River Dart went on around the year. My Boatwork Log Book for 8th December 1962 records: 'More pulling practice for the regatta. I am now finding it easier to take a long steady pull. It rained heavily throughout which added to the usual pleasure in stopping. Wind Force 1. Tide ebbing.' Another entry reads 'We had several times to leap out waist deep in water, knee deep in mud, to push'.

We had to run between classes, where we were taught naval history, seamanship, and knots. We polished our boots to a high shine, made our beds meticulously, and folded and stacked our clothes with equal care. We did parade ground drill, sometimes in weather so cold that one's hand almost froze onto the rifle.



I did my first solo flight in a Tiger Moth.

Those of us who were on our way to being pilots were given initial pilot training at the nearby Roborough airfield. We flew in Tiger Moth bi-planes with open cockpits, wearing leather helmets and goggles.

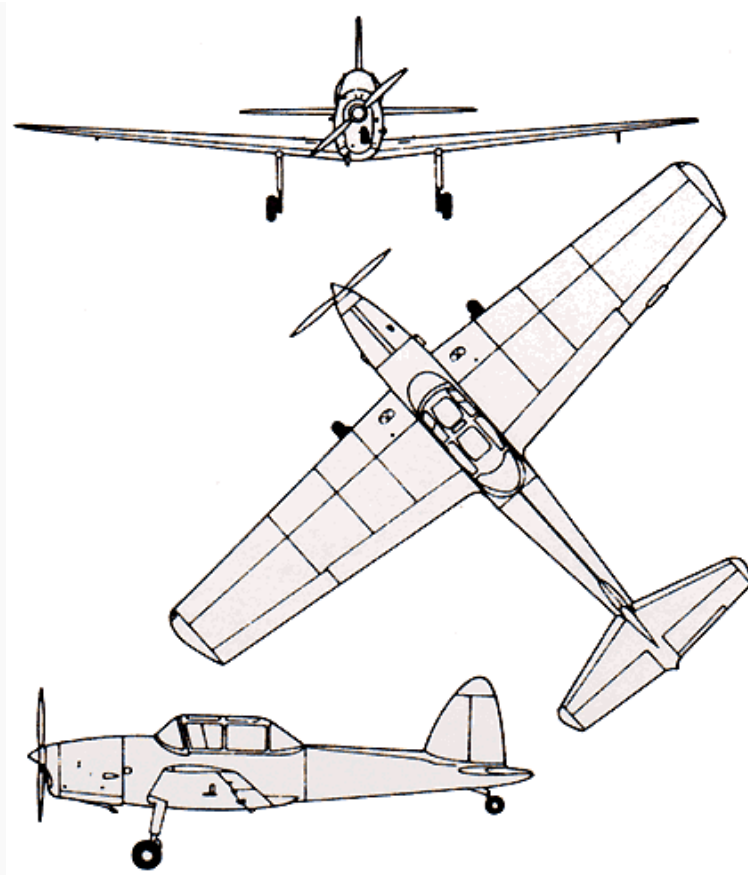
After about ten hours of instruction we were sent out on our first solo flight. It was a nerve wracking but fun experience.

Yorkshire

After six months of the rigours of Dartmouth I moved in spring 1963 to my fixed wing flying training at Linton-on-Ouse, an RAF airfield near York. It was six months of sheer pleasure. There were interesting morning lessons covering aerodynamics, the mechanics of aircraft, and meteorology.

Then in the long summer afternoons we would have an hour of flying and several hours of sitting in deep armchairs in the crewroom (or on the grass in the sunshine) reading and dozing.

We trained on Chipmunk monoplanes, which looked a bit like Spitfires. The training included not just taking off and landing, but also aerobatics and formation flying. The aerobatics included barrel rolls and looping the loop. It was strange, in formation flying, how you could lock onto another aircraft just a few feet away. We also did instrument flying, where the cockpit windows would be covered in yellow perspex, and the pupil wore blue goggles. This meant that the pupil couldn't see out at, and had to rely entirely on his instruments.



Chipmunk aircraft, used in the flying training at Linton-on-Ouse.

An alarming feature of the fixed wing training was something called Unusual Attitudes. You would fly up to a reasonable height of say 5,000 feet. The instructor (who sat in front of you, with dual controls) would take control and tell you to shut your eyes. He would then put the aircraft into an Unusual Attitude, that is to say into a forbidden and dangerous combination of speed, angle, and control settings. For example he might put the aircraft into a downward vertical spin, so that it was upside down, dropping like a stone, with the rudder and joystick controls in the wrong position. He would then calmly say: 'Open your eyes. You have control'. You had within seconds to work out what was going on, to recall the right corrective actions, and get the aircraft back into level flight.

The reports I received at the end of my training at Linton-on-Ouse were mixed. The Commanding Officer wrote:

He is at his best when breaking new ground, reaching very high standards easily and quickly, e.g. he soloed in almost record time and his knowledge of his aircraft was 100%. He is occasionally prone to criticise and he would be better advised to turn his talents to furthering and improving. He will not find dealing with sailors comes easily but it will do him a world of good. Should he remain in the Service he could be an outstanding officer with a very bright future. He would, however, need to embrace the Service completely, not just take it gently by the hand as at present.

But the Chief Ground Instructor was more critical:

Reid's previous education has given him a remarkably brilliant brain, and the industry to go with it; sadly, he knows this. He has acquired the University's habit of questioning beliefs, tenets and authority which is complicating his adjustment to naval discipline.

Cornwall



The grey Lotus Elite. It went like a rocket.

Then to RNAS Culdrose in near Helston in Cornwall, where we did our helicopter training. We started in little Hiller helicopters: a clear bubble with a stick coming out of the back carrying the tail rotor. Their great advantage was that you could see all round, including downwards. Flying a helicopter is completely different from

flying a fixed wing aircraft. The key skill is learning how to hover, ie hang stationary in the air. This requires demanding coordination of eyes, hands and feet, but you eventually get the hang of it, rather like riding a bicycle. We then moved on to Whirlwind and Wessex helicopters. By comparison with the Hiller they were great lumbering beasts, more like lorries of the air.

There were two sub-specialisms for helicopter pilots: anti-submarine and commando. I was assigned to commando, which is the transport of men and machines, formation flying, and low flying. The low flying was designed to afford protection from ground attack, and was particularly exciting. You would fly at about 100 mph only six feet or so above the ground. If you came to a hedge you had to rise up to clear it then drop down again. You had to keep a careful lookout for telephone or power lines, which could be lethal.

To help while away the hours in the crewroom we got into a craze of making very small box kites; surprisingly these could fly when they were as small as two inches on each side. I bought a Lotus Elite, my dream sports car. It was red, but I had it re-sprayed a severe grey. It went like a rocket. I also bought a speedboat which was used for water skiing on the Helford river.



Making a very small box kite in the crew room.

Come the autumn rented accommodation became available, and we took a cottage right on the shore in the fishing village of Porthleven. It was almost like being at sea, with salt water blowing through the windows on windy days. In good weather it was idyllic, with the beach below and green hills behind.

It was during this time that I volunteered for a one month course in Malay in London. My tutor, from the School of Oriental and African Studies, did his best to teach me Malay, but I have no aptitude for languages, and he had little success.

We also undertook parachute training. I greeted this prospect with mixed emotions. I was terrified of jumping out of an aeroplane, but I hoped that having done so I

would become irresistibly attractive to women. Neither expectation was fulfilled. For the first session, instead of being taken up into the skies we were shepherded into a gym, and were taught how to strap on a parachute. A parachute is an ungainly thing, and when you are wearing it you have to hunch forward in an unheroic way. The Chief Petty Officer lined up his hunched pupils in a row and said: 'When I say fall over, fall over'. He then shouted 'Fall over!' and, feeling ridiculous, we fell over. End of first session. Next week we went through all that, more quickly. Then the Chief Petty Officer said: 'Each man get a chair. Stand on the chair. When I say fall off, fall off'. We did as he said, feeling even more ridiculous. End of parachute training.



Alex at the Porthleven cottage

Another part of our education was signals training. I had seen war films in which rugged pilots with deep baritone voices shouted out 'Bandits nine o'clock!', or 'Mayday! Mayday!'. I had been looking forward to doing the same, but it was not to be. The signals instructor explained it was compulsory when in the air to talk in a very high squeaky voice, the better to cut through the static. We had to practise this, with the instructor (who could achieve a remarkable falsetto) urging us to talk higher and squeakier.

After a few months my helicopter training was completed, and I was set off to sea on the aircraft carrier HMS Albion for an 18 month tour of duty in the Far East.

9. HMS Albion at sea



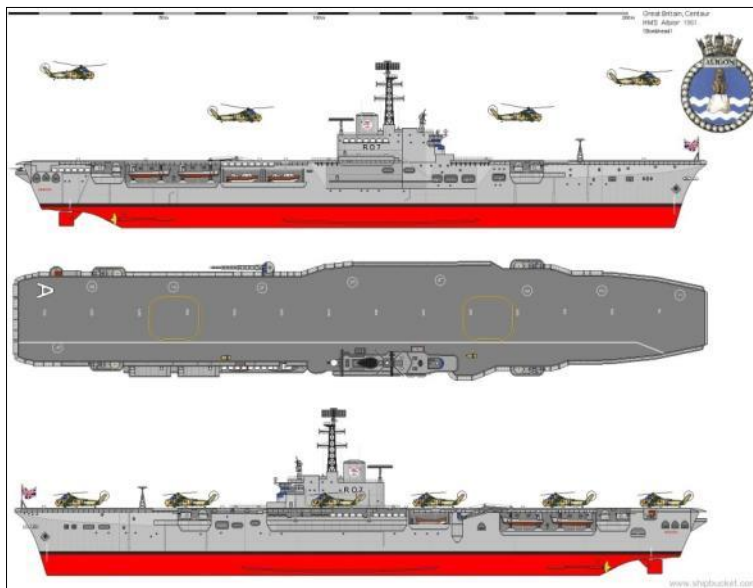
Flight deck of HMS Albion.



Light aircraft landing on deck of HMS Albion.

My 18 months with HMS Albion was the most adventurous time of my life. We sailed out via Gibraltar, the Suez Canal, Aden, Mombasa, Gan and the Seychelles Islands to Singapore. We visited Hong Kong, and I was posted for three months ashore in Borneo. Part of this was spent at a forward base called Nanga Gaat, 100

miles from shore and deep into impenetrable jungle. It was during the confrontation between Malaysia (which incorporated northern Borneo) and Indonesia (which incorporated southern Borneo). I never saw a shot fired in anger, but the flying was very hazardous, and many of my colleagues were killed in flying accidents.



HMS Albion. Note from the top view how small the superstructure is compared to the deck.

There were 30 pilots in our squadron, and during the two years I was in the squadron more than 20 died. Some died in flying accidents in the UK, before we joined HMS Albion. Some died following engine failure over the jungle; some on landing or taking off; some in mid-air collisions; and one, our youngest pilot Tim Wootton, in an accident in the aircraft carrier's hangar. He was buried at sea in a moving ceremony.



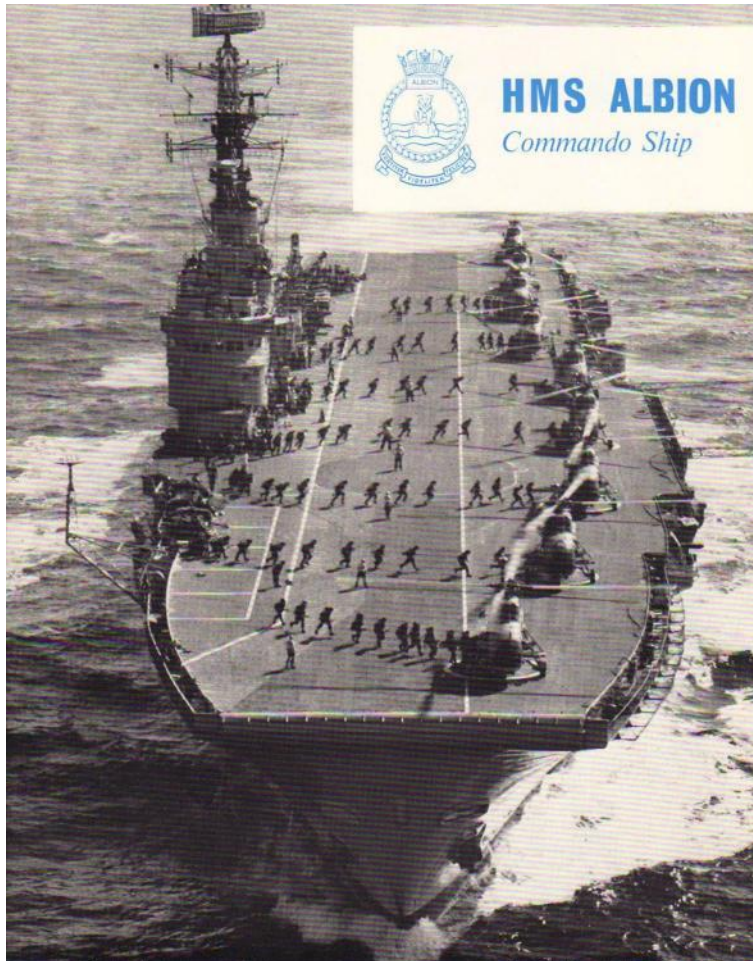
Formation flying at Gibraltar.

In addition to personal letters home, I wrote circular letters to friends and family. In one of these I described the passage from England through the Suez Canal to Aden:

So, down the Red Sea to Aden. This is a town of extreme contrasts. the most obvious is the irony of seeing shops (usually with fake-English names, such as Bonny Look Stores, Harbour Heart Shop, or Scotland Bazaar) bursting with the most modern and expensive electronic equipment; while only a few feet away mangy goats and

cats are scrubbing about in garbage-ridden streets. It is an artificial town, living on the tax free spending of warships and cruise liners.

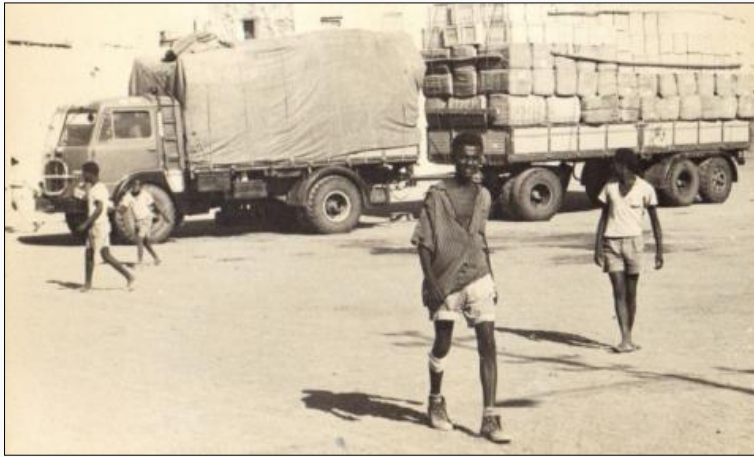
There is one road which leads along behind the harbour. The shops there have a certain standard of cleanliness and restraint. The shopkeepers wait for you to come into the store. Behind this crust there is a seething layer of smaller shops, tattier and cheek by jowl, whose staff are more in the nature of travelling salesmen, roaming the streets to accost any European passer by and lure him in. Their stock is fluid, and the area seethes with underlings fetching and carrying radios, hair dryers and telephoto lenses to and fro between the shops. This hive of activity is only one street thick, and beyond that is shanty town.



HMS Albion with commandos embarking

I bought a Pentax single lens reflex camera, and while we were sailing through the Indian Ocean I made a fitted hardwood box for it in the ship's carpentry workshop. I used the Pentax to take many of the black and white photographs which follow. They have been scanned from prints which I made at sea in the ship's darkroom.

We were unexpectedly diverted for four days to Mombasa, on the coast of Kenya. This provided an opportunity to travel by rail to Nairobi, where some friends of my parents who ran a coffee plantation had me to stay. Their house had been built many years before in stone, for all the world like a Cotswold manor house. Every evening a roaring log fire was lit, and we had a most comfortable time.



Dusty road in Mombasa, Kenya.

The train journey each way was an overnight one, and I shared a sleeping compartment. I took advantage of the conversational opportunity, and wrote the following pen pictures of each companion in a circular letter to friends and family:

Karl Pollman. 50. Red crinkly hair, round build, freckles, ready smile. German. Ran away from home (in Nairobi) at eleven, never to return. Worked as a grease monkey in a garage, living with proprietor. Then on farms to age 21, when he admired a motorised caravan in a Nairobi street, struck up acquaintance with its eccentric millionaire owner, who had driven out from Switzerland to make a film. Director, producer, and hero of film: the eccentric millionaire. Entourage comprised himself, his wife, his previous wife, a cook, a servant, a Swedish couple, a tame panther and a wild parrot. Necessity for driver of second vehicle filled by Pollman, who doubled as cameraman and mechanic. Thousands of feet of film and many vicissitudes later Pollman is back in Nairobi, where he reverts to farm managing. War. As a German national interned and sent to South Africa. Internment camp boring? Not at all. Each internee has allowance of 30 shillings per month. No laundry. Pollman and cronies charge 8 shillings per month irrespective of quantity and spend two years manually washing clothes for their 800 customers. Returns to farming postwar, and build up a small clientele (rich Germans and Americans) as a safari guide.

Now, five years later, he is the head of a prosperous tourist business including filling stations. Next year he has 4,500 tourist booked for his photographic safaris. Speaks fluent Swahili. Kenyan citizen. He bursts with an irresistible joie de vivre, is a great admirer of Kenyatta, and rightly optimistic for the future.

And on the return journey:

Mr Halford Smith. 67. I shared a compartment with him on the night train back from Nairobi to Mombasa. No question of who takes the top bunk, for he has an enormous paunch and a weak chest. Even the effort of taking off his trousers requires a few minutes of sitting on the bunk wheezing and panting to recover.

He has not been able to adjust to the idea of the Africans ruling Kenya. In fact so totally unable to grasp the idea that his face has been frozen into an expression of continuous pained surprise. Macmillan was the real culprit. What did he want to do

making trouble with his wind of change speech? The Africans are alright of course, nothing against them at all, as good as the next man. But to have Africans in Parliament, to have an African President - preposterous.

Mr Halford Smith is the ex-managing director of a British owned Nairobi brewery. His world has collapsed about him. But there is one thing to do. To leave Kenya. That is what, with his battered leather suitcase lettered 'Halford Smith' and his briefcase, he is doing. Not to England, for although he is English to the core, England is not quite English enough nowadays. Mr Halford Smith has decided to settle in South Africa.

An unusual feature of my visit to Mombasa was that I returned to HMS Albion the proud possessor of a second-hand autogyro. This is a minimal helicopter, of a type used by James Bond in one of his films, which resembles a go kart with a rotor on top.

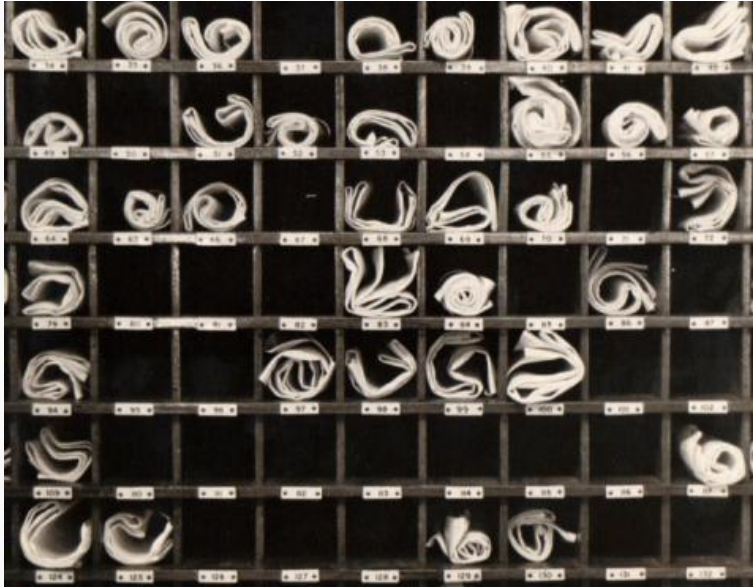


Bensen autogyro. Like a go kart.

I spotted it in a hangar at Mombasa airport. I was told that it had been imported by a wealthy local two or three years ago. He had taken one flight in it, and had been so scared it had not left the ground since. I bought it, for about £100. As we flew our helicopters back to HMS Albion, we had with us various souvenirs such as carved gazelles and beadwork mats. I somewhat upstaged my colleagues by returning with the autogyro hanging from the lifting hook under my helicopter. The authorities kindly agreed that I could store it in the hangar for the onward journey to Singapore.

While we were crossing the Indian Ocean we did a lot of flying, including night flying, from the deck of the aircraft carrier. Two huge sections of the deck, about forty feet square, could sink down as lifts into the hangar below. Our helicopters, with their rotors folded, would be wheeled onto the lifts, and brought up to the deck to be returned below again when flying was complete. In one of my circular letters to friends and family I gave an account of the preparations for a night flight on the aircraft carrier:

As an example of what the flying itself is like, let me take you through a typical evening's night flying. Wander into supper around seven o'clock, dressed in white shirt with gold epaulettes, black trousers and cummerbund. Take your napkin from the rack and sit down. A Chinese steward (one of 70 we carry) materialises with a menu. You ask for the mushroom soup, followed by pork cutlet with bean sprouts and duchess potatoes. You move onto Mousse Royale and Angels on Horseback, and round off the meal with as much fruit as you can eat.



Napkin rack, officers' mess, HMS Albion.

Down to your cabin to change. Mine is on 5 deck, against the ship's side, so that one wall slopes at about 60 degrees. There is a rich orchestration of noise. The slowest and loudest rhythm is that of the waves banging like barn doors against the ship's side. Only slightly lighter and quicker is the throb of the propellor shaft. The engines themselves cause the whole ship to quiver under one's feet; a vibration which is picked up and amplified by the light fittings and cupboard doors. On top of this there is the high-pitched hum of the air-conditioning, intermittent squawks from the public address system and Muzak.

So put on your jungle green flying suit, which is like a boiler suit, except that it's covered with specialised zip-up pockets on the legs, sleeves, knees, shoulders, and has a note pad built into one knee and a quick release sheath knife (attached with a long nylon cord) on the side of the leg. A green towelling cravat and calf length black leather boots complete the ensemble.

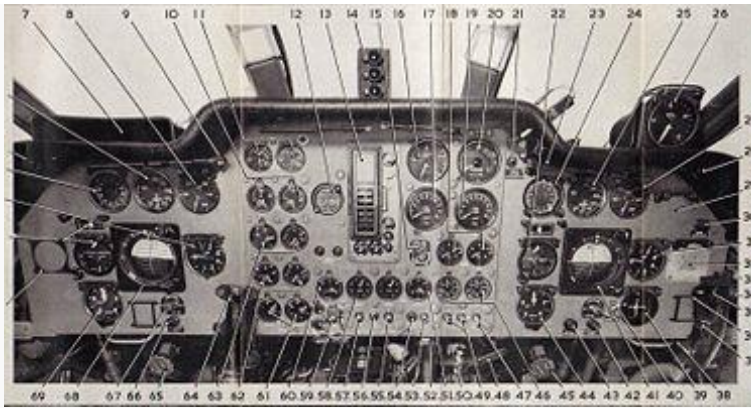
For the sake of the pilots' night vision, the briefing room is lit only with red lights. It is fifteen feet by twenty, with rolling blackboards covering one wall, and tiered benches across the other. As the hand of the plastic wall clock jerks to 7.30, the assistant operations officer (Ops II) rises from his front row seat. 'The time in fifteen seconds will be nineteen thirty. The time NOW is nineteen thirty. Met please.' The meteorological officer rises and gesturing at his elaborate perspex wall board, which displays winds at different heights, sea temperatures, humidity, and cloud cover, he gives us a run down on the likely weather. Ops II stands up again: 'Your task this evening: two aircraft for external loads from spots one, four and seven. Two aircraft for circuits, homings and GCAs. Channel one for take-off, channel

three for the homings, channel four for any work with the escort, Brighton. Listen out on 3456 k/cs upper sideband. Aircraft callsigns are side letters, our callsign Sideboard, Brighton's callsign Papa Six. All aircraft squawk one. Squadron briefing please.'



Wessex 5 takes off from the flight deck of HMS Albion. The noise is deafening.

The squadron senior pilot, a needle-sharp character in his thirties, with crew-cut hair and very neat handwriting [Peter Deller], stands up. 'Right, quite straightforward tonight.; the external loads will be the 2CV Citroens. Put on your downward ident light when you're ready to pick up. Obey the marshaller. Remember to switch off your hook master switch as soon as you're over the deck. I.F. aircraft keep well to the north, try to get in four approaches, and break off at 300 feet on the let-down. All aircraft are fitted with Schermouly flares, so don't forget the no-volts check before take-off. Lights on the ship are as usual; red floods on the deck, white steaming lights on the island, red lights down the port side and across the stern. The glide path indicator is alongside four spot. Run through the start up signals, Metcalfe'. One of the pilots recites: 'Get in, on anti-collision light. Ready to start port engine; rotate red wander light. Disconnect ground supply; nav lights to steady dim. Ready to start starboard engine; rotate white wander light. Ready to engage; nav lights to steady bright. Ready to take off; flash nav lights. Hoist light to summon ground crew'.



There are another 70 controls on the console and on the roof panel.

Your flying suit is only the beginning of what you wear when you go flying, and now you have to put on the rest. First your bright yellow Mae West lifejacket. This inflates from a built-in carbon dioxide cylinder, has a battery operated radio beacon to home rescue aircraft onto you, a small talk-recieve radio, a whistle, a heliograph, a razor blade, a battery operated light, a set of distress flares, a flourescene dye pack, and shark repellent. Surprisingly it is hardly bulkier than a conventional man's waistcoat. The bulky thing is the dinghy which you strap onto your back. This is also yellow, the size of a pillow, and inflates automatically into a cosy one-man boat. Your hat is real astronaut-type; hard white plastic with lining of soft leather and blue silk, glycerine-filled earpads and a tinted plastic vizor which slides down over your face. With white chamois leather gloves and a throat microphone, you are ready to go.

