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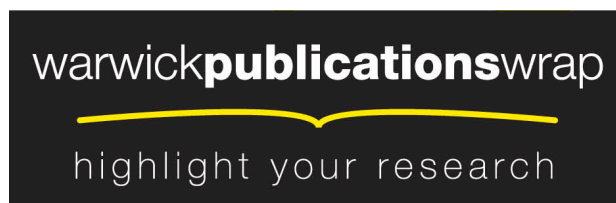
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Memoirs, the University of Warwick 1970-1989

(And the rise of Warwick Business School)

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Initially a research mathematician and senior systems technologist at Pilkington Plc (1964-70). Joined the University of Warwick School of Industrial and Business Studies (now Warwick Business School) in 1970 as a lecturer. Chairman of WBS 1978-81 and Dean 1998-2000. Visiting Fellow at Technische Hogeschool Twente, Enschede (1977) and Visiting Professor at the University of Texas, Austin (1982). Pro-Vice Chancellor of the University 1989-95 and 1999-2005. Chair of the Committee of Professors of Operational Research (1995-7) and President of the Operational Research Society (1998 and 99). Elected a Companion of Operational Research (2007). Board Member of the Coventry Partnership (1998-2005). Governor of Kenilworth School 1989-98, Chair of Governors (1993-97) and Chair of the Trust (2008-2012). An Editor of the European Journal of Operational Research since 2006. Has published on cutting stock problems, investment appraisal, data envelopment analysis and performance management, and operational research and strategy.



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Robert. G. Dyson December 2014

Foreword by Sir George Bain

Robert Dyson and I both came to the University of Warwick in the summer of 1970; a time of student unrest, and Warwick was one of the universities most affected by it. Indeed, earlier in that year when I was thinking about accepting an offer to become Deputy Director of the Industrial Relations Research Unit at the University, I saw Richard Hyman – who had been a student with me at Oxford and was then a lecturer at Warwick – together with E. P. Thompson, a professor of history there, on TV outside the Rootes car plant in Coventry helping to lead a demonstration against capitalism in general and the policies and activities of Jack (later Lord) Butterworth, the University's founding vice chancellor, in particular. E.P. Thompson was also the editor of a highly critical book about the University. On ringing Richard, he told me that I should ignore his and Thompson's left-wing rhetoric and come to Warwick as it was an excellent place to teach and research. And so it proved to be.

In those early days, the Industrial Relations Research Unit had a semi-detached relationship with the School of Industrial & Business Studies. But in spite of, or perhaps because of, the organisational distance between the two institutions, certain features of the School clearly stood out. To begin with, it was not a traditional business school; it was both more and less than a business school. It was a broadly based school, including both industrial and business studies, which was closely integrated into a traditional university rather than separate from it; and while relevant to the needs of companies, unions, and governments, it did not see itself as a consultant to, and, even less, as a servant of these institutions.

Another way in which SIBS differed from a traditional business school is that its strengths were not in such core managerial disciplines as accounting, finance, marketing, and strategy, but in operational research and industrial relations – two areas that are only marginally included in the activities of many business schools. This characteristic resulted in the School's main teaching activity at the master's level being the MSc in Management Science and Operational Research and the MA in Industrial Relations rather than the traditional MBA (then entitled at Warwick as the MSc in Management and Business Studies). Another consequence, as the 1970s progressed, was the lack of professorial leadership on the MBA programme and also at the centre of the school as distinct from within individual subject groups. Indeed, from 1978 to 1983 the School was chaired by senior lecturers rather than professors.

The starting point for the School's recent development and its transformation into the Warwick Business School was a visit by the Universities Grant Committee (now the Higher Education Funding Council of England) in 1982. Although it pronounced the School to be in generally good health, it highlighted two major problems: the role of the professoriate in general and in the MBA programme in particular, and the variability of research activity across the subject groups. This assessment, together with the changing environment that higher education began to face in the 1980s, led the School to redefine its objectives and to specify a programme of renewal and expansion that resulted in Warwick Business School becoming one of the leading business schools of Europe.

Robert Dyson played a crucial role in the School's transformation. As a senior lecturer, he led the School as its chairman between 1978 and 1981; as a professor, he was a key member of the senior management team that began to implement the programme of renewal and expansion in 1983; and he was the School's Dean between 1998 and 2000. His revealing and very personal memoir gives an influential insider's insights and reflections on a development that was highly significant for the University of Warwick and for management education: the transformation of the School of Industrial & Business Studies into Warwick Business School. Anyone leading a business school today will find his perceptive and thoughtful account has many resonances with the history and development of their own organisations.

Professor Sir George Bain

Part 1: 1970-1977, Lecturer in the School of Industrial and Business Studies

My six years of employment at Pilkington's Research and Development Laboratories, Lathom, Ormskirk, finished on 31st July 1970. I had agreed not to join the University of Warwick until 3rd August as 1st was a Saturday and I did not see how I could ask to commence my new post at the weekend. Having accepted the appointment I realised that for the intervening weekend I would not be in either pension scheme and my family would not be covered by the benefits so I took out insurance for two days in case anything serious happened to me over the weekend (badly injured at cricket perhaps (playing for Southport and Birkdale) – this was well before the days of helmets).

I had applied and obtained a lectureship at Warwick although I did not realise how far south Coventry was until I visited the University by car. I had visited the previous year on the 'milk round' recruiting for Pilkington but we visited several universities and travelled by train (first class – I have rarely travelled first class again until advanced booking and a senior railcard came along). However, I had little knowledge of the geography of the Midlands. I left Pilkington for a mixture of reasons. To develop my career at Pilkington I thought I would have to leave Lathom and move to a post in St. Helens, but that would have been a twenty mile journey from our home in Southport and we didn't want to relocate to the St. Helens area. I had also been on three year contracts (two) at Pilkington and somehow coming to the end of a contract made me consider my options. (The three year contracts were designed to make it difficult for researchers and senior managers to leave without a considerable period of notice). Lathom itself would have been Utopia for those colleagues who would like to work in a University without students. On the positive side I had enjoyed my relationship with the Lancaster University Operational Research Department, where I had been a non-residential full-time PhD student, and thought an academic post would be worth trying out. But why consider Warwick? The University had had a difficult time in the late 60s with one version of events being published in E.P. Thompson's book *Warwick University Limited*. It was seen then as one of the trailing rather than leading 'new' i.e. 60s universities, with Sussex considered the most successful. Jack Butterworth (the first vice-chancellor), later Lord Butterworth, had made some strong appointments to lead the academic departments but he was criticised for having too strong links with industry and being too 'hands on', for example personally rejecting an undergraduate applicant, a discovery made during a student occupation of the administration building. However as a result of these events a report on University Governance, led by Dick Sargent, was written and implemented, which laid down a governance structure that largely stood the test of time.

The attraction of Warwick was an advert offering a number of posts across the Business School (then the School of Industrial and Business Studies (SIBS)) and I found the implied breadth more interesting than the more departmentalised operational research (OR) activities elsewhere. I met and instantly liked Hylton Boothroyd who headed the OR Group, and Brian Houlden the Chairman (sic) of SIBS was very persuasive despite the fact that I had been warned that he might not be an ideal boss. Also I was offered a small increase in salary rather than the cut that often accompanied a move from industry to academia at that time. (In fact soon after

joining I received two back-dated 10% salary increases as the union (then the AUT) had been in protracted negotiations as usual).

