

## **Speech 80<sup>th</sup> Celebration (delayed)    Saturday 20 November 2021**

### **Thanks**

Master, Fellows, Guests : I am glad to see the College recovering from the pandemic and reviving traditions – one of them being to allow those reaching 80 to volunteer to give an account of themselves, rather like drafting part of one's own obituary. So here goes.

### **Family background**

My paternal grandfather Thomas Bonner Morley was a Scot from a background of shipbuilding on the Clyde, born in Glasgow in 1881, a mechanical engineer and designer of steam and gas engines. In 1916 he was awarded an ScD of Glasgow University, and the family used to have a fading photograph of a steam-powered biplane that he developed. He worked in Glasgow and then in the Manchester area, and ended his days as head of engineering at Sunderland Technical College, precursor of the University there.

Thomas's second son, my father, George William Morley, was born in Glasgow in 1912, went to Manchester Grammar School, entered Caius College in 1930, took Firsts in Mathematics and Mechanical Sciences, and started work with Dorman Long the Middlesbrough steel company in 1933, as a trainee in the Bridge Department at £1 per week. Not a designer, but an organiser of construction, providing required temporary works and the like, a proper engineer who built things not just an academic interested mainly in theory, George was a much better engineer than I ever was. In a long career he built or repaired bridges over the Zambezi, the Menai Straits, the Nile, the Euphrates, the Tigris, the Forth and the Severn, the latter two as Chief Engineer for the consortium of contractors. Suspension bridges were his particular interest, and floating-in of pieces to be lifted into place his particular skill. When not building bridges he fitted in being the contractor's principal site agent on construction of the huge steel-making plant at Lackenby near Middlesbrough – now moth-balled - and constructing the first jack-up rig to drill for oil in the North Sea.

Later he moved from contracting to inspecting, and became a Resident Engineer representing the designer on site, for the Erskine Bridge over the Clyde, ending his life as Principal Resident Engineer for the suspension bridge over the Humber, for many years the longest main bridge span in the world. So a very hard act to follow!

My maternal grandparents came from rural North Yorkshire, and moved to Middlesbrough where my grandfather, a postman, died early leaving his widow with six children, of whom my mother Dorothy Pearson, also born in 1912, was the last. My mother was immensely bright, with great interest in languages and words, a leader in the Sixth Form at Middlesbrough High School for Girls, who nowadays would have gone to Oxbridge but for whom the family then could afford nothing more than teacher training in Darlington. She met my father at a dance in Middlesbrough, where they married the day before the second war was declared, and I was born in July 1940.

### **My schooling**

I went to primary school in Middlesbrough and then Redcar, where the family (one sister and one brother) moved in 1949. After passing the 11 Plus I attended Sir William Turner's School in Redcar, also known as Coatham Grammar School – with hindsight a remarkably good state school for a somewhat undistinguished area, with several masters with Oxbridge

degrees. As my father was often away on contracts in Egypt and Iraq, we were brought up by my mother. Very proud of her children and what they achieved, she nevertheless regarded herself as at least their equal intellectually.

At school I could do well at almost any subject, except perhaps translating Virgil unseen. We went for walks in the Cleveland Hills, visited London and Edinburgh as well as Whitby, Scarborough and the seaside, and generally had quite a good time, despite rationing and other austerity. I played rugby for the school, and devoted hours to practising cricket, with enthusiasm but very little success. My father wanted me to go away to school, Gordonstoun or Barnard Castle, but I refused, determined to stay in Cleveland with my mates and the local scouts.

In those days industrial Tees-side was thriving, with steam and smoke rising on every hand, smells from the chemical works, and brilliant illumination of overcast night skies by furnaces and tipped slag. Also my favourite uncle was a radio engineer who for some years before the war had received TV signals at record distances from London. So there was little doubt that I would aim to be an engineer.

### **Cambridge**

After A-levels I stayed on at school to prepare Maths, Physics and Chemistry for the Seventh Term Entrance Exam for Cambridge, taken in Cambridge itself – I arrived at Caius in December 1958 in one of the last thick smogs before the Clean Air Act took effect. I won a Major Scholarship, and also gained financial support from the Institution of Civil Engineers.