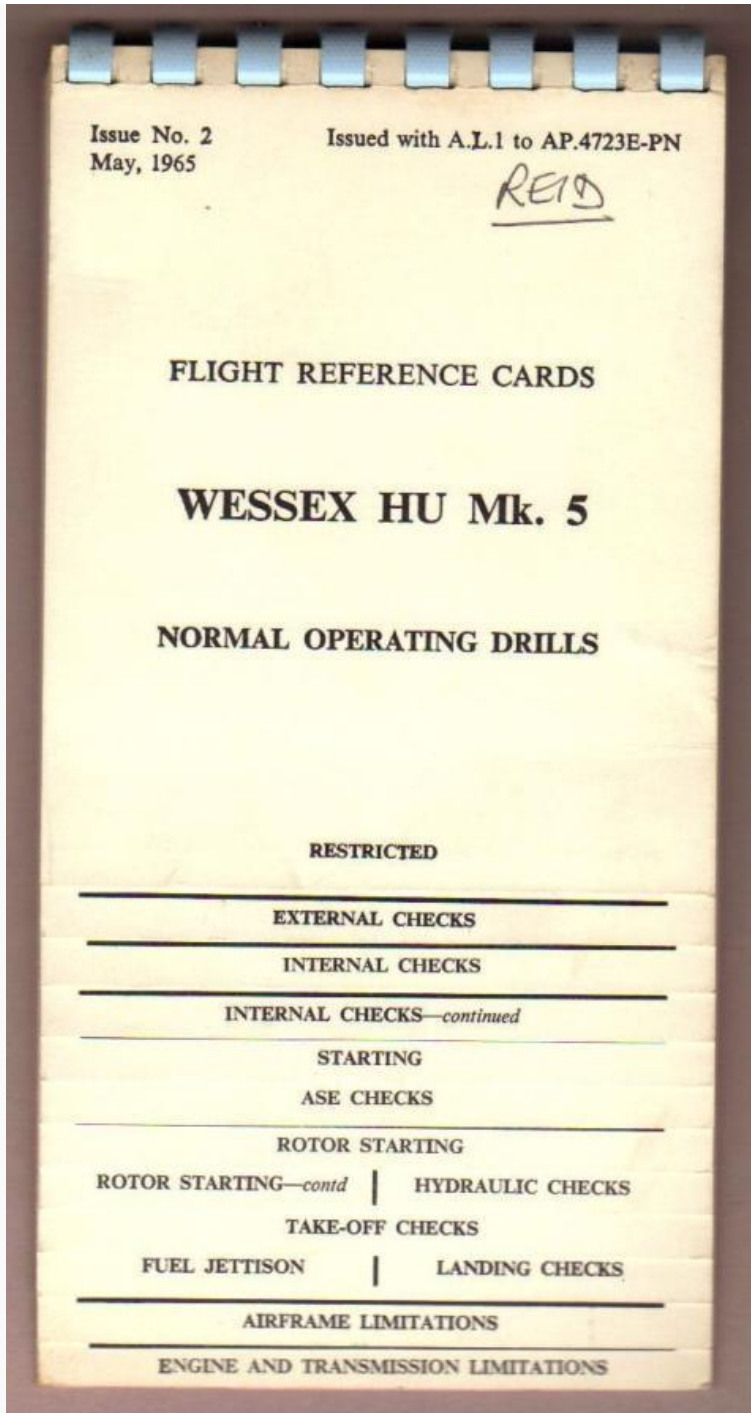
All day the maintenance ratings have been working to prepare your aircraft [a Westland Wessex 5] for this one hour flight, and their work is recorded between the hard blue covers of the 700 book. It is a sacred rule that the pilot must initial the aircraft's 700 before take-off, so after a check of the fuel state, the limitations log, and the list of acceptable deferred defects, you do so.

It's a dark night, and having inspected the outside of the aircraft to make sure nothing's missing, you grope ten feet up its side into the cockpit, and strap yourself in. Now begins the pre-start ritual. This is a memorised check of the hundreds of instruments and switches, starting: 'Brakes, battery master, lights, intercom, computers, ASE switches up, up, up, up, central, central, and to pitch and guarded. External master on, anti-coll on. Radio channel to one and off, IFF off, squelch disabled ...' and ending, some minutes later '... main drive out and indicating out, starter select to port, speed select levers back, both servos on, ready to start'.

You are wearing your helmet, so you don't hear the deafening whine of the port jet engine starting, nor the scream of metal and beating of wings as you engage the main rotor.

All you can hear is the crackle of the radio and intercom systems fed into your headset. The rotor is heavy, the aircraft is light, and as you spin up to a rotor tip speed of some 400mph, the whole fuselage sways on its wheels, the tail tries to kick, the pneumatic undercarriage sighs and settles back again. After another twenty pre-take-off checks you are ready to lift off. 'Flyco, this is Victor Juliet, request take-off'.

There is a marshaller in front of the aircraft, a luminous wand in each hand. On an unheard signal from flying control, he beckons you off the ground. Stab in the auto-pilot button; the aircraft lurches in response as gyroscopes operate micro-switches which activate tiny pilot valves in the hydraulic control jacks, which can sense the role and pitch of the ship, and are trying to keep you in a constant attitude in space.



Pocket checklist.

A last-minute check of your control frictions and safety harness. The marshaller, a monklike figure in surcoat and hood leaning against the wind, is no more than a black blob against the red-floodlit deck. Ahead of you and to your right there is

blackness. With your fingers and toes poised to anticipate the kick as the aircraft responds to the wind over the deck, you lift her off.

This great thing, five tons of thin magnesium alloy, a ton of aviation fuel, and producing two thousand shaft horsepower, grinds its way into the night sky like a monstrous bird of prey. As you have left the deck, your eyes must lock onto the softly illuminated instruments, for orientation can play tricks with you at night. Set on 2500 lbs of torque, one degree nose up, check your heading, and she climbs away.



Frigates in line astern, Indian Ocean. White Ensign flying.

Our routine was broken in the middle of the Indian Ocean when we picked up a distress signal from a Russian merchant ship with a seriously ill man on board. We diverted to rendezvous with the ship, and as I was taking a correspondence course in Russian, I was pressed into the boarding party as interpreter. My account of the adventure was published in the ship's newsletter:

The boarding party was a motley crew. Led by Surgeon Commander Hayes, it consisted of a Marine, a Naval LSBA, and a pilot. We assembled in the seaboat to start the long vigil as Albion closed the Russian tanker 'Poti'. Swaying insecurely over the ship's side we felt very much like astronauts awaiting the countdown in a Gemini capsule. After what seemed an eternity, the order came to lower the seaboat. To the accompaniment of a host of naval orders, and the derisory cheers of a few well-wishers, we hit the water.

In no time at all we were making passes at the Poti's gangway. It was small and the swell was big, but eventually we all scrambled on board. The sickroom was small

and hot, and apparently occupied by about half the ship's company including four female passengers on hand-holding duty. Since we had come aboard with colloquial Russian translations of suitable phrases such as: 'If we fly him he will die of shock', 'If we move him he will die of shock', and 'He will die of shock', communication was no problem. None of the crew spoke any French, or more than the merest English. I tried my Russian, which they clearly took to be a strange foreign tongue.

Luckily the patient was not in such a bad way as we had feared and after some quick treatment it was decided we could return to Albion, leaving the 'Poti' to run to the Seychelles.



Lenin.

However, no cure is complete without a celebration, and in an atmosphere of great goodwill we were ushered into the Master's cabin for a farewell drink. Cream paint, with wooden panelling up to waist height, was set off by plum coloured and tasseled curtains over every porthole.

The table was draped in dark red velvet, and even the television was modestly hidden under a small coverlet. The decorations consisted of a notice board with small posters of soaring graphs, and a two foot by three foot portrait of Lenin. The furniture was extremely solid and made out of peanut coloured wood.

The Master clapped his hands for the stewardess, who produced vodka, mineral water, dried fish, cheese, and bread. We stood up, clinked our glasses, shouted 'Ha' and downed the vodka. We clinked up, stood our glashes, shouted 'Ha' and downed the vodka. We clod up, stinked our glashes, should 'Vod' and downed the haka. After a few drunken choruses of the Volga boatmen's song we were extricated by Marine Bennett, boarded the seaboat and returned to a hero's welcome.



Barrels of rum being unloaded onto the deck of HMS Albion.

These were the excitements. But there were also long periods to while away at sea. We played cards and long games of the board game Risk. Having recently read John Le Carre's 'The spy who came in from the cold', in which it was always unclear whose side anyone was on, I devised a board game on the same principle.

It was like Monopoly, except that each player (Europe, China, USA and Russia) had three pieces - a male spy, a female spy, and a master spy - which they moved around the board on the throw of a dice. The spies had colourful names; for example the European spies were Mad Count Hildersen, Charlie Higgs, and Helene 'Allo' Dufy. Instead of collecting properties you would collect secrets (warhead, guidance, propulsion, blueprint) and the winner was the person who had collected all the secrets of another country. Instead of Chance or Community Chest you might land on Torture or Death. The twist lay in the fact that the three spies in your pay were not necessarily those that appeared to be working for you. Each player knew who was in their pay, but not who was in the pay of the others. I was the only person who understood these arcane rules, and after I had won a few times it became difficult to persuade others to play.

A more useful invention was a curious spanner. I devised this when I was night duty officer. My duties involved walking all round the ship at hourly intervals to check all was well. At 1am I found in the hangar a team struggling to undo a very large and inaccessible nut that held a helicopter's engine in place. Two hours later they were still struggling. I sketched a design for a self-gripping spanner which I thought might work. An hour later they had welded one up, and it did the trick. After twelve months I got a surprise cheque for £25 from the Admiralty as a thank you.



Wessex 5 lifting a load off HMS Albion.

To help pass the time I did some writing for my own amusement. The following piece was inspired by a Reuters news report of a fracas at an Indian restaurant:



'Robert Prigg was settling down to a meal of curried rice and chicken in an Indian restaurant here when a stranger came up and insisted on showing him how to mix it. Prigg watched with interest as his helper got to work, asked him politely if he had finished, then picked up the plate of food and pushed it into the stranger's face. The stranger, William Fleming, 28, was fined £5 yesterday for hitting Mr Prigg over the head with a chair' - Reuter report.

Although bereft of dateline, and woefully haphazard in detail, the story has the completeness of Greek tragedy. The first sentence sets the scene and introduces the characters, both of them faceless at this time. In the second, the action fairly gets under way, and in the third, with a neat twist of plot, the grisly episode is brought to sober conclusion.

Yet it is riddled with uncertainties. The tantalising insertion of the word 'here' in the first sentence cries out for a dateline, in view of which lack we are forced to grope about for clues as to where it all took place.

It could hardly have been in India, or it would not have been necessary to point out that the restaurant was Indian. Both names sound English, and the use of £5 suggests as much, but surely we would not have been expected to do a quick mental conversion from Dinars or Fils if it had taken place in Yugoslavia or South Arabia.

Then again, what are we to make of this man Prigg? Could it be that having been persecuted all his life with a name like Prigg his psyche was screwed up to a point that it only required a meddling curry expert to snap? Yet, of course, we cannot be certain that Fleming was a curry expert. At 28, he was hardly old enough to have that grasp of curry mixing which is born of years of dividing two chicken biryanis, one Ceylon curry and four portions of fried rice equally among three people.

Prigg is either very deep or very impulsive. His polite remonstrations as Fleming leaned over and started the demonstration would fit either case. But in what spirit did Prigg sit by and 'watch with interest as his helper got to work'? When he 'asked him politely if he had finished' it could mean two things. Either Prigg was proud and silent, containing his wrath as Fleming laid into the various dishes. In this case the question would have been icily restrained, loaded with all the bitterness of a mature man driven beyond endurance.

Alternatively his reaction may have been no more than a sudden whim. After all we are told that he 'watched with interest as his helper got to work'. Perhaps Prigg was a youth of 17, who had never been into an Indian restaurant before, genuinely curious as to what all these disgusting looking brown liquid dishes were. In this case, the unexpected use to which he then put Fleming's masterpiece can be attributed to mere boyish high spirits; a zest for life and living which he no doubt expected Fleming to share. If so, he gravely underestimated his man.

In the third paragraph, Fleming, till then a sketchy character, springs instantly to life. If we admire Prigg for his bold action in shoving the curry in Fleming's face, how much more we must admire Fleming's resourcefulness in what must have been a difficult and indeed embarrassing situation.

Whereas Prigg had all the time in the world to plot and scheme his attack, Fleming was taken totally unawares. He more than rose to the occasion. He did not, as you or I might have done, return disillusioned to his own table. No, blinded with curry and stung into revenge, he ups with the nearest bentwood chair, takes his aim, and bops Prigg over the head.

It is just at this point, where the encounter was promising to escalate frighteningly, that our reporter leaves us in suspense. Did Prigg, his blood up by this stage, return to the attack, perhaps pressing Fleming's own curry into his face? At what stage did one of the participants resort to that stock-in-trade of slapstick, namely sweeping the tablecloth, crockery, cutlery, curry and all off the table? What was the reaction of the other diners? Did they, as in the standard Western saloon fight, cower behind their tables? Or did they turn partisan, using what dishes they had not already eaten as weapons?

All we know is that the affair ended in the police court. It would be nice to think that after judgement had been passed they were persuaded to shake hands, and left the courtroom to patch things up over a quiet curry lunch.

10. Far East

Singapore



Photo taken during scooter expedition into Malaya.

On arrival in Singapore our squadron disembarked to be based for several weeks at an airfield on the island. Sara (together with Anna, only a few months old) had beaten me to it. Ours was not an 'accompanied posting' in which case travel and accommodation for families would have been provided. The Navy did (reluctantly) allow unaccompanied families to hitch rides out to the Far East in RAF transport planes, on something called 'indulgence flights'. T

We bought a Honda 50cc scooter, which we used for nipping around Singapore, and for expeditions over the causeway into Johore Bahru and points north. I did come off the scooter once, and still bear the scar on my left elbow, but that was our only accident.

We were on one of our scooter expeditions to Johore Bahru when we passed a lavish modern house, with iron gates and a guard. I explained to the guard that I had an interest in modern architecture, and asked if it might be possible to look more closely at the house. He went away to consult and came back to welcome us in. It turned out that the house belonged to the Sultan of Johore; he was in residence, was very Anglophile, and was happy that we be shown round. I wrote up at the time the following account of the visit:

The Sultan was supervising the rearrangement of some large potted plants in the garden of his latest palace. This is an ultra modern affair, all plate glass and concrete cantilevers, which has just been completed on a hilltop site overlooking the straits of Johore.

Shortly after we arrived some of the guards caught a snake, which was deemed to be rare and poisonous. The Sultan instructed the guards to catch it alive and put it into a polythene bag. They eventually completed this dangerous operation by wrapping their hands in old newspapers. What, under these circumstances, do you do with the snake? Of course you send for the Royal Snake Keeper, who arrived minutes later in the Royal Snake Keeper's Van. He reputedly could go for three weeks without food and could handle even the most deadly snakes without danger.

We were then shown round the new palace by the Royal driver. He, like all the other guards, had developed a splendidly undeferential attitude to his Highness, and his Highness' belongings. He sauntered into the building puffing at a cigarette, and showed us all round it with great pride, not forgetting the bedrooms, bathrooms, and all. On the way out he casually tossed his cigarette end into one of the flower beds, and took us back to the Sultan who kindly invited us to stay on for supper.



The main palace of the Sultan of Johore. It has a 35m tower and a private zoo.

To fill in the time before supper, we were shown round the large pre-war palace built by the Sultan's father. Only about a mile away, and built on an even more dominating hilltop. It is built in the Hollywood Baronial style with vast steep green tile roofs, pillared entrance and baroque staircases leading from one enormous chamber into another.

At the entrance to the drive of this palace are the Royal stables and garages. The Sultan maintains a polo ground and stable some four miles out of Johore Bahru, where sixty snow white horses are kept in immaculate stables. However, the Sultan likes to keep horses around, and in his palace stables there are eight beautiful white horses.

Nor are the Royal garages any disappointment. Behind heavy sliding wooden doors, and in immaculately polished array, lie the Sultan's stable of thirteen cars. Up front, a 1965 Cadillac brushed chrome with an equally unmarked 1964 Cadillac. Like some kindly uncle, a 1939 Cadillac, a real Al Capone car, brought up the rear. Alongside, a vast bulgy 1962 Daimler limousine with rear facing seats

and a flagpole on the bonnet towers over a beautiful white convertible 1938 Mercedes, with snaking external exhaust and eight cylinders. As companion cars to this Mercedes, there are a 1938 open Lagonda, and a Jaguar of the same year, all immaculately maintained in running condition. A touch of the ordinary is provided by a large standard Mercedes Benz 1963 saloon, no doubt used for fetching the luggage from the station. But to round off the line in Mercedes is the Grand Mercedes 600 belonging to the Sultan's son, a great lorry of a limousine in which everything is automatic, and you can lie down on the floor in the back if you want to. If you feel that the tone so far is rather stately, consider the open scarlet E-type Jaguar lurking modestly at the back of the garage, and the matched pair of brand new P1800 Volvos. That makes twelve? Oh yes, I forgot the Rolls Royce.

We enter the main palace, as dusk was falling, through a monumental doorway that would be more appropriate to a court of justice, into a dark and spooky mausoleum of a room, stuffed to the rafters with strange furniture, curios, and ancestral signed photographs. The room rises to a vast height, and has a great winding stairway going up one side.

Here my account ends, but I remember more about that day. As we went up the stairs we were startled by three or four bats wheeling past us. We were shown everything, including the Royal bedrooms and dressing rooms. In the Sultan's dressing room there was a wardrobe-sized American fridge; our guide opened the door to show that it was completely full of oranges. On our way out we were taken past a well stocked private zoo, which occupied part of the grounds.



A porcupine arriving.

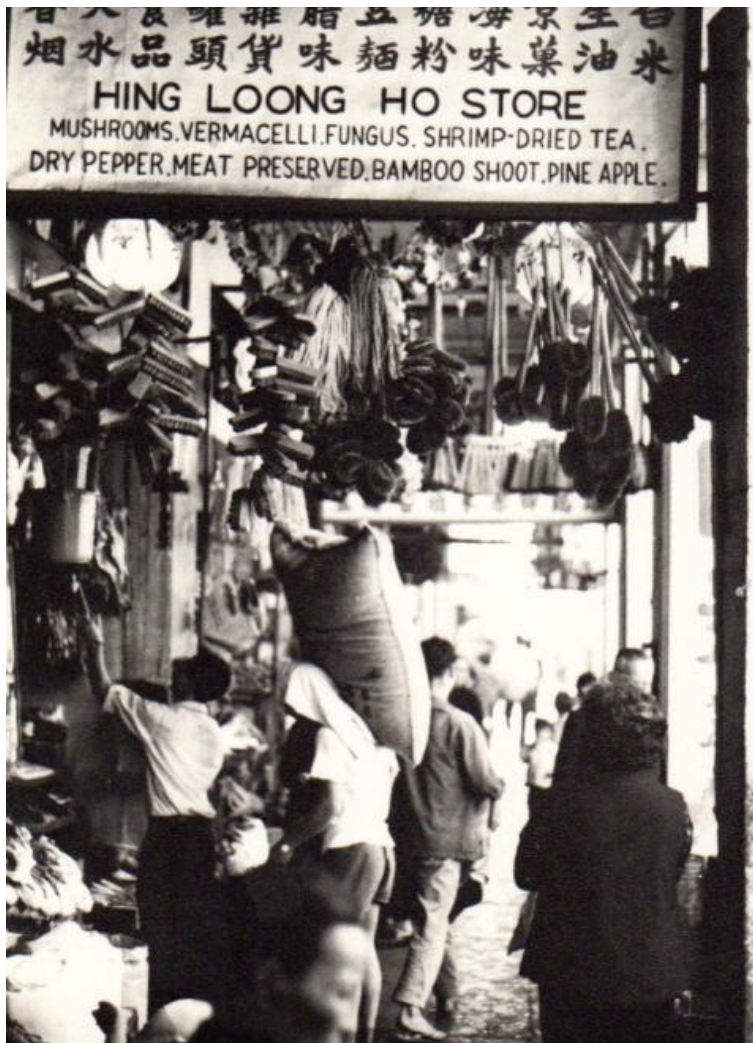
I remember that we then set off with the Sultan and five or ten companions to an expensive local restaurant. A table had been reserved, and we were ushered in with much bowing and scraping.

Two things stick in my mind about the meal. Firstly, over coffee we were entertained by two exotic dancers. They turned out to be a young couple from

Liverpool, who had made this their profession. They were both skimpily dressed and acrobatic. The husband's star turn was to make his stomach muscles oscillate in time to the music; this provoked sustained applause from the Sultan and his party.

The other memorable incident was when an underling entered the restaurant, and approached the Sultan to deliver an urgent message. I heard him say 'The porcupines have arrived'. I wondered for a moment whether we were to be served roast porcupine; but no, he was reporting some new arrivals at the Sultan's private zoo.

After the meal we returned to the Sultan's palace, thanked him warmly for his impromptu hospitality, and drove home on our Honda scooter.



Shop in Singapore.



Angkor Wat, Cambodia.



All aboard.

We undertook an ambitious expedition by train to visit the ruins of Angkor Wat in Cambodia. This involved passing through Bangkok to the Thai/Cambodia border at Poipet. Because there was diplomatic tension between Thailand and Cambodia no public transport crossed the border at Poipet. You had to get out of the train, and walk across the bridge carrying your suitcase, to pick up another train in Cambodia. This worked smoothly on the way out, but on the way back things became more complicated. My account reads:

Since the single track railway from Sisophon to Poipet had been blown up the night before with a plastic mine killing the driver of a goods train, the only way to make the journey was by bus. We had not been waiting for more than an hour before a twelve seater contraption staggered into the dusty main square and expired. Concocted from an American truck cab and a fairground caravan by some vehicular Frankenstein, it nevertheless cut a certain dash what with its bouquet of flowers on the radiator cap and stained glass windows.

The bus company's business methods were as bizarre as its equipment, for we soon discovered that in order to provide a truly personal and economical service they had discarded fixed timetables, fixed seating plan, fixed route, or even fixed stops.

The bus could not leave until it had an economical load. This consisted of not only two compressed lines of passengers facing each other along the hard little benches which ran down each edge of the bus, but a third line squatting on a raised plank which itself scarcely fitted between our knees. The few gaps were neatly filled with babies and small animals.

The crew comprised two drivers sitting on the same seat working in shifts, and four conductors who clung to the rear running board or sat on the roof kicking you in the back of the neck with their heels. Beyond this there was a floating population of casual passengers including irregular troops wearing peculiar hats and sidearms. Economy also demanded that the bus carry a full lorry load of sugar cane, wooden planks, coconuts, bicycles, earth, contraband and offal on the roof.

The route was the lowest common multiplier of anywhere that anybody wanted to go. We detoured for miles along a cart track through a Chinese cemetery to pick up three bags of rice. As for bus stops, these were not only where anyone wanted to get out, but also where anybody looked as though they might conceivably want to get in. At one point the owners of the load of planks climbed onto the roof of the bus, threw the planks one by one into a nearby river, then jumped in after them. Another stop was occasioned by a bridge so rickety that all the passengers had to get out and walk across to lighten the bus.

Towards dusk the driver incautiously let his revs drop going over a hump-backed bridge, and the engine stalled. The crew flung themselves under the opened bonnet and beat the engine with huge tools. It started up again, but a few miles further on gave up the ghost for the second time. This broke the spirit of the crew. Not even bothering to open the bonnet, they lay down in the road in the dark and went to sleep. After a while the passengers realised that something was amiss. Seeing that nothing would happen for some time they all got out and hobbled about slapping their calves to get the circulation back. In fact the bus had run out of petrol, and half an hour later a fast runner arrived from the nearest village with a can.

When the passengers had been squeezed back into place, we shot away at an exhilarating pace which did not slacken until we reached Poipet. The thirty two mile journey had taken almost three hours.

Back in Singapore I had one very hair-raising flight in the autogyro. It came with a small instruction leaflet, which alarmingly advised wearing heavy boots in case you needed to cushion the landing with your legs. The leaflet explained that before attempting free flight it was wise to attempt towed flight behind a vehicle. Accordingly my fellow pilot Dave Baston drove along a Singapore airstrip while I bumped along behind in the autogyro at the end of a long rope. The rotor started turning, and then promptly dipped down and chopped off the plywood tailplane.

We took the autogyro back to the ship, where the workshop made a new tailplane. A few days later we made a second attempt. I got airborne to about forty feet, but was completely terrified and made desperate hand signals to Dave Baston to slow down.

This he did, and I landed without injury. I never flew the thing again, and we managed to sell it to a daredevil.

Borneo

Borneo, which lies in the South China Sea to the south east of Singapore, is the third largest island in the world. It is about five hundred miles in each direction, with the land rising to a mountainous ridge, up to 13,000 feet high, along the centre of the island. It is completely covered with dense rain forest.

The northern part of Borneo (less the tiny enclave of Brunei) forms part of Malaysia. The larger southern part forms part of Indonesia. In 1965 there was a low level conflict (known as the Confrontation) between Indonesia, which claimed the whole of Borneo, and Malaysia. Malaysia, as an ally and former colony of Britain, was defended by British forces. Although normally helicopter support to inland operations would be provided by the RAF, a shortage of RAF helicopters and pilots led to HMS Albion's helicopter squadron being pressed into service in Borneo.

We were stationed at a forward base called Nanga Gaat, which was about 100 miles inland. The only way in and out was by helicopter or light aircraft, and most of our food and other supplies were dropped by parachute. This my account of arriving for the first time at Nanga Gaat:



Wessex 5 helicopter at Nanga Gatt. Parachute drop in background.

Nanga Gaat is a 75 minute trip [from the coast] along a broad river which is a hundred yards wide for most of the way. Long stretches of increasingly precipitous jungle are only interrupted every 25 miles or so by small towns on the river: Kapawit, Song, Kapit. These consist mostly of a mission school, a hospital, a playing field, a few administrative buildings and a scatter of flimsy asbestos roofed houses clustering at the river bank. Between them are several longhouses on the sides of the river.

Arrival at Nanga Gaat, and as we get out of helicopter, we are surrounded by a motley crew in a mixture of khaki and jungle greens. We are shown to the officers' sleeping quarters, which are constructed out of a frame of rough hewn logs, about as thick as your arm. These are covered, roof and walls, with coarse rush matting. The floor, which is suspended some four feet above the ground, is of split bamboo with big gaps between.

There is no lack of humanity, nor indeed animality. A company of the Royal Malay Regiment, a topographical survey team, 40 assorted naval personnel, Ibans, Chinese and Dyaks who work here as manual labour, cows, goats, cats, chickens, dogs, deer and insects compete for every available inch of horizontal space. The animals roam at will between the aircraft, under the dwellings, into the armaments store, or wherever fancy takes them. The Ibans are tiny and dark brown, as tough as cocks, with bandy legs, hair fringed in front, eighteen inches long at the back (sometimes plaited) and tattoos all over.



Iban boys playing in the camp in Nanga Gaat.

We were based for about two months in Nanga Gaat, flying for hours every day over the surrounding jungle. We would do the rounds of jungle clearings, close to the border, delivering stores or equipment to forward patrols, evacuating casualties, and as part of our 'hearts and minds' campaign taking sick local people for emergency treatment in hospital.



This hit a tree.

Some of the clearings were hardly big enough to allow a helicopter to land. If, in trying to land, one of the helicopter rotor blades was to hit a tree you would almost suffer a fatal crash. This is because the rotor blades would become unbalanced, and their enormous rotary energy would spin the helicopter into the ground. On one occasion, trying to land in a very small clearing, one of my rotor blades did indeed hit a tree, but luckily it only clipped it with the soft aluminium tip of the rotor (which I have kept as a souvenir) and I did not crash. A few inches further and this life story would probably have ended there and then.

Hong Kong



Street stall in Hong Kong.

HMS Albion then moved on to Hong Kong. En route to Hong Kong, we anchored off the Borneo shore to entertain the local Iban Chieftain. I was alarmed, as a very junior officer, to be invited to the formal dinner to sit between the Captain and the Chieftain as a Malay interpreter. This arose because I was the only person on the

ship whose personnel record showed any language training in Malay. I brushed up on my Malay, extending my vocabulary from about ten words to thirty.