We moved house to Kenilworth in early September and I spent some time in August preparing teaching notes on linear programming and associated topics. I was due to give lectures to the students on the MSc Management Science and Operational Research (MSOR), the MSc Management and Business Studies (MBS - later to convert to the MBA), the BSc Management Sciences and on an option in operational research to third year mathematics students. These courses, plus the MA in Industrial Relations, were all up and running to the credit of the founding staff. I also was to hold weekly tutorials with first year undergraduates (three groups of six students – there were only eighteen first years in the School (SIBS) at that time). My teaching load in terms of contact hours was not dissimilar to an assistant professor today, but the numbers of students in the classes were rather different. There was also no assessed coursework although students did non-assessed work which we marked for feedback. The first versions of the MScs were very interlinked with the MSOR students taking the same core courses as the MSc Management and Business Studies students apart from replacing industrial relations with a second OR/quantitative course. We usually taught OR to the MSOR and MBS students separately although Roy Johnston taught them together for a while using a different coloured chalk for the difficult bits that only the MSOR students needed. (Lecturing was mainly talk and chalk in those days, overhead projectors were not in common usage and PowerPoint wasn't even a fantasy.) However talk and chalk was effective both for case studies and developing mathematical expressions interactively, as in the formulation of linear programs.

I joined SIBS on the same day as Keith Sisson and Thom Watson. In the Operational Research Group, Hylton, Roy and Derek Atkins were already in post. Thom was the first appointment to the Organisational Behaviour Group. Keith joined Hugh Clegg and Richard Hyman in the Industrial Relations Group, later to be joined by Bob Price, although there were other IR researchers in the Centre for Industrial Economic and Business Research, a joint free-standing centre connected to SIBS and the Economics Department. The Centre, initially funded by the Ford Foundation, went through various transformations over the years, quickly spawning the Industrial Relations Research Unit (IRRU), headed by Hugh Clegg initially and then George Bain who also joined Warwick that summer, and the Institute for Employment Research – both still active at the time of writing, the latter under the leadership of Robert Lindley for many years. IRRU was initially a Social Science Research Council centre located at Warwick, but eventually became a part of the Business School (SIBS) (the Council was later renamed the Economic and Social Research Council when Sir Keith Joseph declared that social science was not a science). Thom was the initial appointment in organisational behaviour later to be joined by Joanna Liddle, Alan Brown, Alex Shubshacs and Andrew Pettigrew who became the first professor of OB and a leading researcher. The School initially had four professors – Brian Houlden (business policy), Derek Waterworth (marketing), Hugh Clegg and Bob Tricker (finance and information systems). Brian's chair was sponsored by the Institute of Directors, Hugh's by Pressed Steel Fisher, Derek's by Clarkson's and Bob's by Barclay's Bank. The latter sponsorship was not publicised as Barclay's were out of favour with the

students and many academic staff due to their South African association during the apartheid period. Bob soon left to head Templeton College, Oxford and then moved to the University of Hong Kong. Other staff already in post included Mel Hirst (marketing) and Jimmy Dewhurst (accounting and finance). Ian Watson joined Derek and Mel in the Marketing Group and he later founded the Centre for Small and Medium Sized Enterprises. The Operational Research Group soon grew to seven with the appointments of Bob Hurrion, Tony Brearley (who on moved to Shell) and Gwyn Bevan (who moved on to health posts at the King's Fund and St. Thomas's hospital before returning to academia and a professorship at LSE). Derek Atkins moved on to the University of British Columbia. Roger Fawthrop joined as the Esmee Fairbairn Professor of Finance and Bob Berry, now a professor at Nottingham, joined the Accounting and Finance Group. Roger Kistruck became the Barclay's Bank Professor of Management Information Systems. The support staff in the seventies consisted of six secretaries including Barbara Stanton, the Chairman's secretary, Carol Cunion, who amongst other things supported the MSc Management Science and Operational Research, and Jenny Penfold, the Industrial Relations Group and MA. Jenny later moved to the Economics Department. Mary Ann Wallace was appointed in Marketing and later became the Chairman's secretary. Agnes Cox was appointed by Roger Fawthrop as the first administrator and was followed in that role by Lesley Williams.

The majority of staff in the early days were appointed from industry. For example, Brian Houlden had been head of the National Coal Board Operational Research Unit with Hylton as his deputy. Roy worked at Dunlop's and Bob and Tony at ICL. Keith came from Fleet Street where he had worked for the employers' association. Apart from the industrial experience, one effect of this was that we were used to attending the workplace during 'office hours' which in those days meant 40 or so hours per week. These days 'office hours' are the short periods when the staff are available for meeting students and many academic staff attend the University only as they deem necessary. Indeed with the advent of email face to face meetings are increasingly rare. With the growing pressures to publish in later years it became virtually impossible to appoint academic staff from industry (or the public sector), except perhaps as teaching fellows. There has recently been an attempt to reverse the trend with the creation of the post of Professor of Practice, but publication record is the main appointing criterion for the vast majority of academic staff.

The founding appointments of the School were Brian and Hugh, totally different but complementary characters. Brian was the ultimate pragmatist. He had ensured independence from the Economics Department when some thought that business studies should be subservient to that discipline. He had also crossed swords with the University Grants Committee who had a graduate school vision for business – London and Manchester Business Schools had been founded in the 60s as graduate schools. Brian however wanted an undergraduate degree and succeeded in securing funding for the BSc Management Sciences which launched in 1969/70 with 25 well qualified students followed by a reduced intake of 18 the following year due to the poor standing of Warwick at that time. The degree was seen as having a strong disciplinary base of economics, quantitative methods and organisational behaviour and in its first incarnation the first year consisted exclusively of economics and

quantitative methods. This disciplinary focus was seen as differentiating the degree from the more practice and functionally orientated courses in the polytechnics, making it academically respectable (barely respectable to many people at Warwick and elsewhere). Hugh in contrast was the academic and research leader of the School, founding the industrial relations research tradition, but also being an example to the rest of the School and keeping research firmly on the agenda. (Hugh also took on many key public roles such as being a founder member of the National Board for Prices and Incomes).

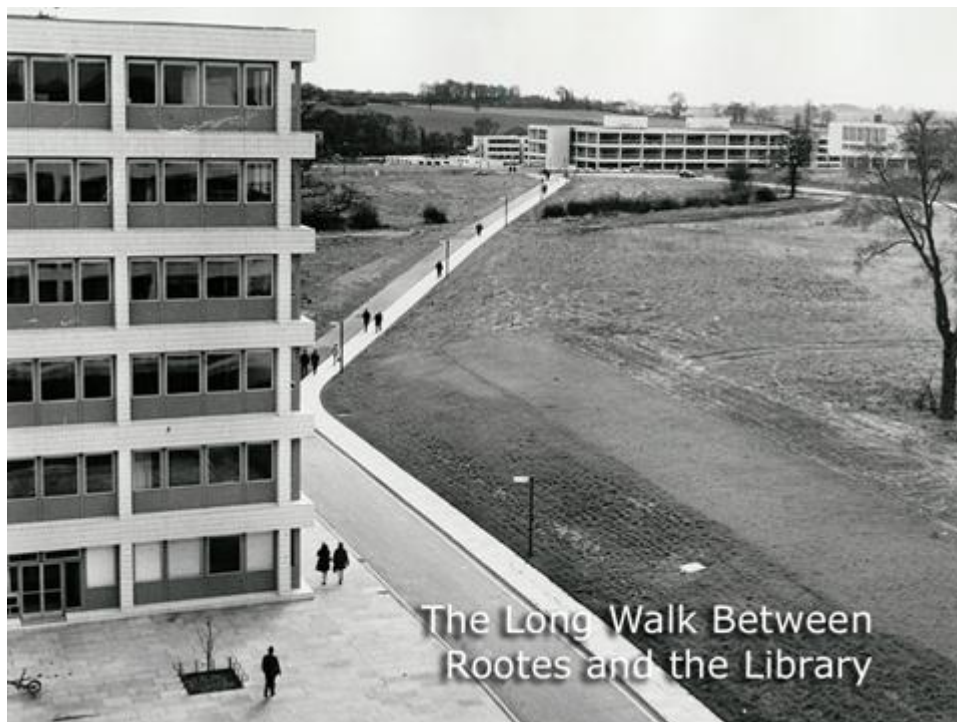
The BSc Management Sciences was so named to reflect the broad disciplinary base of the sciences/social sciences seen as underpinning business studies. There was some confusion over the name as management science was also in common usage as being a more purely quantitative/operational research subject. Indeed given the preponderance of quantitative analysis and economics in the first version of the course many members believed it was indeed a BSc Management Science. John Mingers, a member of the first cohort and later a member of staff argued that he had a degree in management science until I persuaded him to look at his degree certificate. The debate no longer exists as the course has developed away from its disciplinary base (not altogether) and is now simply the BSc Management.