I spent a fairly conventional three years as an undergraduate, in the same rooms in Gonville Court throughout – played rugby, went to the cinema often, ate meals in Hall supplemented by Indian restaurants, was supervised by one of those who put the car body up on to the roof of the Senate House, went to lectures on philosophy as well as engineering, and attended meetings of the university Heretics Society (which existed to bring unconventional speakers to Cambridge – not something much done nowadays I fear).

I decided to stay on to do research on Structures, but in order to differentiate myself somewhat from my father, to work on reinforced concrete rather than steel.

I went by sea to Ottawa for a summer internship in the Canadian National Research Council, and was all set to start as a Graduate Student when, to my astonishment, an offer arrived from Caius to become a Junior Research Fellow – a so-called Unofficial Fellow – immediately, without having done any research, much less written a dissertation! all on the strength of Tripos results.

The irony was that the person Caius really wanted – when my Tutor said ‘what about Chris’ – accepted a rival offer of an immediate teaching fellowship at another college! So Caius was left taking a great gamble on me.

At the oral exam on my PhD thesis the two distinguished examiners argued about whether a correct solution to a certain problem could even exist, so I spent much of the time sitting back, diplomatically concealing somewhat my full agreement with one of them, Eustace Fox, Fellow of Trinity, a powerful mathematician who later went on himself to find the solution in question.

## **Industry**

In 1965 I left Cambridge and joined Freeman Fox and Partners, consulting civil engineers, a firm for which my father later worked. Motorways were then being constructed across Britain, and I was sent first to work on the Almondsbury Interchange between the M4 and M5 near Bristol; then to watch construction of concrete bridges for the M1 in Northern Ireland (fortunately just before the renewed outbreak of Troubles in 1968); and then to the design office in London, working on an interesting M5 viaduct along a hillside near Weston-super-mare.

## **Cambridge again**

In 1968 I returned to Cambridge as an Assistant Director of Research in the Engineering Department. Eustace Fox was about to retire, Trinity appointed me to succeed him as College Lecturer, and I have been a Fellow ever since, so far for 53 years.

On the teaching side, I greatly enjoyed my time in the Engineering Department – not so much the lecturing to large audiences as the laboratory teaching of smaller groups, especially in the Structures Lab and the Concrete Lab, and the project and design work – and I was Deputy Head (Teaching) in the Department for a few years.

I have never regarded college instruction of undergraduates – supervision – as any kind of chore to be avoided. So I always did at least my stint, and to this day do about three hours per week of second-year Structures and Mechanics, greatly helped by the principles of my subject not having changed much over the years.

I did have a number of research students during my career, about one new one per year, and there are two dozen PhD dissertations on my shelves. Several students went on to good positions in industry or academia. However, although my own research started well, with a theorem or two and what I thought were some interesting findings on reinforced concrete, it did not advance as well as I had hoped, with some pursued avenues not proving fruitful, a couple of mistakes, and insufficient writing or grants obtained – and I did not progress beyond Senior Lecturer.

## **Offices in Trinity**

So I gradually turned towards holding other part-time offices in the College, starting with becoming Steward in 1971, then Tutor and Senior Tutor, then Assistant Bursar, Tutor for Advanced Students for ten years, Vice-Master, and latterly Secretary of the Council. Here I would like to express my great appreciation of the highly competent and loyal staff who assisted.

Of course I continued as an ordinary Fellow, doing one three-year stint on the Council, and contributing to ongoing debate, for example joining the long battle to end the restriction of Junior Research Fellowships under Title A to those already members of Trinity – frankly astonished by some of the arguments made for keeping the competition closed, for example that Graduate Students would not apply to Trinity without such an exclusive route to Fellowship. Research Fellows, junior and senior under Titles A and B, are I think very important to establishing some independence from the University, so that for research the College is not thought of as just some sort of rooming house.

