

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. British Telecom
14. Octagon
15. Alert Publications
16. DEGW
17. Royal Institute of British Architects
18. Retirement

1. Introduction

I am starting my life story in January 2008 at the age of 66, living here at 27 Millington Road, Cambridge, England. I sit in my study on the second floor, at my grandfather's kneehole desk, with windows to the south looking out over St. Catharine's College playing fields and Grantchester Meadows beyond.

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.

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.



Philip, Louisa, and Border Terrier Pippa, 1955.

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.

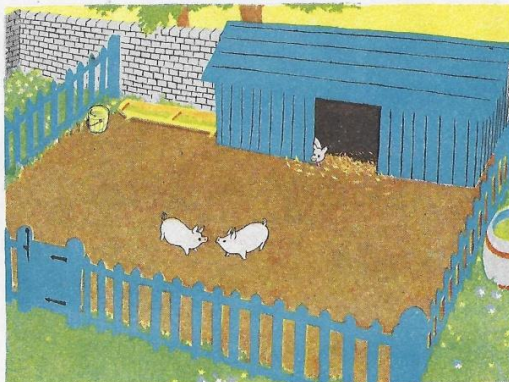
We spent two and a half years in South Africa, frequently moving to any temporary accommodation that was available. In August 1944 we set off on another sea voyage to wartime England. The ship did not travel in convoy, and the risk of being torpedoed by a German submarine was very real. At one port we 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



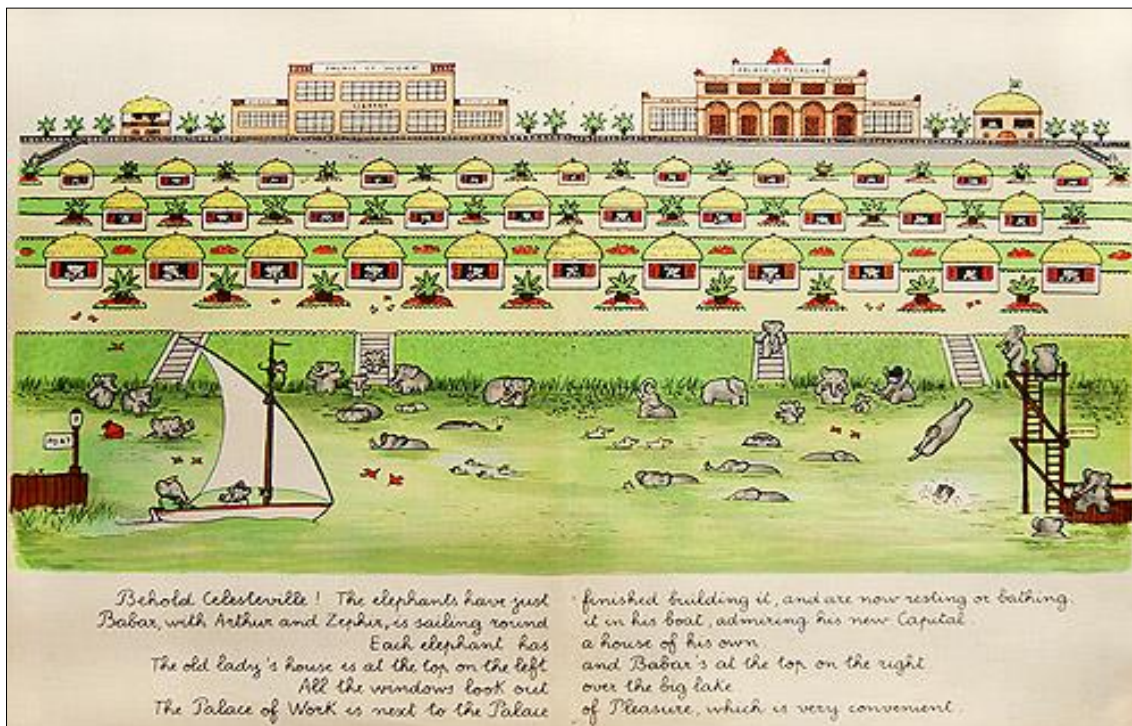
bright blue—every bit of it, from the roof to the pig-sty.

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. 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 Ensligh, 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 Alexander Reid Term Spring 1948
 Form Lower I.A. Age 14 1/2

Subject	General Remarks	Signature
Reading	Good. Alexander reads fluently, and shows some ability in catching new words successfully.	M. McL
Writing	Generally good. He is apt to write too quickly and so spoil the style.	Cf D
Number	A very good term's work figures, need care.	Cf D
Story Work	Good keen work. Alexander makes sensible contributions to the lessons.	Cf 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. McL
SINGING & BAND		
Gym.	Fair to very fair.	Capt. C
Games	Good.	Cf 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. 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.



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.

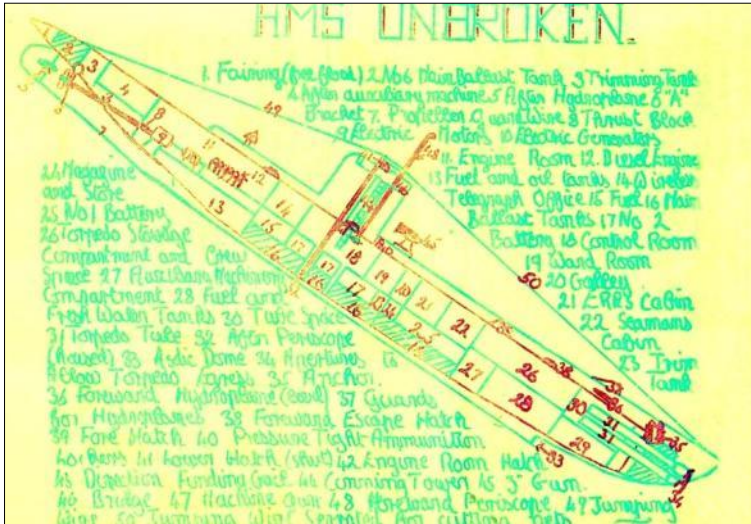
The school Prospectus included the following:

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.

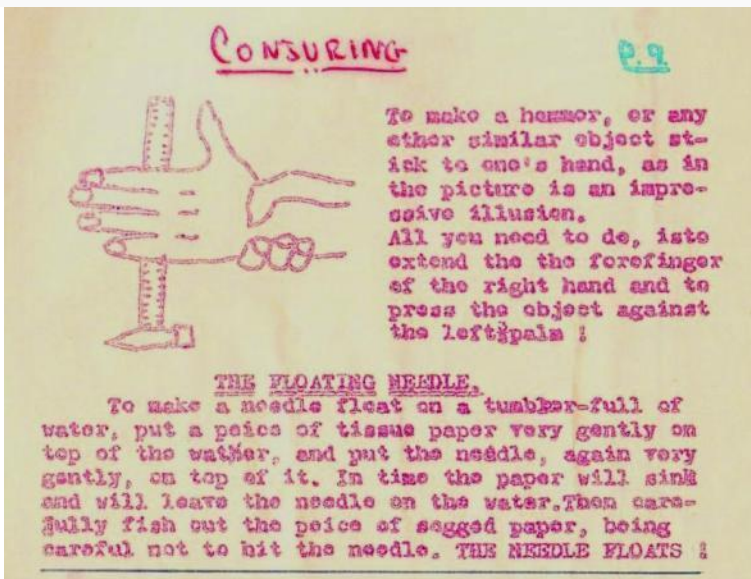
The grounds (70 acres), include football and cricket fields, and a large kitchen garden which supplies the school with fruit and vegetables. The farm, belonging to the school, provides pure milk and cream. The ventilation and sanitation have been carefully planned by experts in accordance with the demands 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.



My favourite reading matter was the Eagle comic (above). My own journalistic enterprise was to launch and edit the Earleywoodian magazine. It was produced by typing or writing onto a kind of carbon paper of various colours. The sheet was then attached to the cylinder of a hand-cranked duplicating machine which, with the application of copious amounts of methylated spirit, printed out blurred but coloured pages. Each issue of the Earleywoodian started with an adventure story.



Cutaway drawing of submarine, from the Earleywoodian magazine.



How to make a needle float, from the Earleywoodian magazine.

One of my own efforts was called 'The Clue of the Faulty Statement'. Dipping into the story, we find that:

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.