It was a requirement that each department held a departmental meeting of academic staff at least once per year. Under Brian's chairmanship they were held twice a term at 3.30 on a Friday with the idea that that would curtail the length. This was often the case although Brian's style of chairmanship was never to finish an item until we agreed on his position where he had one. One Friday a very controversial item came on the agenda – the replacement of a second stolen kettle. Brian declared that the School had paid for one replacement and could not pay for a second. The argument raged into Friday evening. Eventually Roger Kistruck could not contain himself any longer and shouted 'I will pay for the bloody kettle'. He did and fastened it to a tap with a thick piece of cable. In those days it was seen as a duty for all academics to attend the School meeting, even when it was held on New Year's Day as it was in 1971! When Roger Fawthrop followed Brian Houlden as Chairman he established a Resources Committee thus instituting the School's committee structure beyond the departmental meeting and making the finances of the School transparent.

The student unrest, at Warwick and nationally, of the late 60s continued into the 70s but in later years the students became less radical. There were sit-ins and occupation of buildings and often unpleasantness. On one occasion when the students supported a strike by the cleaning staff (I think) there were aggressive pickets at the entrances to many of the buildings (there were rumours that non-members of the university joined the picket lines (flying pickets)). I remember seeing Bob Fryer addressing strike supporters in the Airport Lounge in Rootes. (Bob went on to have many senior management roles in universities and the National Health Service.) The undergraduates these days are concerned about fees and debt, but in the 60s and 70s they had no fees to pay and many (the majority?) had maintenance grants. They could and did focus their political activity on broader issues. One Warwick student, Kevin Gateley, was killed at an anti-National Front rally in London.

Assembly, a meeting of all academic staff in the University, met on a regular basis and often there were robust exchanges between the senior management and the staff. The 70s was also the time of 'days of action' by the AUT in support of pay claims. I travelled to London with Robert Lindley and Gwynneth Rigby of the university administration (later Lady Bain) taking part in a march to the Central Hall, Westminster. There were coach loads of police waiting in side streets but we didn't trouble them. The march was headed by Vice-Chancellors. In those days the government funded any pay increases so the conflict was between the universities and the government. Mrs Thatcher soon remedied that by giving the university sector a fixed budget and thus internalising any conflicts over pay.

In 1970 the School was located at the East Site, later renamed Gibbet Hill campus. East Site housed the first building on the campus and the plan was for new departments to start there and then move to Main Site (Central Campus) as new buildings were commissioned. The School had initially had offices in the Library building before moving to East Site and in 1971 moved to the newly opened Arts building (now Humanities – renamed due to the confusion between the Arts building and the Arts Centre). The picture below shows the centre of the Main Site when I arrived in 1970, devoid of Social Studies (now Social Sciences), the Arts Centre and Senate House. The many white tiled buildings turned out to have a fundamental flaw. The white tiles kept falling off so the buildings were fenced off for many years while litigation continued – was it the fault of the glue, the design or the execution? Hylton spent a pleasant few hours in the Library working out the equations of motion of a falling tile.



East Site was a mini university with offices, lecture theatres, restaurant, senior (for academic and administrative staff) and middle (graduate students and secretarial) common rooms and at one time a badminton court plus a temporary building that housed the administration. Although we soon moved to Main Site (Central Campus), a number of us continued to go to lunch at East Site for several years, usually walking but sometimes using the minibus service. For many years the East Site restaurant was seen as the best on campus with the food all being prepared and cooked there. The lecturers' rooms in the Arts building were furnished with a desk across the end facing inwards and a table end on to it forming a T which was designed for tutorials of six students – a reflection of the more favourable student staff ratios.

In the mid-seventies the School received funding from the Foundation for Management Education which led to the construction of the FME building (a wing of the Social Studies building). The Foundation had provided significant funds to support the establishment of London and Manchester Business Schools, and limited funding for Warwick, Aston and Bradford. Although the FME building is a wing of Social Studies (Sciences) it was in fact built prior to the main building. It included offices (including the Chairman's office), the School's flagship lecture theatre (A 0.23, a small room with a horseshoe layout seating 48 people although with poor sight lines at the ends of the front row) where the MScs were taught, and seminar rooms. When the first phase of Social Studies was built the rest of the School was able to transfer and the growth of the School and Social Studies departments generally led to a series of extensions. Several of the extensions were linked free-standing buildings in order to comply with the VAT regulations at the time. The photograph below is of A 0.23 in the FME building (possibly taken on 3 October 1977), the first horse-shoe lecture room on campus, designed to facilitate interactive learning, particularly case teaching. The people in the room look like an MBA class, but in fact it was a staged photo populated by staff from the School, and the University administration. You may be able to recognise Thom Watson, Roy Johnston and myself from the School and Jonathan Nicholls (later Registrar at Warwick, Birmingham and Cambridge), Jim Brant (Personnel Manager), Tony Rich (now Registrar at Essex), possibly Steve Cannon (now Registrar at Aberdeen) and Jenny Hocking who later became the senior administrator in the School. (Roy, Tony and Jonathan are on the front row and Jenny, Thom, Jim and me on the second row).



The picture below shows the East Site and Main Site with the centre beginning to be populated with buildings including Social Studies. The first phases of the Arts Centre, funded by an anonymous benefactor now known to be Helen Martin a Smirnoff Vodka heiress, opened in 1974. Also in the picture are Senate House and the Sports Centre with the first residences across Gibbet Hill Road on the Warwickshire land to the left of Gibbet Hill Road. The playing fields can be seen on the Coventry land. They were transferred to the Warwickshire land in the 90s to allow academic expansion on the Central Campus.



Socially the University was very welcoming. The Vice-Chancellor had frequent dinner parties at the VC's lodge on Kenilworth road. The vast majority of academic staff were male and many had wives not in paid work. The Vice-Chancellor's wife, Doris, had set up a University Women's Group (Wives Club) which organised social events at East Site. The wives produced the food and there were bands playing 60s and 70s music (I can still visualise Jack Butterworth dancing to 'I'm a union man'). There was also a cookery club and a book club (wives only) which although no longer having any formal connection to the University, still exist. Dorothy (my wife - a lapsed teacher) was very active in the Women's Group and made many friends as I did at the events we males were allowed to attend - the socials and the cookery club annual party. The photograph below taken at an early social event shows Jack (centre) and Doris Butterworth. On Jack's left are Phillip and Mrs Mead. Phillip was a member of the University Council and Treasurer for five years. He introduced Helen Martin to the University, who was the anonymous benefactor making a major contribution to the funding of the Arts Centre and other projects. The Mead Gallery in the Arts Centre is named after Phillip.