The captain of the Albion, Captain B.C.G.Place, VC, DSC, had won his VC as a young submariner in the Second World War for the successful attack on the German battleship Tirpitz in a midget submarine. He, I, and the other naval officers were smartly dressed in the naval equivalent of dinner jackets, with gold braid and black bow ties. The chieftain outshone us all; his ceremonial garb included a flowing leather cloak and hat covered in brilliant feathers. I inserted myself between the Captain and the chieftain, and soup was served. Captain Place turned to me, and said 'Reid, please explain to the Chieftain that HMS Albion is a Centaur class light fleet carrier of 22,000 tons, which was built on the Tyne by Swan and Hunter, and was launched in 1947. Her engines produce 80,000 horsepower, and she is capable of 27 knots. She has a complement of 900, carries 19 Wessex 5 helicopters powered by twin Bristol Siddeley Gnome gas turbine engines, and can accommodate up to 1,000 troops'.

Summoning all my knowledge of Malay, I turned to the chieftain and said in Malay 'This is a big ship'. He did not understand. Whatever dialect of Malay he spoke, it was clearly far removed from that which I had been taught in Bloomsbury. I repeated the same sentence many times, with gestures. Captain Place was impressed by this sustained conversation. Eventually, the Chieftain's face lit up with a huge smile of comprehension.

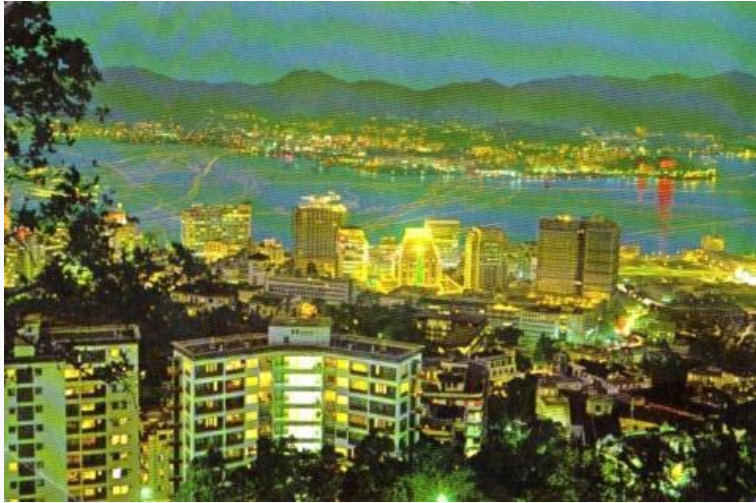
He embarked, presumably in colloquial Malay, on a stream of enthusiastic conversation, of which I could not understand a word. Captain Place turned to me and asked what the chieftain was saying. I had to improvise. 'He is saying, sir, that it is a privilege to have your great ship visiting his shores, that the food is delicious, that he is most impressed with the smart turn out of the men, and that he and all his people welcome you warmly. He is a great admirer of the Queen and Prince Philip, and asks that you send them his regards'. This process repeated itself several times, among much clinking of glasses. Captain Place and the Chieftain came away with the impression that they had had a long and useful conversation. I did not disillusion them.

My account of Albion's arrival in Hong Kong:

Dawn, January 5th 1966. HMS Albion is sliding into Hong Kong waters. Stand on the broad overhanging bows and look down at the mill-pond sweeping underneath you. There is no noise, no wash, not even any vibration. The sensation is simply of being borne inexorably forward into a scene whose grey serenity outdoes even the rock-steadiness of the ship.

All night the fishing boats have been luring their catch with massive kerosene lamps. We had approached them in the pitch darkness, their bright lights defining an otherwise invisible horizon ahead of us.

Our arrival amongst them coincided with the inklings of dawn, and their lights paled in comparison. Now the fishing boats stretch in a dense constellation for miles around us, their brittle sails becoming clearly visible as one by one their lights, like candles on a Christmas cake, are carefully blown out.



Postcard home.



Washing in Hong Kong.

Round the corner of the straits between Hong Kong and the mainland everything changes. The northern side of Hong Kong island is clothed in huge blocks of flats and offices built on precarious ledges dug out of the mountain. The whole city is a dancing facade of activity, its neon feet rising out of the busiest harbour in the world. One is assailed by noise, colour, smell, motion.

The sun, which has been gathering strength behind the mountains, slams into view; another hot bright Hong Kong day has begun.

During our time in Hong Kong, Sara and Anna visited China (I, as a naval officer, was not allowed to go) and also made an expedition by sea to Australia to visit her cousins there.

I did a trip to Tokyo, where I travelled on the bullet train, and was taken to a Sumo wrestling match by Andrew Maclean Watt. He had been head boy at Winchester, and was working in Tokyo for the J Walter Thompson advertising agency. I also visited a Sony factory, with rows of young ladies diligently seated at a production line.



The latest from Sony.



Bullet train in Tokyo.

In August 1966 HMS Albion completed its Far East tour of duty, and we sailed back to Portsmouth via the Seychelles, Mombasa, and Aden. Noel Coward was

holidaying in the Seychelles, and came on board for our cocktail party. He described the Seychelles as 'ropy but unspoilt'.

11. Portland



In flying kit in 1966

On returning to England I was transferred for the last year of my naval service to search and rescue duties at Portland in Dorset. Sara, Anna, and I settled into modern terraced married quarters in Wyke Regis, between Portland and Weymouth. Our second daughter, Kate, was born in Dorchester hospital in April 1967.

The search and rescue work involved a practice flight every morning, and then much time reading in the crewroom awaiting an emergency call. We were equipped not with the modern twin-engined Wessex 5 helicopter we had flown on HMS Albion, but with the much older single-engined Whirlwind.

I had on various occasions to lift people on and off ships, using a harness lowered down on a winched cable. Another task was to clear pleasure sailors away from areas of sea being used for gunnery practice. Because we had no way of communicating with them by radio, we had to hover close to the yacht, and the crewman in the back of the helicopter would hold up a blackboard on which he had written 'YOU ARE STANDING IN TO DANGER'.



Whirlwind search and rescue helicopter.

It was during my time at Portland that I experienced the alarming experience of crash landing in the sea. The head of Portland naval base, Captain Turnbull, was leaving and a ceremonial flypast of nine helicopters had been arranged. We were to form up in a T formation, with five across and four forming the stem of the T, to fly over his house on Portland Bill. My helicopter was the last in the stem of the T. We approached Portland Bill over Weymouth Bay at about 1000 feet. Suddenly my Whirlwind's single engine stopped, and there was a deafening silence. There was no way of re-starting the engine without ground equipment, and in the case of an engine failure you had to land in the sea.

We constantly practised engine failure procedure, which was complicated and critical. First, you had to slam down the Collective Lever (which varies the collective pitch of the rotor blades) within seconds of the engine failure; otherwise the rotor blades would slow down and fold upwards, and the helicopter would drop like a stone.

With the collective lever down, the helicopter would 'autorotate' down, rather like a sycamore leaf. In the minute or so available, you had to work out the direction of the wind, and turn the helicopter into the wind so as to reduce the relative ground speed. You also had to carry out numerous checks on the way down, dictating what you were doing over the radio so that the control tower could correct you made a mistake.

Finally, there was the critical business of pulling up the Collective Lever sharply at just the right moment - about ten feet above the water. This would provide a once-only slowing down of the rate of descent, enabling the helicopter to settle gently on the water. If you pulled up too soon the helicopter would pause, then crash violently into the sea. If you pulled up too late, you would crash violently into the sea.

More by luck than good judgement I got the timing right. You then slammed on the rotor brake, and sat tight in the helicopter while it started to sink. This was because if you got out before the rotor had stopped turning you would be likely to be hit by it.



Portland Harbour and Weymouth Bay, top right.

When I was up to my waist in water the rotor stopped turning. I climbed out into the sea and inflated the dinghy I was carrying on my back. I climbed into it, and within seconds one of my colleagues was hovering above. He lowered a strap into which I climbed, and was winched up to safety. The helicopter sank to the bottom of Weymouth Bay.

12. University College London



University College London, Gower Street

My five year short service commission in the Royal Navy came to an end in 1967. I spent the five years 1967 to 1972 at University College London, the first two doing my MSc at the Bartlett School of Architecture, the second starting my PhD, and the last two as Director of the Communications Studies Group.

Home

In 1967 we bought our first home - a Victorian two storey terrace house at 41 Festing Road, in Putney. It cost £4,250. We fell in love with Festing Road, which ran down to the Thames. The embankment was lined with rowing clubhouses, and it was a scene of constant activity with rowing and sailing boats being put in and out of the water.

We did an unconventional refurbishment of the house. We opened out the first floor so that the living room at the front made a continuous space with the stairs and the rear part which became dining area and kitchen. The central room upstairs was my study, to which I fitted a thick sound-proof door. We had two proper bedrooms and a bathroom on the ground floor, and a back room which could be used as a spare room. There was a tiny garden. There was also a small park, Leaders Gardens, at the bottom of the road. It was there that Anna, and later Kate, learned to ride a bicycle.

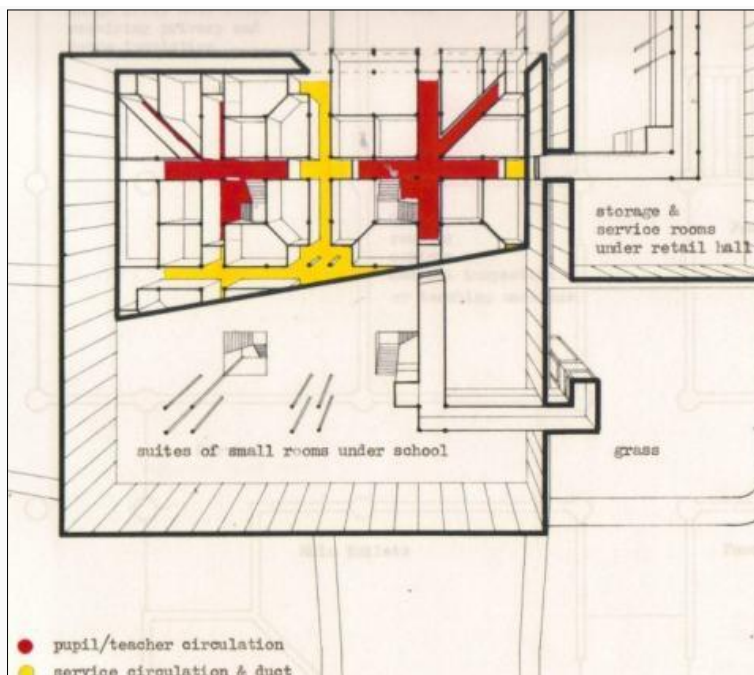
We hired a builder, but I did much of the work, including installing the central heating. When first turned on it leaked everywhere, producing a gentle drizzle throughout the house. The builder put this right with a large spanner. Every time I brought some item of building material into the house he would ask how much I paid for it. He would then whistle through his teeth with astonishment at how I had been swindled. The only way to avoid this was to lie and give a figure of about half what I had paid. The house was quite small, and we tried to make maximum use of the space, on nautical principles. Our bed was three feet in the air, supported on four whitewood chests of drawers. And in the living room I constructed a built-in sofa

along two walls of the room, with wooden structure, rubber webbing, and foam cushions covered in a buff corduroy.

MSc, Bartlett School of Architecture

I was offered places to continue my architectural studies at both the Architectural Association and the Bartlett School of Architecture, which is part of University College London. I opted for the latter, drawn by the range of subjects on offer.

After five years in the navy, it was a pleasure to be back in architecture school. I made new friends including Robin Nicholson, who became key figure in Ted Cullinan's practice. It was good to work with Robin twenty five years later when he was a Vice President at the RIBA.



School project: cutaway drawing.

The first year routine was similar to Cambridge, with most of our time spent in the studio working on design projects. Our two main projects were for schools in the new town of Milton Keynes, and a multi-storey car park in Walthamstow, north London. One reason for choosing Milton Keynes was that the head of the Bartlett, Richard Llewellyn-Davies, also ran a successful architectural and planning practice, which had produced the master plan for Milton Keynes. He and his wife were both made Labour life peers. I was impressed that he came and went in a chauffeur driven Mercedes.

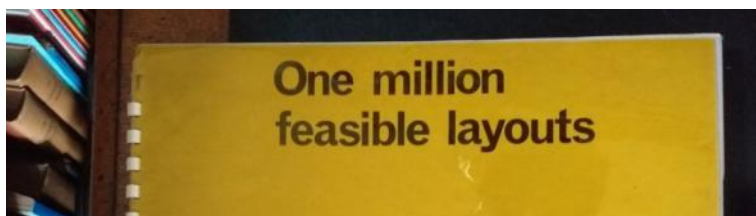
For Milton Keynes, I proposed two types of school: 'base schools' serving a population of between 900 and 1800, and specialist 'activity centres' serving a population of 30,000. As the child grew up, it would spend a decreasing proportion of its time at its base school, and an increasing proportion at an activity centre. My proposal for the design of the base schools was unusual.



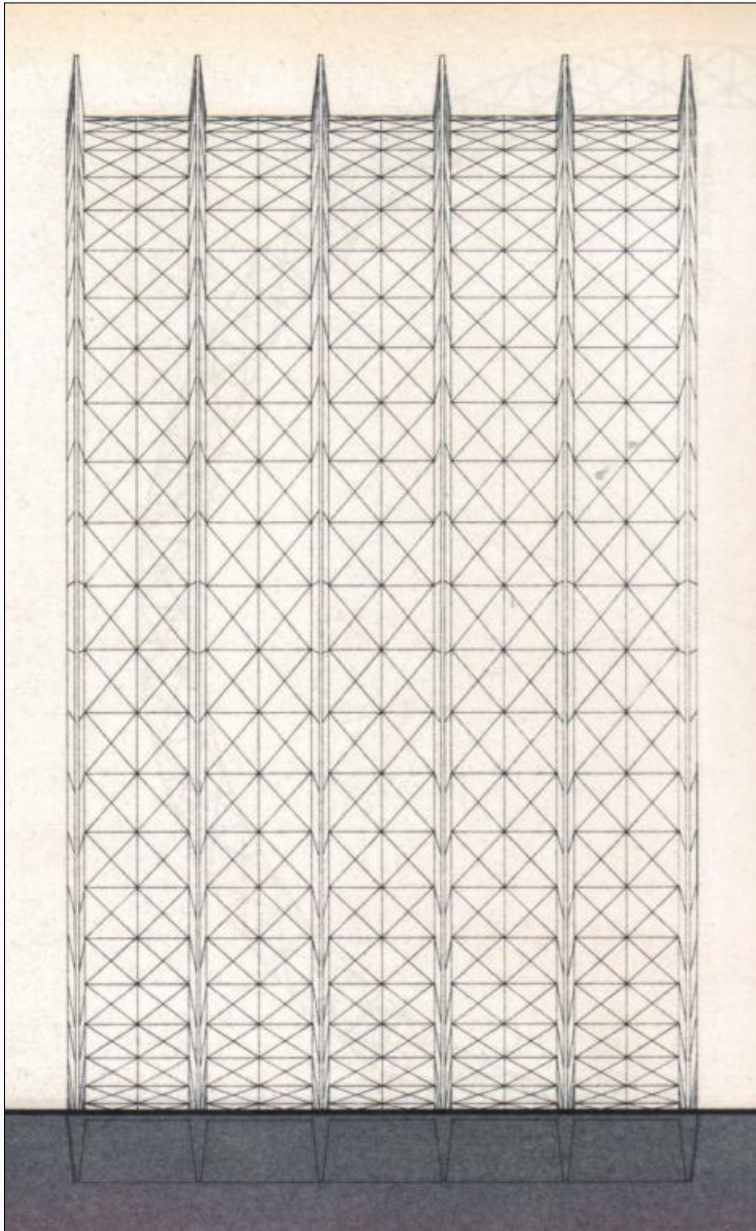
School project: classroom layout.

The proposed design for the base school consists of a large double height enclosure at first floor level, 47m square, within which four staircases lead down to four self-contained suites of rooms at ground floor level. The main space of the school is divided by a continually changing pattern of cardboard partitions of variable height, which can be stapled up and demounted by the teachers and pupils. Support, storage, and entry to the cardboard enclosures is provided by movable wooden storage units. The rooms on the ground floor are used for activities requiring sound insulation or privacy, such as cloakrooms. An upper level walkway runs through the building complex, and is reached by spiral staircases at selected points.

We were also asked to propose ways in which the base schools could be combined with shops and flats to produce neighbourhood centres. My proposal was described in the crit as inflexible. I was stung by this, as I believed it was capable of many variations. To demonstrate this, for the next crit I produced a bound folder entitled 'One million feasible layouts'. This consisted of a ten page A3 book. The first page showed one particular layout. But it, and the following nine pages, were each cut into six horizontal strips.



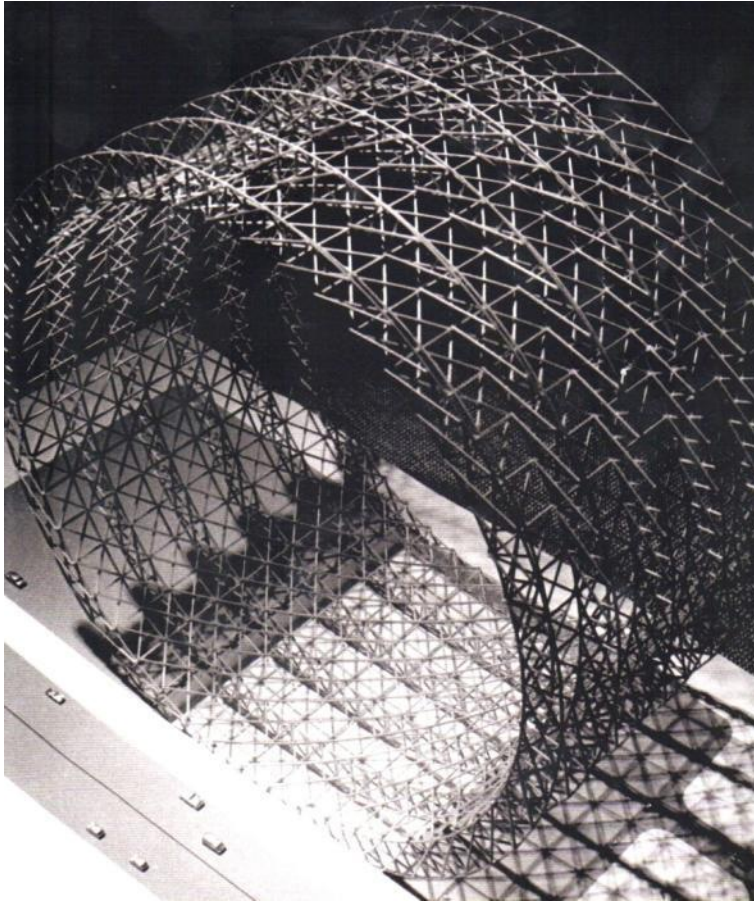
The book could therefore be opened in a million different ways (10 to the power of 6). Careful attention to adjacencies ensured that however you opened the book, the layout made sense and the walkways connected up properly.



Car park project: elevation.

The other major project in the first year was a multi-storey car park in Walthamstow, near the Blackhorse Road underground station on the newly opened Victoria Line. It was to provide park and ride facilities for 1250 cars. The other students produced, as expected, a conventional five or six storey concrete building with access ramps. Determined to do something more imaginative, I proposed a huge ferris wheel:

This is designed as a continuously rotating drum 124 metres in overall diameter. Structurally, it is a rigid lattice steel rim in compression, cross-braced with tension cables. The cars are held in a series of gondolas suspended on the outer surface of the drum. the whole is recessed 8 metres into the ground, enabling mechanical insertion and extraction of the cars to occur mechanically at ground level.



Car park project: model.

The unique feature of this design is that apart from its use as a commuter car park during working hours on working days, it has a complementary use as a drive-in 'sky ride'. In the evenings and at weekends the speed of rotation is reduced from one revolution every 5 minutes to one revolution every 45 minutes. The customers remain in the cars and are silently lifted 350 feet above the ground to enjoy from the comfort of their own cars a spectacular view over the Lea Valley and central London.

I spent hours in my study at Festing Road making a balsa wood model of the car park, three feet in diameter, from hundreds of narrow balsa wood rods. It photographed well, but it became brittle and only the baseboard has survived, hung on my study wall.

In the second year of the Bartlett course, we concentrated on a written thesis. Having become interested the social and economic aspects of transport, I chose as my topic 'The Journey to Work in Central London'. The thesis was organised into four sections: historical, economic, human, and geographical. The following extract is from the introduction to the thesis:

In architecture, individuals who differ acutely over other matters have arrived at a common conviction that buildings should be approached not as finite objects created at a point in time, but rather as the receptacles for continuously changing and open-ended sets of activities.

In this situation of uncertainty the one thing of which we can be certain, and in fact the thing that lies at the root of the high rate of change behind the uncertainty, is the accelerating flow of messages, persons, and goods. That is not to say that each of these categories will necessarily increase; new technologies may enable substitutions to be made between, for example, personal travel and electronic communications.

At Cambridge I had worked hard but somewhat frivolously. At the Bartlett I worked hard and seriously. I was now a married man with two children to support. My diligence paid off, and I was awarded an MSc with distinction, and also the Sir Banister Fletcher Prize and Medal for the architecture student with the highest marks in the final exam. The medal is a about the size of a digestive biscuit, and is not designed to be worn; one friend suggested that although you could not wear it at formal occasions, you could perhaps take it along and pass it around from hand to hand.



Sir Banister Fletcher Medal.

My only wearable medal is the Borneo Medal awarded to all who served in the Borneo theatre during the Confrontation. I lost it, and years later in Cambridge was invited to a formal dinner whose invitation stated that 'Medals will be worn'.

I decided to buy a replacement, which turned out to be surprisingly easy. It only needed a telephone call to Spink & Sons. But the gentleman from Spinks did throw at me one of the most baffling questions I have ever had to answer. When I explained that I needed the medal for evening wear, he replied 'Certainly sir. Do you wish it fixed or hanging free?'. Unable to envisage these options, I asked what he would advise. 'I would advise, sir, that it hang free'. And so it did.

13. PhD, Joint Unit for Planning Research

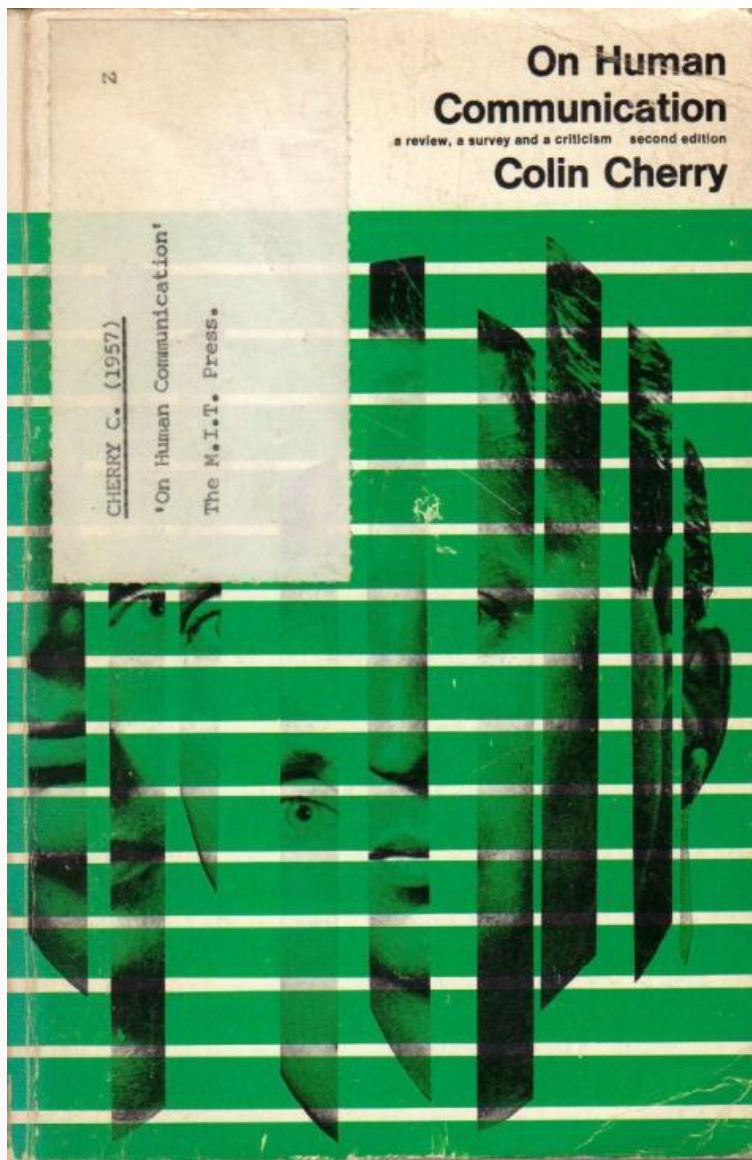


Bell Picturephone.

In the course of writing my MSc thesis, I had become intrigued by the question of whether new developments in telecommunications, particularly the video telephone, would reduce the need for travel. For example, if people could work from their homes or from neighbourhood work centres, the need for commuting, and indeed the argument for great cities as working centres, might be reduced. The issue hinged on whether people would find the videotelephone a satisfactory substitute for face-to-face contact.

I found that among those concerned with this question great controversy raged. The techno-enthusiasts said yes, the traditionalists said no. Because videotelephone systems were not yet in use, no side had any evidence on which to base their views.

I decided to tackle this question as the subject for a PhD. Specifically, I proposed to undertake controlled experiments, with pairs or groups of participants, to measure differences between communication by telephone, by videotelephone, and face-to-face. I found an academic home for the project at the Joint Unit for Planning research, a joint venture of the Bartlett and the London School of Economics which was headed by Prof. Peter Cowan.

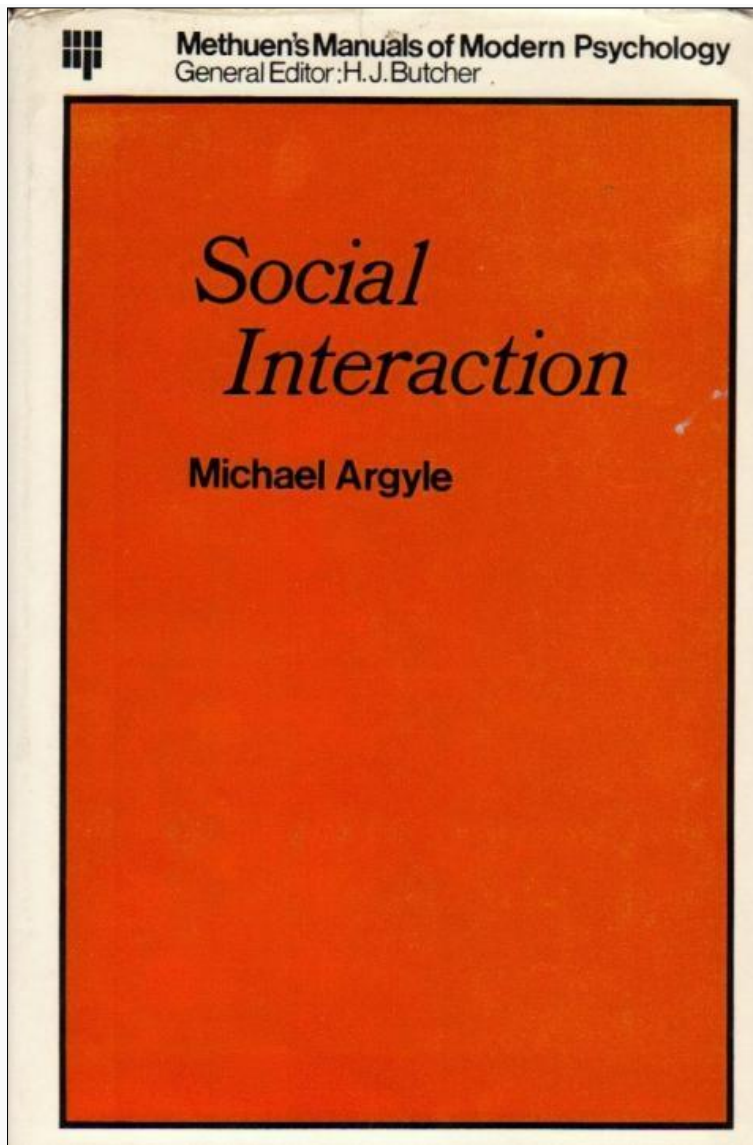


Cherry book.