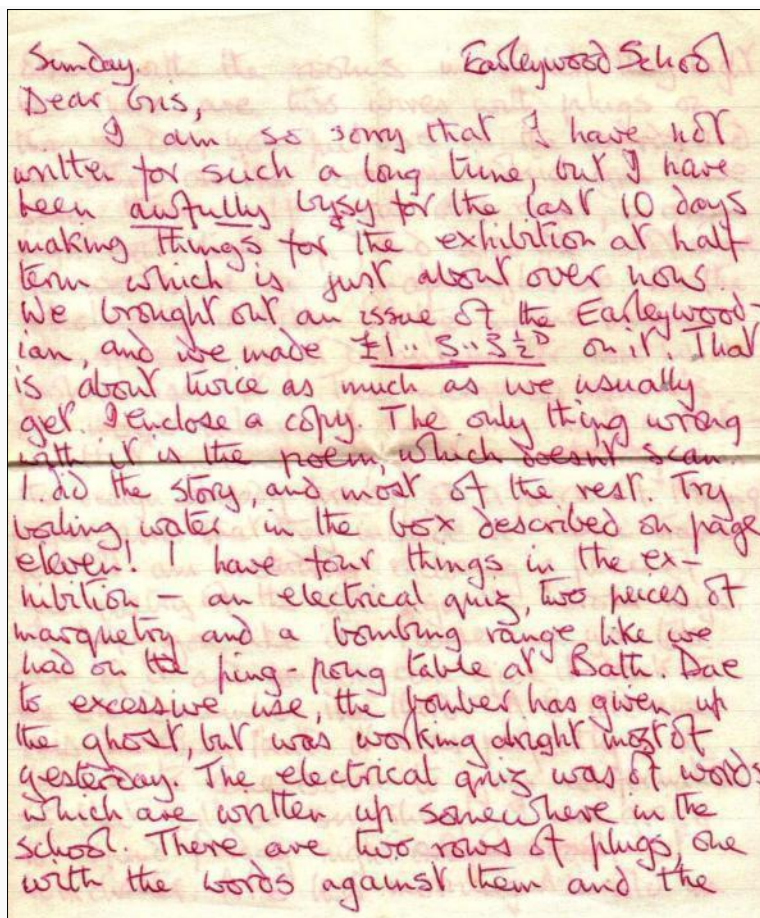
Other contents of The Earleywoodian included poems, jokes, crosswords, sports reports, and useful information on sign language, semaphore and conjuring tricks. A flavour of life at Earleywood is conveyed in this letter I wrote to my sister Griselda.

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.

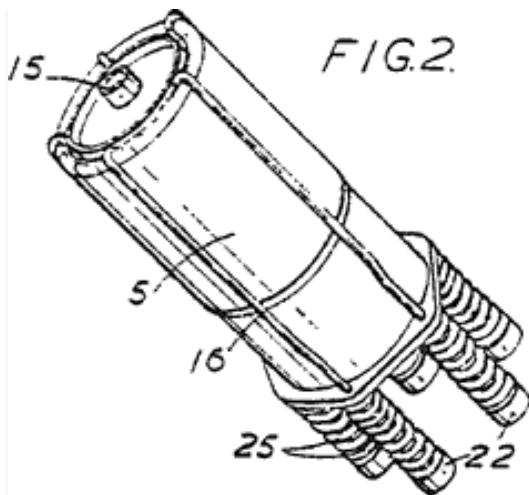
Other cameo memories of my happy five years at Earleywood, from 1949 to 1954, include:

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.

A rocket and a bishop

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. 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. 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.

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.

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.

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



Playing French Cricket at the Royal Crescent, Bath.

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.

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.

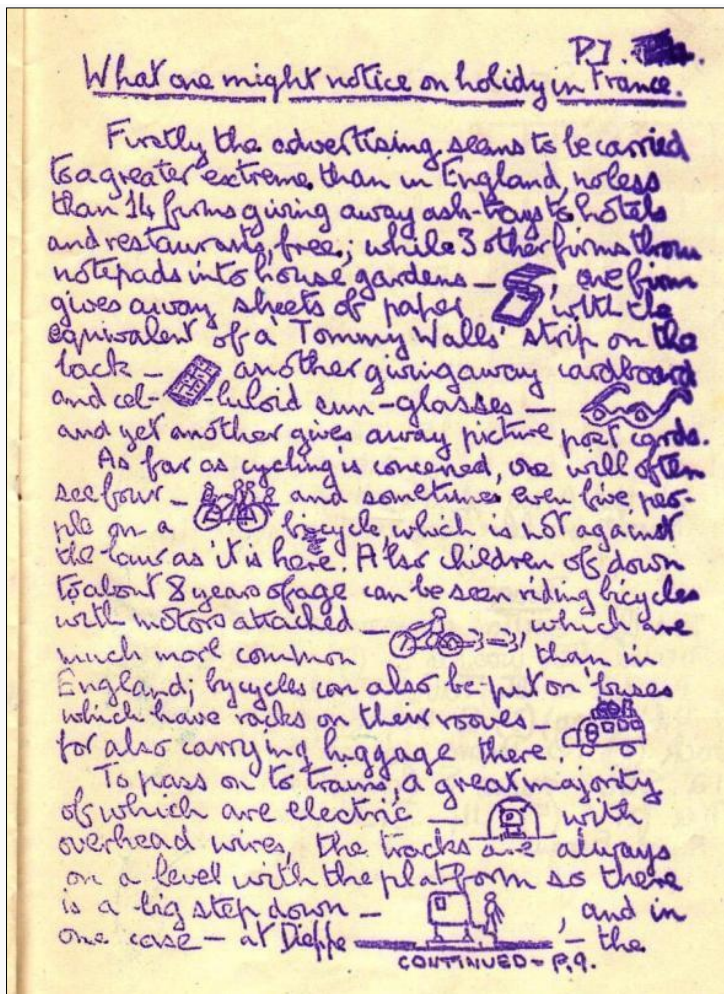
I was also keen on conjuring, and was taught conjuring tricks (and 'patter') by Mr Donovan, a member of the Magic Circle who lived in the Royal Crescent. Later, when I had children of my own, the conjuring came in useful at birthday parties. I also learned from a conjuring book a mnemonic technique for 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.

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 Earlywoodian.

Most summers we would go by ferry to Brittany for a seaside holiday in France. My Earlywoodian article above, written when I was twelve, accords with the Englishman's traditional polite surprise at the strange ways of foreigners. One of the highlights of our time in Bath was the Festival of Britain exhibition in 1951. 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.

The 1953 coronation of Queen Elizabeth 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.

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.

We were expected to learn this language in our first term, and were given an examination by the prefects.

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.



Outfit worn by scholars.



The old cloisters.



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. 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.

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 old cloister adjacent to the main chapel.

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.

Extra curricular activities included pottery and carpentry, where I made a miniature oak table. 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. In History we are

doing the Industrial Revolution - you know, Crompton's Mule, Arkwright, Cartwright etc.



Gramophone, like the one made by Alex.

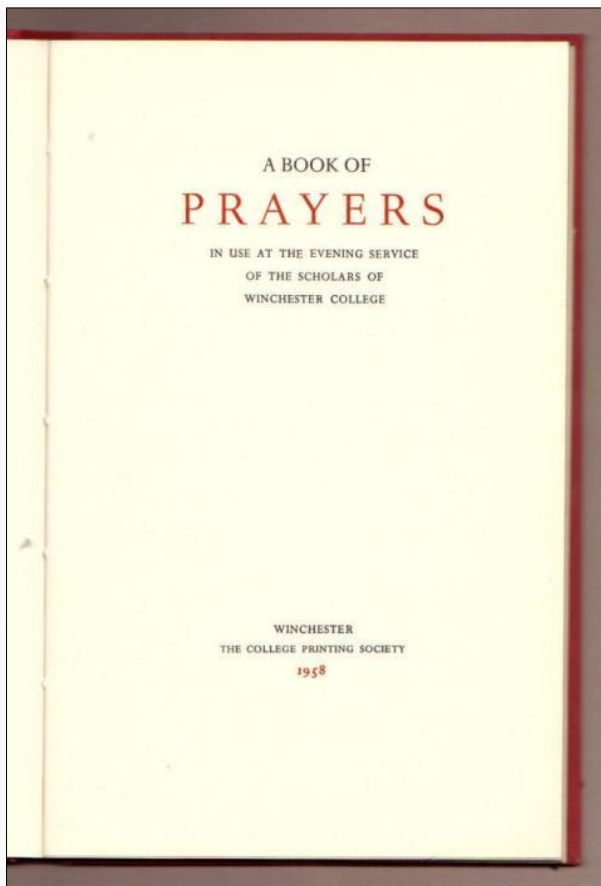
My two main extra-curricular ventures both took place in my penultimate year at Winchester, 1958. Both were joint ventures with my good friend Philip Steadman, who also went on to read Architecture at Cambridge. The first was the setting up of a Printing Society, whose largest project was a book of prayers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