Brian Sadler, the University Senior Tutor, also organised JMS Balls (junior, middle and senior common rooms) at East Site which attracted all categories of students and staff. The SIBS undergraduates also organised dances/socials which the staff were invited to. I joined the Staff Cricket Club again meeting people from across the University. I was looking for a cricket club for weekend cricket and was introduced to Jim Rushton, a senior administrator and later Deputy Registrar for many years. Jim was a member at Leamington C.C. and I joined in the summer of 1971. I also played table tennis a little for the staff team. Staff members who I met in the early days in these ways included Malcolm Cooper (Physics), George Rowlands (Physics), Paddy Stephenson (Administration), Doug Darby (Administration), David Holmes (Administration, later Registrar at Liverpool, Birmingham and Oxford), Clive Barker (History), John Halliday (Politics), Lincoln Allison (Politics), Rob Burns (German), Brian Holland (Physics), Bob Pettifer (Physics), Peter Byrd (Politics), Mike Lewis (Physics), Ken Foster (Law), Andrew Barker (Philosophy), Gwyn Lewis (History), Robin Oakey (History) and Steve Lamb (German). Peter and Steve both later became the University Senior Tutor. Phil Dixon, uniquely twice the President of the Students' Union in the 70s, was also a regular member of the Staff C.C. Staff from across the University also used to congregate in the AU (Athletic Union) Bar in the sports pavilion at 4.00 on a Friday when the bar opened. Thom Watson and Roy Johnston were regular attendees but I only went occasionally.

Rootes Hall (now just Rootes) was the social centre of the University prior to the building of the Students' Union and the Arts Centre. The first floor consisted of the Rootes Restaurant (canteen style then) and the Airport Lounge. The Airport Lounge was the main student bar and the carpet was typically sticky with spilt beer due to the heavy usage. It was so named as it was said to resemble the departure lounge at Middlesbrough (Teesside?) airport – designed by the same architects. Also on the first floor was a billiard room and Frank's Bar, named unofficially after Frank the barman, an 'old school' barman. If you wished to buy a drink you would have to go to wherever he was standing as he would not come to you if you stood anywhere else at the bar. Later the University formally named it after Sir Frank Whittle and it was recently used as a lunch/rest room for Rootes staff. Adjacent to the Restaurant were the Sutherland and Caulfield rooms, used as restaurants for visitors and adorned by art by the eponymous artists. The top floor of Rootes housed a large space called the Workroom (now the Panorama room) where students could study informally and exams and events were held including concerts. We only went there to one concert, by Pentangle. Also on the top floor, following the opening of the Students' Union building, was the Staff Club consisting of a bar, food outlet and games area. I don't recall how the ground floor was used, apart from the kitchen, although at one time it was the home of the Rootes Grill, a popular waitress service restaurant. In an early plan of the University it was envisaged that there would be several halls each with residences and a social building but the plan was never implemented. The Rootes building and residences were named after Lord Rootes of the motor company who was to have been the first Chancellor but died before being installed. Rootes and other businesses were early sponsors of the University along with Coventry City and Warwickshire County Councils, who each gave 250 acres of the site.

Cricket was my main social interest in the 70s with a mid-week game for the Staff Club and Saturday and sometimes Sunday games for Leamington. At one time Leamington first eleven fielded five University staff members on a regular basis (Jim Rushton, the captain, Bob Hurrion, Doug Darby, David Holmes and I). Tom Edmonds joined the undergraduate programme in 1974 and also played cricket at Leamington. He was a good cricketer and a good talker and I recall Tom holding his own with the President of the club and one of the senior players in a three way 'conversation' in which no-one was listening. (I recall a similar non conversation at about that time between Keith Tocher, a pioneer of computer simulation and the President of the Operational Research Society, and Jimmy Reid, a leading trade unionist who had given a plenary speech at an Operational Research Society conference.) At the start of one season when I was captaining Leamington 2ndXI a new player appeared. I asked the vice-captain, who filled in last minute gaps in the team, who he was. He said it was a Warwick student called Rupert Howell. Not only was I Rupert's personal tutor, but I had had several meetings with him – I never was strong on faces, particularly out of context. Rupert successfully started his own business and was a member of the School's Advisory Board for many years. He was recently a Board member at ITV before stepping down in July 2010. He claims that he was an ill-motivated student in his early days at Warwick, but 'conversations' with me set him on the straight and narrow (not very narrow!).

The staff team played in the Coventry Works League in the evenings in a competitive 20 over league. The opposition included Dunlop's, Alfred Herbert's (once the largest machine tool company in the world), Jaguar, GEC, Morris Motors, Rolls Royce and Alvis. Manufacturing in Coventry declined during the 70s and the league dropped 'works' from its title. We also entered the Coventry Knock Out competition which included teams from the league but also others from across Coventry and we reached the final one year losing to Coventry and North Warwicks C.C., the leading club in Coventry. The University staff team also competed for some years in the University Staffs Cricket Festival. We spent a week at various universities playing against Sheffield, Leeds/Bradford, Keele, Newcastle and sometimes Sussex. The southern team crept in due to connections via Paddy Stephenson, who move there as Registrar, and Colin Brummit, who moved from Sussex to become Finance Officer at Warwick. Jim Rushton captained the side in this competition, but not in the league. He brought in one or two non-university Leamington players to strengthen the team. One year we could not raise a team to travel to Newcastle. After that the Staff Club, who also played at the weekend, opted for a cricket week in Wales although I never participated.

The Economics Department was closely linked with SIBS through the economics teaching on the SIBS courses and formally through the School of Economic and Industrial Studies, a sub-faculty of Social Studies (the existence of two Schools with similar titles caused a little confusion occasionally). There was also the jointly sponsored research centre, the Centre for Industrial Economic and Business Research. (There was some speculation as to whether there was or should be a comma after Industrial as it was the industrial economists from the Economics Department who were most involved in the Centre.) The Economics Department had been founded by Dick Sargent, with able support from Graham Pyatt, Keith Cowling, Alec Ford, Alan Rowe, Norman Ireland and Geoff Round among others and seemed well established by the time I joined SIBS in 1970. Ben Knight was a key undergraduate teacher and continued to teach on School (SIBS) courses into the 2000s, and Keith Cowling taught industrial economics particularly to the MSc and later MBA students. There were some tensions between the departments however. Brian Houlden was keen to ensure that SIBS had a separate identity. Additionally it soon became clear that the amount of economics in the BSc Management Sciences was too great (something like 60% of the first year and 30% of the second). Negotiations were held to restructure the course, but these were not straightforward as the Economics Department considered that macro and micro could not be taught without a considerable chunk of the time available, and any reduction in the amount might lead to a reduction in resourcing to the department due to the resource allocation system (the matrix) which ensured that resources followed the students. The latter concern was overcome by the numbers on the course increasing throughout the 70s (and beyond). The School of Economic and Industrial Studies was a joint school open to all academic staff of both departments to discuss curricula issues and put proposals to the Faculty (of Social Studies) Board. The matrix system (possibly designed by Chris Zeeman, the founding Chairman of the Mathematics Department) was crucial in the smooth development of SIBS as it ensured resources followed the growth in student numbers without having to persuade colleagues across the University that business was an appropriate subject

and should be allowed to develop. There were views at that time that a large business school could be detrimental to the success of the University as business schools were only being accepted grudgingly by the academic community. (I recall that David Mervin, an early and effective Chair of the Social Studies Faculty, expressed such views in the magazine *University Opinion*).

A feature of the job involved links with industry via consultancy, short courses and MSc projects. Organisations I linked with included Pedigree Petfoods, Wellman Incandescent, Harwell, Newage Engineering, Rockware Glass, Avon Rubber, Alfred Herbert's, the Department of Health, British Airways, Alcan and GEC Marconi. The MSc students carried out consultancy style projects and students I supervised included John Meddings, Malcolm Dodman, Peter Owen (Peter was so stunned by one of Hylton's exams that he couldn't write at all. He got 80% in the resit however), John O'Neill, Martin Wilson, Geoff Balls and there must have been many others although we only needed to supervise two or three at the most in any year.