Through a personal contact, I approached the Philips group to see if they would be prepared to fund me to undertake the research. They sent me over to their laboratories in Eindhoven, Holland, for interview. Philips did offer to fund the research, but only if I joined their research department at Eindhoven, and undertook the work there.

Through another personal contact, Martin Elton, I was introduced to the British Government's Civil Service Department, which was evaluating proposals for a big move of Government jobs out of London to regional centres.

The study had thrown up as a key uncertainty the question of whether the videotelephone could be used to substitute for face-to-face meetings between London and these regional centres. The CSD offered to fund my work and Ivery happily accepted their offer.



Argyle book.

During the first year of my PhD I read voraciously on the subject, making careful notes of several hundred relevant books and research papers. I found that study of human communication had been undertaken by two very separate groups of people: electrical engineers interested in signal processing, and social psychologists interested in how people behave. A leading figure in the first group was Prof. Colin Cherry, an electrical engineer at Imperial College London, who had written a famous book called 'On Human Communication'. A leading figure in the second group was Prof. Michael Argyle, a social psychologist at the University of Oxford, who had written an equally famous book called 'Social Interaction'. But their worlds hardly intersected. An indication of this was that each book had a long list of references, but I found that only one reference was common to the two books - 'Human Behaviour and the Principle of Least Effort' by G.K.Zipf.

In addition to the reading, I undertook in my first year one controlled experiment, ably assisted by David Prichard, an architecture student at the Bartlett who later became a partner with Richard MacCormac in MacCormac Jamieson Prichard architects. The controlled experiment compared efficiency of communication between pairs of people communicating by telephone and face-to-face. It did this by

giving the pairs a set communication task, and afterwards measuring by questionnaire how accurately the recipient had understood the communication. Social psychologists had studied for decades the non-verbal cues used by people in face-to-face conversation, including facial expression, gesture, and posture. They had assumed that these played an important functional role. It was therefore surprising that our experiment showed no statistically significant difference in performance between those communicating by telephone and those communicating face-to-face.

Part way through the first year of my PhD I approached Post Office Telecommunications to seek additional research funding. My approaches included a telephone call to James Merriman, the Board Member for Technology. I managed to get past his secretary and spoke to him. I discovered much later, after I had joined British Telecom, an internal memo which he wrote following our telephone conversation:

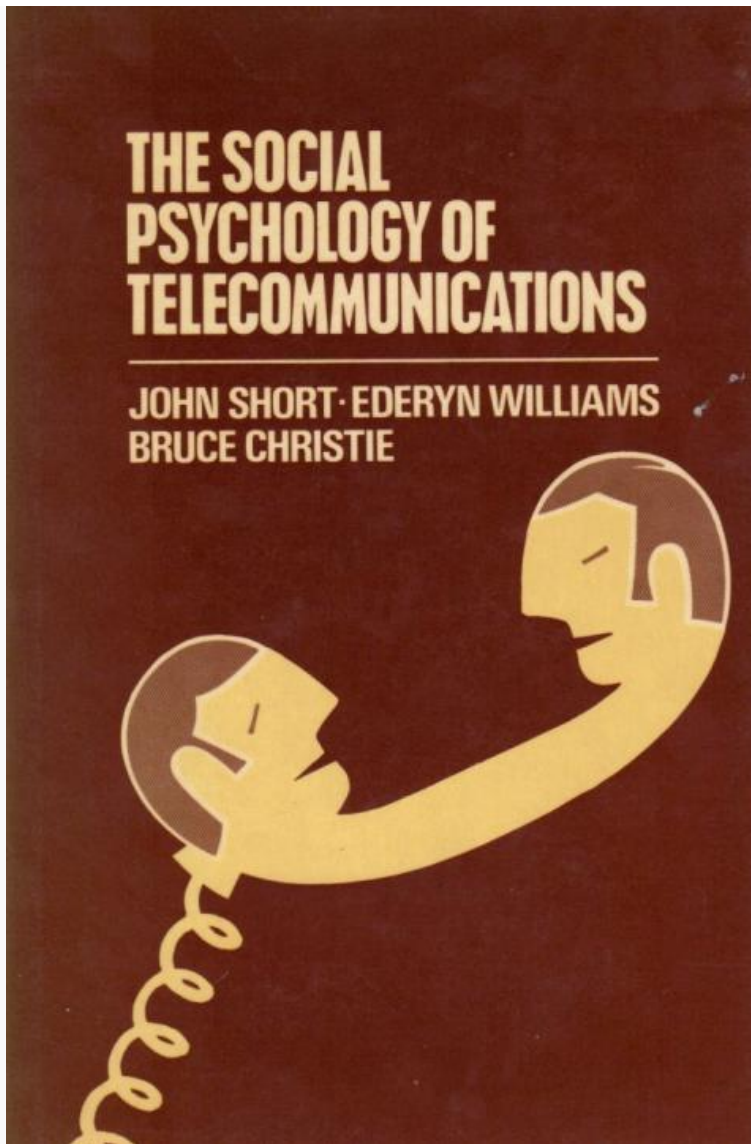
A Mr. Alec Reid telephoned to-day. Reid is aiming in his three-year project to seek to understand the relationship between telecommunication and human behaviour as telecommunications changes from voice only to voice+vision and data. I suggested that if he felt that he had a strong case for associating his work with us, I would certainly consider it. I took this view because it seemed to me even from a brief telephone conversation, that he was approaching this problem in a very business-like and understanding way.

In the light of his interest, I prepared an ambitious three year research proposal, in which I would lead a team of six researchers - three social psychologists to undertake the experiments, two electrical engineers to forecast technical developments, and a mathematician to model the comparative economics of telecommunications and face-to-face communication. We were all to be paid salaries over three years, and the total cost including the necessary equipment came to £75,000; equivalent to about £850,000 in 2007. I put the proposal to the Civil Service Department and British Telecom, and they agreed to fund it jointly.

Communications Studies Group

With this funding secured, Peter Cowan agreed that we should set up the Communications Studies Group, of which I would be Director, within his Joint Unit for Planning Research. I was lucky to recruit a highly talented young team: Brian Champness, John Short and Ederyn Williams as social psychologists, Barry Stapley and Hugh Collins as the electrical engineers, and Roger Pye as the mathematician.

Brian Champness played a critical role, as he was the only one among us who knew how to design and execute rigorous social psychology experiments. The work involved surveys of the frequency and type of face-to-face meetings within the Civil Service and experiments with numerous different types of communication task. These included information transmission, negotiation, and lying. Surprisingly, as in my first experiment, we found that the visual channel added negligible measurable benefit. We speculated that this might be because when we have no visual channel in a conversation we adapt our behaviour. For example instead of looking puzzled we might interrupt to explain that we are puzzled.



Roger Pye built models estimating the shift that would occur from face-to-face to telecommunication, using techniques of modal shift analysis that had been developed for transport forecasting. The work was written up in a book by John Short and Ederyn Williams called 'The Social Psychology of Telecommunications', published by John Wiley.



Bell Laboratories, Holmdel, USA.

It was gratifying that our work caused interest in the USA. I was invited to spend a month working with Ed Klemmer, of the human factors department at Bell Laboratories, Holmdel, New Jersey. He and his wife Ruth made me enormously welcome, having me to stay in their own home. It was equipped with central vacuum cleaning, an intercom to summon the children to meals, and an electric rubbish compressor under the sink.



Inside the Bell Labs Holmdel building.

Bell Laboratories was breathtaking in its scale and style. We worked in a huge glass building, accommodating more than 5,000 researchers, which had been designed by Eero Saarinen. There was a lake in front, with tall fountains, and at dusk the great building glowed from within like a spaceship. The visit included a trip to Chicago, where the first field trials of the Bell System Picturephone (which had been launched to great acclaim at the 1964 Worlds Fair in New York City) were taking place.

I was invited to speak at various telecommunications conferences in the USA, and through those contacts we were offered additional research funding by two US government departments: the Department of Transportation and the Department of Housing and Urban Development. We were also given funding by the central laboratories of General Electric at Schenectady, New York. I was impressed that in their canteen the paper place mats were printed with graph paper, linear and logarithmic. The sponsorship from the USA enabled us to grow our team to twelve - exciting times for a lowly PhD student.

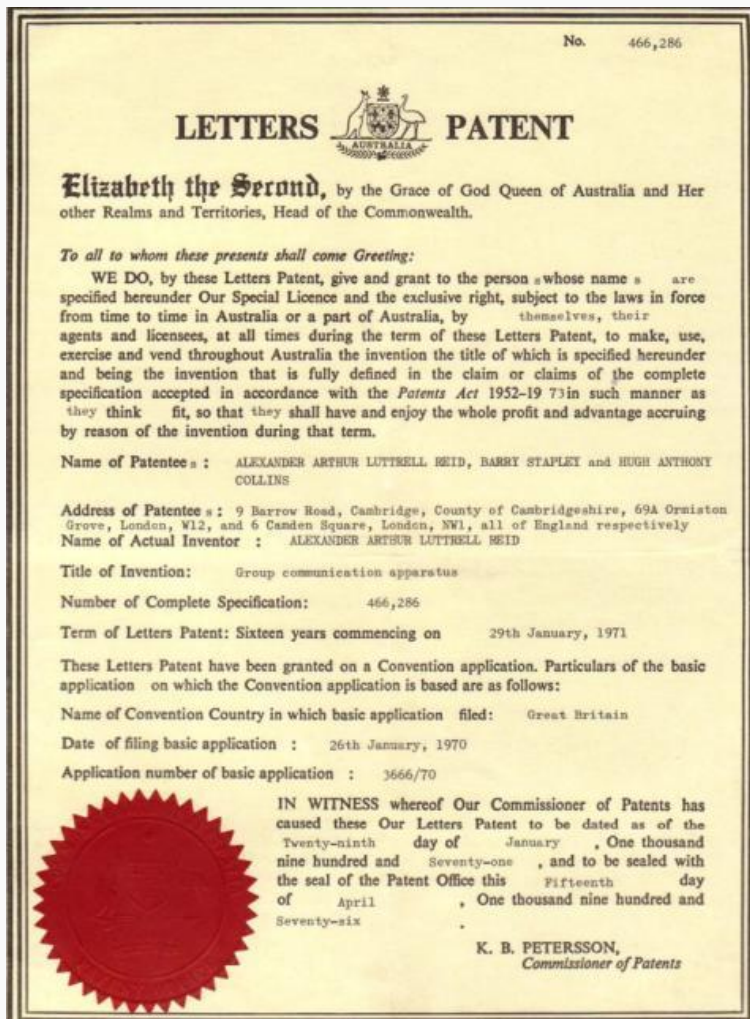


Loudspeaking telephone.

In addition to carrying out the experiments, Barry Stapley, Hugh Collins and I developed a novel audio conference system. We had concluded that a drawback of using a simple loudspeaking telephone for meetings was that it was difficult to tell who was speaking at the far end.



Remote Meeting Table, Barry Stapley seated centre. Velvet curtains to reduce feedback.



UK patent for Remote Meeting Table.

Our Remote Meeting Table overcame this by constructing a pair of circular tables, one for each end of the link. At each table there were six places for local people, with microphones, and six places for remote people, with illuminating nameplate

and loudspeaker. Ingenious circuitry designed and built by Barry Stapley detected who was speaking by comparing the strength of the signal in each of the microphones; a signal sent to the far end activated the appropriate loudspeaker, and lit up its nameplate. The Civil Service Department paid us to build a pair of Remote Meeting Tables to connect the London and Edinburgh offices of the Scottish Office. They worked fine. We took out patents, which we sold to the electronics company Plessey for £25,000, equivalent to hundreds of thousands of pounds today. we invested our £8,000 share in the purchase of a house to let in Norwich Street, Cambridge.

For acoustic reasons, we had in both London and Edinburgh to build a room within a room, with absorbent ceiling panels and heavy curtains on all walls. This involved, in the case of the Scottish Office, in Whitehall, some sawing up of timber on the pavement. I was sweeping up the sawdust, dressed in my boiler suit, when I was hailed by a passer-by who had been at Cambridge with me, now a rising star in the City. He was surprised to see me working as a street sweeper, and I had to explain.

Our offices were in a neglected outpost of University College London in Tottenham Court Road. We had a lot of laughs, which got us into trouble, as one of the offices on our corridor was occupied by a clinical psychologist. One day, when we were laughing too loudly in the corridor, the psychologist popped out of his office, saying: 'Please stop laughing, I have a severely disturbed patient in here'. We tried to keep straight faces.

There was an amiable old boy who acted as porter and boiler stoker. One of his tasks was to sort the mail coming into the building, and deliver it to the appropriate people. This was an impossible task, because the population of researchers was a shifting one, and most of the letters were addressed to people who were no longer there, or were off on months of fieldwork. The porter saw it as his task to find a home for every item of mail, and he would plead with you to accept mail not addressed to you. Some mail carried exotic foreign stamps, and was reputed to contain samples of dried excrement being collected by a researcher on zoological fieldwork in East Africa. Another researcher, leaving for months of fieldwork, entrusted to me a cardboard box full of his life's work which he asked me to guard with my life until his return. It consisted largely of long spools of paper produced by mechanical thermometers which he would attach to the outside of native huts. He said that by examining the temperature changes he could deduce the activities taking place inside the hut, including eating, sleeping, and lovemaking.

There was another cardboard box incident when I was clearing clutter from my own office. I found a cardboard box marked 'Henshaw', with some old papers in it. I was about to throw it away, but was stopped by someone who knew better. It turned out that Henshaw was a tenured member of staff at the Bartlett. He had succumbed to a clearing out of dead wood initiated by Richard Llewellyn Davies when he took command. Llewellyn Davies could not legally sack Henshaw, but agreed with him a legal fiction whereby Henshaw would nominally continue to work at the Bartlett (thus preserving his entitlement to salary and pension) but would not actually turn up. At first Henshaw was assigned an office as his notional base. Then, with

pressure on space, this shrank to a desk. By the time I arrived Henshaw's presence had shrunk into the cardboard box. We looked after it carefully.



Henshaw.

As the Communications Studies Group expanded we took over more rooms on the corridor, some of which were assigned to other departments but did not appear to be in use. These became a kind of no man's land in which we could squat. Periodically some other department would be sent round to see if they wanted to occupy these officially vacant rooms. We tried to discourage them, and I remember that on one occasion, being notified in advance of such a visit, we poured milk down the backs of the filing cabinets hoping to generate a deterrent smell.



IBM Selectric and golf ball.

Because we were sponsored by large organisations, who sometimes visited us, I tried to present ourselves as a modern, well-organised unit, rather like Bell Laboratories on a tiny scale. It was an uphill struggle. Our own rooms were ferociously neat, and equipped with new furniture and IBM Selectric correcting electric typewriters. These had a second, sticky, ribbon which would actually lift the plastic ink off the page to correct an error.

But the meeting room, which we did not control, had become a junk room, full of broken furniture. We had to use this room for a small seminar which I had organised on the future of telecommunications. We invited people from leading manufacturers, hoping they would give us money.

My star guest was a senior research manager from the General Electric Company. I cannot remember his name, but let us call him Dr Schwartz. I had tried my best to tidy up the meeting room, pushing the debris back into a heap around the walls. We set up a table, and managed to find a dozen serviceable chairs.

The event was a disaster. I, my colleagues and other guests were gathered in the meeting room at the appointed time, but there was no sign of Schwartz. After about 20 minutes, I thought I should go out and look for him in case (as was likely) had been misdirected by the porter. I stepped out of the meeting room into the corridor, to hear a strangled cry and a crash as the door of the cleaner's cupboard opposite flew open, and Schwartz burst out like something in a horror movie. He was wrestling with a broom, and had a bucket stuck on one foot. He had indeed been misdirected, into the cupboard. I disentangled him from the cleaning kit, and apologised profusely. I reached out to shake hands, to find that his right hand was covered in black grease. He explained, in a shaking voice, that he had caught his hand in the heavily greased concertina gate with which our ancient lift was equipped. He recovered himself, and I took him into the meeting room, where he was introduced.

To flatter Schwartz, and to help him recover from his unpleasant experiences, I invited him to start the discussion. I vividly remember the next few moments. Schwartz, who spoke with an impressively scientific German accent, led off by saying: 'With modern technology, everything is possible'. As he said 'everything is possible', the two right hand legs of his chair slowly collapsed, sliding out sideways. Schwartz kept talking as he rolled gracefully and inexorably onto the floor. I helped him up, threw the broken chair onto the heap of junk, and offered him another. He sat down very carefully. We did not get the money.

A less dramatic UCL experience which is equally surreal in retrospect. At the till in the canteen, I noticed two tomatoes of different size placed on top of the till. I enquired why they were there. The assistant behind the till explained that when pricing a customer's salad not only the number but the size of the tomatoes was taken into account. A small tomato was priced at say 2p, 3p for a medium tomato, and 4p for a large one. If a lone tomato appeared it was very difficult to judge its size (and price). The large and small tomatoes on the till were reference tomatoes.

14. British Telecom

In 1972 British Telecom (then part of the Post Office, and known as Post Office Telecommunications) advertised a vacancy for the head of the Long Range Studies Division. This was the department funding our research at the Communications Studies Group. It was a senior post and the occupant, like all managers in British Telecom at that level, was well into his fifties. I was only 31, and this would be my first job, apart from my five years in the Royal Navy. I was tempted to apply for the job, but was worried that this might be seen as highly impertinent by the people we were dealing with in the Long Range Studies Division, and might alienate them. As they were our paymasters I did not want to do that.

To escape this dilemma, I decided to write to the person the Board Member to whom this post reported (James Merriman) and explain that while tempted to apply I had decided not to do so, as I did not want to let down British Telecom by abandoning our research at the Communications Studies Group.

This rather odd manoeuvre had a happy outcome, in that Merriman wrote back thanking me for 'exposing my dilemma' and suggesting my concerns should not hold me back from applying for the job.

I wall called to an interview, for which I mugged up furiously to prepare myself for the baffling questions the panel might ask. The most crucial question came from Merriman himself. He asked - of the many developments that are occurring in telecommunications, what is above all the single most significant change which will affect everything else? I racked my brains and answered 'Digital'. This was evidently the right answer, because Merriman relaxed with a slight smile.

I heard nothing for about three months, during which I assume they were offering the job to other candidates who had turned it down.

Then to my surprise and delight a letter arrived offering me the job, which I promptly accepted.

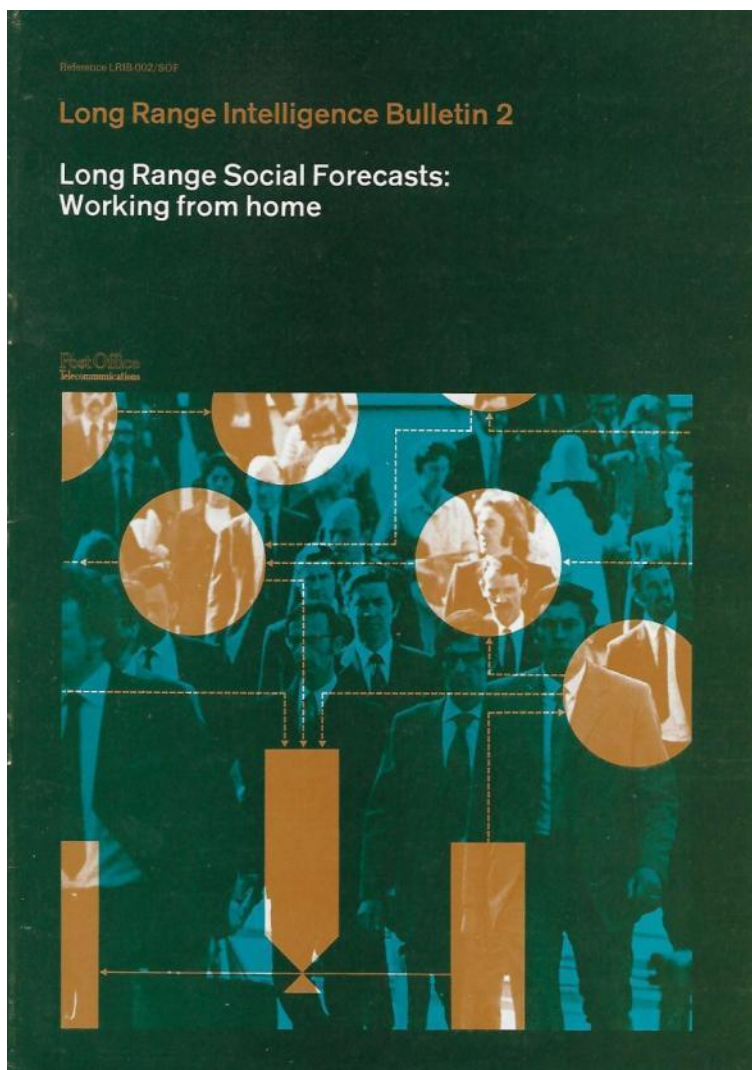
Long Range Studies

The role of the Long Range Studies Division was to advise British Telecom on how the world was likely to change over the next 30 years, and how the company should develop strategies to respond to long term threats and opportunities. There was another department that produced plans for the next ten years, who were keen that I should keep off their turf. So we focused on the period ten to thirty years hence.

I inherited a team of about fifteen engineers engaged on a three year study of long term options for the development of the local network - which connects telephone exchanges to the customers' premises. The study worked up three different demand scenarios, setting out on an annual basis the growth in demand for various services. These included video services, which have a much high requirement for transmission capacity than do voice services. They then developed several technical options, including traditional copper wires, optical fibres, and radio.

The team then drew a random selection of about 100 actual local areas, drawn from all over the country. They got hold of the network maps for each area, showing ducts, poles, and cable runs. They then sat down and used these actual maps to plan how each local network would need to be developed using each of the technical options for each of the demand futures. The work included costing these numerous options.

I also inherited two economists, both of whom moved on from the Post Office to distinguished careers. Donald Hoodless became chief executive of Circle 33, one of the largest Housing Associations in the UK. George Young became a Conservative MP and Cabinet Member, as Secretary of State for Transport, Leader of the House of Commons, and Chief Whip. He is now a member of the House of Lords.



A Long Range Intelligence Unit report by sociologist Joan Glover.

My main initiative was to establish a multi-disciplinary Long Range Intelligence Unit. It was based in Cambridge to facilitate collaboration with Cambridge University. It was a horizon scanning operation which researched and reported on strategic issues. The work involved much reading, much writing, and enjoyable trips to international conferences. To provide a shared information resource we used a computer system (very primitive by today's standards) into which we entered and indexed everything we read, saw, and heard.

Some of the most talented staff in the Unit were recruited via the Post Office Student scheme. This scheme funded engineering students generously during their undergraduate course, gave them work experience at the Post Office research laboratory during vacations, and offered them a job on completion. There was great competition to get into the scheme.

One such recruit was David Cleevely who went on to found or back several highly successful technology companies in Cambridge including the telecomms consultancy Analysys, and the antibody company Abcam.

Another was Charles Jonscher, who went on from us to do his PhD at Harvard and later founded the investment company Central European Trust. He also wrote books on the social and economic information technology including 'Wiredlife: Who are We in the Digital Age?', and 'Information Resources and Economic Activity'.

I was also joined at the Long Range Intelligence Unit by the psychologist John Short, who had worked with me at the Communications Studies Group, UCL, and by the very able economist Michael Tyler.



My boss Roy Harris

I could not have been luckier with my two wonderful bosses at the Long Range Studies Division. James Merriman took a great interest in all we did and (perhaps because we were a small cog in a very big machine) basically let us get on with it. I subsequently reported to Roy Harris.

He was an equally good boss, but could occasionally be challenging. He once suggested (I don't think in jest) that we should develop a new kind of telephone. You would talk in at one end in your usual stumbling manner, with poorly chosen words, gaps, and repetitions. Out the other end would come perfectly grammatical, fluent and persuasive speech. I said I thought this might take some time. But now that we have spell check and grammar check and artificial intelligence perhaps he was just slightly ahead of his time.

It was a pleasure to see Roy Harris after we had both retired at the annual lunch for ex-Directors of British Telecom which is held (slowly revolving) at the top of the BT Tower.



At the top of the BT Tower

My five years with the Long Range Studies Division of British Telecom were extraordinarily interesting, rewarding and relaxed. Congenial colleagues, steady funding, no conflicts, no competition, and no stress.

Prestel

In 1977 Sam Fedida was a very inventive engineer working at the Post Office research labs at Martlesham, Suffolk. Observing that the Bell System's Picturephone was designed also to carry text on the screen (for information services such as phone directory, weather forecast, and share prices) he hit on the idea that in the absence of Picturephones the same thing could be achieved on the screen of a TV set.

His concept, which he named Viewdata, was based on the simple and powerful idea that the TV set (then in almost every home) could be wired to the phone line (also in almost every home) to provide a nationwide information retrieval system.

He built a prototype system, which involved the addition of some electronics, including a modem, to a TV set, and began to demonstrate it. Strangely, no one seems to have had this idea before, and it caused something of a sensation.

The Board of British Telecom sat up and took notice for two main reasons. Firstly here was British Telecom, often derided (particularly by Conservative politicians) as a sleepy monopoly, coming up with a world first. Secondly, at a more mundane

level, extra phone traffic (which Viewdata would generate) is extremely profitable for a phone company, as most of its costs are fixed.



The Managing Director of British Telecom at the time was Peter Benton. A Cambridge-educated ex McKinsey consultant, he had worked at senior level at British Gas during the big changeover to natural gas. This has persuaded him that a major innovation in a large organisation needs a dedicated team with a person in charge. He felt that if Viewdata was to succeed it should be introduced not through the traditional inter-departmental committees, but through a new dedicated department with a single person in charge.

Bank share prices generally, with NatWest shares up by 8p at 262p and with gains of 4-6p in the considered to be more than required at present. The bank's international

Post Office will spend £100m. on Viewdata

BY MAX WILKINSON

THE POST OFFICE is to spend £100m. over the next eight years on a more rapid development of Viewdata, a system which can convert the domestic television set into a home computer terminal.

The system will allow modified sets to be connected by telephone line to a network of computers which will eventually store millions of pages of information on topics ranging from

want to obtain information on different topics, but it can also be used for two way "interactive" communications.

Subscribers will be able to use the system to type messages via the computer to other subscribers' television screens or, by using a simple keyboard, to play games with the computer or answer quizzes.

Viewers may also use the computer's programs to make their

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Financial Times, 1.3.78.

I was asked by Benton to prepare organisational proposals for this, involving staff being seconded from all parts of British Telecom to a new Viewdata department. He agreed these proposals and appointed me as Director of Viewdata to take on the task. I was extremely lucky to have him as my boss. He was a wise guide, a good friend, and full of drive and enthusiasm.

Suddenly I found myself as the line manager of a substantial operation, involving expenditure of well over £100 million, equivalent to about £400 million in 2019. A team of around 100 was created by transfer from all parts of British Telecom, and I reported direct to Peter Benton.