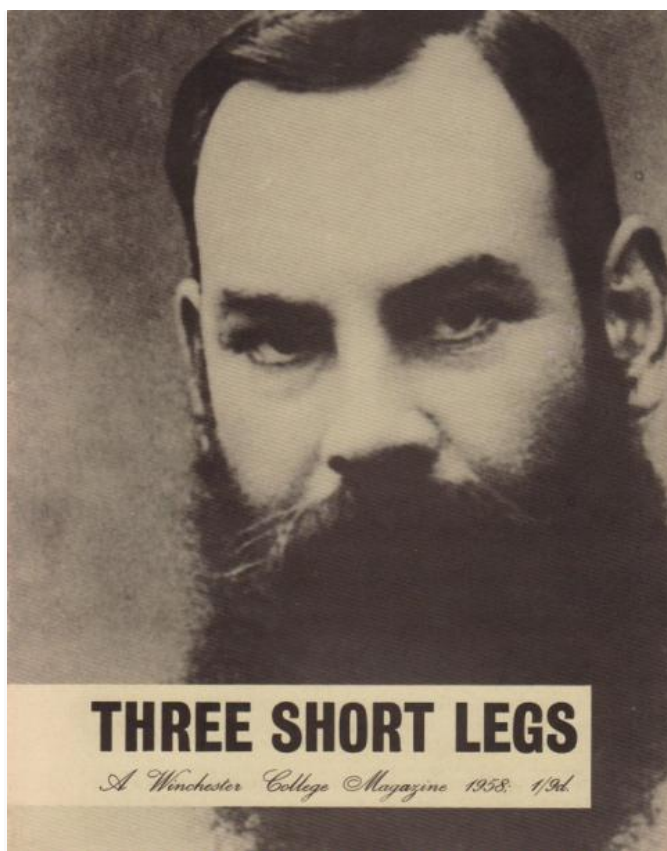
The great project of the Printing Society was the production of a 30-page book of prayers for use in the scholars' evening services. The previous edition had run out of print, and the College agreed to commission us to produce a replacement. The project was a joint effort of the 21 members of the Printing 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

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?

"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.

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 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.

Other cameo memories of my five years at Winchester College include:

Acting as Lady Macbeth

Tom Howarth, who was producing the College play, decided in my first year that I would make a good Lady Macbeth. In the dress rehearsal of the sleepwalking scene I set fire to my wig with the candle. I managed to put it out.

Sailing on the Hamble

Being a disaster at cricket, I opted for sailing as an alternative. We would set out in a minibus for the Hamble River, under the care of Mr Darling. Darling was a physics teacher who was keen on sailing. Indeed he taught largely through the medium of sailing, explaining most physical principles (such as velocity, levers, pulleys, and relative motion) by drawing pictures of sailing boats on the blackboard. The College kept Firefly dinghies at the Hamble boatyard of Fairey Marine.

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.

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.

Writing to The Times

<p>was n in, three mily, were</p> <p>was cted. had , but sore. y so e to rove- ts of the the at. It both was ntist shing</p>	<p>ALEXANDER G. THOMAS, President, Antiquarian Booksellers' Association, 15, Orange Street, W.C.2.</p> <hr/> <p>EARLY ENCOURAGEMENT</p> <hr/> <p>TO THE EDITOR OF THE TIMES</p> <p>Sir,—Those of your readers who have perused her Majesty's purchase tax regulations will have noticed that while carpentry sets are exempt, chemistry sets are chargeable at 30 per cent.</p> <p>At one time the security of our country depended on her wooden ships; it was then no more than prudent to encourage the incipient carpenter. To-day, when we hear so much of the need for scientists, might it not be a first blast to guide the tiny feet of our younger generation on to the path of chemistry?</p> <p>Admittedly it is messy, but at least it makes less noise.</p> <p>Yours faithfully, ALEXANDER REID. The College, Winchester.</p> <hr/> <p>VOICES OFF</p>	<p>cor lan aga tion not be of qu I alth enc</p> <p>I</p> <p>T S Mr Jul Co no oth bus the act ign</p>
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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.

Templeknowe & Greenhill

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 my mother decided to transform it. 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 tomato soup colour. She also bought an electric cake mixer; a man came to the flat to demonstrate it by making a Victoria Sponge.

During this time my father inherited a substantial house in the Scottish borders from his childless cousin Herbert Eckford, who had emigrated to Canada as a young man and made money from a Calgary brewery. He 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 manner, 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.



Greenhill.

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 come off, so you could keep things in it.

7. Cambridge University

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. In later life I followed this advice.



Buckminster Fuller's Dymaxion House.

I took to architecture and much of my life 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. 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.

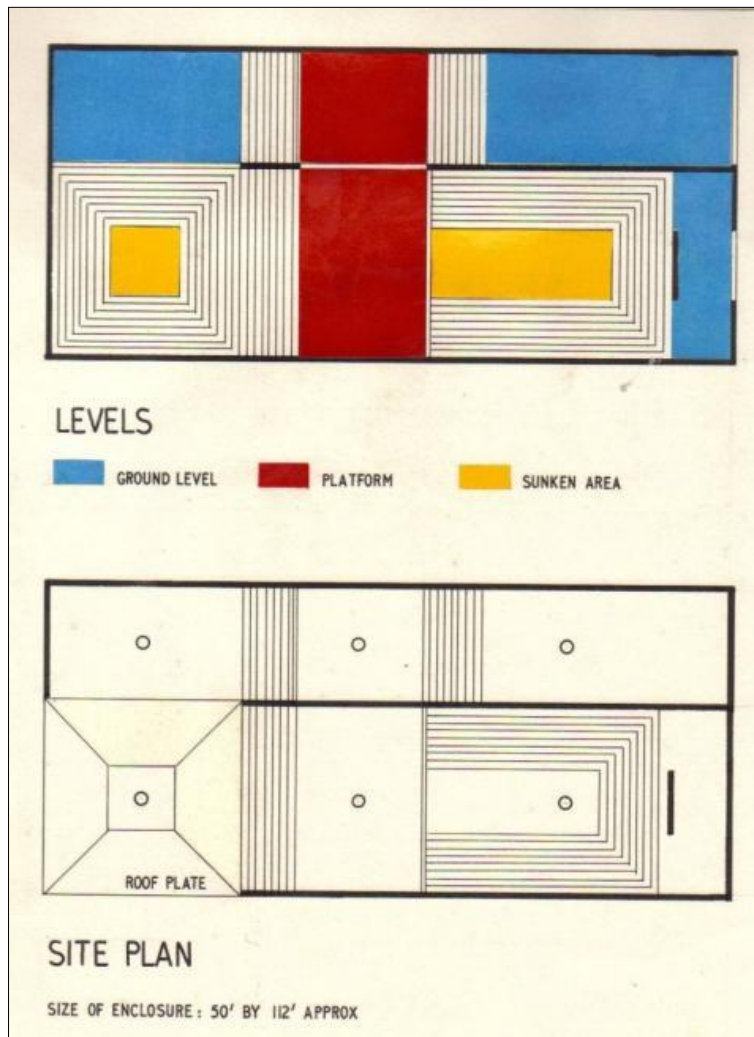
Leslie Martin had been Chief Architect at the London County Council, and was responsible for the design of the Royal Festival Hall. He transformed the Cambridge University Department of Architecture, which had previously been sleepy and backward looking.



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.

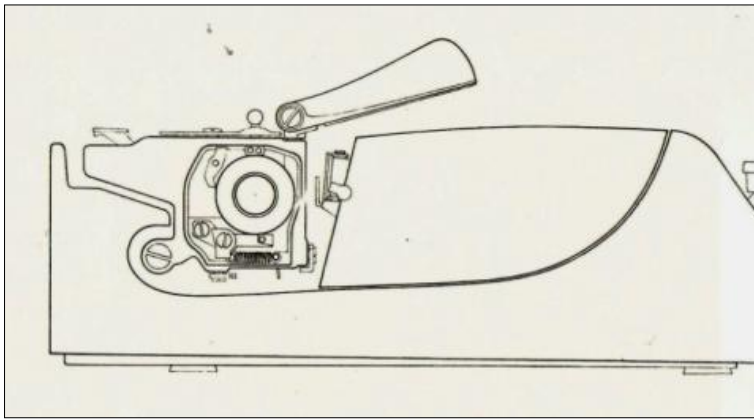
Sadly, I don't think I ever did anything as good as the Sculpture Court again. Looking back on it, there was a central paradox in the way we were taught. We were encouraged to reject old ways, and to think for ourselves. One of the reasons we all admired the heroes of the modern movement was that they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



Sculpture Court project.

But, perversely, we were expected to adhere slavishly to the new orthodoxy, represented by Corbusier, Mies, Wright, and Aalto. If our buildings did not look somewhat like theirs, there would be trouble. A student from Malaysia produced a design with windows in curved Islamic style. She was quietly taken aside by the year tutor, who explained that this was not done. Her subsequent projects were rectangular.