Executive courses also featured from the start with a series of modules for the Steel Stockholders Association, although I did not participate. However the Operational Research Group did run some short courses including one for the Post Office at their training centre in Northamptonshire and one at Harwell. Life however was relatively uncomplicated as my diaries for the early 70s do not list my teaching commitments – or perhaps I just had a better memory.

One of the early administrative tasks I undertook was admissions to the BSc Management Sciences. Hylton inducted me initially and it is fair to say that in the early 70s we were a recruiting rather than a selecting department (and university). We were not inundated with applicants with straight grade As at A level, so we looked at applicants more thoroughly and in a more rounded way than perhaps happened in later years, and interviewed a good proportion. The numbers of applicants had been at their nadir for the 70/71 intake and steadily grew during the seventies. For example by 72/3 we were running eight open days and seeing about 350 applicants. I recall in my first year as a selector seeing a headmaster's report which suggested that candidate X was by no means his best pupil but would probably be worth a place 'on your sort of course at your sort of university'. I also recall a candidate turning up in my office one August, offering us one grade D and three Es at A level with the D being in Art. He talked his way onto the course, contributed well over the three years, gained a lower second class honours, which was seen as a thoroughly respectable degree then, and no doubt went on to a successful career. Course selectors had autonomy in those days apart from the applicant having to satisfy general entrance requirements (GER) which meant two A level passes (i.e. grade E) and a spread of O levels. A case could be made to waive GER, say for an older student who had not taken A levels, and that would be put to the GER committee. Today with University league tables, entry is almost entirely A level grade driven. A typical offer in 1971 would have been CCD at A level. Today it would be AAB or AAA, with A*s coming into play, although the number of A grades these days is an order of magnitude greater than in the early seventies when a grade C was looked on as a good result. The film of the University shown to prospective students had the Beatles Abbey Road album as the soundtrack. One of the downsides

of being an admissions tutor was that the latter part of August was decision time so with two children starting school the holiday period was rather restricted. A side issue of the admissions process was that we ran a three weeks preliminary maths course in September for those not offering A level maths.

With a full teaching load and relatively few students I got to know the students in the early years better than later in my career. Some of them also reappeared in later years. From the first undergraduate intake of 1969, John Mingers later joined the School as a lecturer, becoming a professor and group head before moving to the University of Kent as an associate dean for research. Gordon Pearson invited me to carry out a consultancy on the operations of a peat bog, and later we communicated on various issues including his interest in business ethics from his post at Keele and Graham Hooley became a professor and pro-vice chancellor at Aston. There had been few students prior to 1969, but I came to know Bob Shanks, an early MPhil student, and Chris Montagnon, Ross Tristem and Richard Gibbs who were PhD students. (Chris's father worked at Henley (on Thames), then the Administrative Staff College, and when I met him to discuss the possibility of a move there he was rather dismissive as I did not have sufficient business experience). Chris at one time worked at Sainsbury's and collaborated with Richard Ormerod on developing strategic information systems. Ross became deputy director of the Audit Commission and we carried out some early work on performance measurement for him. Richard (Gibbs) had senior posts in the Civil Service. Keith Bedell-Pearce was an early graduate of the MBS degree and was a long-standing member of the School's Advisory Board and currently a member of the University Council. He had a very successful business career at the Prudential before heading up the student loan company in its first years. Rupert Fisher was a research student and research fellow and I remember seeing him at Coundon Road, the then home of Coventry Rugby Club. Richard was accompanied by his blind father and delivered a running commentary of the game. That was in the days when Coventry was a leading club side (Duckham, Rossborough, Preece, Evans, Webb...) playing exciting open rugby. On first seeing Coventry play I was immediately converted from soccer (still a Huddersfield Town supporter). I had gone to watch Coventry Rugby out of curiosity and later that same season watched Coventry City play Huddersfield Town in the then first division. It was a boring 0-0 draw with the only redeeming feature being a beautifully controlled lob over the defence by Frank Worthington. As a spectator sport rugby v soccer was no contest in Coventry at that time. Sadly I still watch Coventry Rugby now in the third tier.

From the 70/71 intake, Mike Akers later became President and CEO of Titan Europe and joined the School's Advisory Board. Arild Mathisen, one of my personal tutees, was our first Norwegian undergraduate student and also obtained the first first class honours on the undergraduate programme. We later had a contract with the Norwegian government which at its peak involved 20 students per year joining the programme. I met David Browning, an MSc student, from time to time as he practised as an operational researcher, but I also worked with his sister, Alison, on international projects when she joined the School. David Hunt kept links through his accountancy connections and also served as a member of the University Council for some years. Nick Paul, who played a lead role amongst the MBS students, I later met on many occasions when I had a regional remit as a pro vice-chancellor and Nick was

Chair of Advantage West Midlands, the regional development agency. I played some cricket with Michael Earl, also an MBS student. He followed an academic career being at one time the Acting Dean of London Business School and then Head of Templeton College, Oxford. Inur Cevik was an undergraduate. Later when visiting Turkey an Inur Cevik was editor of the English Language newspaper in Istanbul and I wondered if it was the same person, but did not check it out. Most of the names from the 70s are still familiar to me (apologies to those not mentioned) although I can't remember too many from the 80s onwards when I had relatively little interaction with the students.

Pictured below is the 71/72 intake to the BSc Management Sciences kindly supplied by Sandy Meadows (Bishop). (Note the two girls were allowed Christian names.) The numbers in the first year had grown from 18 in 70/71 to 32. We frequently played the students at five a side football and I recall one match where a member of staff lost control and assaulted the referee who happened to be a student (Paul Wyman?). The picture also shows Dan Davidson who was one of our first older undergraduates. He was a good footballer but found the younger members of the student teams a little cliquish. On one occasion Dan inadvertently left an exam with his script, but we were able to recover it before it became an issue.



I was still immersed in teaching in 71/2 and again had contact with many students later. Maria Frantzeskakis, an MSOR student became Managing Partner, General Electromechanical Works in Greece and also joined the School's Advisory Board. I kept in touch with Richard Ormerod (MSOR), particularly when he was at the National Coal Board and he later joined the School as Professor of Operational Research and Systems. Sandy Meadows, an undergraduate, later played a lead role in the Alumni Association and also joined the School's Advisory Board. Roger Hill (MSOR) became an academic at Exeter and worked closely with Roy Johnston. Although I did not teach them as they were on the MA Industrial Relations, Linda

Dickens and Mike Terry were students in the early years and went on to become professors and play lead roles in the development of the School.

Rob Bryer was a PhD student in the early 70s, supervised by Roger Kistruck, the Professor of Management Information Systems. Rob joined the staff and later became a professor of accounting. The 73/4 intake included Emmanuel Thanassoulis and his wife to be Meriam. Emmanuel stayed on to study for a PhD, initially supervised by Derek Atkins. Derek sought pastures new in British Columbia so I took over supervision. Later Emmanuel joined the staff and we had a very successful research collaboration. Emmanuel is now a professor at Aston. Other students from the 70s, who became professors, included David Ashton (Bristol), Cynthia Hardy (in Canada and later Australia) and Stan Brignall (Aston). Bob Price, an MA student (later joining the ESRC), and John Charnock (MPhil) also joined the staff. John Baxter was an MSc student and a lecturer at Coventry University and later had a long standing link with the School through tutoring on the Distance Learning MBA. Luca Braito appeared one summer having been admitted to the BSc course for the following October. He spoke fluent English although 'admitting' that it was only his fifth language after Spanish, Italian, French and I think German. Luca was an exceptional student, later marrying the daughter of a member of staff, but dying tragically at an early age. Agnes Pujo was an MSc student and we kept in touch when she returned to France. Other overseas students included Jim Robinson (MSOR) from the USA and Rene Van Soest-Koedam from Holland. However there were few overseas students during the 70s as there were no separate intake targets for them and no financial incentive to recruit them. The picture below was taken after the graduation ceremony of 1976 and shows Agnes, John O'Neill and me.