Peter Benton - characteristically enthusiastic

Benton and the British Telecom board were keen to press on with the launch of a commercial Viewdata service. The team was highly motivated, and all parts of British Telecom cooperated splendidly.

While the engineering team cracked on with developing the necessary electronics for the TV sets (in cooperation with the leading TV set manufacturers) and the necessary software for the central computers (in cooperation with GEC, the maker of the computer hardware), several key issues needed to be settled quickly.

First, and most fundamental, was the policy as to who would provide the information, and how they would be chosen. Second, was whether the system should be built around a single new central computer storing all the data, or whether we should build a distributed system by replicating around the country the small prototype computer system we already had. Third was the question of charging; how should users be charged, and who would control the pricing of information. Fourth, but important, was what our service should be called.

On the first question I was much influenced by Tony Smith, a writer on broadcasting who was Director of the British Film Institute and later went on to be

Master of Magdalen College Oxford. He was a passionate advocate of the 'many voices' approach, exemplified by the structure of Channel 4, whose development he strongly influenced.

Discussing all this with Tony Smith it became apparent to me that it would be both impractical and undesirable for British Telecom to act like an editor, choosing what information should appear, from whom, on its Viewdata service. That would give rise to endless arguments with potential information providers, and would also fail to realise the potential of Viewdata. Unlike broadcasting, where there is (or at least was at that time) a practical limit on the number of channels, the capacity of Viewdata was in principle unlimited.

I therefore recommended, and it was agreed, that Viewdata should act as a carrier rather than a publisher, carrying unlimited amounts of information from an unlimited array of information providers, provided only that the content did not break the law.

This policy disappointed some potential information providers, who had hoped to obtain exclusive rights to provide particular types of information, such as news, weather forecasts, or racing results. But they accepted the policy with good grace, if only because it meant no one was excluded.

On the second question we took an early decision to avoid building a huge new central computer system (such projects being notoriously prone to time and cost overruns) and instead build a distributed network of pairs of small computers (the duplication to provide back-up) in various cities. Rather romantically, we chose as names for these the curiously battleship-like names of some of the obsolete London telephone exchanges. These included Dreadnought, Frobisher, Hunter, Imperial, Monarch and Reliance. An additional small computer system interacted with the information providers, and updated the distributed computers serving customers.

This was I think a wise decision, as the initial system was completed on time and budget, and could be rolled out to other cities incrementally. The only drawback was that the updating was not instantaneous, so the system did not lend itself to split-second information such as share prices for stockbrokers.

On the question of charging we adopted a completely flexible approach. Each information provider could fix the price per view for each of its pages - ranging from free to perhaps £1 in today's (2019) money. Our system tracked page views, collected the money from customers through their phone bills, and passed on the proceeds (minus I think a modest percentage) to each information provider. This free market approach gave choice to the customer, and avoided arguments we might otherwise have had with information providers.

The question of what our commercial viewdata system should be called was given careful thought. Because the term Viewdata was becoming well known, some thought that we should simply call the system Viewdata. But because that word was in common use to describe this type of system it was not proprietary or protectable. To build a commercial brand we had to choose a new name.

I undertook this process personally, compiling a long list of simple words which had appropriate connotations. We then subjected a short list to professional checking for availability and protection worldwide - and to ensure that the word does not mean something rude in a foreign language. The winner in this exercise was Prestel. Pre had connotations of press, presentation, press button, prestige and premium. Tel had the telecomms connotation.

It was pleasing to me that this word we had invented would end up in 1982 on a British postage stamp commemorating information technology.



Prestel appears on a postage stamp.

We commissioned the leading design agency Pentagram to design a house style to be used in all our promotional material. Their partner Mervyn Kurlansky produced an elegant diamond shaped logo, inspired by the way in which the letters on the Prestel screen appeared in rich glowing colours against a black background.



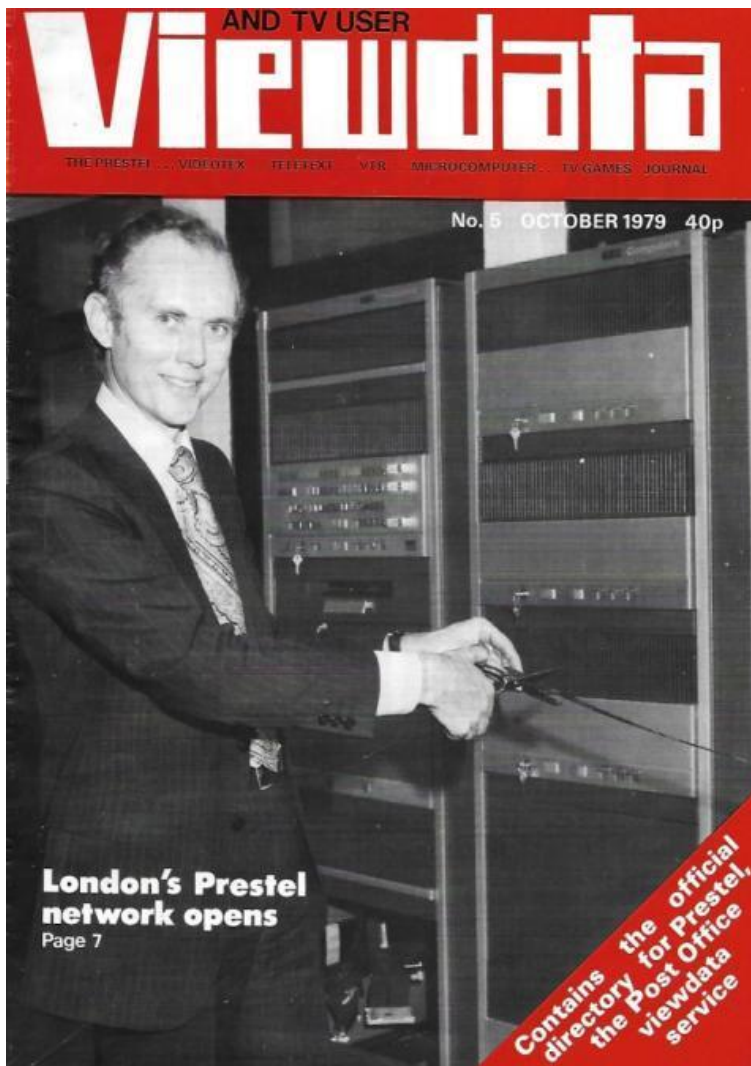
Prestel logo designed by Mervyn Kurlansky of Pentagram.

By the time our launch approached in early 1980, there were hundreds of firms actively involved in the project, including numerous manufacturers and retailers of TV sets, and many information providers.

These included prominent publishers such Reuters, the Financial Times, and Exchange and Mart. Also leading bookmakers and travel agents.



An example of a Prestel page. Crude, but did the job.



I appear to be cutting a vital wire but am actually cutting an inaugural ribbon.

fruitful field for speculation. Another fascinating prospect is the use of the computer by clubs, societies and even households, which must rent part of the computer's capacity to use it. Their own private use, too, is information processing, and this has many applications. In a longer term it is likely that the computer will be made "intelligent" by the addition of a computer ethics module, which will enable it to sit in the size of a postage stamp. By this time, slavin devices to tape recorders and printers could be used in conjunction with the video system. The television set would then be converted into a quite compact computer terminal for games, map instruction, business use and applications as Invention 10. The basic data bank, then, would be provided down telephone lines from the video computer memories. These possibilities are likely to be extended by the advent of the Post Office's Videotext system, which will be the first of the new services. The current Post Office has already started to buy the system for a sophisticated terminal, and the Australia Air Force is likely to be the first to use it. France, which is developing a different system, is also looking at ways to make it compatible with a European network.

Mr. Peter Benton, head of the Office of Communications of the Post Office, says that a substantial amount of foreign revenue. Some of the revenue from the system will not come from the sale of new sets (computer programs) and

viewing the information provider will pay an annual fee of £250 plus £1 for each frame of 960 characters (about two paragraphs) stored in the computer for a year.

The information providers range from companies and national agencies to consumer advice or public service groups. Some of the information will be of use to any subscriber who

will be available for those readers to send messages to the computer, or to other subscribers.

Videotext receivers will also be able to display pages of text transmitted by the BBC and the independent network on the television screen. These services, called Ceefax and Oranix, are free of charge

investments will allow access to 800,000 pages to be stored, with an eventual capacity running into millions of pages. Total investment up to 1985 could be £10m, but the service is expected to be profitable.

The quickest pace of development stems, in part at least, from a realization that British companies must be

the business community, which it sees as the main users of the system in the first year, says Mr. Stone. However, he provides a frequently updated list of the many companies which are planning to produce satellite systems.

Mr. Stone also expected that business services will cost yards of 100p, plus 10p of their value, while most of the information directed at individual households will either be free or priced at a few pence per page. One interesting project aimed at the ordinary consumer is an expenditure diary, which will be priced at 65,000. The diary will be provided by the British Printing Corporation.

One of the greatest unknowns is the effect which Videotext and Teletext will have on advertising.

Television advertising, which amounts to 10 per cent of total expenditure, could be cut in half if viewers could skip through the teletext pages. Videotext, however, could present a direct threat to classified advertising, which is the mainstay of many advertising expenditure and a vital part of the income of many newspapers, particularly the provincial Press. Viewers could skip through what is almost certain to be a cheap way of selling one item after another, and it may prove to be more efficient.

Mr. Kenneth consultants estimate that by 1985 more than half of television advertising delivered will have teletext decoders. It is probable that the television industry will be forced to make provision for an optional planar Viewcom conversion system.

An extra boost to the Viewcom system may come from the interesting communications services which the system can be stored if

Prestel generated great public interest, with many articles, including special supplements, in the Guardian, the Financial Times, and other newspapers. I was asked to demonstrate Prestel to the American press magnate Walter Annenberg, who had been ambassador to the UK. He drew up outside my office in a brown Rolls Royce. I was also asked to demonstrate Prestel to the Queen Mother, and to Prince Philip at Buckingham Palace.

[illegible]

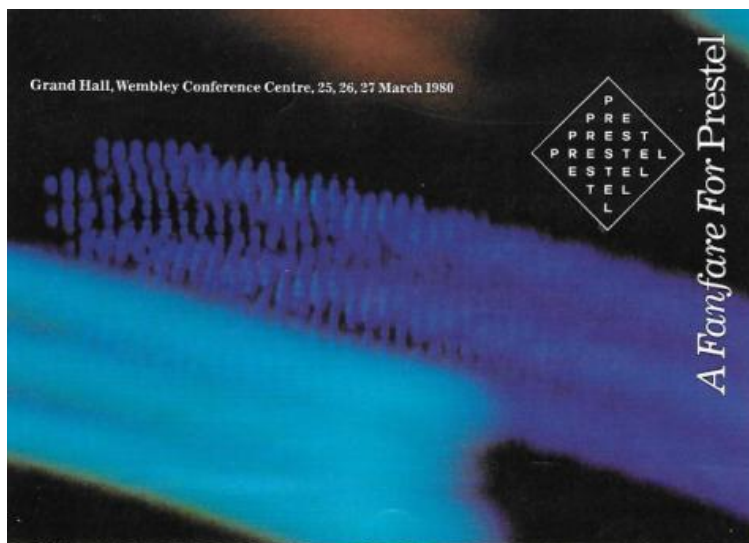
126

A trade exhibition firm had organised a show at the Wembley conference centre in March 1980 to promote Prestel to the trade and the public. They had no plans to use the central auditorium, which seats 1500. I decided that we should take it over for the three evenings of the event, and put on an hour long show called Fanfare for Prestel, which would be free to the public.

I had a meeting with Peter Benton and the then Director of Public Relations of British Telecom to seek approval for this event. I explained that the centrepiece would be a live demonstration of Prestel, in which I would tap out the numeric page addresses with my feet, while walking on a specially-constructed giant keypad. The pages would appear on a large overhead screen, the whole contraption being wired through to our computers at Martlesham.

I also explained that we planned a short film about Prestel, starring the then popular comedian Leonard Rossiter, and that we would be giving away a Prestel set each evening to the person with the lucky ticket.

When I had finished my exposition, Peter Benton turned to the Director of Public Relations, and asked his view. He said: 'MD (we called Benton MD), I have two objections to Alex's proposal. Firstly, I do not think anyone will come. Secondly, in the unlikely event that they do come, I do not think they will enjoy it'. I suspect he took this view because long experience of handling public relations at the Post Office had taught him that all press coverage of the Post Office was adverse, and that it was best to keep a low profile.



Pentagram designed the invitation leaflet for Fanfare for Prestel. The coloured blurs are enlargements of text on the screen of a Prestel set.

Adding to my gloom, Benton said that he too had an objection. He said that an event of this kind needed trumpeters, and that I did not seem to have included any. Relieved, I asked how many trumpeters he had in mind, and of what kind. He said four would do, and that he had a contact at the regiment in which he had done his National Service who could provide them. With the addition of trumpeters, he gave us the green light.

The event was well attended, with a pretty full house on each evening. The trumpeters performed, as did a jazz group called The Prestellies made up of Prestel staff. People seemed to enjoy themselves, and there were no complaints; but since it was free there was not much scope for complaint.

Key to our success was the role of Richard Hooper. An ex-BBC Open University TV producer, he was running the Prestel operations of one of the large information providers (Mills & Allen). He kindly agreed to act as producer, and controlled the proceedings very professionally from a glass box at the back of the auditorium. He later took over from me as Director of Prestel at British Telecom.

The computing and telecoms worked well, with no hitches. I learned later that my team, in order that I should not be let down, had throughout the proceedings stationed engineers at every critical point in the network between Wembley and Martlesham.

Peter Benton introduced the event each evening. His opening remarks were:

I am delighted that you could join us at 'A Fanfare for Prestel'. It is something of a celebration, and I believe we have plenty to celebrate. Since the decision in February 1978 to launch a public Prestel service, we have:

- Developed the software and hardware for the world's largest computerised information service.*
- Installed it as a fully operating system, with the associated computers, telecommunications plant, and staff.*
- Developed, with the TV set and telecommunications industries, a comprehensive range of Prestel sets which solve, for the first time, the problems of connecting TV sets directly to the telephone network.*
- Assembled, with the Information Providers, the only database in the world which is sufficiently broad in scope, and lively in presentation, to appeal to the general public as well as to the business user.*

But this is only the beginning. For Prestel, success depends on growth. All the parties who have invested in Prestel (chip makers, set makers, set distributors, Post Office, and Information Providers) need rapid growth in the number of Prestel users.

We need tens of thousands in 1980, and millions during the 1980s. For, as with other electronic products, volume production is the key to cheapness - which is the key to mass demand; and a big market will encourage the provision of a large, varied and topical database. Success will breed success.

In the event, the growth of Prestel did not live up to these expectations. In the early 1980s electronics were still expensive, and the costs of Prestel (both the Prestel TV set and the phone calls for use) were a serious deterrent. Also the use of the TV set meant that a family member who wanted to use Prestel might have to interrupt the TV viewing of another family member.

Some business sectors, particularly the travel industry, took up Prestel on a substantial scale, with the number of Prestel sets in use peaking at about 90,000. But Prestel never took off as a consumer product. The personal computer, which soon arrived on the scene, proved a more powerful and convenient way of receiving electronic information in the home. And British Telecom did benefit financially from the additional traffic that personal computers brought to its phone network. So all was not lost.



Prestel terminal as used by travel agents

Some suggest that the French Minitel (a small viewdata terminal originally intended mainly for looking up phone numbers) is a successful contrast to the Prestel failure. I am not so sure. Millions of Minitel sets were given away free by the French government, whereas Prestel was always designed to pay its way. This huge giveaway did, I think, distort the French market in an adverse way. Because the crude Minitel terminals were given away free, they repressed demand in France for much more capable personal computers. Partly for this reason, and partly through the efforts of Sinclair, Acorn, and the BBC, personal computers (which were the way of the future) took off more quickly in the UK than in France.

Business Systems

In a process known I believe as 'failing upward', I was promoted from Director of Prestel to Director of Business Systems, retaining responsibility for Prestel, but also taking on responsibility for data communications (including Telex) and mobile communications. My main recollection of this period concerns mobile communications. These were the early days when, due to their power requirements, all mobile phones were installed in vehicles. I did sometimes carry one around for demonstration purposes; it was the size and weight of a very large brick.

Due to frequency constraints, there was a total of only about 2,000 mobile phone numbers in the UK. They were like gold dust, and one of the few privileges of the Chairman of British Telecom was that he could decide who got the numbers that became available when people died. My colleague responsible for the mobile phone

service explained to me (only partly in jest) that our customer base fell into three segments: millionaires (because the phones were hideously expensive to use), criminals (because the phones were useful for coordinating robberies), and friends of the Chairman.



Much bigger than a smartphone

I remember getting word one day from the Chairman's office that a leading industrialist, Sir Hector Laing, had complained to the Chairman about the malfunctioning of the mobile phone in the Bentley provided to him by his company, United Biscuits. Laing was a good friend of Margaret Thatcher (then Prime Minister) and made it clear that if his mobile phone was not promptly fixed he would complain to the Prime Minister, in whose hands the Chairman's career prospects lay.

I swiftly made an appointment to meet with Sir Hector in his lavish company flat in Kensington Gore. I had hoped that I would be accompanied by my colleague who ran the mobile phone business and knew all about it. He explained that he could not face Sir Hector Laing, with whom I think he had had traumatic exchanges over the years. When I expressed surprise that he found Sir Hector so alarming, he clinched his argument by saying that on that particular day he would have no false teeth, as they would be under repair. Perhaps he was afraid Sir Hector would bite him, and that he would not be able to bite back. I accepted his improbable excuse, and went alone.

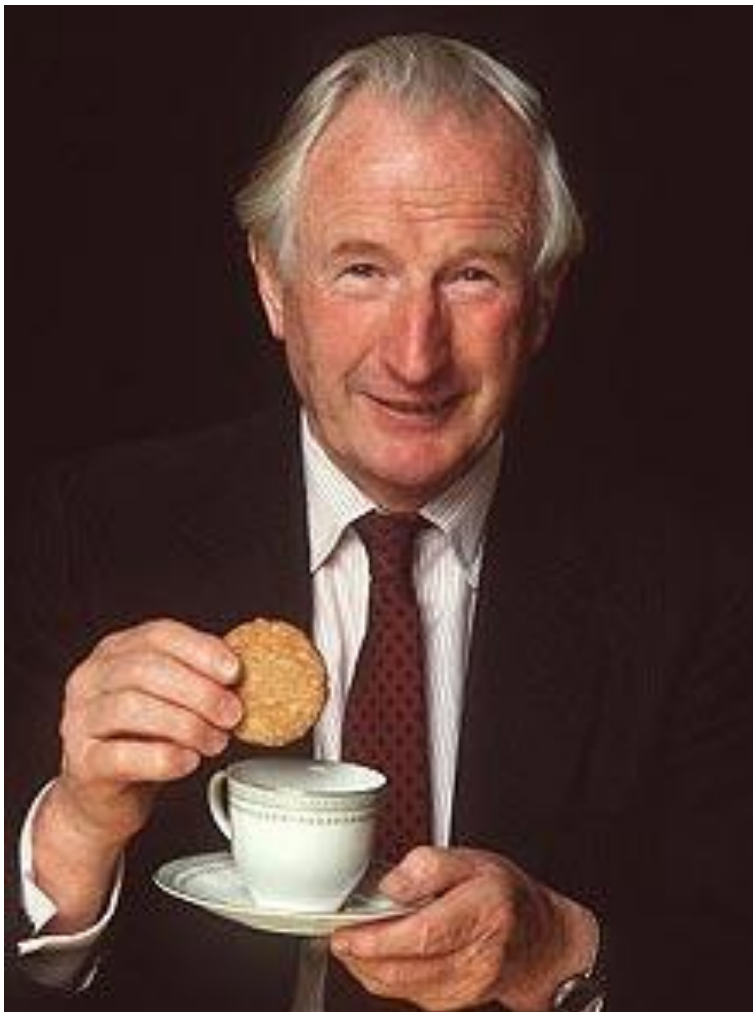
Although a humble employee of British Telecom I was greeted by Lady Laing with elaborate courtesy. She explained that Sir Hector had been delayed, and would join us shortly. She sat me in her drawing room and offered me tea on fine china. I was not expecting such a welcome, but I think Lady Laing was used only to entertaining important persons.

After a considerable delay there was a knock at the distant front door of the flat, which evidently opened to admit Sir Hector. At this stage he could be heard and not seen. There was a sound of huffing and puffing and grunting as he made his way down the corridor. He then burst into the drawing room bent double, with his arms outstretched in front of him as if in pain.

It emerged that he was indeed in pain, having done his back in during a courtesy flight that morning in an RAF Lightning jet fighter (perhaps arranged as a treat by Margaret Thatcher). Lady Laing leapt to her feet in alarm, grasped his hands, and steered him, like a supermarket trolley, to an armchair into which he collapsed with a gasp.

I had decided to approach the interview not as a supplicant or apologist but with the bedside manner of a consultant physician. His circumstances suited this plan perfectly.

I sat beside him with my notebook and plied him with questions - which meant nothing to me but might help my colleagues sort out the vagaries of wireless transmission to which these early mobile phones were prone.



Sir Hector (later Lord) Laing in happier times enjoying a cup of tea - with of course a biscuit.

It turned out that his mobile phone had a fault which he found infuriating. He explained that he could hear perfectly the words of his subordinates running his

biscuit factories, but they could not hear a word he said. I do not think he would have minded if it had been the other way round.

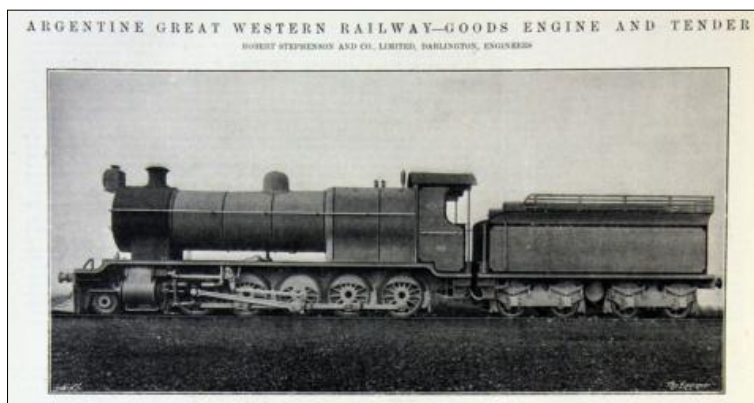
Some to whom I have told this story suggest that his subordinates could actually hear fine but were pretending not to. We shall never know.

I asked if the problems occurred at a particular time of day. Or in particular weather. Or in particular places. Or if there were particular phone numbers which he found it difficult to reach. Or if the problem was more severe when his Bentley was travelling fast. I noted down his answers meticulously.

I think Sir Hector's mobile phone gradually improved not through any action on our part but as a result of the general worldwide advance in mobile communications. At any rate he seemed pleased that someone had listened carefully to his concerns.

Value Added Services

My responsibilities were expanded to include new 'value added services'. These are specialist services which ride on the phone network, their aim being to expand British Telecom's business, and increase usage of its network.



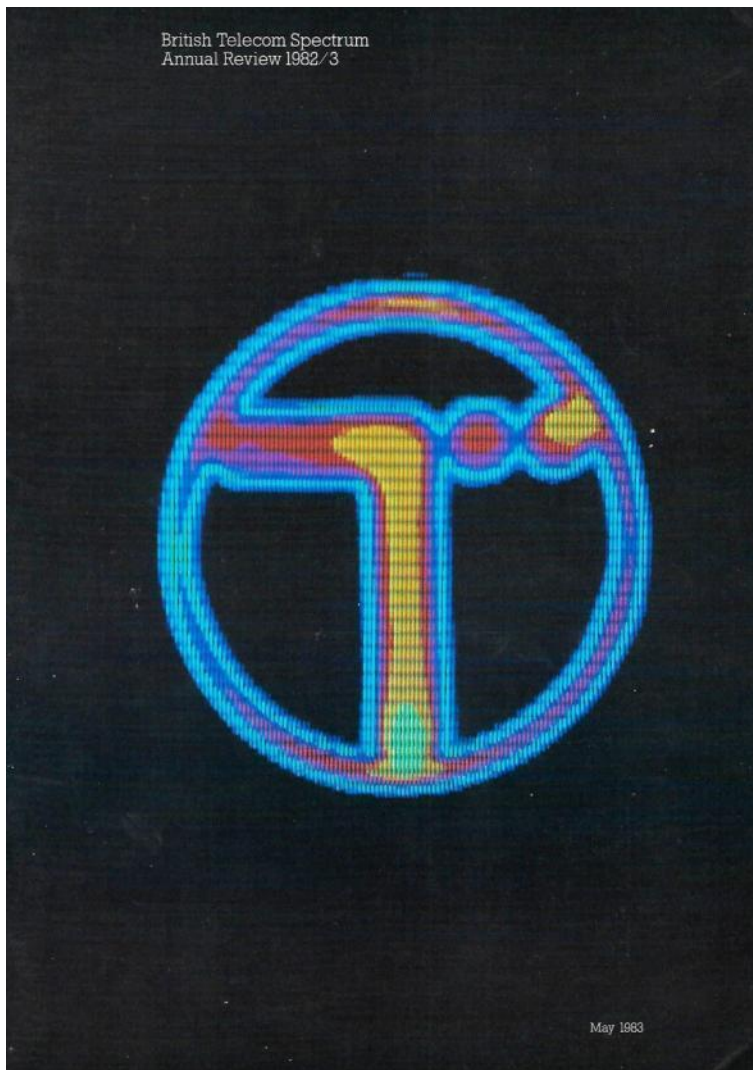
A goods engine and tender of the Argentine Great Western Railway. Manufactured by Robert Stephenson

I managed these innovative services from the incongruous surroundings of River Plate House in Finsbury Circus. Now taken over by British Telecom, the building had been built for the Argentine Great Western Railway Company - which built British-owned railways in South America in the late 19th century.

My office, originally that of the Managing Director of the Argentine Great Western Railway Company, was a huge panelled room with several tall sash windows and an open fireplace. The River Plate, after which the building was named, forms the border between Argentina and Uruguay. I was amused to reflect on the room's evolution from steam engines to digital services.

I am reminded of an anecdote of my daughter Anna. During a brief spell working in the Cabinet Office, she was asked to a meeting with the Minister in his enormous and ornate Victorian office in Whitehall. He explained how he was turning Government into a lean modern machine, humming with computers. He was annoyed to be interrupted by a knock on the door, which was opened by an elderly man in overalls carrying a step ladder. Asked what his business was, the man

explained that he needed immediate access in order to wind up the ancient Ministerial wall clock over the fireplace. Which he proceeded to climb up his step ladder to do. He explained that this was his full time job because there were hundreds of such clocks throughout Whitehall which needed frequent winding up.



The stylish black Spectrum annual report, designed by James Sutton.

By May 1983 our portfolio of value added services had become substantial. Our annual review booklet described the following:

Radio Paging. Led by Trevor Harvey.

Radiophone. Led by Michael Vadon.

Telecom Gold electronic mail. Led by John Morris.

Telecom Violet teleconferencing. Led by Peter Duschinsky.

Telecom Tan answering services. Led by David Jones.

Telecom Telemarketing. Led by Robert Leiderman.

Telecom Red alarm systems. Led by Kim Warwick-Oliver.