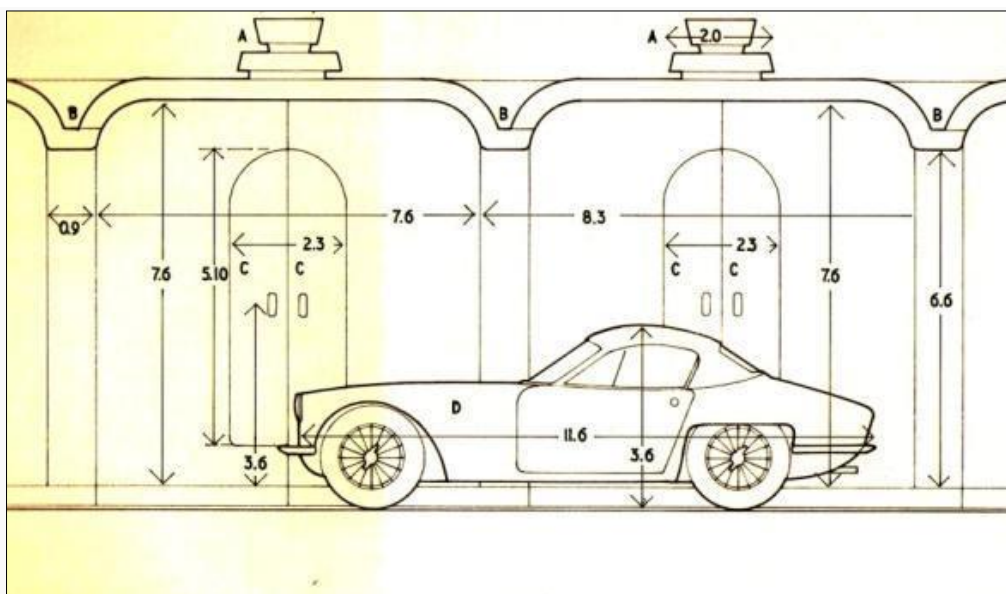
My first signs of insubordination came when we were asked to do a measured drawing. Being enthusiastic about industrial design rather than classical architecture, I did a meticulous measured drawing of the plan and elevation of one of my favourite possessions - an Olivetti Lettera 22 portable typewriter.



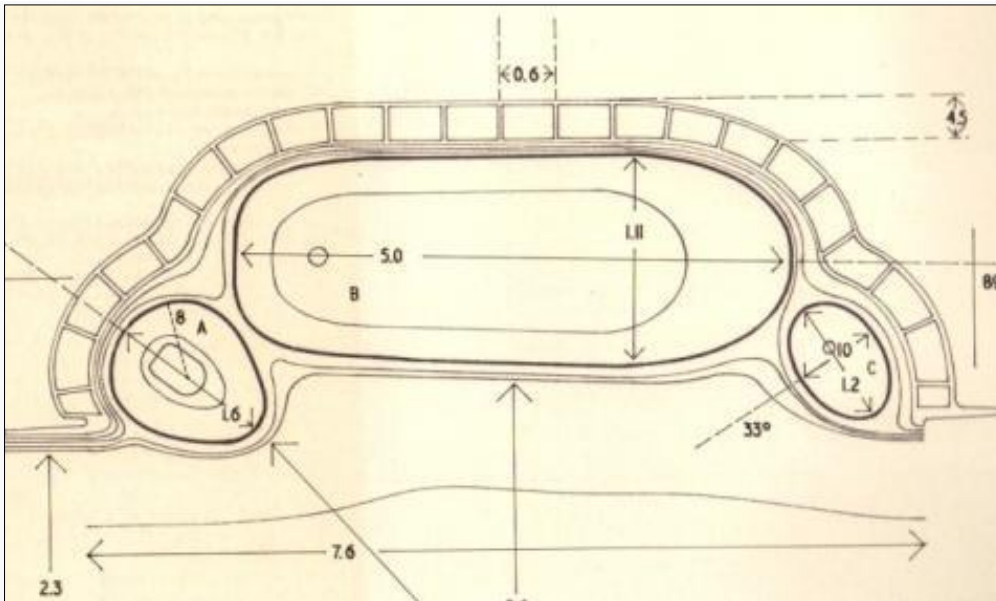
My real clash with the orthodoxy came when we were asked to design a motel for a roadside site between Cambridge and Trumpington. Reflecting the transient nature of road travel, and influenced by the work of Buckminster Fuller, I produced a design consisting of a string of spherical pre-fabricated plastic 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.

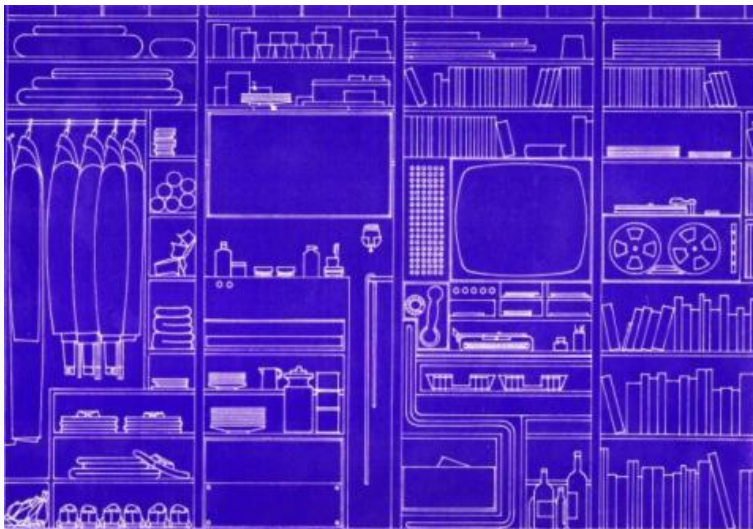


Elevation of prototype glass fibre motel project, with Lotus Elite visiting.



In a homage to Buckminster Fuller, the bath, basin, and toilet were moulded into the room as a single unit.

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.



Fitted furniture in windowless student rooms.

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), and Robin Spence .

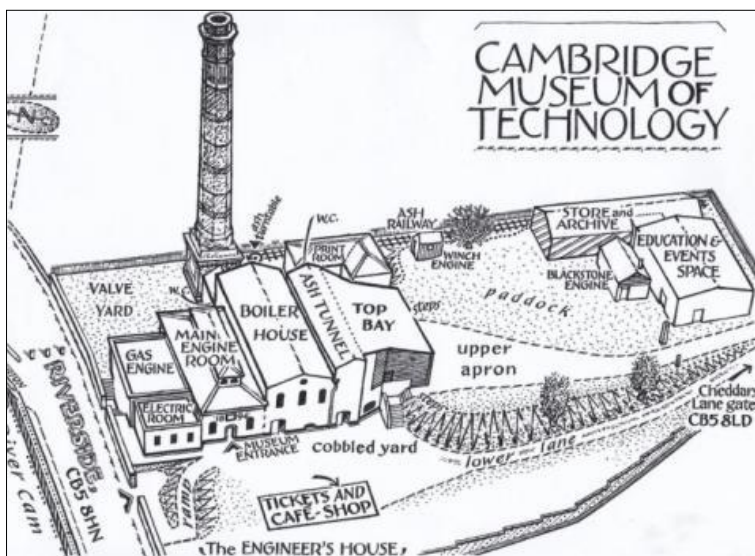
Richard MacCormac went on to have a distinguished career. He established the firm of MacCormac, Jamieson and Prichard, won numerous RIBA Awards for his

buildings, became a Fellow of the Royal Academy and President of the RIBA, and was knighted in 2001. 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.



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.

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.



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.



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.

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.



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

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.

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.

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.

To Jerusalem and back



In May 1961, over a spaghetti bolognese, 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. 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.

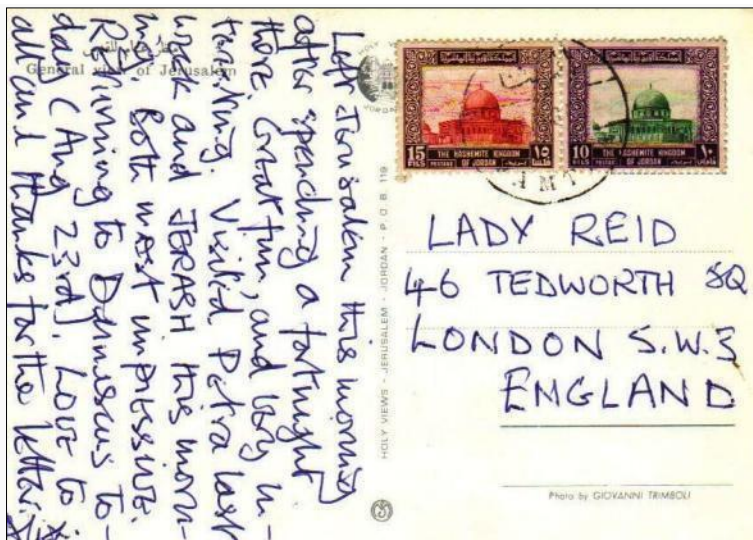
I travelled in the Land Rover with Tony and two others, and Colin rode ahead on his motorbike. We had everything you could want in the Land Rover, including sunhats, refrigerator, mosquito nets, snake-proof tent, lettuce shaker, toilet paper, tinned food, a collapsable Calor gas stove, and an economy 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!'.



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

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

The motorcade 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.