From January 1974 life must have been becoming more complex as teaching commitments began to appear in my diary for the first time. I also ran a course in OR in Production, building to some extent on my experiences at Pilkington where I was engaged in developing computer systems for glass cutting problems and other production orientated activities.



Research was firmly on the agenda although the pressures to publish were by no means as great as in later years. Indeed I passed my probationary period after one year in post despite having not yet published anything beyond my PhD thesis. I was also deemed to have passed probation again the following year so presumably I had double tenure. Tenure in theory meant that you could only be dismissed for misconduct although it did not stand up when Hull dismissed a lecturer for financial reasons. Tenure was ultimately dropped by the University sector for new entrants and on promotion –at Mrs Thatcher’s instigation - but as I was already a professor by then I retained it until retirement. My first attempt at publishing journal articles was successful. I wrote two papers on cutting stock (glass) problems from my PhD thesis, one with Stewart Gregory an ex colleague at Pilkington and one with Mike Chambers my Lancaster supervisor. Hylton Boothroyd gave me very good editorial advice and the first paper was accepted without any change at all. The second paper was awarded the President’s medal by the Operational Research Society. I thought publishing was easy but it has seemed to have been downhill ever since. I dropped cutting stock problems as my research topic and decided that with my degree in mathematical statistics and expertise in mathematical programming I should be able to make some progress in stochastic programming. I secured a research grant from the Science Research Council (as it then was), recruited Gillian Swaithe as a research assistant and we published three papers on what is now termed robust optimisation, and is now a popular topic. They were ignored by the academic community – perhaps they were before their time. In the OR Group, Hylton wrote a well-received book on the theory of OR, Bob (Hurrion) pioneered visual interactive simulation and Roy (Johnston) had expertise in forecasting and stock control. The industrial relations people were seen as the research leaders in the UK and beyond.

PhD supervision was not seen as essential during the 70s, but I supervised Craig Baker, following his maths degree at Warwick, Rob Yates who was aiming for an MPhil and Emmanuel Thanassoulis who I took on when Derek Atkins left for the University of British Columbia. Craig joined the Audit Commission before becoming a successful consultant and he also joined the School’s Advisory Board. The relationship with Emmanuel proved very productive later when we collaborated on research in data envelopment analysis and performance management.

Apart from our involvement with the Economics Department and options in business studies and operational research offered across the University we participated in a new undergraduate degree in Social Sciences and Mathematics, organised by Terry Thomas from the Engineering Department. There was a common first year and then some of the students transferred into the School including Jenny Balcombe, one of my personal tutees.

There was a move in the University to make our degree courses more flexible and Rolf Schwarzenberger (a maths professor who later transferred to the Science Education Department) wrote an article in University Opinion suggesting that we should introduce a 2 + 1 model on the lines of the Cambridge part three (I think). I raised this with colleagues in the School and was encouraged to pursue the idea. We put the idea of two years science and a final year in business to the science departments. I visited Arthur Shercliffe, the founding Chairman of Engineering, Jim

Eels and Roger Carter in Maths and John Forty in Physics. Arthur moved to Cambridge and quickly was elected a fellow of the Royal Society. He hadn't had time to add much to his CV apart from the institution. Perhaps Warwick wasn't much on the radar in those days – apart perhaps from the Mathematics Institute (i.e. Department) which had rapidly established itself under the leadership of Chris Zeeman. John Forty later became Vice-Chancellor at Stirling. Maths, Physics, Chemistry and Engineering all signed up to the joint degrees and they still exist. As there was a number of third year modules in the management sciences degree that did not build heavily on the first two years it was possible for the students to take mainly third year modules. With the subsequent restructuring of the management degree that is now problematic and in recent years the Quality Assurance Agency needed some persuasion that the third year really was at an appropriate standard. Biological Sciences remained aloof and Computer Science wanted a more integrated version which Hylton developed with them. (Computer Science later also adopted the 2+1 model whilst retaining the integrated version). The Science Departments liked the idea as it helped them with their marketing and recruitment and gave them two years to retain the students. However many students, who had drifted onto a science degree following science A levels, did transfer into the School for their third year and valued the opportunity. Following a conversation with Rob Burns at the bar at Bedworth Town Hall, following a cricket dinner (we had won the midweek league), the same model was adopted for the German and Business Studies course.

In the early 70s Jeff Harrison joined Warwick from ICI to set up the Statistics Department. He had an interest in collaborating at masters and undergraduate levels. At masters level he suggested that as OR was 20% technique and 80% something else (not sure what he had in mind – methodology...) his department would take over the technique teaching on the MSc Management Science and Operational Research and we would do the rest. We were not receptive to the idea. He also proposed a joint undergraduate degree to be led by the Statistics Department and involving the OR Group, Mathematics and Economics. The degree was to be called MORSE and proved very successful. I was involved (with Tony Brearley?) in the design of the mathematical programming modules and colleagues developed modules in simulation (Bob Hurrion), forecasting (Roy Johnston), methodology (Hylton Boothroyd) and Gwyn Bevan developed a module on OR in public planning. Jeff and Roy organised a series of two-day courses on Bayesian forecasting and Roy invited Dorothy to provide the lunch. Dorothy linked up with Joan Cooper and they provided catering for the School and many other departments in the University for some thirty years. They provided high quality buffets at a competitive price to the considerable benefit of the recipient departments. They and other outside caterers provided good value to the University and healthy competition to the University catering department. Outside caterers are no longer welcome on campus. The pictures below were taken at a Dorothy and Joan lunch. The author and David Hunt (an ex student and one time member of the University Council) appear in the first picture. Roy Johnston is in the top right-hand corner of the second.



In the mid-seventies we began a relationship with the Department of Health and Social Security's OR Group. Ross Tristem and Richard Gibbs had obtained PhDs from Warwick and were members of the Group headed by Alex McDonald. The initial engagement was through MSc projects. Alex then proposed that we make the MSc available to part-time students as there was a need in the Civil Service. I was course director at the time and reorganised the timetable so that a part-time student

would only need to attend on two days per week. Two students took the course but only one, Max Moulin, actually graduated. If there was demand out there for part-time study it was untapped. The Department also had a significant consultancy budget and Roy Johnston, Bob Hurrion and I were commissioned to carry out a consultancy project. There was an agreement that academics could spend up to a day a week on paid outside work. The Civil Service however considered academics as public employees to be more or less a free good, so we had to set up a company in order to be paid a reasonable rate. The deal was struck at the offices in Great Titmarsh Street, London, and then eight of us went out to lunch which consisted of eight rounds of drinks. Roy drank eight pints; I drank eight halves and Bob eight orange juices. (Lunchtime drinking was commonplace in those days (although not eight rounds). In the early days of the staff club on the top floor of Rootes there would typically be staff standing three or four deep at the bar having a liquid lunch.) Ray Jackson was involved in the consultancy work and later he headed the Clinical Trials Research Centre which was initially located at Warwick before moving to London.

Bob and I also did a significant piece of consultancy for Alfred Herbert's on production scheduling. Unfortunately it did not save the largest machine tool company in the world from bankruptcy.