Telecom Silver online credit card systems. Led by Terry Walton.

Talkabout telephone chatline. Led by Sian Roberts.

Cable Interactive Services. Led by Ederyn Williams.

Some of these managers were recruited from within British Telecom, but most were brought in from outside. The most unusual CV was that of Robert Leiderman which included a spell as a 'singer, dancer and mover on Broadway'. I asked what a 'mover' was, and he explained that it is the most junior category of performer in a Broadway musical. Movers sway about at the back of the stage, without their feet leaving the ground.

One of those brought in from outside was Sian Roberts, who joined British Telecom after a master's degree at the London Business School. This how we met, and five years later she became my wife.

During my time at River Plate House I was visited by an American academic whose special subject was corporate venturing. He asked me lots of questions about our start-up businesses, making careful notes. At the end of the interview he explained that he had studied dozens of examples of corporate venturing from around the world, and assured me that what we were doing was indeed corporate venturing. As he left I thought I should take advantage of his expertise, and asked him if he had come to any conclusions as to how to succeed in corporate venturing.

He said that his research had led him to the conclusion that corporate venturing is doomed to fail. This was a bit of a downer. He explained that all corporate venturing fails for one of three reasons.

One possible outcome is that the member of the Board who is keen on corporate venturing retires or leaves, and there is no one else to pick up the baton.

A second possible outcome is that the person running the corporate venturing leaves (because he thinks he can earn more elsewhere) and it all collapses.

A third possible outcome is that everybody engaged in the corporate venturing leaves (because they think they can earn more elsewhere) and it all collapses.

Is there no escape, I asked him, from this trinity of doom? Why, for example, can the company not offer the corporate venturing people more money, to discourage them from leaving? 'Oh', he said, 'that can't be done because paying those people more would upset and de-motivate the people running the boring old core business. And that cannot be risked because the core business is the most important thing.'

He closed his notebook and left. A few months later I bore out his theory by leaving British Telecom.

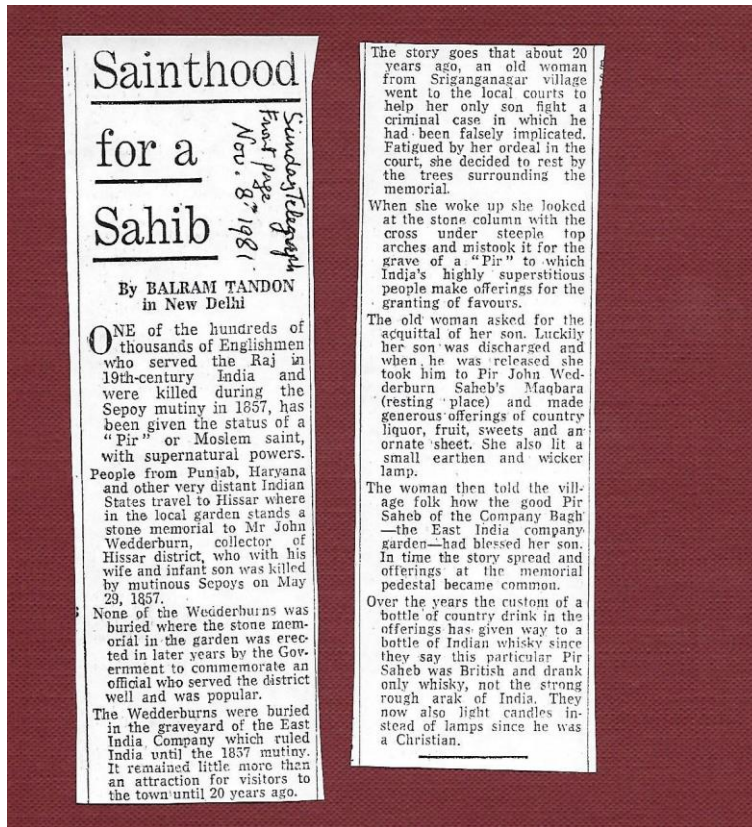
There followed ten years of adventure in the world of business. I set up a venture capital firm, Octagon Investment Management Ltd, specialising in start-ups in the information sector.

Alongside this, I undertook two company rescues as a company doctor - Acorn Computer Group and DEGW.

A curious footnote

Towards the end of my time at British Telecom my daughter Anna, then 16, was keen to open a bank account. She had somehow conceived the idea that Coutts Bank

would be more interesting than the Midland Bank, which was the one we used. So to indulge her I wrote to Coutts Bank asking if I could open an account for her. I expected to be embraced warmly, as it was a time when banks were keen to attract customers, even presenting them with welcome gifts such as fountain pens or wallets. Coutts, however, replied with a polite but frosty letter (on heavily engraved notepaper) saying they would be happy to entertain my request, but would first need details of my financial circumstances and family background.



In my reply I was able to explain my financial circumstances quickly, as my finances were minimal. On the question of family background, I explained that they need have no concerns, as I was descended from a saint with supernatural powers. I enclosed a copy of a clipping from the Sunday Telegraph of 8.11.1981, which my mother had sent me a few days before. It reported that my ancestor John Wedderburn, who was killed in a mutiny in India in 1857, was now being worshipped as a saint.

Twenty years earlier an elderly woman had mistaken his grave stone in the Hissar district of India for that of a saint, and had left an offering there on her way to intercede for her son, who was standing trial for a criminal offence. Her son was acquitted, word spread, and soon pilgrims seeking intercession came from far and wide to leave offerings (including bottles of whisky) at his grave. Coutts replied saying they would be happy for us to open an account, which we did.

15. Octagon

What triggered my move from British Telecom was an advertisement I saw seeking investors in a Business Expansion Scheme Fund. The Business Expansion Scheme had been recently launched by the Government as an incentive to individuals to invest in small start-up companies. The investments, of up to £40,000 a year for each individual investor, could be offset against income tax. The top rate of income tax at the time was 75%, so a £40,000 investment actually only cost the investor £10,000. A very attractive proposition!

It was apparent that investors would have difficulty finding and evaluating firms in which to invest. Also investors might prefer to spread their risk among several investments.

This gave rise to the creation of professionally managed Business Expansion Scheme Funds, with professional fund managers selecting several investee companies for each fund, and spreading the investors' money between them.

The normal terms of such funds were that the fund manager could charge fees to the investors and to the investee companies. The fund manager could also negotiate options to buy a limited amount of shares in the company at an advantageous price at a future date.

It seemed an interesting proposition to set up Business Expansion Scheme Funds, specialising in information technology, on this basis.

I was introduced to a leading stockbroker, Hoare Govett, who agreed to launch such funds on a joint venture basis, and we went ahead.

Hoare Govett promoted the funds to their clients, and we also took out newspaper advertisements.

Finding good investments was more problematic, for two reasons. Firstly, this type of investment imposed considerable restrictions on the investee company. Those companies with the strongest case tended therefore to get their money from established venture capital firms, who did not need to impose such restrictions. This meant those companies seeking Business Expansion Scheme money tended to be those that had failed to raise investment from conventional sources. Secondly, in order to obtain tax relief for investors the money had to be raised, and the investment made, within a single tax year. This produced huge pressure to invest quickly, which is the enemy of wise investment.

I rented a small office in a building in St.James's Street, which has been demolished and re-built on a grander scale. My financial mentor Nicky Branch described the neighbourhood as 'fruity', in contrast to the more austere Holborn area in which he had his own office. I furnished it with architecturally admired Action Office furniture from Hermann Miller.



Herman Miller Action Office furniture

This is expensive new, but I discovered that Hermann Miller had a huge warehouse of used furniture near Bristol. When I rang them they said they could supply everything we wanted, provided it was green. So green it was.

I recruited as co-directors of Octagon two extremely capable former colleagues: Christopher Rowlands and Ian Barton.



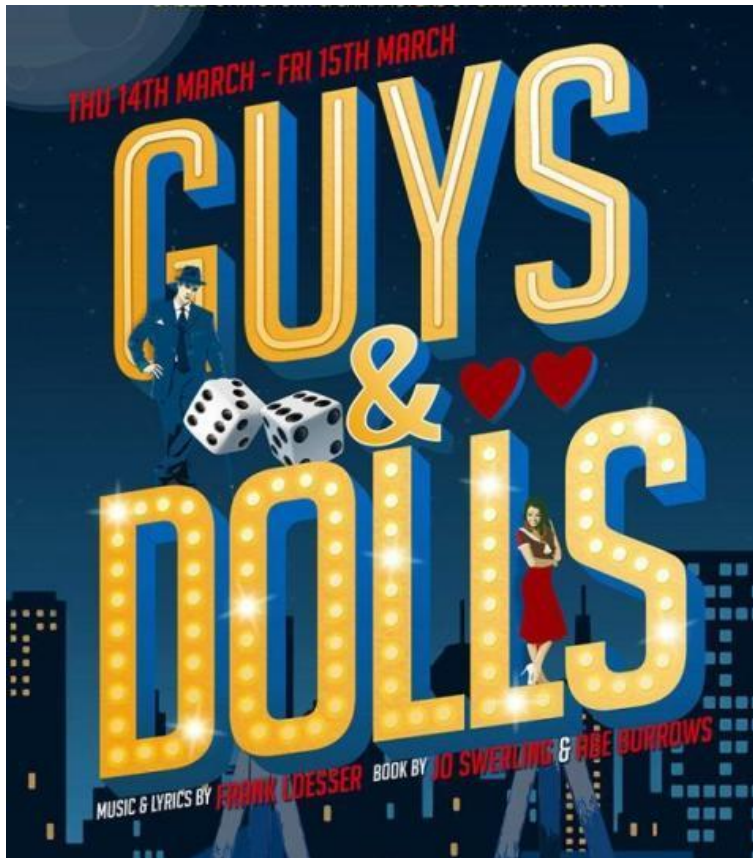
An example of our Octagon newsletter.

We raised several annual Business Expansion Scheme Funds investing in about ten small companies a year. For the first couple of years things went well and hopes were high. We organised cheerful monthly meetings at the Oxford & Cambridge Club for the investees, one of whom would speak about their business.

We also organised a special event for investors and investees comprising a 'staircase party' at our St.James's Street office (which was very small on the fourth floor but with lots of staircase) and walking in a crocodile, led by a kilted piper, to Piccadilly Circus to enjoy a performance of the musical Guys & Dolls (one of my favourites).

Our secretary Clare Condon worried that we should get police permission for the pedestrian expedition. So we contacted the local police who said it would be alright if we straggled, and did not move as a packed mass. I am not sure if they were worried about congestion or revolution.

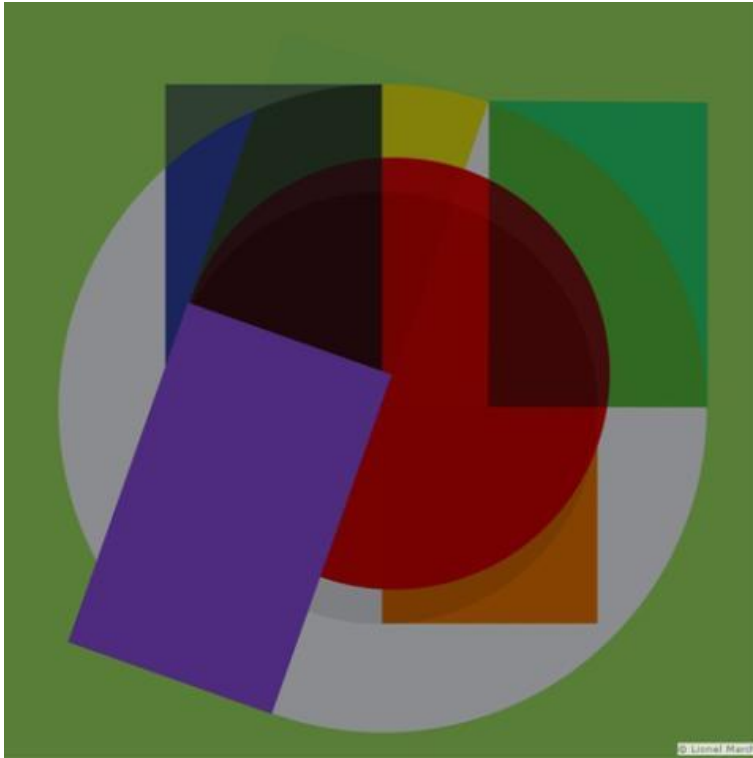
Of the thirty or so start-ups in which we invested many failed. Some survived, and only a very few returned significant profit to the investors.



Other ventures in which Octagon engaged were a turnaround unit, led by Geoff Bristow, formerly of Texas Instruments, and an information technology services unit led by Kip Meek, formerly of McKinsey. A key figure in the latter was John Hunter, who helped large organisations to track and manage their telecommunications expenditure.

16. Royal College of Art

During my time at Octagon I was invited to join the Council (the governing body) of the Royal College of Art in Kensington Gore. I believe I was nominated by the newly arrived Rector (chief executive), Lionel March.



Paladin Septet 5 by Lionel March.

He was somebody I knew from the Cambridge University School of Architecture, where he was a researcher while I was an undergraduate. He was a mathematician fascinated by the geometry of buildings and the space between them. He was also an accomplished abstract artist. It was a fascinating experience, as the RCA is an extraordinarily creative place, drawing very talented postgraduate students from all over the world. Walking through the studios was an almost overwhelming sensory experience, and the annual degree show displayed an abundance of innovative and interesting work - in product design, graphics, fashion, textiles, jewellery, vehicle design, and photography.





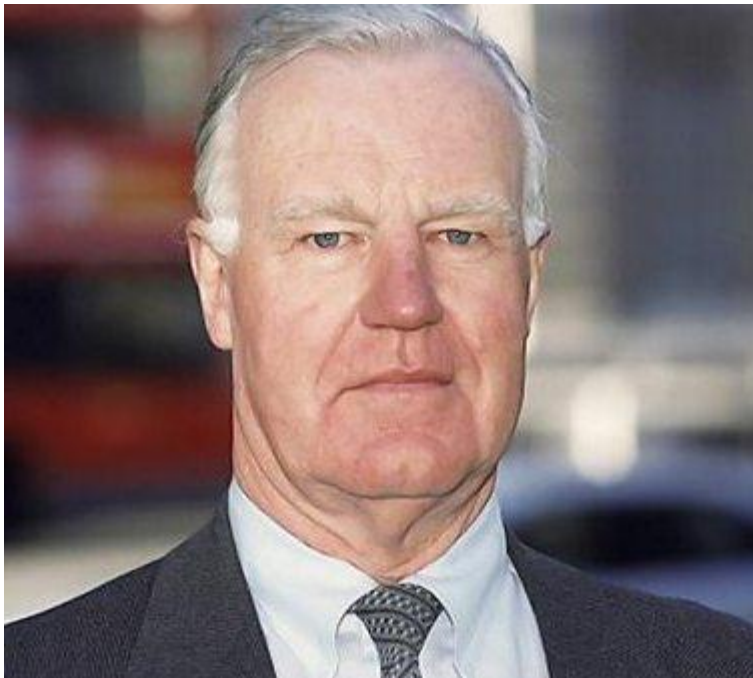
The Royal College of Art, beside the Royal Albert Hall

I was appointed as chairman of the Buildings Committee, and then as Chairman of the overall Council. By this time Lionel March had left for the University College of Los Angeles, and had been replaced by Jocelyn Stevens. Stevens, a former magazine and newspaper publisher, was a force of nature difficult to contain.

He had been public schools boxing champion, and did his National Service in the Guards. A tall and strongly built man with a prominent jaw, he could be very charming, even inspirational. But he could also be extremely angry and headstrong.

I was very impressed, when Stevens first arrived, that he took the trouble to explore every corner of the RCA, including the basement, meeting the staff at all levels, asking them about their work and how he could help. For the first few years he was, I think, very effective. He breathed new life into several departments by bringing in capable new staff. And he was successful in getting money out of government. But after holding the post for several years he became increasingly unrestrained.

At one committee meeting I was chairing he got so angry with another committee member that his target collapsed onto the table, and had to be taken out and revived. And I was increasingly approached (furtively) by senior staff expressing their acute concern at his behaviour. I came to the view that it was time for him to move on. But the Council did not share that view, and I stepped down as Chairman. Shortly thereafter Stevens did indeed depart.



Jocelyn Stevens

One of my strangest memories of the RCA was of being called upon at very short notice to give a speech to the hundreds of graduating students and their families in the Royal Albert Hall. With no time to prepare, I fell back on reading out alphabetically the long list of countries from which the students had come, pausing for applause after each. This filled the time.



On ceremonial occasions the officers of the Royal College of Art would dress up. The costumes had been designed in the 1950s by the Fashion Department.

17. Acorn



While with Octagon I was invited to join as a non-executive the board of Acorn Computer Group.

This was a highly successful technology start-up based in Cambridge. It was founded in 1978 by Hermann Hauser (an Austrian who had come to Cambridge to do his PhD in the Cavendish Laboratory) and Christopher Curry, who had previously worked for electronics entrepreneur Clive Sinclair.

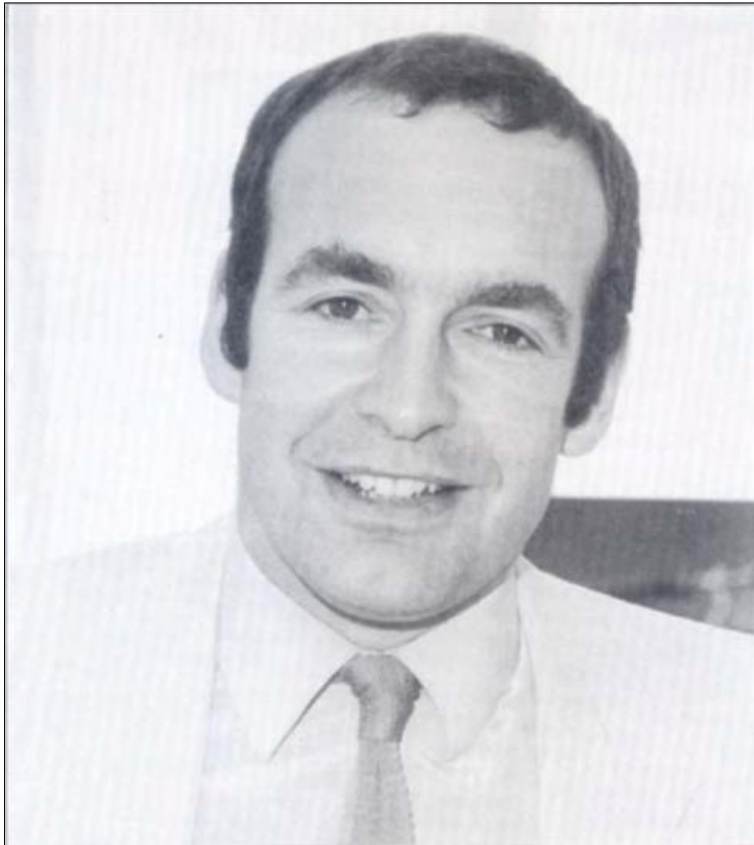
I had come to know Hauser personally, as we both lived in Cambridge and used to play squash together.

Both are remarkable people. Hauser for his technical brilliance and infectious enthusiasm. Curry for his determination, drive and enterprise.



Hermann Hauser

Acorn had experienced phenomenal growth through the success of the BBC Micro computer - which was launched in 1981 and was linked by the BBC to a series of TV programmes promoting the use of computers in the home.



Chris Curry



In 1983, while both the founders were in their thirties, Acorn floated on the Stock Exchange with a valuation of £135m (£430m in 2019 money). Hauser and Curry each owned nearly half the company, so became very wealthy.

Within a year of my joining the board of Acorn, disaster struck. Responding to widespread criticism that it was not producing its computers fast enough to meet demand, Acorn placed enormous orders with their suppliers in the run-up to Christmas 1984. But an upsurge of competition from cheaper products, and a degree

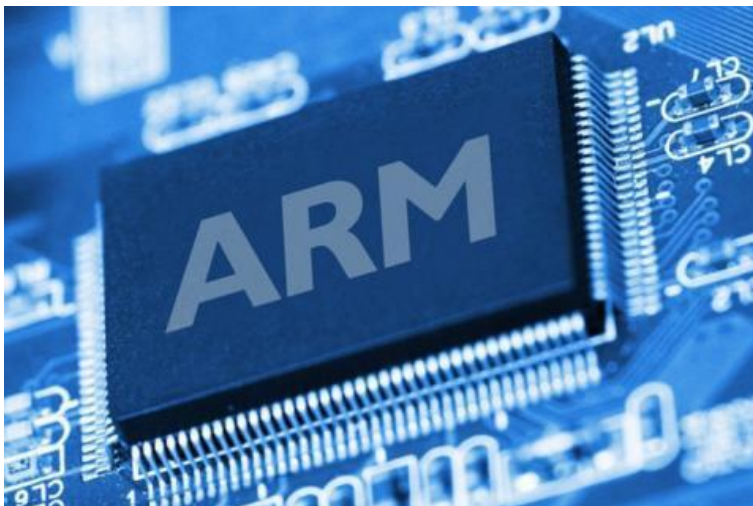
of market saturation, produced a sudden collapse in demand. Acorn was forced to take delivery of thousands of computers which it could not sell, and it did not have the money to pay for them. Compounding this, large retailers started sending back to Acorn computers of which they had already taken delivery. Our black humour joke was that the only reason these could be fitted into Acorn's warehouse was that the stacks of returned computers were so high that the lower packages were squashed flat.

Suddenly Acorn turned from being a headline-grabbing success story to standing on the brink of bankruptcy.

It was all hands to the pump to save the company. I volunteered to switch from non-executive director to chairman, to steer a rescue. We took on an extremely energetic merchant bank, Close Brothers, who devised a rescue plan. This involved persuading our manufacturer creditors (to whom Acorn owed tens of millions of pounds) to defer these payments, and persuading Olivetti (a former leading manufacturer of typewriters, moving into computers) to invest £12m to buy 49% of the company. The transaction was completed at 2.30am on 20th February 1985.

In order to effect this rescue we had to maintain the confidence of our bank, Barclays, and persuade them that we taking steps to get back into profit. This sadly involved reducing the staff over a period of weeks from about 500 to about 250. Other drastic actions included selling all the company cars (including a Jaguar and a Porsche) to raise cash.

This rescue proved to be insufficient, as Acorn could not bear the weight of the deferred creditor claims it was facing. A second rescue had to be organised, A further investment by Olivetti increased their shareholding to 79% and the creditors had to accept substantial write-offs. On completion of that second rescue I stepped down from the board, and was replaced as chairman by an Olivetti nominee.



An ARM chip.

Acorn subsequently experienced an extraordinary renaissance through the development of its RISC (reduced instruction set chip). This was used through the 1980s in Acorn's Archimedes computer. In 1990 Acorn formed a joint venture with Apple Computer and VLSI Technology, to develop and market the Acorn RISC

chip. The joint venture was called Advanced RISC Machines Ltd, later shortened to ARM. The company prospered, based on an intellectual property model, where ARM undertook no manufacturing, but licensed its technology to competing chip makers around the world.

ARM was floated on the London Stock Exchange in 1998 with a valuation of £280m. By 2012 its valuation had risen to £13 billion. And in 2016 ARM was taken over by Japanese technology conglomerate SoftBank for £24 billion.

A curious footnote

During my time with Acorn we were living in London, but I was spending most of my time in Cambridge, hospitably accommodated by Hermann Hauser and Chris Curry. Hermann has a large comfortable house in Cambridge. Chris had, more adventurously, bought Croxton Park outside Cambridge. It is a stately home, complete with grand staircase, long corridors, a walled garden, a lake of I think 40 acres, and extensive parkland. The previous elderly owner, Lady Fox, enjoyed reading under a tree a couple of hundred yards from the house. She had arranged for an electric wire to be hung between trees to her reading spot, where there was a push button operating a bell in the butler's pantry. When she wanted a cup of tea she would activate the bell, possibly using some kind of code to signal whether she also wanted a scone. Beech the butler would make his way across the parkland carrying a tray.

An incident sticks in the mind from one evening I spent with Chris Curry. After work he invited me to join him at Panos' Greek restaurant near the Cambridge station roundabout. We were to entertain the Archbishop of Cyprus, who was a key target customer for our educational computers - as the Greek Orthodox Church ran most of the schools in Cyprus. He had been introduced to Chris by Panos' brother-in-law, who was well connected in Cyprus. Said brother-in-law duly arrived at the restaurant with Archbishop in tow. The Archbishop was over six feet tall, heavily built, and with an enormous beard. He smiled and shook hands but said nothing. We sat down to a multi-course meal, during which the Archbishop continued to smile but say nothing. After about an hour there was a lull in the conversation, and to our surprise the Archbishop spoke. He said 'Woman is like a water melon'. We tried to draw him out on this new topic of conversation but, continuing to smile, he said nothing more for the rest of the evening.

18. Alert Publications

After my time with Acorn, the activities at Octagon were winding down, and my services were no longer needed. I embarked on an entrepreneurial venture, setting up a subscription newsletter, distributed by broadcast fax, called Telecom Alert.



An example of a Telecom Alert fax bulletin.

It gained a roster of large companies as customers including many of the UK's leading telecoms companies. I wrote the content myself, summarising news items from newspapers and trade journals.

Our slogan was 'The World on a Page', and the idea was that reading this single page would be a time-saving way for subscribers to keep up with developments in their particular industry.

The concept was expanded to a range of 53 newsletters produced by partnering organisations and individuals, the income being split with the partner. The page below is from the brochure describing all the 53 titles. Partner organisations included the leading law firm Clifford Chance, and the accountants Touche Ross. Some of the titles were very specialist, for example Construction Risk Alert, Chromium & Nickel Alert, and Salt & Soda Alert.

Alert Publications: The World on a Page

No Risk Guarantee! Please fax orders to Alert Publications on +44 71 833 9251 (tel +44 71 239 7764). If you cancel during the first 6 weeks of service, your order is void and you owe us nothing.



Aviation & Space Titles

The first two titles in our *Aviation & Space* list cover helicopters - civil and military. They are written by international experts, each of whom has many years of senior management experience in helicopter operations.

Civil Helicopter Alert by Robin Keith & Nick Boyd
Development, sale, and operation of civilian helicopters, offshore & onshore. Air incidents, avionics, and training. 25 issues, £95 p.a. Ref C1HE.

Military Helicopter Alert by Keith Reid
Development, sale, and operation of military helicopters & tilt-rotor aircraft. Airframes, engines, avionics, air incidents, training. 50 issues, £190 p.a. Ref M1HE.

Computing & Telecomms Titles

Our 31 titles in this sector give a uniquely comprehensive and authoritative coverage. Two **Special Titles** - *Computer Alert* and *Telecom Alert* - are published 100 times a year and cost £380 per annum. *Telecom Alert* is also available as an online database. Our other titles are produced weekly or fortnightly, priced at £190 and £95 per annum.

Of our four **Policy** titles, two, edited by the leading law firm Clifford Chance, cover *Computer Law* and *Telecom Regulation*. Touche Ross produces a related title on *Information Protection*, and Osium produces a title on *Telecom Policy*, covering numbering & interconnection.

Network Services are covered by ten titles on *Broadband Switching*, *Computer Network*, *EDI*, *Global Network*, *ISDN*, *LAN*, *Network Ventures*, *Voice Networking*, *Premium Rate & Video Comms*. Three of these are produced by Intelidata.

Mobile Communications are covered by two titles from BRC - on *Personal Comms* and *Mobile Data* - and by a *Portable Computer* title.