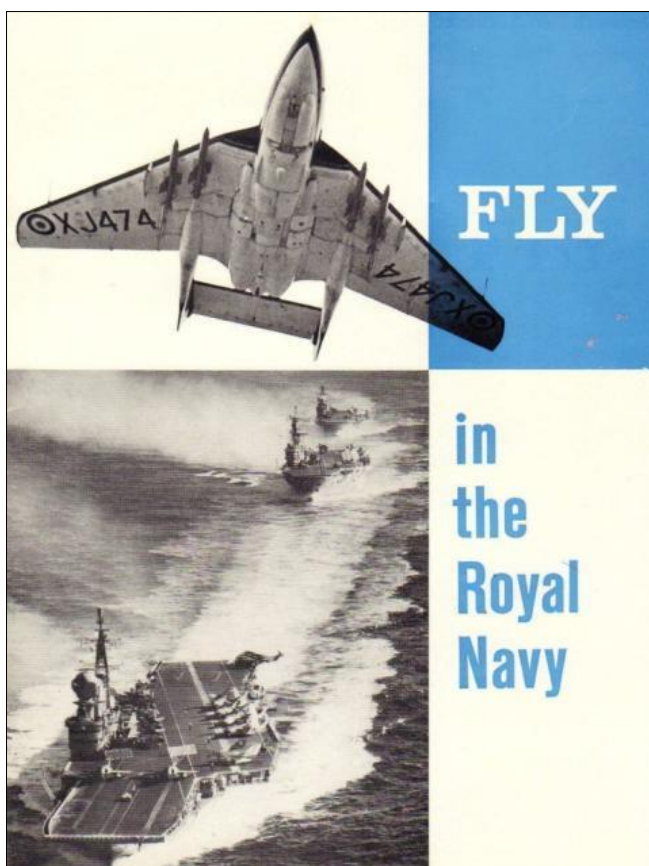
and our arrival in Jerusalem:

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.

8. Learning to Fly



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

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'.

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'.

TERM 1	DATE	TYPE OF BOAT	CAPACITY AND DURATION	REMARKS	TERM 1
ignit vs. grey light off to a start, car onsistently ed 9th out used the inlet and ronarily de 100/06	18.10.62	Whalbr	crew 2 hrs.	Pulling back from Ditisham 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 wind to push wind to tide oblong	

Dartmouth Boatwork Log Book.

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.

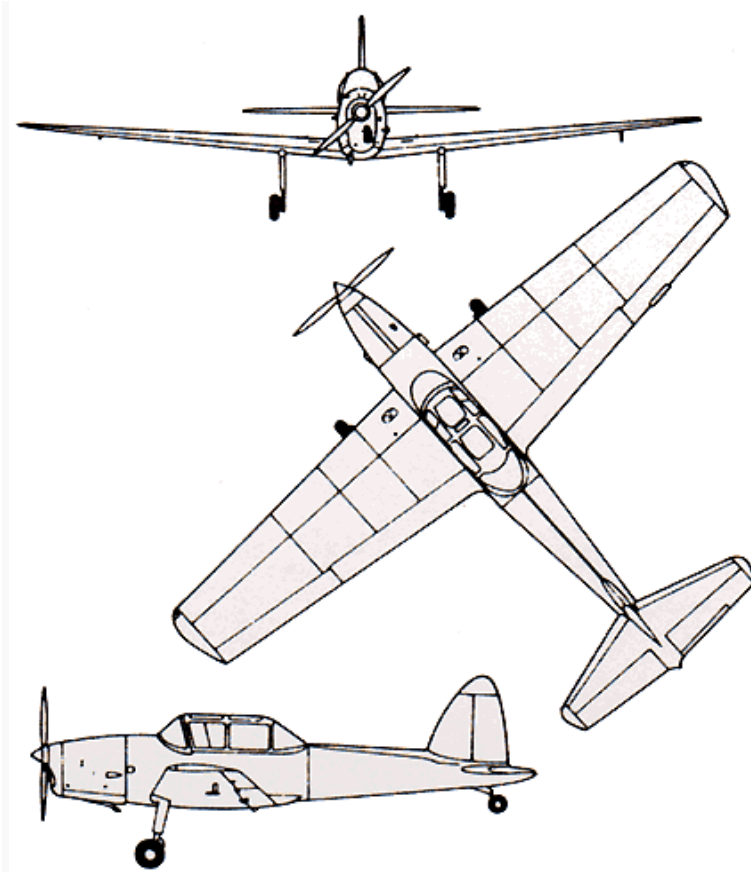
Those of us who were on our way to being pilots were given initial pilot training at the nearby Roborough airfield. We flew in Tiger Moth bi-planes with open cockpits, wearing leather helmets and goggles. After about ten hours of instruction we were sent out on our first solo flight. It was a nerve wracking 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.

Cornwall

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.



During my time at Culdrose 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 Offer 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.

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.

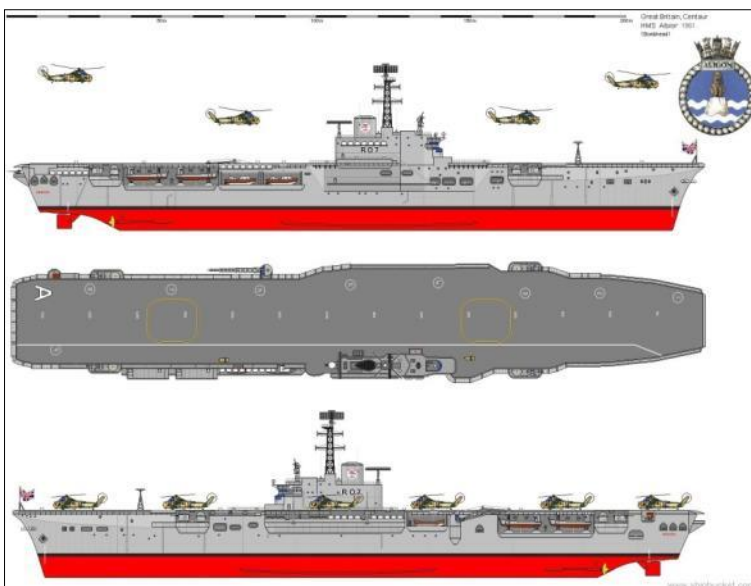
After a few months my helicopter training was completed, and I set off to sea on the aircraft carrier HMS Albion for an 18 month tour of duty in the Far East.

9. HMS Albion at sea



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

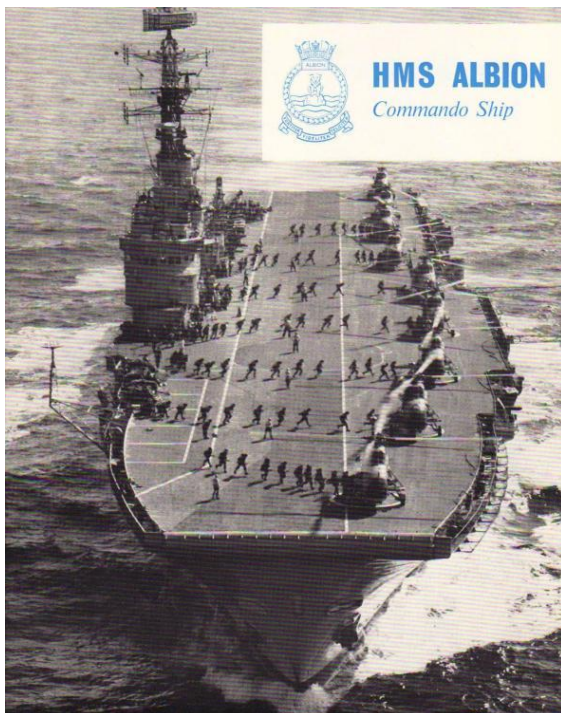
joined HMS Albion. Some died following engine failure over the jungle; some on landing or taking off; some in mid-air collisions; and one, our youngest pilot Tim Wootton, in an accident in the aircraft carrier's hangar. He was buried at sea in a moving ceremony.



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.



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.

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 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.

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.

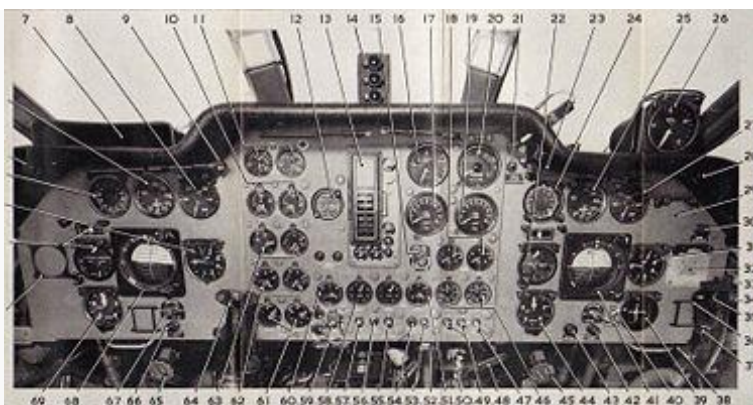
For the sake of the pilots' night vision, the briefing room is lit only with red lights. It is fifteen feet by twenty, with rolling blackboards covering one wall, and tiered benches across the other. As the hand of the plastic wall clock jerks to 7.30, the assistant operations officer (Ops II) rises 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.