I had joined the Operational Research Society whilst at Pilkington's and in the 70s my main engagement was with the Mathematical Programming Study Group – a joint study group with the British Computer Society. We met every month at LSE. Martin Jeffries (who owned a software company) was the chair and Paul Williams (a lecturer at Sussex) the secretary. I would attend more or less every meeting travelling down after lunch and spending an hour or two in London prior to the meeting at 6.30. There seemed to be more time for that kind of activity in those days. When Paul moved to a professorship at Edinburgh Tony Brearley, Susan Powell (LSE) and I took on the organisation. The Study Group continues to meet on a regular basis although my interests and priorities moved away.

By the mid-70s I had switched my admissions duties from the BSc to the MSc Management Science and Operational Research. The course had gained support from the Science Research Council (SRC) as it was then titled. Initially we were awarded six or so studentships which paid both fees and living expenses. The number grew into the 20s until the SRC began withdrawing support from masters' courses in the late 90s. Numbers on the course were around 20 in the early 70s and we interviewed most of the candidates individually.

By 1976 I was getting my first taste of University administration, joining the Board of the Faculty of Social Studies and the Computer Unit Committee. I was also now teaching mathematical programming to the MORSE students alongside advanced quantitative methods on the BSc Management Sciences and quantitative methods to the MSc Management and Business Studies students. I also contributed project planning to a part-time MSc in Civil Engineering.

It turned out that 1977 ended my period as a lecturer where my main focus had been teaching and research. I was on study leave for the spring and summer terms and

spent three months as a visiting fellow at the Technische Hogeschool Twente in the Netherlands. Roger Fawthrop had provided me with a contact. In mid-February we (Dorothy, Michael (8) and Joanne (4)) loaded up the car and headed for the Dover – Ostend ferry. We should have been sailing from Harwich to the Hook of Holland but the ferries were on strike on that route. The late change of plan meant that we had to go for an early crossing which involved driving through the night to Dover. Somewhere south of London the lights on the car failed. I managed to find a phone (no mobiles in those days) to call the AA. The patrol man asked to look in the car boot. When I opened the boot several cans of Spam fell out. Traditionally we ate bacon for breakfast and had heard that, despite the preponderance of pigs, it was difficult to obtain in the Netherlands. I had therefore filled every nook and cranny of the boot with tins of Spam, as a bacon substitute, which had short circuited the lights. Fortunately I had built sufficient slack into our journey for us still to arrive in time for the ferry.

Twente provided us with accommodation on campus in Reelan 3, which was one of a small block of apartments for visiting academics. We made friends with the Indian and Indonesian/Australian families next door and Dorothy taught the children in the mornings rather than send them to a Dutch school. My duties involved research and giving six seminars on various topics including scheduling/cutting stock problems from my Pilkington days, stochastic programming and my emerging interest in corporate/strategic planning. At one seminar I was in discussion with a Dutch man and asked him what his job was. I assumed he was a lecturer. However it transpired he was a student in his ninth year. In those days students could take as many attempts as they wished to pass their exams and could also get government funding. The average time to completion to the equivalent of an MSc was 7.2 years. I estimated that with the shorter length of time to graduation, the less favourable student staff ratios and the lower salaries, that the British system must have been about five times more efficient than the Dutch, and not obviously less effective. I also spent time studying strategic planning and in particular the more participative Dutch system. I was fortunate to gain access to Akzo, a chemical company, and the Regge and Dinkel Water Authority. The groundwork I carried out led to a successful bid for SSRC funding and a later collaboration with John Foster, who had previously been a maths student at Warwick.

Whilst at Twente I also heard that I had been promoted to senior lecturer, which although I did not realise the significance at the time made me eligible to be Chairman of the School. In the autumn of 1977 one of Derek Waterworth's sons had a serious motor cycle accident. Derek stood down from being Chairman of the School. I became Acting Chairman on 1 January 1978 and appointed Chairman for a three year term from 1 August. In those days the appointment of Chairman involved a nomination process. If a person got a clear majority of nominations from the academic staff, he (it would more or less have had to be a he in the 70s) would be appointed although the University could veto a nomination but rarely did. Otherwise there would be an election. Apart from Brian Houlden, the first Chairman, Roger Fawthrop, Derek Waterworth, myself, Thom Watson, George Bain, Robin Wensley and Bob Galliers were all appointed by this process. The title changed from Chairman to Chair and then Dean, and the most recent Deans, Howard Thomas

(previously a dean in the USA) and Mark Taylor, were appointed following a search and selection process.

The period 1970-77 had been one of steady development for the School and the University from its nadir in 1970. Brian Houlden was followed by Roger Fawthrop, as Chairman and after a three year spell was followed by Derek Waterworth. The BSc Management Sciences developed and strengthened and the BSc Accounting and Financial Analysis was added with the joint degrees with the sciences and MORSE completing the undergraduate portfolio. The popularity and credibility of the undergraduate courses improved noticeably. An MSc in Marketing was added to the strengthening masters' portfolio but it was short-lived. Many students from the late 60s and 70s went on to significant careers in both academia and business. Research developed patchily with industrial relations at the forefront, operational research developing and variable quality elsewhere. The development of the School mirrored the broader development of the University under the leadership of Jack Butterworth who remained the Vice-Chancellor into the 80s. Already Mathematics at Warwick was being talked of in the same breath as Oxford and Cambridge and the rest of the University was poised for significant progress through the 80s. My own career diverted in 1978 with a significant proportion of my time being taken up by management and administration until retirement.

Part 2: 1978-1983 Senior Lecturer and Chairman, the School of Industrial and Business Studies

My term as a lecturer from 1970 – 77 ended with my promotion to senior lecturer from 1 October 1977. September involved meeting Susan Powell at LSE followed by a Mathematical Programming Study Group meeting, The Operational Research Society's Annual Conference at Oxford and preparation for the coming academic year. We also moved house within Kenilworth and have remained there ever since. (We were able to purchase a four bedroom detached house although Dorothy was not earning. I think that would be difficult for an academic on an equivalent salary these days). The promotion had had no immediate effect on my teaching duties and in the autumn term of 77/8 I continued to lecture on mathematical programming to the MSc in Management Science and Operational Research and on mathematical programming to the second year MORSE (mathematics, operational research, statistics and economics) students. I seemed to be involved in more committees, including the Departmental Meeting, the OR Group, the Centre for Industrial Economics and Business Research (CIEBR), the Social Studies Faculty Board, the School Resources Committee and the Student Staff Liaison Committee. Additionally, Derek Waterworth, the School Chairman, set up an Advisory Group of senior lecturers which included Keith Sissons (industrial relations), Richard Hyman (industrial relations), Mel Hirst (marketing) and me. In the autumn term of 1977 there was also a meeting of the University Assembly, where issues were discussed with the University senior management.

The Operational Research Group still had Hylton Boothroyd, Bob Hurrion and Roy Johnston, but Derek Atkins (University of British Columbia), Tony Brearley (Shell) and Gwyn Bevan King's Fund) were all to move on during the period. Alan Waller joined the Group for a few years before moving to Cranfield.

Bob Hurrion and I continued our consultancy role with Alfred Herbert's, then the largest machine tool company in the world but shortly to go into liquidation, and liaison continued with the Department of Health and Social Services (DHSS) OR Group. In the November of 1977 there was a day of action in London organised by the Association of University Teachers, presumably concerned about the most recent pay offer. (Days of action were not strikes and often supported by senior management. Pay negotiations were between the sector and the government rather than within the sector as now).