Key Information Processing topics are covered by nine titles, seven of which are produced by the Infact Group. *Business Strategy Alert* covers general management trends. At the leading edge of **Innovation**, we have titles on the *Virtual Office* and on *Virtual Reality*.

Broadband Switching

Alert by Touche Ross
Developments in broadband switching, including ATM, SDH, cable phone. Suppliers, case studies, innovations. 50 issues, £190 p.a. Ref BRSW.

Business Strategy Alert by Jay McMahan

The effects of technical and social change on firms' structures and strategies. Theory, practice, and case studies. 50 issues, £190 p.a. Ref BSTR.

Client Server Alert by

Infact Research
Software & hardware for client server applications, work group computing, and groupware. 50 issues, £190 p.a. Ref CLSE.

Computer Alert by Edward Vulliamy

Key events in computer hardware, software, & services for suppliers, users & consultants. 100 issues, £380 p.a. Ref COMP.

Computer Law Alert by Clifford Chance

Software & data protection, distribution of hardware & software, product liability, EDI, competition & trade law. 50 issues, £190 p.a. Ref COLA.

Computer Network Alert by Edward Vulliamy

Markets, technology, standards and innovation in data networking, LANs, WANs, network management and EDI. 25 issues, £95 p.a. Ref CONE.

Data Management Alert by Infact Research

Mainframe, mini, PC & client server databases. Database mining, data quality, object oriented databases. 50 issues, £190 p.a. Ref DAMA.

Dealing Systems Alert by Infact

Hardware, software, and services for stock exchange & dealing rooms. Trends, innovations, standards, and case studies. 50 issues, £190 p.a. Ref DESY.

Alert Publications

Alert Publications, founded in 1990, is an independent and privately owned company, based in London, dedicated exclusively to the supply of expertly-edited information services. These are distributed worldwide using BT's Multifax fax broadcasting bureau. This has a computerised processing centre in London with 100 telephone lines, which are spread for security between three telephone exchanges.

We welcome suggestions from readers or potential editors for new Alert titles. Please contact:

Dr Alexander Reid, Alert Publications, 8 Crinan Street, London N1 9SQ. Tel: +44 71 239 7764; fax +44 71 833 9251.

19. DEGW



Frank Duffy



John Worthington

I was then drawn into another company rescue. DEGW was an architectural practice founded in 1971 by four partners. Three (Frank Duffy, John Worthington, and Peter Ely) had studied together at the Architectural Association school of architecture in London. The fourth, Luigi Giffone was an architect and engineer.

Frank Duffy and John Worthington had both won Harkness Fellowships to continue their studies in the USA, and obtained PhDs on space planning of offices. DEGW thrived, specialising in the space planning of offices. Their work was evidence based, drawing on research into how offices are actually used, and how they can be designed to foster creativity and productivity.

DEGW had flourished, growing to about 250 staff. It gained a blue chip client list of global companies, and set up offices in Paris, Milan, Madrid, Munich and Amsterdam.



Flexible workspace designed for Sky by DEGW Italia

I had got to know Frank Duffy and John Worthington, and was contacted by them in 1991. DEGW had found itself in a dire financial crisis, and their Managing Director had resigned. I was invited to join the company as Managing Director to attempt a turnaround. The company had recently moved to very much larger premises near by Battlebridge Basin near Kings Cross. This had produced a sharp uplift in expenditure, both from premises costs, and from the additional staff they were now able to accommodate. Unfortunately this uplift in costs coincided with a drop in income, leading to exhaustion of their overdraft facility (which was joint and severally guaranteed by the nine partners) and to an inability to pay the next quarter's rent (which was similarly guaranteed by the partners). Not only was DEGW facing bankruptcy as a company - all nine partners were facing personal bankruptcy too, on account of the personal guarantees they had given to bank and landlord.

With the crucial help of David Wheatley, who joined DEGW as finance director, we were able to extricate ourselves from this crisis. It involved a painful reduction in staff, and negotiations with bank and landlord. In the case of the bank we moved the overdraft to a bank which did not require personal guarantees. Critical to this was

persuading the new bank that we had put in hand a viable recovery plan. In the case of the landlord (to whom rent was payable at £625,000 a year) we persuaded them to cancel the personal guarantees in return for an additional deposit of one quarter's rent. This wiped out the threat of personal bankruptcy, but actually put the landlord in a better position, because it is in practice notoriously difficult and complicated to enforce personal guarantees.



Page from DEGW brochure in five languages.

We also beefed up our marketing efforts. These included the launch of a monthly fax newsletter to some thousands of contacts, and the production of new marketing literature. To emphasise our international network of offices, we printed our company brochure in five languages – keeping the text short! In a nod to the decades of research on which the work of DEGW was based, we adopted as our slogan 'The Science of Workplace Design'.

The recovery plan was successful, and within a year DEGW, instead of having an overdraft of over £1m, had £1m of cash in the bank.

One of my most interesting experiences at DEGW was participating in a project to re-design the central area of Jena - a town in the former East Germany which was the headquarters of the Carl Zeiss optical company. Germany had only recently

been re-united, and visiting Jena was like time travel to the 1950s. Because of the supply chain difficulties in the old Soviet Union, Carl Zeiss was extraordinarily self sufficient, even hand making its own office computers. Most of the working population of Jena worked for the company, and following re-unification most of these people, and most of the Carl Zeiss buildings, were redundant. I remember particularly tower block headquarters of the company, which was equipped with an alarming Paternoster lift.



A Paternoster Lift. It never stops.

After being taken over twice, DEGW has now been absorbed into the international consultancy AECOM. Its archive is preserved at the University of Reading.

20. Royal Institute of British Architects

Towards the end of my time at Octagon and DEGW I applied for the advertised post of Director General at the Royal Institute of British Architects. Housed in a splendidly preserved 1934 building at 66 Portland Place, designed by Grey Wornum, the RIBA is the professional institute for UK architects.



The atrium at 66 Portland Place

I was fortunate to be appointed to the post, which I took up in 1993. I succeeded Bill Rodgers, one of the 'Gang of Four' - the former Labour cabinet ministers who founded the Social Democratic Party. Rodgers was kind enough to invite me to share his office during the month of handover which had been arranged.

In 1993 the RIBA was running a deficit, its membership was static, and little use was being made of its headquarters at 66 Portland Place other than as office accommodation for RIBA staff.

I set myself four main objectives: to improve the finances, to grow the membership, to make better use of 66 Portland Place, and exploit the potential of the internet. It was satisfying that we were, during my seven years tenure, able to make great strides in all four areas.

We got the finances back into surplus by cutting back less important activities, and through the growing profits of our commercial subsidiary, RIBA Enterprises, which sold contract documents and information services to the construction industry.

The membership grew, partly through our provision of improved support services for members. In addition to the electronic services for members described below, we made the case to clients that good design could add value, and that they should be prepared to pay reasonable levels of fee for architectural services.

To this end we promoted the Brooks Method of architect selection. Rather than selecting for lowest fee, the method selects for design quality, provided that the fee is within an acceptable range.

Engaging an Architect

Guidance for Clients on the Brooks Method of Architect Selection



Royal Institute of British Architects

We used a lot of yellow in our literature, to bring sunshine into the slightly forbidding atmosphere of a professional institute.

66 Portland Place was transformed from what was essentially an office building into a centre to promote architecture, with several exhibition spaces, evening events, an enlarged bookshop, and a large café beside the outdoor terrace in the Florence Hall. We had the outside of the building cleaned for the first time in many years.

We switched on the floodlighting which had been carefully maintained but was permanently switched off. We bought a grand piano, and found that one of our junior staff was a skilful performer. She played every lunch time.

Many vertical surfaces in the public parts of the building carried large ornate portraits of elderly gentlemen – the past Presidents of the institute. This did not convey the cutting-edge image we were keen to project. We had the portraits professionally valued for insurance, retaining the most valuable and confining them to a single room. The others went into storage. Amusingly, it turned out that in several cases the frames were more valuable than the portraits.



Welcome pack for new RIBA members, designed by Morag Meyerscough.



The grand piano in situ

We had the carved lettering Royal Institute of British Architects over the front door gilded, as it was previously illegible. This needed permission from English Heritage, who gave it the go ahead but specified a particular shade of gold.



The letter R naval flag

We had the whole external stonework of the building cleaned with water jets. And we flew every day a large flag from the rooftop flagpole, which was previously bare. I have always been an enthusiast for the traditional naval signalling flags. We decided to spell out the letters RIBA very slowly, with each letter being flown for one quarter of the year. My colleague Amy Chamier approved of this scheme, saying that every organisation needs an enigma.

Marcus Binney, a leading architectural journalist, was kind enough to commend the changes at 66 Portland Place in an article in *The Times*. His article opened:

Quietly spoken he may be, but Alex Reid, the new director general of the Royal Institute of British Architects, is steadily proving himself the most constructive force for change that RIBA has seen for half a century. Walk into the institute today and you will find that the whole ground floor is suddenly open to the public. 'We have turned my old office into a competitions gallery,' Reid says.

His deputy's office has become a students' gallery with a changing monthly show mounted by the students themselves. 'We now have seven exhibition galleries where there were just two,' he says.

Outside the main entrance, a billboard invites you into Patisserie Valerie. 'Some of my colleagues were doubtful that a first-floor café would ever work, but it's now exceeding its revenue target of £1,000 a day,' Reid continues.

The first floor terrace will come to life on February 5th when Reid switches on the William Pye water sculpture that captivated last year's Royal Academy summer exhibition.

This expenditure on our headquarters building would have been understandably unpopular with hard-pressed members if it had been paid for from their subscriptions.

However, we were able to pay for all this from the rent we received from the café, arguing that we needed to make the building a welcoming place if the café was to be a commercial success. So everybody was happy.

But perhaps the most significant development during my time at the RIBA was the use we made of information technology – particularly the then infant internet. We undertook four major initiatives which I believe placed us well ahead of what any other professional institute was doing at the time.



The RIBA Library.

The RIBA Library, the most comprehensive architectural library in the world, had a computerised index which was available online. But only at great hourly expense through a commercial computer bureau in the USA. With the advent of the internet, we decided to make the catalogue available free to the world online.

We initiated a weekly email broadcast, free to all RIBA members, updating them on the continuous changes occurring in building regulations. These included regulations on disabled access, energy efficiency, and fire escape.

We established Ribanet, a free social network for RIBA members with an online discussion forum. It was fascinating to observe the way in which members would help each other out. I remember one case in which a member found himself having, for the first time, to build over a disused well. He sought advice on the forum, and rapidly got useful advice from another member who knew all about capping wells.

And we produced for members a free CD-Rom containing thousands of pages of useful reference information.

As in any professional institute, things could get contentious. I was answerable to the governing Council, of about 50 unpaid elected architects. Some were open minded people, willing to listen to all sides of an argument. Others were passionately convinced of a particular point of view. And there were sharply differing views among them as to the role of the Director General – the most senior employee to whom all the staff reported. Some Council members took the view that all initiatives should originate from the Council, with the Director General acting as

a sort of clerk who would carry out their wishes. Others regarded the Director General like the chief executive of a company, whose task was to develop strategy as well as implement it, and who would be held accountable for the success or failure of the institute. It was a challenging task to keep both groups happy.

I have many happy memories of my time at the RIBA. The organisation had a real sense of purpose – the advancement of architecture - with which all the staff were imbued. There were few architects on the staff, and I believe I was the first Director General (since the founding of the RIBA in 1834) to have qualified as an architect. But even those staff members who had no particular interest in architecture when they joined seemed to acquire it quickly.

One of the pleasures of the job was getting to know numerous architects, young and old. They were talented and dedicated people, with great curiosity about the world and a real sense of social purpose. Their homes and offices had great character, and were always enjoyable to visit.

Just to take one example, Rod Hackney. He had been President of the RIBA and was a member of Council throughout my time. As a young architect he had been a pioneer of Community Architecture. In the 1970s he moved into a slum area of Macclesfield to fight slum clearance and help people improve their own surroundings.



Plaque marking the 1974 Black Road community architecture project.

Rod Hackney kindly invited me to stay at his home in the Peak District near Macclesfield. His wonderful house was the most unusual I have ever seen.

In external appearance an ordinary hillside farmhouse, he had transformed it within. He had propped up one wall of the house, and had personally driven a mechanical digger under the house to excavate a basement swimming pool. You entered the swimming pool through a kind of trap door in the hall. The water was a few feet deep; you could swim happily, but the ceiling was not high enough to let you stand up. The pool was illuminated throughout with high-tech white fairy lights.



A characteristically cheerful Rod Hackney visiting Black Road 40 years later.

More remarkably, you could enter the pool via a flume, built into space between the rooms of the house. The entry to the flume was concealed behind a cupboard door on a first floor corridor. According to Hackney few visitors dared to enter the dark and mysterious tube. Those who did would be dropped into the basement pool with a considerable splash. Other remarkable features of the house were a full-sized pipe organ (demolition salvage from a local church) which was installed in the back lobby, and a model seascape of a naval battle fixed upside down to the ceiling of one of the rooms.

There was also a secret passage for Rod's small son. The secret passage ran up and down and around the house in spaces between the walls of rooms. One of the entrances was a child-size door beside the fireplace in the living room. The secret passage was too small for an adult, and it was not clear to me what would happen if Rod's son had become stuck or been taken ill in the secret passage. Presumably another small child would need to be sent in to effect a rescue.

Another pleasure of the job was the opportunity to visit many wonderful contemporary buildings. The Scottish Poetry Library (below) is just one example.

It is a beautiful building designed in 1999 by Malcolm Fraser Architects. It is given a magical quality by passages of Scottish poetry which are etched into the windows. When the sun shines the poetry floats across the space of the library and moves gradually across the opposite walls.

Another fine example of a different kind is the remarkable restoration of the Park Hill housing estate in Sheffield, by developers Urban Splash. They turned a neglected and decaying estate into a place of joy – while respecting throughout the original architectural intention.

Designed by the Sheffield City architects department, Park Hill was built between 1957 and 1961. It contained 995 flats in several blocks on 17 acres. In plan the blocks were canted at obtuse angles to maximise the panoramic views across the city and the southern Pennines.



Scottish Poetry Library by Malcolm Fraser Architects



Park Hill flats before Urban Splash restoration.

Initially popular, Park Hill deteriorated during the 1980s with tenants deterred by lack of maintenance, poor acoustic and thermal insulation, and worries about security.

The structures of the buildings remained sound, and Sheffield City Council decided to initiate a radical renovation, in partnership with the developers and architects Urban Splash. Prior to the renovation the whole complex was given Grade II* listing, making it the largest listed building in Europe.



Park Hill flats after restoration.

No Bentley

During my time at the RIBA I had the luxury of a parking space behind 66 Portland Place, and I used to drive between Notting Hill Gate home and work. This journey took me past, near Harley Street, a car showroom specialising in second hand Bentley and Rolls Royce cars. I had always wanted to own a Bentley and these (presumably pre-owned by Harley Street consultants) were like new but about 10% of the new price.



The remarkable interior of a Bentley Mulsanne Turbo.



I took a ten year old Bentley Mulsanne Turbo, in immaculate dark green with tan leather, on a test drive and was greatly impressed. Inside it felt like the drawing room of a stately home on wheels. I negotiated a trade-in price for my existing car, and consulted Sian on the project. She was sensibly and firmly opposed. I thought her opposition might melt once the Bentley arrived, and did consider pretending that I had bought the Bentley without having done so. Dependent on her reaction I could conclude the purchase or not. But I recalled the proverb ‘When first we practise to deceive oh what a tangled web we weave’ and decided to abandon the project. So no Bentley.

RIBA Presidential election

From: Alex Reid, 27 Millington Road, Cambridge CB3 9HW.
Tel: 01223 356537. Fax: 01223 319733. Email: alexreid@extonet.com

I would be very grateful if you could bring this to the attention of RIBA members in your practice.

RIBA ELECTION: POLLS CLOSE FEB 26

Whether or not you usually vote in the RIBA Presidential election, please use your vote this year. By voting for Alex Reid you will be voting for an RIBA which is **listening, helpful and inclusive**.

My practical proposals, described at www.alexreidwebsite.com, include:

- Improved practice information and advice.
- Provision of CPD modules online.
- A campaign against fee-bidding.
- A free-call phone number and user-friendly website for client enquiries.
- Publicity and awards for small projects.
- A drive to help members take up the RIBA's electronic services.

To be sure your vote counts please post it **no later than Tuesday Feb 20th**.

REID: A.	1
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Those nominating Alex Reid for election as President come from every Region of the RIBA:

East Midlands Ann Cumber Prof. George Henderson Julian Owen William Smedley Douglas Smith	Nicola Gillen Stephen Greenberg Alan Griffiths Bernard Hunt Bryan Jefferson Adam Knight Richard MacCormac Robin Nicholson Valerie Owen Sunand Prasad John Romer Prof. Philip Tabor Andrew Willis David Wylie Stephen Yakeley	Prof. Robin Webster Andrew Wright South East Lee Batten Simon Beck Andrew Clague Patrick Mills Anthony Murphy Roland Phillips Ken Storey Clare Underwood Andrew Wittich	Ulster Frank McCloskey Wales Robert Firth Wessex Henry Alpass Chris Askew Christopher Balme Peter Clegg George Ferguson Richard Feilden William Gething Richard Lee David Mellor
London Bryan Avery John Bartlett Mark Beedle Hugh Broughton Chris Colbourne Ted Cullinan Ben Derbyshire Sir Philip Dowson Frank Duffy Robin Ellis John Eynon Mike Fletcher	North West Richard Gibson Rod Hackney Stephen Hodder Northern Tony Allott Jane Darbyshire George Oldham Scotland James Cuthbertson Joyce Deans	South West Jonathan Ball Ken Bingham Peter Lacey Jeremy Newcombe Prof. Michael Wigginton Southern Neville Churcher Heather Clews Michael Clews Sir Andrew Derbyshire Malcolm Nickolls Richard Patterson Martin Smart	West Midlands Alan Cotterell Michael Partridge Yorkshire Richard Burt David Lumb Robin Parker Sarah Richardson Michael Wildblood Philip Wright

After retiring from the post of Director General at the RIBA, I rather oddly decided to stand in the election for President – the part-time unpaid role at the top of the institute. It was an unorthodox idea, but I was encouraged to do so by two former Presidents, Frank Duffy and Rod Hackney.

There were three candidates. My election leaflet focused on providing useful services, including electronic services, for members. In the event the election was won by the eminently deserving Paul Hyett and I came second. The members had,

The weekly newspaper
for architects

Friday June 30 2000

Issue 1447 £2.50

Inside
Business & Practice **8**
Letters **12**
Will Self **12**
Comment **13**
Culture **18**
Recruitment **23**

298
JOBS
INSIDE

BUILDING DESIGN

Fighting talk: Alex Reid tells BD about his turbulent years at the RIBA
10

Mouse building: Using IT to predict environmental impact and streamline the design process
20

Tall skinny little Edward Soutar Architects's new double-height cafe for Arnes occupies an unusually thin site in a potentially sensitive location in Kensington.
Pages 14-15

21. Retirement

Cambridgeshire County Council



The Council Chamber, Shire Hall, Cambridge.

When my term of office at the RIBA ended in 2000 we moved home to Cambridge. My wife Sian became elected to Cambridge City Council as a Liberal Democrat. I followed her example in 2003, being elected to Cambridgeshire County Council, also as a Liberal Democrat. It was a time of exciting and rapid growth in and around Cambridge with lots of issues about transport and housing. But we were in opposition, with the Council controlled by the Conservative majority, so it was not possible to have much impact on events. In so far as we did have influence we pressed for improvements in public transport, and high energy efficiency standards in new schools.



A fine new fence replaced concrete posts and decomposing wire netting.

The most satisfying part of the Councillor role was not in the Council Chamber, but was in dealing with local residents and their concerns about their neighbourhood.

Our residents were alarmingly highly educated, and you had to watch your grammar. One wrote to me politely pointing out that the reference in our newsletter to 'recognising that graffiti is a problem' should have read 'graffiti are a problem', as graffiti are plural.

One small triumph was to persuade the Council and the College landowner to pay for a fine wooden fence along the path to Grantchester Meadows. It replaced a dreadfully dilapidated fence with concrete posts and dangerously decomposing wire netting which tended to reach out across the path and grab you.



Sian and I as Liberal Democrat Councillors had to do door-to-door canvassing, to build up our local party's database of likely and unlikely Liberal Democrat voters. Also when Council and General Elections came around (at least once a year) we were pressed into service to make up stakeboards and plant them in the front gardens of the willing. Our posters were of unusual shape, and pleasingly bright in colour.

Green Spaces

I was involved, during and after my term as a County Councillor, with two greens spaces projects.

As a Councillor I took part in consultative workshops, organised by AECOM, about the University's plans for the North West Cambridge Site, now known as Eddington. We were divided into groups, each group being given a big map of the site, and numerous small wooden Lego-like blocks representing the accommodation that had to be fitted on the site. The assumption had, I think, been that the development would extend continuously out from the existing built-up area, as had happened in other parts of the city.

As an enthusiast for the large green spaces trapped within the historic city, I suggested that the new neighbourhood be separated from the city by a substantial green space. I suggested this be circular, and my suggestion did find its way into the next iteration of the master plan (below).



The initial concept for Storey's Field was circular.



In the final plan the Storey's field green space has become rectangular, but is still there.

The idea of this large green space survived later iterations of the master plan, although its shape did change. Its survival was largely due to Sian, who fought for it, and for its public use, as leader of Cambridge City Council. Now known as Storey's Field, the green space is comparable in size to the 25 acres of Parker's Piece in the centre of Cambridge. It has made a huge difference to the development.

The other green space project was an initiative I took after standing down from the County Council. It was a campaign to get the University to think again about building all over the last large green space, known as the East Paddock, in the West Cambridge Site.

The East Paddock was currently being used by horses associated with the adjacent Veterinary School. I thought the green space should be preserved and opened to the thousands who would be working on the West Cambridge Site. A good place for picnics and frisbees. Part of my argument was that a preserved East Paddock was a modest ask because it would amount to less than 5% of the total area of the West Cambridge Site.

I drummed up several hundred signatories to a petition to the University. At the next iteration of the master plan there was a larger central green space, but I do not know whether my efforts had anything to do with that.

I accordingly set out to establish an endowed charitable fund, known as the Outlook Fund, whose income could be used in perpetuity for this purpose. The Cambridgeshire Community Fund (of which Sian had been a founding trustee) played two key roles in this.

Firstly, the Outlook Fund was set up as part of the Cambridgeshire Community Foundation. This avoided the considerable complications of recruiting trustees to form a new charity; it also gave confidence to donors that their money would be under the care of a well-established organisation. And the Cambridgeshire Community Foundation would deal with grant applications, grant monitoring, and the investment management of the endowment fund.

Secondly, the Cambridgeshire Community Foundation was operating a Government matching scheme for endowment donations. This meant that for every £1 raised from donors, £1 would be contributed by the Government.



One example of an Outlook Fund project. The transport of a climbing wall to the annual Fun Day for Looked After Children and their foster parents.

The first donors to the Outlook Fund were Hermann Hauser and Pamela Raspe, who very generously donated £40,000. Several other large donations were received from Cambridge entrepreneurs. Together with donations from other individuals and from companies, I was able to raise more than £150,000 in donations. This was matched by an equal amount of Government funding. The County Council also generously agreed to match with another £150,000, meaning that just over £500,000 was raised in total. The income from the Outlook Fund has been used since 2012 to fund dozens of projects to improve the lives and life chances of Looked After Children in Cambridgeshire.

Our own donation to the Outlook Fund took the form of a valuable antique clock, which had been given to my Reid grandfather when he retired as Chief Justice of Lahore, in Pakistan, in 1901. The clock was for years on the mantelpiece of my parents' home, until it got stolen during a break-in to their house in Lopen, Somerset. They were sorry to lose it, but glad to get something like £2,000 from their insurance company. They decided to spend the £2,000 not on another clock, but on indulgences such as frugal holidays in Madeira. Imagine their surprise when, more than a year later, the police recovered the clock. And imagine their

disappointment when the insurance company reasonably demanded the return of their £2,000.

Worried that it would get stolen again (apparently burglars are creatures of habit, and often return) they passed the clock on to me. I too was worried about having such a valuable item on the mantelpiece, and put it into the bank for safe keeping.

So when we were raising funds for the Outlook Fund we decided that the clock should be auctioned for the benefit of the fund, rather than sitting in a bank. I consulted my sister Griselda, who agreed. The auction took place at Cambridge's auction house Cheffins. It was an exciting occasion, with a packed room and several Cheffins handling telephone bids. In the event the clock sold for more than £20,000. I was glad for the Outlook Fund, and relieved that I did not have to worry about it sitting on our mantelpiece.



My grandfather's Frodsham carriage clock.

East Forum

I was drawn into an enjoyable project soon after our move to Cambridge. Hermann Hauser, my friend from Acorn days, and his wife Pamela had donated £8 million pounds to the University of Cambridge for a new building on the West Cambridge Site.

Known as the East Forum, it was intended as an entrepreneurship centre, which would house Cambridge Enterprise – the department of the University tasked with realising the potential of University inventions – by licensing and through encouragement of start-ups. The building would also contain an incubator for start-ups, a café, and lettable commercial space.

Construction had not yet started, but the Hausers, and the University were very concerned about the upward spiralling of costs, and about some features of the design which seemed impractical.

At the Hausers' suggestion, I was retained as a consultant to the University to help steer the project to success. This we managed to do by adopting a simpler design, and striking a deal with a developer under which he would contribute several million pounds to the project (in return for acquiring the commercially lettable space) and would bear the construction risk.

A fascinating aspect of the project was the need to negotiate approval through the democratic processes of the University. Although there is a governing Council of manageable size, final decisions lie with the Senate House, comprising thousands of academic staff. Until the invention of email, decisions by Council were invariably rubber stamped by the Senate House. But email allowed activist members of Senate House to mobilise objection to things of which they disapproved.



Exterior of East Forum, with gap between the buildings.



East Forum café nice and busy.

In the case of the East Forum there were objections in Senate House to the concept of a single building containing both academic and commercial activity.

The objectors thought it important that there be a clear distinction between these. This objection was accommodated by splitting the building into two parts, with a gap of about thirty feet between them, covered by an open canopy.

MJP Architects

In 2006 I was invited to join the board, as a non-executive director, of MJP Architects. The firm had been founded by my contemporaries from Cambridge Richard MacCormac and Peter Jamieson. The P who joined the firm later was David Prichard; I had a connection with him too because he gave me invaluable help in conducting the experiments during the first year of my PhD at University College London.



Cable & Wireless building by MJP Architects.

My main task was to work out a plan for the future ownership of the company. Currently, it was owned 50% by David Prichard, who had left to start his own architectural practice Metropolitan Workshop, and 50% by Richard MacCormac, who at 68 was approaching retirement. The other directors and staff owned no shares, which was clearly an unsatisfactory situation going forward.

I had developed an enthusiasm for employee ownership, admiring firms such as John Lewis and Arup. I accordingly suggested that the company transfer to employee ownership. A note produced at the time set out the arguments:

The aims of transferring ownership and control of MJP to its employees, through a trust, are:

To help attract, retain, and motivate high quality staff by allowing them to have a stake in the company and benefit from its success.

To foster a collective team spirit throughout the practice.

To enable senior staff to be appointed to positions of responsibility entirely on merit, and without regard to their financial means.

Conversely there is no liability on the company to find the money to buy out shares when shareholder directors leave.