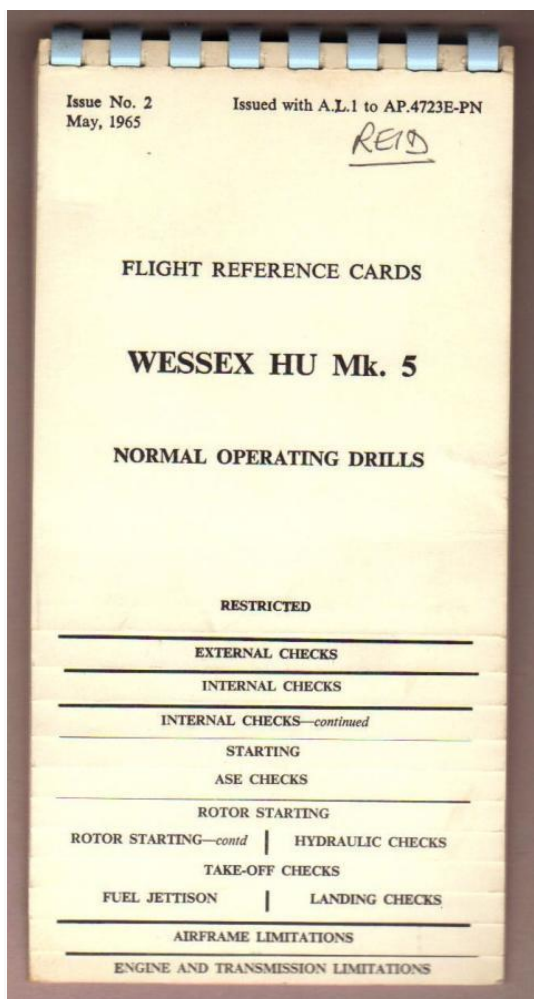
All day the maintenance ratings have been working to prepare your aircraft [a Westland Wessex 5] for this one hour flight, and their work is recorded between the hard blue covers of the 700 book. It is a sacred rule that the pilot must initial the aircraft's 700 before take-off, so after a check of the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

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. 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.



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. 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.

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'. This required Sara to hang around for days at RAF Lyneham, with little Anna, hoping that there might be a spare place on a flight to Singapore. She was eventually lucky, had got to Singapore, and had installed herself in a small rented flat. It was wonderful to see them both again.

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. Sara had a small basketwork seat she could strap to her back for carrying Anna on the scooter. It would not have complied with any modern safety regulations, but all three of us were young and carefree. I did come off the scooter once, and still bear the scar on my left elbow, but that was our only accident.

Sara and I 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 spotted 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.

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.

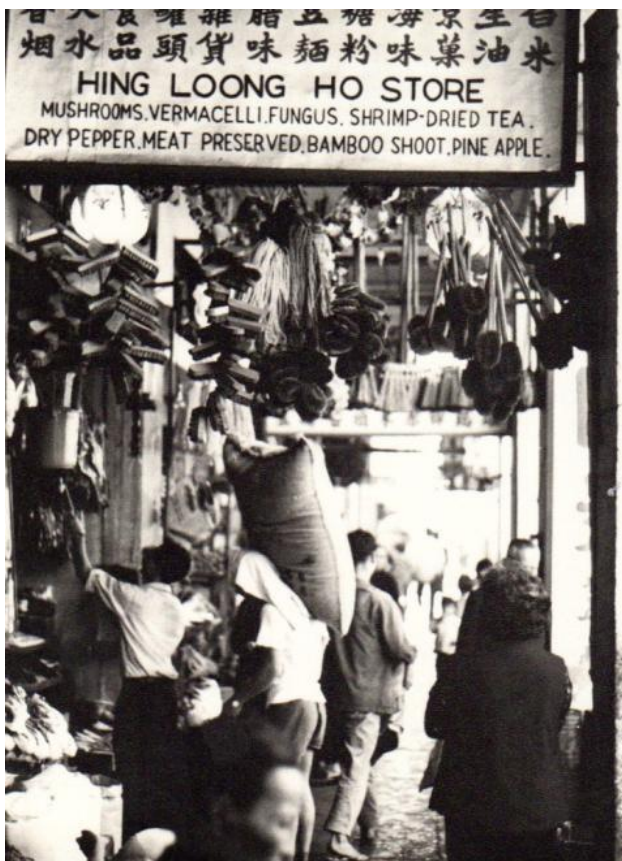
At the entrance to the drive of this palace are the Royal stables and garages. The Sultan maintains a polo ground and stable some four miles out of Johore Bahru, where sixty snow white horses are kept in immaculate stables. However, the Sultan likes to keep horses around, and in his palace stables there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

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.



Shop in Singapore.



All aboard.

Sara and I 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.

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 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.

I wrote a circular letter home about our 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.

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.

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. 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'.

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.



Whirlwind search and rescue helicopter.

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.

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

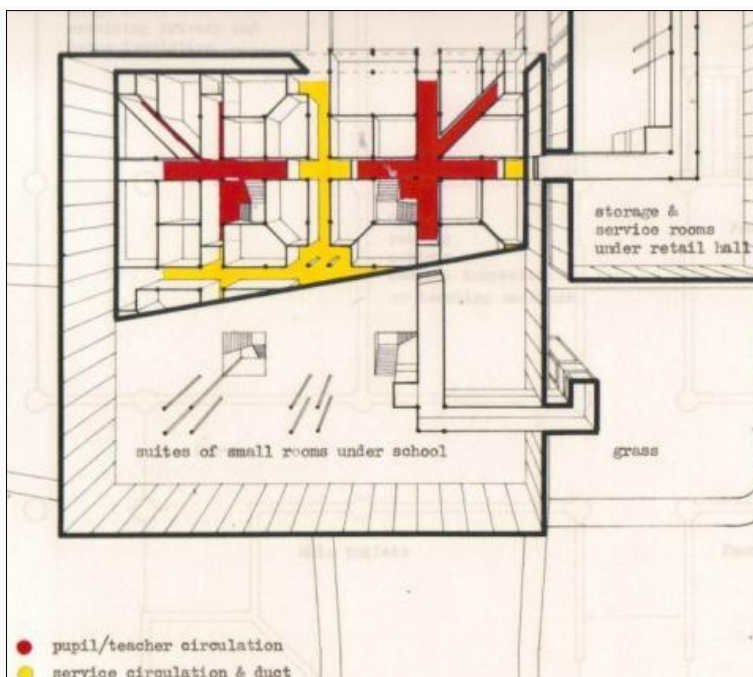


University College London, Gower Street

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.

MSc, Bartlett School of Architecture

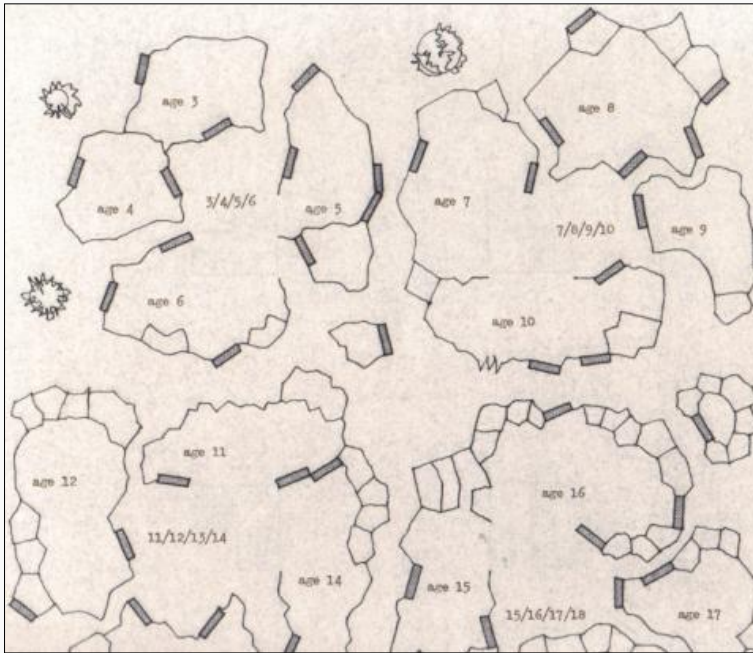
I was offered places to continue my architectural studies at both the Architectural Association and the Bartlett School of Architecture, which is part of University College London. I opted for the latter, drawn by the range of subjects on offer.



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.