Alliances of Fellows on the various topics formed and dissolved. I joined Gareth Jones in urging Trinity to give more support to less-well-endowed colleges, regarding that as a duty – not just philanthropic but out of self-interest, rather as football clubs, though rivals, need to keep their league alive. I was delighted by the establishment of an Expenditure Committee at my suggestion, in those days aiming to promote rather than rein in expenditure.

I fully supported Anil Seal in his campaign for proper maintenance of the College's buildings, and his foundation of the Cambridge Commonwealth and Overseas Trusts to support students from overseas whose fees went up dramatically, and his foundation of the Newton Trust as a vehicle for supporting others – but I have not been forgiven for once combatting his election to the Council by putting up a rival candidate, successfully. He had favoured keeping Title A closed.

### **Ordinary life**

For many years I was a batchelor don, residing in L3 Nevile's Court. However I did not want to become submerged in the College, and – interested in sport as a participant rather than a spectator – I played very amateur rugby for a local club, and a little cricket with the High Table team. After returning from sabbatical leave in Oslo I became (and still am) an addict of orienteering, going out to forests nearly every Sunday, also with a local club. That year on leave in Norway was spent on research and design work for large concrete platforms for exploiting North Sea oil – not widely approved of nowadays, but then a great challenge for engineers. Later on, returning from more sabbatical leave in Zurich and Singapore, I brought back habits learned there, and took to running every Monday evening with the local hash house harriers. In the Long Vacations I went every year on the Trinity Lake Hunt from Seatoller in the Lake District, chasing human hares across the fells around Great Gable – and latterly I have annually led a group of friends walking for six days in European hills.

### **College offices: Steward, Tutor**

Returning to the various college offices that I have held, I tried to be reasonably innovative – the instinct of engineers being to invent things.

My good fortune as Steward for four years in the early 1970s was that I did not have to appoint a Catering Manager. I did try to vary the menus somewhat, but habits were somewhat ingrained – when I moved fish from Fridays the wine served at dinner continued for several Fridays to be white only. The food was not very distinguished, and there was a Kitchen Suggestions Book in which Fellows could practice vituperation, which the Steward would graciously rebut. It was gratifying to be succeeded by two Fellows, one to administer the Catering Department, the other charged with improving the food.

I greatly enjoyed my time as a Tutor, getting to know and giving advice to pupils and steering the ones in difficulties towards appropriate professional assistance. To quote from some anonymous verse pushed under my door one evening:

*If your heart is aching sorely,  
if your purse is feeling poorly,  
if your infant son is bawly - so on for several lines, ending  
take no heed as heretoforely,  
come and talk to Dr Morley.*

I was again very fortunate – although of course there were visits to hospital beds, a couple to the police station, and conversations with anxious parents - in my twenty years as a Tutor, with over 100 pupils each year, not a single person on my Side died, when national statistics suggested that two deaths were to be expected.

In those days Tutors hoped not to see parents until Graduation Day, when they and their child would be wished well for the future – earlier contact with parents suggested that something might be going wrong. By contrast, nowadays parents are regularly invited by the Alumni Relations office to ceremonies and the like – whether this is good for establishing independent personality I rather doubt.

### **Senior Tutor**

I became Senior Tutor in 1979. We did not then have so many problems as nowadays with student welfare and mental health. One of the most important tasks of the Senior Tutor, then as now, was to recruit new members of the Teaching Staff, Fellows under Title C. I did this with enthusiasm, and perhaps insufficient regard for inter-college convention, advertising for College Teaching Officers. It is sad that so many of those appointed in my time have already passed on: Michael Neuberger, Eric Griffiths, Neil Hopkinson.

As a Director of Studies in Engineering, and then as Senior Tutor, I took a great interest in admission of undergraduates, and a problem cropped up in the early 1980s. Colleges had for years been moving away from examining applicants in the Seventh Term, as likely to favour those who could afford to stay on at school beyond A-level. So students could opt for examination in their Fourth Term in the Sixth Form, but that was not satisfactory as their A-level study was not finished by then. This led many colleges toward making offers of admission conditional only upon A-level results, but the grades given at A-level did not distinguish sufficiently well between the high-calibre students we were fortunate to attract. So I and a few others, convinced of the superiority of exams over interviews, invented what seemed the obvious answer, to examine Cambridge applicants at much the same time as they did A-level, with a Sixth Term Examination Paper (STEP) of more searching questions on the core syllabus for A-level, admission to be conditional on the combined performance.