MJP brochure describing its work for universities, including Oxford and Cambridge.

Employee ownership was introduced and worked well. The qualifying employees (those who had served more than two years) had real power. For example, a majority of qualifying employees was required to appoint a new director.

One of the notable results of employee ownership was cost consciousness. Because most of the profits were distributed to staff, cost savings went straight into their

pockets. A powerful incentive which had not existed when all the shares were owned by two of the founders.

MJP Architects produce great buildings, and were a pleasure to work with. I stepped down from their board in 2018, but continue to have lunch regularly with their managing director, Jeremy Estop. We meet at the Wagamama in Spitalfields Market, for Yaki Soba with Chicken and Prawn.

Cambridge Talks



One of the good things about retirement in Cambridge is the opportunity to attend the numerous post-graduate seminars and talks at Cambridge University. To prompt my memory of these I kept a list of the talks I attended. Between 2014 and 2019 these amounted to more than 400. They are announced on a wonderful Cambridge University website www.talks.cam.ac.uk. About half are highly scientific with even their titles being unintelligible to the layman. The others cover a dizzy variety of topics. The titles of some recent examples of talks I went to are:

Talking About Shapes
Expropriation of Berlin Corporate Housing
Grand Strategy of the Hapsburg Empire
The Fukushima Accident and its Aftermath
Cyber Warfare in the South China Sea
The Art of Bridge Design
Microbes as Medicines
EDF Nuclear Development
Thomas Malthus
The BBC During World War II
Using Reason and Evidence to do the Most Good
The Life and Death of Galaxies
Democracies and International Law
Are We on the Road to Collapse?

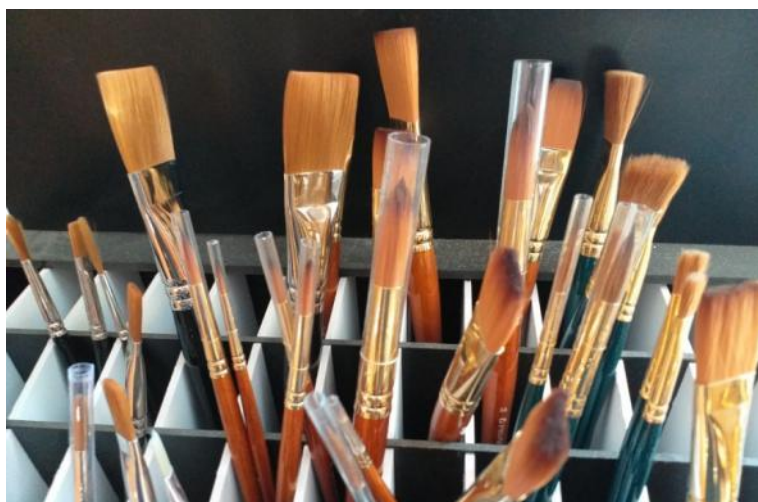
The talks take place at various University and College meeting rooms, all within a few minutes ride from home on my electric bicycle. This activity is rather like going to University, but with three advantages. There are no barriers to entry, there are no examinations, and it is free.

Photography

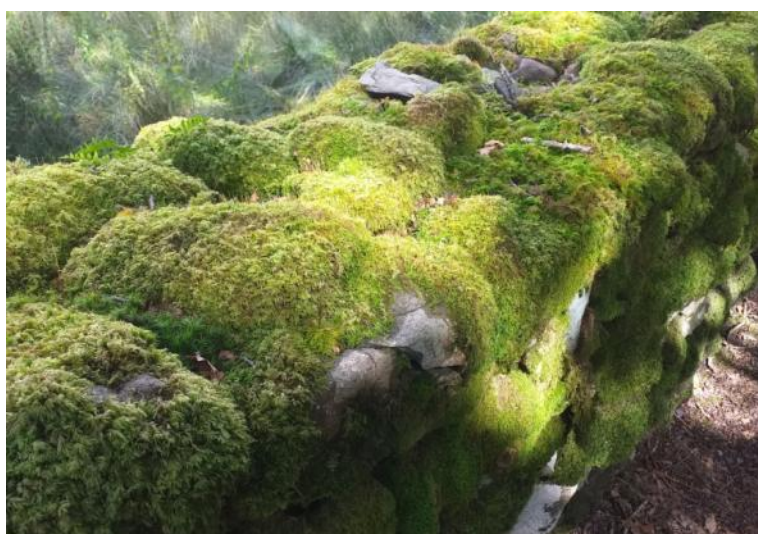
I have always enjoyed taking photographs, for example those in this life story of my time on H.M.S.Albion. More recently I have taken to using my smartphone to capture ordinary things which deserve a second look. Some examples follow.



Pickford self storage in Cambridge.



Artists' brushes at Cass Art, Hampstead.



A mossy stone wall near Machynlleth



Beach balls at Aberdovey.



Funfair at Great Yarmouth.

Carpentry



Bookcase on wheels for 18 Luxborough Tower. Thanks to Ridgeons for the cut-to-size MDF and to IKEA for the built-in chest of drawers.

Harking back to my early days of carpentry at prep school, I did lots of woodwork in our various homes.

Once we moved to Cambridge I discovered an idiot way of making bookshelves, using the cut-to-size facilities of the builders' merchants Ridgeons. They had a wonderful vertical sawing machine which could cut 18mm MDF to the nearest millimetre. So everything had to be rectangular, glued and screwed and painted. Using this crude but effective technique I made numerous bookcases at our two houses in Cambridge (Millington Road and Grantchester Meadows) and at our two flats in London (18 and 22 Luxborough Tower).



A vertical sawing machine. Ideal for cutting MDF to size.

Websites



Surplus fishing boat paint was used for the colourful buildings in La Boca, Buenos Aires.

Following my experience of the internet at the RIBA I have occupied my retirement by building a series of websites. These included a website detailing construction products in the UK and the USA. I built a website called Colourful Cambridge arguing the case for the greater use of colour on Cambridge buildings. The website showed examples of colourful buildings from all over the world.

Also a website describing and linking to what I judged to be the world's best website on each of hundreds of topics. I found the latter to be a fascinating exercise. It was a pleasure to encounter remarkable websites, published by enthusiastic individuals, which were in my view the world's best on their subject. Some examples:



Washington Banana Museum.

Bananas. The website of the Washington Banana Museum. The creation of Mitchell Lovell, who has a collection of almost 4,000 items associated with the banana.

Roman Colosseum. The Colosseum website is published by Andrea Pepe, his son Daniele, and his wife Catherine McElwee, who are citizens of Rome.

Rum. The Ministry of Rum website by Edward Hamilton. He had the idea when his sloop Tafia took him to a monthly full moon party on a small Caribbean island near St. Thomas.



Lucinda 'Sandy Feet' Wierenga

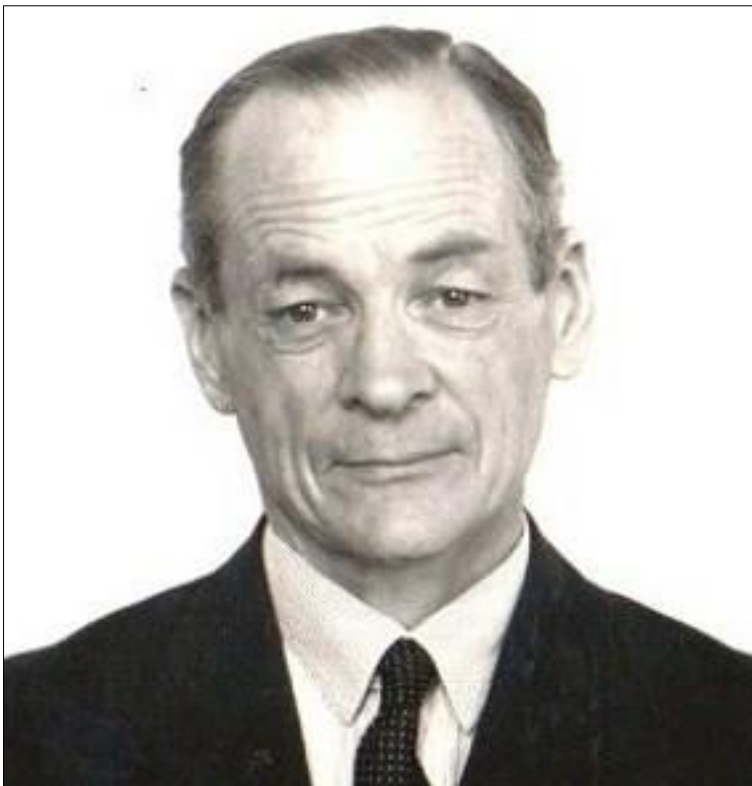
Sand Castles. The Sand Castle Central website, published by Lucinda ‘Sandy Feet’ Wierenga from her home by the beach in South Padre Island, Texas.

I currently publish two websites. The 500 Free Things to do in London website is at www.500freethingstodoinlondon.com. It describes the huge variety of free activities that London offers – more than any other city in the world. I built the website with the initial intention that it would be useful to family and friends. It has now gained a wider audience. I have very much enjoyed the experience, which has taught me a lot about London.



God's Own Junkyard museum of neon. One of 500 Free Things to do in London.

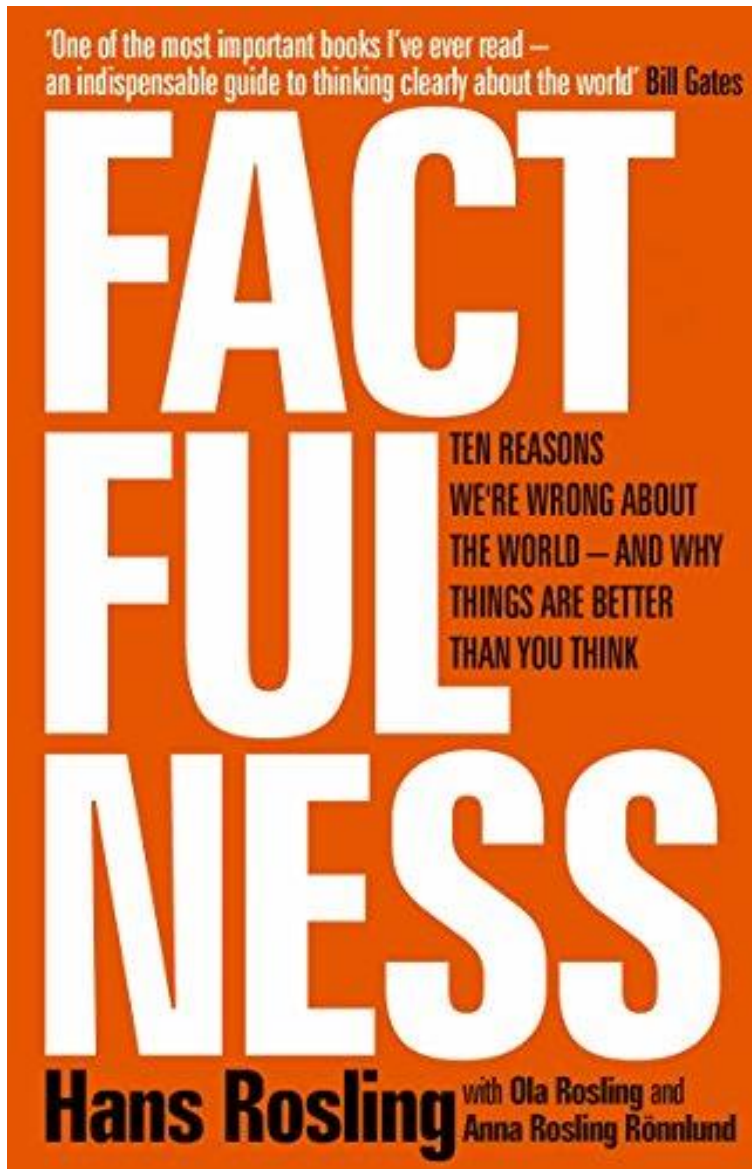
The other website I currently publish is Lives Retold, at www.livesretold.co.uk. It is intended as a repository of people's own life stories and those of their relatives.



A photo of my father Philip Reid from his life story at the Lives Retold website.

22. Desert Island

Eight books I would take to a desert island:



Factfulness by Hans Rosling. Why things are much better than they seem.

Manhattan '45 by Jan Morris. New York City at the end of World War II.

Meyer Berger's New York by Meyer Berger. Anecdotes of New York City.

Team of Rivals by Doris Kearns Goodwin. The political genius of Abraham Lincoln.

The Code of the Woosters by P.G. Wodehouse. High jinks at Totleigh Towers.

The Remnants of War by John Mueller. Why state against war is obsolete.

The Years with Ross by James Thurber. Early days of the New Yorker.

Winston Churchill: By Piers Brendon. Hilarious portrait of Churchill.

And eight DVDs of films:

Air Force One. Thriller starring Harrison Ford as an idealised US President.

Calamity Jane. Musical starring Doris Day. Includes The Windy City.

Guys and Dolls. Musical starring Marlon Brando and Frank Sinatra.

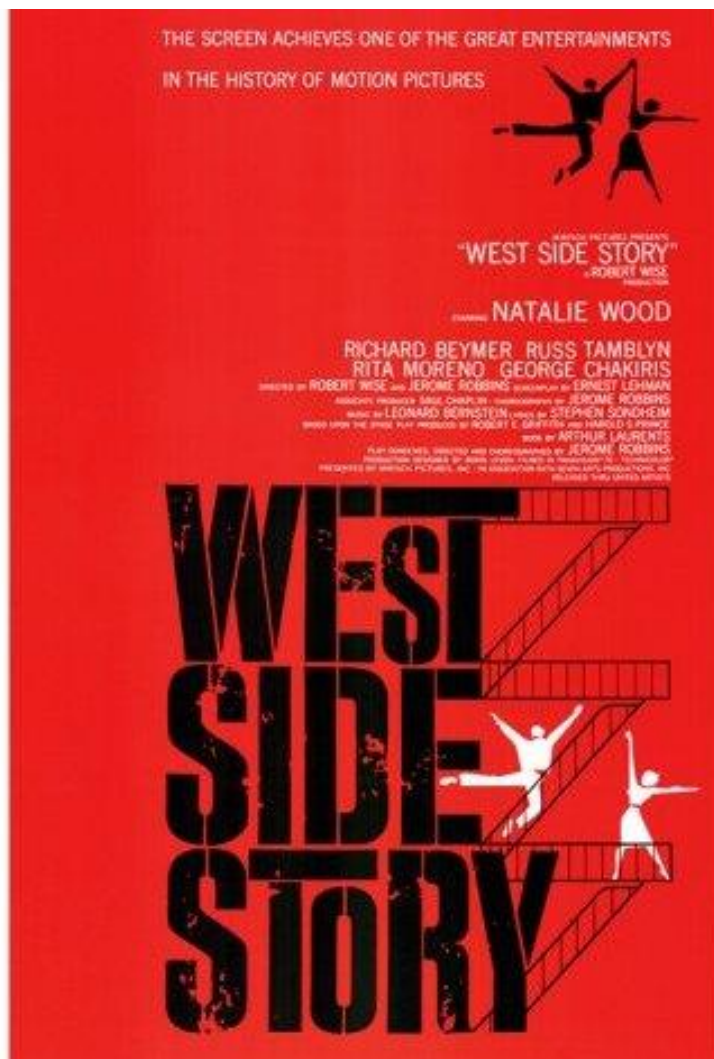
Oklahoma. Musical by Rodgers and Hammerstein.

South Pacific. World War II musical by Rodgers and Hammerstein.

The Third Man. Starring Orson Welles, set in Vienna after World War II.

To Catch a Thief. Alfred Hitchcock comedy thriller starring Grace Kelly.

West Side Story. Leonard Bernstein musica, lyrics by Stephen Sondheim.



23. Family life

Sara



My naval colleagues formed a guard of honour as we left the church



I have been married twice. First to Sara Coleridge, a descendant of Samuel Taylor Coleridge, whose parents lived near mine in Somerset. We were married on 11th

July 1964, when Sara was 19 and I was 23. The wedding took place at Ottery St.Mary Church.



Anna and Alex in Singapore



Sara, Kate, Alex & Anna in the garden of my parents' house Greenhill, July 1969

We started married life in a tent, pitched in a field just outside the perimeter of the Royal Naval Air Station Culdrose, where I was being trained to fly helicopters. We then moved to the picturesque coastal fishing village of Porthleven, near Helston. I did an 18 month tour of duty to the Far East on the aircraft carrier HMS Albion. Although it was an unaccompanied posting, Sara made her way out to Hong Kong and Borneo with little Anna who was not yet two.

During my last year in the navy we lived in married quarters at Portland, Dorset. When I finished my five years in the navy in 1967 we bought our first house in Festing Road, Putney, a Victorian terrace very close to the river Thames.



Festing Road, Putney

We moved later to 9 Barrow Road, Cambridge, and then to The Old Rectory, Piddleshinton, near Dorchester.

Anna

Our first child Anna was born in 1965. She went to the Perse School for Girls in Cambridge, then on to Oxford, and a career in journalism and writing, firstly with the Economist, then as a foreign correspondent in Kiev, Ukraine, and latterly as a successful author of books on the Ukraine, Siberia, and the Siege of Leningrad. Anna is married to Charles Lucas, a banker. They have two sons: Edward (born 18.2.2003) and Bertie (born 27th October 2004).



Kate and Anna



Publisher's photo of Anna

Anna and Charles are living in a Victorian terrace house overlooking Ravenscourt Park, west London. They also have a holiday house and boat in Ireland.



Anna's house in Ravenscourt Park Road.



Anna pitches a tent at Millington road with her boys



Edward with a machine he has constructed



Edward being a flamingo on a visit with me to the Derry & Toms roof garden, now sadly closed.



Bertie at the boatyard near our Welsh cottage

Kate

Our second child Kate was born in 1967. She too went to the Perse School for Girls in Cambridge, going on to Edinburgh University where she read politics and economics.

Kate's first jobs were with Anderson Consulting and SQW – a firm of consultants based outside Cambridge specialising in assessing the outcomes of policies and projects. Kate married Alex Creswell, who has had a career in industry and in the Foreign Office.

They lived in London then Cambridge, with overseas postings in South Africa, and Jordan. They then moved to Dorset, where Alex had inherited a house and farm from his parents.

During her time in Cambridge, while her boys were small, she got all three on her bike using a remarkable contraption called a Double Tagalong. It clipped on below the seat of her bike and took Jocelyn and Sinbad. Walter was carried in a kind of plastic bucket attached to her handlebars. Propulsion was collective; navigating sharp corners was awkward.



A Double Tagalong.

Kate now teaches economics at Sherborne School for Girls. Kate and Alex have three sons: Jocelyn (born 25.5.1999), Sinbad (born 14.7.2000) and Walter (born 6.6.2003).



Alex Creswell and Kate



Jocelyn outside the Derby Stores, Newnham, Cambridge



Sinbad on a day trip to the Beaulieu Motor Museum



Walter

Sian



64 Kensington Park Road, London W11.

My second marriage is to Sian Roberts, who had studied foreign languages at Bristol University, and obtained an MBA at the London Business School. We had met through both working at British Telecom. We were married on 27th February 1988 at Westminster Register Office in Marylebone Road, London. We celebrated at a party at the Royal College of Art, where I was serving on a voluntary part-time basis as Chairman of the college's Council.

We started our married life together in a tall Victorian house at 64 Kensington Park Road, London W11. We later moved a short distance to a modernist house (built on a bomb site) at 9A Lansdowne Walk.



9A Lansdowne Walk

It was on three floors rather than five, and looked out on greenery front and back. In 2000 we moved out of London to Cambridge, first at 27 Millington Road, then at 79 Grantchester Meadows.



Sian with Lizzie by the Cam.

Sian tutored in management studies at the Open University, and became active in the Liberal Democrats. She was elected as a City Councillor, later becoming leader of the City Council. In that capacity she pushed hard for carbon reduction. This included tough negotiations with Cambridge University to achieve very high energy efficiency standards in their new developments.

Sian later chaired the Cambridge Literary Festival, and became a trustee of the Cambridge ice rink project. This arose from a bequest the Cambridge University, many years before, from a Canadian alumnus with a keen interest in ice hockey.



Front door of 27 Millington Road, Cambridge. We planted the tree.



The triangular garden at 79 Grantchester Meadows

While living in Cambridge we bought and refurbished a cottage, Cefn Cynhafal Bach, near Machynlleth in west Wales.



As an adjunct, we kept two 'land boats' at a nearby boatyard on the Dovey estuary. These are retired wooden boats firmly placed on land and used for reading and picnics. The Suzy M is a retired seaweed harvesting boat from Ullapool in Scotland. The Thalassa is a gentleman's motor yacht with two-berth cabin.



The Thalassa and the Suzy M. The R flag means 'My ship has stopped'.



View of the Dovey Estuary from the land boats

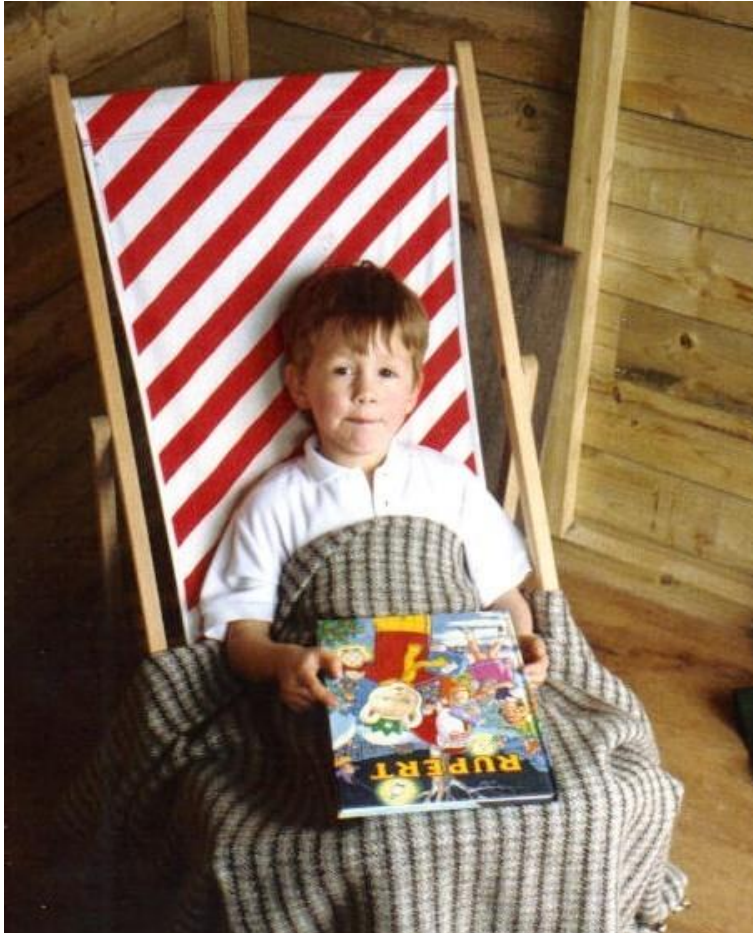
Philip



Philip (in Postman Pat jersey knitted by his Aunt Griselda), Sian and Lizzie at Kensington Park Road

Our first child Philip was born in 1989. He went to the Acorn Nursery School, near where we were living in Kensington Park Road.

He went on to primary school at Cameron House in Chelsea. When we moved to Cambridge he transferred to the Leys School, where he stayed through sixth form. During Philip's childhood we made good use of our cottage and beach hut by the sea at Studland, Dorset, and our small dinghy the Toad.



Philip well settled in the Studland beach hut



All aboard the Toad

After obtaining a qualification in child care, Philip obtained a BSc in Audio and Music Technology at Anglia Ruskin University, Cambridge, and an MSc in Architectural and Environmental Acoustics at South Bank University. His enthusiasm for child care led him back to that field of work. He is currently (2019) working as an early years practitioner at a nursery in Queen's Park, London, living in a studio flat in Luxborough Tower, near Baker Street station.



Luxborough Tower



Philip's set-up for making music mixes in his flat at Luxborough Tower



Philip rowing on the Regent's Park Boating Lake in 2019

Lizzie

Lizzie was born on 11th August 1992 in Bangor; Sian had gone to stay with her parents in Anglesey for the birth. She grew up at Kensington Park Road, going (like Philip) to the nearby Acorn nursery school, then moved on to Pembridge Hall,



Lizzie at Lansdowne Walk house cooling party



Lizzie off to St.John's College School

When we moved to Cambridge in 2000 Lizzie joined St.John's College School. From there she moved (like her half sisters Anna and Kate 27 years before her) to the Perse School for Girls.

She went on to do a foundation course and then a degree in Graphic Design at Kingston University. On graduation she joined Pentagram, a leading design consultancy with offices in London and New York, then moved on in 2018 to work for Google.

She is currently (2019) sharing a flat with two friends in King Henry's Road, near Primrose Hill.



Puzzled as to the total surface area of a leek, Lizzie decided to dismantle one.

Hugh

The big event for us all in 2002 was the arrival of Hugh Roberts and Miranda Stern as members of the family. Their mother had died when they were small, and Miranda's father Michael Stern (who had also brought up Hugh) was tragically killed in a car accident. He had named Sian and me as their guardians, and Hugh and Miranda joined the family as brother and sister to Philip and Lizzie. Hugh was in his last year at Clare College Cambridge, reading English. He took a master's degree in International Relations at Columbia University, and from there joined the staff of the United Nations in New York. He went to work in the Policy Unit at 10 Downing Street.



Hugh with Sian at Millington Road

He then became a professional writer, his work including editorials for the Guardian newspaper. He is currently (2019) living in Madrid with his partner Carolina.



Philip on USA holiday with Philip and Lizzie

Miranda





Miranda with Lizzie



Miranda and Lizzie with baby owls

When Miranda joined our family she was at boarding school at Bedales. She moved in with us, and transferred to the Hills Road Sixth Form College, Cambridge. She went on to take a degree in English at Sussex University. She has made her career in television, and is currently (2019) living in Glasgow and working on independent television productions. These include a property programme called Location, Location, Location, and observational documentaries on childbirth and motorway management.



Miranda and Julyan on their wedding day with Lizzie and Sian

In 2018 Miranda married Julyan Stout, who also works in television. His family comes from Orkney, where we had the pleasure of visiting his mother in 2019. Miranda and Julyan live in a fine two storey flat in Lansdowne Crescent, Glasgow. They also have a camper van which they use to explore Scotland.



Lansdowne Crescent, Glasgow

Griselda



My sister Griselda has three sons – my nephews Harry, Theo and Fred. Harry, a marketing consultant, has a daughter Lizzy and a son Bill. Theo, a theologian and

author, has three children – Martha, Hal and Edie. Fred, a commercial barrister, has a French partner Luc and lives in Camden.



After giving us a good lunch at their home in Barnes, Harry and family would don waders and go pond walking in Barnes Pond. It is a slow motion activity, which puzzles onlookers.



When Theo and family visited us at 27 Millington Road, Cambridge, we had lunch outside in the south-facing loggia. From left to right: Martha, Sian, Edie, Hal, Tess and Theo. My final photo in this section is of our extended family gathered for what has now become an annual event - a picnic by the bandstand (with band playing) beside the boating lake in Regent's Park.



23. Reflection



In the grand scheme of things, one life is a passing thing, like a butterfly on the wing. But just as a photograph can capture a butterfly, I hope this life story will capture something of my own life, which I have much enjoyed, and of the extended family within which I have been so lucky to live it.