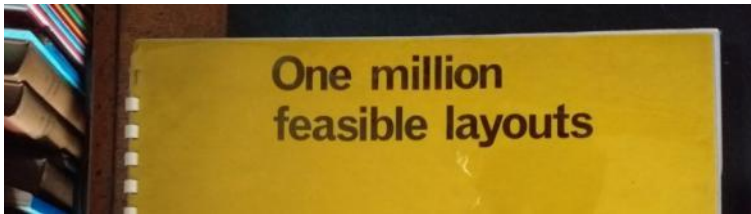
For Milton Keynes, I proposed two types of school: 'base schools' serving a population of between 900 and 1800, and specialist 'activity centres' serving a population of 30,000. As the child grew up, it would spend a decreasing proportion of its time at its base school, and an increasing proportion at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



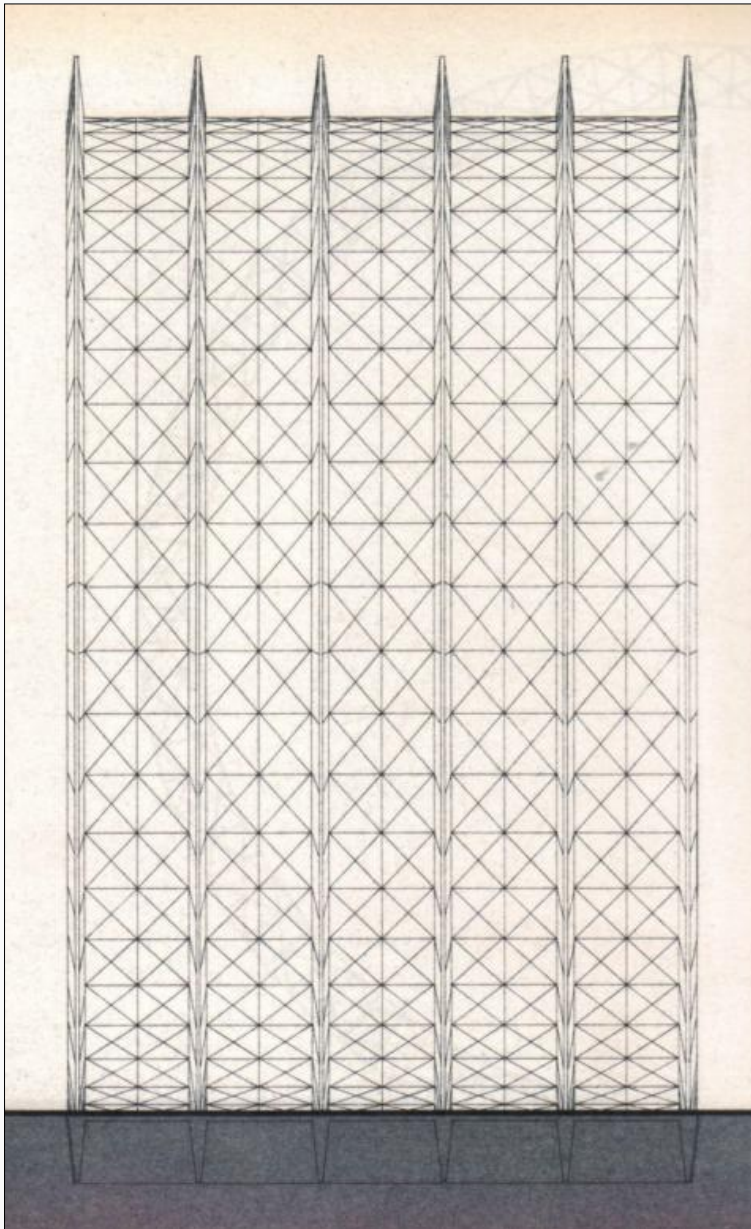
School project: classroom layout.

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.



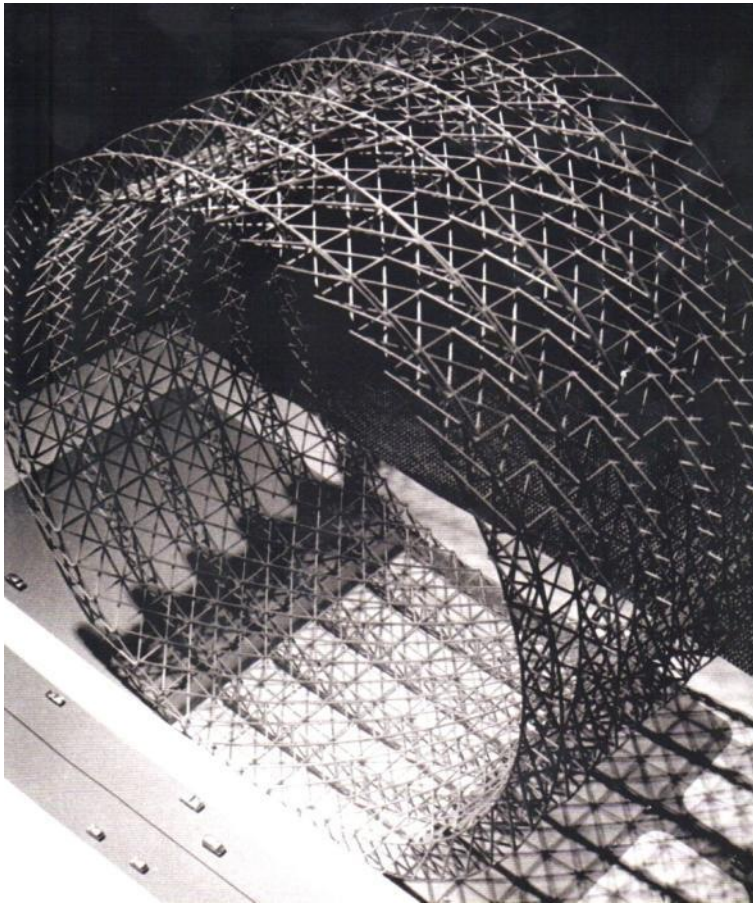
The book could therefore be opened in a million different ways (10 to the power of 6). Careful attention to adjacencies ensured that however you opened the book, the layout made sense and the walkways connected up properly.



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 unusual, 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 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.

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 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.

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.

PhD, Joint Unit for Planning Research

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.

Through a 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.



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.

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.

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.

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



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

For acoustic reasons, we had in both London and Edinburgh to build a room within a room, with 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. 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.



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 'golf ball' and 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.

13. 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 was 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. They also 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.

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.

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. 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 economist Michael Tyler.



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 only 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 (above). 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.

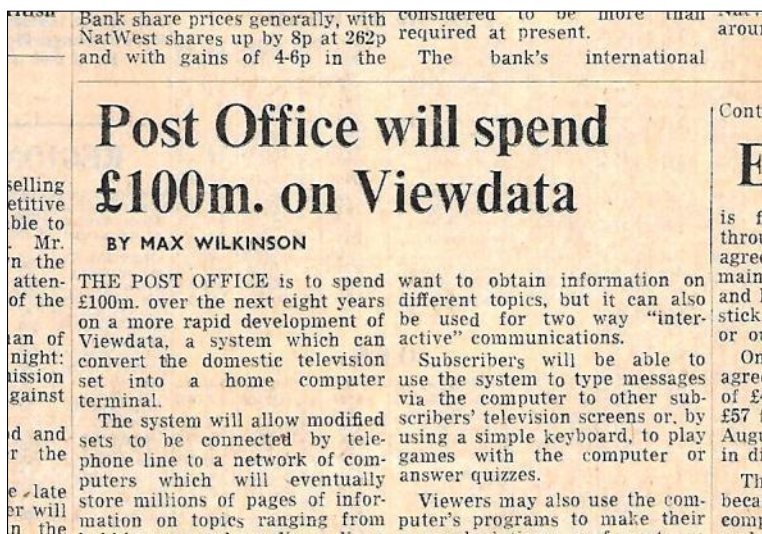
Prestel

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.



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 (below centre).



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.



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



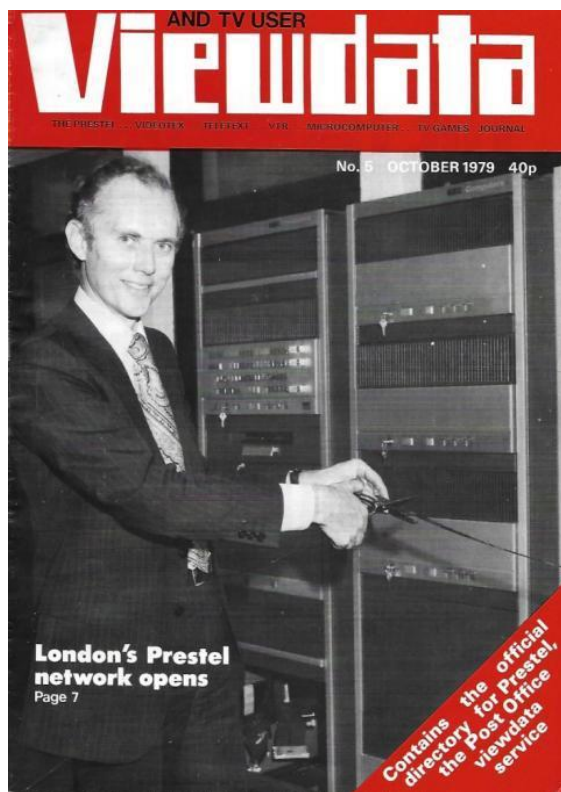
an elegant diamond shaped logo, inspired by the way in which the letters on the Prestel screen appeared in rich glowing colours against a black background. By the time our launch approached in early 1980, there were hundreds of firms in the project, including numerous manufacturers and retailers of TV sets, and many information providers. These included prominent publishers such Reuters, the Financial Times, and Exchange and Mart



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

At least two publishers had launched Viewdata magazines and directories, and others had organised trade exhibitions and events. A new industry was being born! 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.