I recall going to Oxford, which planned to continue with the Fourth Term exam and might have scooped the pool, to persuade them that students should not be allowed to apply to both Oxford and Cambridge in the same year. Rather to my surprise they agreed, and that has been the case ever since.

A visit to UCAS in Cheltenham did not go so well. I had hoped for the condition on STEP to be worded “a performance justifying admission to the University” so as to give colleges complete freedom – but they insisted on grades as in A-level. Originally STEP was offered in a wide range of subjects, especially in the sciences, but its use gradually declined to Mathematics only – where it continues happily to this day. The decline was due partly to competition between colleges – “apply to us and we won’t demand STEP” – and partly to the need for decisions in August during the holidays. Maybe its use will revive if Post Qualification Application comes in.

I was completely unsuccessful with a scheme for lectures to start on Mondays, with a catching-up week in the middle of each main Term, defeated by a combination of bursars, re-search-workers and cynics. It is interesting that a similar scheme is again under discussion, forty years later.

### **Assistant Bursar**

In 1985 John Bradfield had heart trouble, and on stepping down as Senior Tutor I was appointed part-time Assistant Bursar to provide support to John. I spent time reading and correcting leases, visiting properties, getting to know the staff, and improving liaison between companies on the Science Park and University Departments, by arranging lunchtime research talks on the Park. My main task was to sit in on negotiations with prospective tenants so as to know what deal to conclude should John not survive (though fortunately he did).

### **Tutor for Advanced Students**

In 1991 I took over as Tutor for Advanced Students, admitting graduates of other universities to do research or Masters’ courses here, serving in that role for ten years. This must be one of the best jobs in the College – the students were more mature and certain about what they wanted to do in life, and got into fewer scrapes.

On admissions the TAS had power – of course colleagues were consulted, but it was I who signed the admission document - and looked after the persons concerned when they arrived, so that any mistakes were soon apparent. I very rarely regretted having accepted someone – of course, that should indeed have been the case as we had around ten applications per place. However, only one of those I admitted is now a Fellow – and he was super numerum. I am doubtful whether I made any significant innovations in the role – apart maybe from talking for ten minutes to each of the sixty new arrivals each October – but I very much enjoyed the job.

I took pleasure in admitting students from a wide range of backgrounds and countries, thinking that being in a diverse student body would be good for their education. Comparatively few were British, partly because many Britons continued from undergraduate study here, and partly because the best-qualified Britons in other universities seemed to stay on there. I do sometimes feel that we may have gone too far in striving (for good reason) to be an international College.

## **Vice-Master**

In 1999 I was elected Vice-Master, and carried out the associated tasks, of attending Council meetings, chairing committees including the College Buildings Committee, and welcoming guests to the High Table and for wine in the Combination Room. In the traditional ceremony at Great Gate and in the Chapel I welcomed Martin Rees to the College, the last Master to be appointed by the Crown after the Patronage Secretary had taken soundings in the College, without any voting by the Fellows.

One invention was of the Fellows' Guide, a compendium of practical information about the College, supplementing the Statutes and Ordinances, read mainly by newer Fellows as the older ones think they already know such things. This 60-page booklet, drafted by me and John Easterling, from whom I learned much, was to be updated annually by the Council Secretary, an arrangement I later came to regret.

On 11<sup>th</sup> September 1999 there was a tremendously fortunate occurrence, altering my life dramatically for the better, that could not have happened had I not been Vice-Master. Sitting in the Parlour I noticed a very elegant lady guest being brought to dinner by Martin Roth. With few people there on a Saturday in the depths of the Long Vacation she was placed at table next to me, and, with me doing my duty to welcome guests, conversation began. Three years later we were married at the Register Office in Cambridge, the marriage was blessed in our Chapel, and a memorable Reception was given by Amartya Sen in the Master's Lodge.

So I became the consort of Carol Black, a highly intelligent, elegant and prominent woman doctor, living for four years partly in the President's flat in the Royal College of Physicians in London, and later for seven years in the Principal's Lodge in Newnham College. Sadly we met too late in life for there to be any children, but Carol disinterred me somewhat from Cambridge, and reformed me – and somehow allowed my loyalty to Trinity to continue. We have so far enjoyed two wonderful decades together, with for me greatly-widened horizons – travel, opera, art, continued running, dancing and walks – and contribution on the sidelines to national affairs.

## **Secretary of the Council**

A few months after Mike Proctor succeeded me as Vice-Master in 2006 I was appointed Secretary of the College Council, a role in which I still continue – preparer of papers, note-taker at meetings, drafter of minutes, not a member of the Council but at the heart of the College's affairs, meeting for at least two hours every Friday in termtime. The unconfirmed minutes are sent out to all Fellows on the following Tuesday, so that any objection can be raised before decisions are confirmed the next Friday - so the weekends are quite constrained. I find myself deploying skill with words and phrases stemming from my mother not my father.

Several important things have happened since 2006, but I cannot describe them all. Early on the College had to become a registered Charity, having previously been an exempt one. The objectives of the College – previously somewhat obscure and in Latin – had to be clarified, a task undertaken by Tony Weir (so much missed) and me. Told that we must specify what proportion of income would go on each of several separate objectives, we decided to have only one – “advancement for the public benefit of education, religion, learning and research, primarily by the maintenance and development of a college in the university and city of Cambridge”. I do sometimes worry about the word ‘advancement’, implying that we must strive

for continual improvement rather than simply continuing to provide education and so on – but maybe we can live with that.

One thing I did invent as Secretary – the thought came to me when walking to a meeting through the screens passage beside this very Hall – was the system of electronic ballots of Fellows on major issues. One problem with College Meetings of Fellows in person was that we could never agree what was the best time to hold such a meeting – inevitably some could not attend, so the outcome could not represent all Fellows, and might depend on the timing of the meeting. Nowadays an electronic ballot of Fellows on some important resolution may be held, over several days so that all can vote wherever they are in the world, the result guiding decision by the Council. This has settled three or four recent contentious issues.

Needless to say, I did not myself approve of everything that the College decided. There was a long debate about capping the total number of Fellows and the numbers in the various Titles – favoured by those who complained that they could not get to know every colleague (though such social comfort for the Fellows does not feature within our charitable objective). Here I preferred a direct attack on the perceived problem – by events such as this – rather than assume that fiddling with numbers would do the trick. I wanted to leave the Council unfettered, to respond as seemed best to changing circumstances. But my side lost – though we did manage to get the caps amended to guidelines.

Then there was the width of the High Tables, not being used today for this very reason – so wide that conversation across the table is difficult, especially when the Hall is full of students. They needed repair, and it was shown that the tables had been narrower in centuries past – so here was a great opportunity for reform. Some of the arguments for retaining width were I thought bizarre, for a common table – for example that instead student numbers or voices in Hall should be restricted so that Fellows could hear their opposites better, or that improved conversation across would lead to unwanted eavesdropping. But I was again on the losing side – the Fellows preferred grandeur to conviviality.

While Secretary I have been involved in three batches of changes of Statute, through the Privy Council – and more amendments are still needed. I developed great admiration for those who wrote the Statutes in 1926. While the officers of the College have to declare on appointment that they will act according to the Statutes, the Fellows generally do not declare that they will ‘obey’ the Statutes, but rather that they will ‘loyally observe’ them – very different, and less restrictive. And although the Fellows do declare that they will ‘in all things promote its welfare’ exactly what constitutes the College’s welfare is not defined – so there is plenty of scope for debate on strategy and the best way forward in changing circumstances.

If you asked me for a valedictory message I would say ‘trust in the good sense of the Fellows’. I expect that in future there will be pressure to have external representation on our various committees and boards, and perhaps even the Council. External advice and assistance must of course be sought, and students and staff be fully consulted, but I hope that the College will remain self-governing – governed under the Statutes by the Fellows and the largely-elected Council – and of course successful.

Thank you for listening to me.