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

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.

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 included:

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.

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 much 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.



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. I 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.

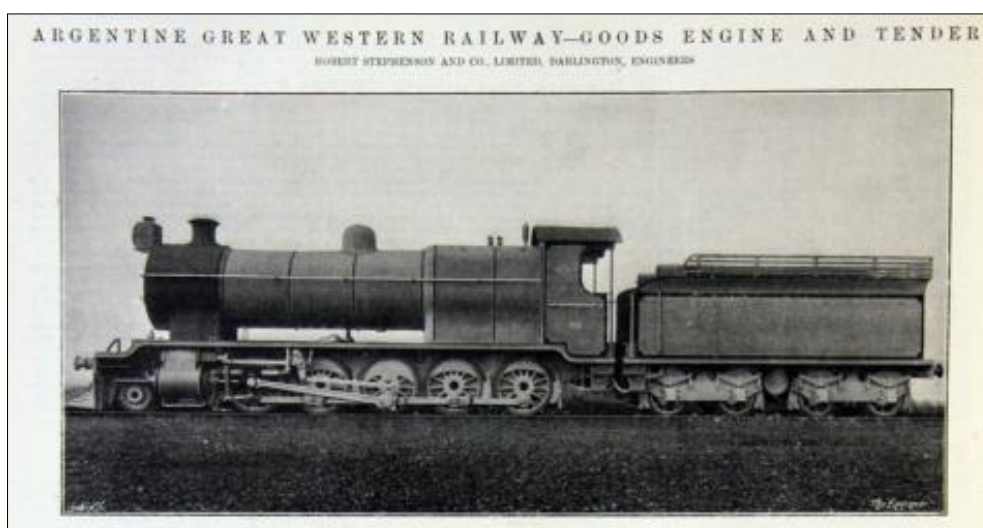
After a considerable delay there was a knock at the distant front door of the flat, which evidently opened to admit Sir Hector. At this stage he could be heard and not seen. There was a sound of huffing and puffing and grunting as he made his way down the corridor. He then burst into the drawing room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

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. 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



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

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. 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. 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.

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. 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 either because the Board member responsible for it leaves, or because the manager running the corporate venturing leaves, or all those involved in the corporate venturing leave. 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.

14. 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 recruited as co-directors of Octagon two former colleagues: Christopher Rowlands and Ian Barton. 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 telecommuni-cations expenditure.

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. He was somebody I knew from the Cambridge University School of Architecture, where he was a researcher while I was an

undergraduate. 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. 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. 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.

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 infection enthusiasm. Curry for his determination, drive and enterprise. 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. 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.

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. 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.

Curious footnotes

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 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 the meal, during which the Archbishop continued to smile but say nothing. After about an hour there was a lull in the conversation, and the Archbishop spoke. He said 'Woman is like a water melon'. We tried to draw him out on the subject but, continuing to smile, he said nothing more for the rest of the evening.

15. 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.

Telecom Alert 1992-148: December 29th

Ref: mtele. Edited by Alexander Reid. Published 100 times per annum by Alert Publications, 8 Crinan Street, London N1 9SQ, UK. Tel: +44 71 239 7764, fax: +44 71 833 9251. £380 (US\$685) per annum. The World on a Page.



DEUTSCHE TELEKOM LOOKS EAST

Deutsche Telekom has set up a joint venture with two German firms - ANT Bosch Telekom and Deutsche Aerospace - to build and operate a telecomms network across central and eastern Europe using capacity leased from Intelsat. Deutsche Telekom will have 51% in the venture, which will use Deutsche Telekom's Intelsat capacity. Target customers include businesses wanting one-way and two-way satellite services, TV broadcasters, and local phone operators. Deutsche Telekom already has a 19.5% stake in Utel, the company awarded a licence by the Ukrainian government to re-build the country's long distance and international phone network. (FT Telecom Markets 22.12.92).

And From Telecomms Policy Journal ...

The December 1992 issue of Telecommunications Policy is a special issue devoted to the papers presented at the IBC/PA conference on World Privatization of Telecomms:

- **Softly Softly.** Bessel Kok, chief executive of Belgacom of Belgium, describes an emerging European model of progressive privatization, in which the first step is to achieve operational autonomy from Government.
- **Key Role of New Entrants.** Bruno Lasserre, Director General of the French Directorate of Regulatory Affairs, argues that the admission of new entrants to the telecomms markets is much more important than the privatization of the existing dominant operators.
- **The Role of the EC.** Herbert Ungerer of the EC describes the three main aims of the EC in telecomms policy: liberalization, the separation of regulatory and operational functions, and the realization of scale economies.
- **Competition in Canada.** Keith Spicer, Chairman of CRTC of Canada, describes competition strategies adopted in Canada. Competition in the long distance market has been sanctioned, and Teleglobe has been privatized.
- **Competition and Social Goals.** Bill Wigglesworth and Fod Barnes of OfTel describe how competition has been introduced into UK telecomms without detriment to social goals.
- **Four Models of Telecomms Regulation.** David Gillick of PA describes: the autonomous semi-judicial commission; the independent official supported by a separate office; the independent official supported by a unit within government; and a government ministry.
- **Privatization and Capital Markets.** Sammie Thompson of Kidder Peabody says that what has made telecomms privatizations attractive to US investors has been the growth potential in countries with low phone penetration, and the opportunities to improve productivity.
- **Monopolies in High Growth Economies.** James Golob of SG Warburg argues that the most attractive opportunities will be monopolies in high growth economies, and markets where the regulatory system is in its infancy.
- **Eastern & Central Europe.** Edouard Wylleman of the European Bank for Reconstruction and Development discusses the financing of telecomms in Eastern & Central Europe.
- **Privatization and Modernization.** John Buckley of PA argues that, on balance, privatization has a net positive effect on the rate of modernization.
- **Privatization and Public Service.** Michel Treheux of France Telecom argues for monopoly in basic telecomms services and competition in other services.

• Other papers discuss privatization in the Argentine (Luis Gonzalez Lanuza, Marval, O'Farrell & Mairal), Alberta, Canada (Neil Webber, TELUS), and New Zealand (S M Lojkine, NZ Commerce Commission).

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.

16. DEGW

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.

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.

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. The little open-fronted cabins moved continuously, and you had to jump in and out very quickly.



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.

17. 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. 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.

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.



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.

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 praise 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.

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. 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.



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

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. Rod Hackney kindly invited me to stay at his home in the Peak

District near Macclesfield. 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 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.

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. 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.

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. 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 and I decided to abandon the project.

RIBA Presidential election

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, very reasonably, decided that the Presidency should be held by a practising architect, not by a manager.

18. Retirement

Cambridgeshire County Council

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. 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.

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. 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 (above). The idea of this large green space survived later iterations of the master plan, although its shape did change.

Outlook Fund

In 2009 I stepped down from the County Council after serving 6 years. I had learned during my time on the County Council about their role in caring for Looked After Children. Formerly known as children in care, these are children who have had to be removed from their parents into the care of foster parents or a foster home.



This arises only in dire family circumstances, such as neglect, addiction, or violence in the home. I set out to establish an endowed charitable fund, known as the Outlook Fund, whose income could be used in perpetuity for this purpose. The first donors to the Outlook Fund were Hermann Hauser and Pamela Raspe, who very generously donated £40,000. 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. 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.

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 - an entrepreneurship centre, which would house Cambridge Enterprise – the department of the University tasked with realising the potential of University inventions. Construction had not yet started, and there were concerns about the upward spiralling of costs. At the Hausers' suggestion, I was retained as a consultant to the University to help steer the project.



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. My main task was to work out a plan for the future ownership of the company. 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. Employee ownership was introduced and worked well.

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. 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?

Photography

I have always enjoyed taking photos of ordinary things which deserve a second look. The eerily empty corridor below is at the Pickfords Cambridge self storage building.



Websites

I have in retirement built various websites, most of which fizzled out. They included one on Colourful Cambridge, one on the World's Best Websites, and one on 500 Free Things to do in London. I much enjoyed each exercise, but it was a bit like writing books that do not get published. The exception is a website which is thriving. It is called Lives Retold, is at www.livesretold.co.uk, and contains more than 350 life stories totalling over 20,000 pages. The first was an account of my father's naval life. I then did accounts of my mother's life, and this account of my own life. I went on to collect family life stories from friends and relations, and compiled life stories of people I found particularly interesting – mainly inventors, designers, makers, and founders of institutions.