A tragic event occurred during the autumn of 1977 which affected Derek Waterworth, the Chairman, personally and myself professionally. One of Derek's sons was in a serious motor cycle accident sustaining a head injury. He survived but in a poor state and Derek and his wife Mary decided to nurse him at home which was more or less a 24 hour commitment. Derek decided that he should not carry on as Chairman and resigned from the end of the term. This left the School with a dilemma. Normally a professor would be Chairman (sic) but the existing professors who were approaching retirement did not wish to be considered (Hugh Clegg, Brian Houlden and Roger Fawthrop) and Andrew Pettigrew, a recently appointed professor of organisational behaviour, was something of an unknown quantity. (Andrew delivered his Inaugural Lecture in January 1978.) Senior Lecturers were eligible and I was approached to take over from Derek. I was duly appointed Acting Chairman for the following spring and

summer terms and then following a nomination process elected Chairman for three years from August 1978 – July 1981. After the founding Chairmen across the University, including Brian Houlden, had agreed to stand down – they had been appointed to permanent posts as Chairman originally - a nomination and election (if necessary) process was the norm. Promotions to senior lecturer, reader and professor were the remit of the University Professorial Board, and had to be handled by a professor. The School therefore needed a ‘professor responsible’ to take on those matters and Derek agreed to undertake that role. I now received excellent support from Maryann Wallace, the Chairman’s secretary and Lesley Williams, the School administrator throughout my term as Chairman. Maryann later move to London Business School with George Bain, and Lesley moved to the Industrial Relations Research Unit, succeeding Frank Souch as the administrator.

The role of Chairman involved a small honorarium and a 50% reduction in teaching load to allow for the additional administration. However that did not seem to have much impact on my teaching in the first year as I continued teaching mathematical programming to the second year MORSE students and mathematical programming on the MSc MSOR. I also taught quantitative methods to the second year Management Sciences students and mathematical programming to the first year MORSE students in the summer term. Gary Rawlinson, an MSc student, also appeared in the diary in the summer of 1978. (Was his the only student project I supervised that year?) Research collaboration began on capital investment appraisal with Bob Berry, a member of the Accounting and Finance Group, who later moved to a professorship at Nottingham.

The collaboration continued with the DHSS and meetings were held with the Head, Alex McDonald, who was also head of the government OR service at the time. The collaboration eventually led to the formation of the Clinical Trials Unit being funded by the DHSS and located at Warwick. Ray Jackson headed the unit and moved to Warwick although he was always of the view that London was a preferable location as that was where most of the cancer research was located. Ray did eventually move the Unit to London (University College) after some years at Warwick. Later the Unit broadened its remit and became the Clinical Operational Research Unit.

The Science Research Council (SRC), as it was then called, introduced the CASE (collaborative awards in science and engineering) Awards scheme to fund PhD students. The scheme required a collaborating organisation that would part fund the award. Bob Hurriion had successfully secured CASE awards to support his visual interactive simulation research. I saw this as an opportunity to continue the stochastic programming research and contacted Martin Beale at Scicon. Martin was a leader of developments in mathematical programming, and the only OR person to become a Fellow of the Royal Society, and Scicon had one of the early mathematical programming software packages (Sciconic). Martin had also reviewed an earlier successful SRC grant proposal of mine. Martin was receptive to the CASE option, and we recruited Robert Ashford as the PhD student. Robert had completed his MSc at Lancaster and completed his PhD in two years. We recruited him to join the OR Group at Warwick, having been awarded a lecturing post by the Higher Education Funding Council in a scheme for young researchers. However he did not stay long as his interests were in consultancy and he co-founded Dash Associates with Bob Daniel. As a result his PhD research was never published. Craig Baker was also still

pursuing his PhD and successfully completed with some significant input from the Institute for Employment Research. Craig had a very successful career with the Audit Commission and various consultancy firms and was a member of the School Advisory Board for many years.

On taking on the Chairmanship the diary became rather more heavily populated and I became diary driven from then on until my retirement. Academic life involved teaching, research, liaising with external organisations (including for example the DHSS, the Treasury, Shell, Pergamon Press, Scicon, Alfred Herbert's and Fisons), and increasingly meetings with the University management and services including John Fletcher (Library), Tony Harris (Careers), Mike Ralph and Terry Monnington (Sports Centre, about a possible joint degree), Mike Shattock (Registrar), Colin Brummit (Finance Officer), Adrian Rowe-Evans (Secretary and Registrar) and Alec Ford. Alec served as a Pro Vice-Chancellor for many years and chaired the University's academic resourcing committee, then called Estimates and Grants Committee. This was the committee that sanctioned in great detail all aspects of the School's budget. The School was still establishing its credibility but Alec was supportive. Also the matrix, the University's resourcing model, broadly indicated that resources should follow student recruitment, so the School was allowed to expand in a relatively non contentious way.

Initially the matrix had given additional weight to postgraduate students counting them as either 1.25 or 1.33 of an undergraduate in recognition of the twelve months length of the courses. The UGC, the funding body, had also weighted them in this way. About 1980 or 81 the UGC removed the graduate weighting and the University followed suit. This made the recruitment of UK postgraduates relatively unattractive and as a result the growth of postgraduate studies at Warwick lagged the undergraduate growth. This later became a matter of considerable concern and in the early 90s Bob Burgess (now Sir Robert, Vice-Chancellor of Leicester University) set up the Warwick Graduate School to promote graduate studies. (The graduate weighting was restored later, perhaps before the graduate school was established but the damage had been done.) A significant positive development during this period was ironically the Thatcher cuts in higher education funding. The funding council (the UGC) had their budget cut drastically and additionally overseas students were no longer funded. Warwick did not receive a severe cut due to the quality of its students, and we had not been recruiting many overseas students. The cuts turned out to be a driver for Warwick to seek new sources of income and in particular to enter the overseas market in a significant way, whilst many longer established universities down-sized.

The Chairman duties also involved being a member of all appointments panels except professor and reader in the School and chairing all the examination boards apart from the MA Industrial Relations. There were interviews for a lectureship in industrial relations on 23 May 1978 – I wonder who was appointed (Bob Price or Dave Winchester?). On the 8 May I attended the inaugural lecture of Ken Wallis who had recently joined the Economics Department and remained a pillar of the department and the university until his retirement. Ken was later involved in my promotion to professor, and his wife Margaret became the Head of the Careers Service. Cricket continued for the Staff Club on Wednesday evenings in the Coventry (Works still?) league, but for some reason the only team to warrant an entry in the diary in 1978 was

Dunlop's, and recently Rob Burns (German) reminded me of the many highly competitive games we had with them.

September 1978, involved a number of key meetings which seemed to get in the way of my attending the Operational Society Conference that year. There was a two-day visit from the Foundation for Management Education, the body that had funded the London and Manchester Business Schools and had contributed to a building at Warwick. Funds for new posts were always scarce, and following that meeting they agreed to fund a senior lectureship in production management. We appointed Terry Hill to the post and Terry later moved with George Bain to London Business School after ten or so years at Warwick. We had also interviewed Nigel Slack for the post (or was it for a later professorship when Chris Voss was appointed?) and although he wasn't appointed on that occasion he was recruited to the School later playing a prominent role in the development of operations management. An important meeting for the OR Group was the visit of the Science Research Council (SRC) OR Panel. This was the panel that awarded masters' studentships which covered both fees and maintenance. At that time the main recipients of funding were Lancaster, LSE, Imperial College and Birmingham. Warwick was a relatively recent recipient as we had earlier received funds from the Social Sciences Research Council (SSRC). However the OR Group's standing increased throughout the 80s and by the early 90s we were receiving some 20 studentships per year which was the second largest number following Lancaster.

At the end of the month John Charnock (lecturer in business policy) and I attended the Conference of University Management Schools (CUMS). This was a self-selected club and members included Aston, London Business School, Manchester Business School, Hull, Henley, Bradford, Cranfield and Ashridge among others. The meetings were held on a Friday and Saturday and at that time held at Henley on the banks of the Thames. John Charnock was also director of the MSc Management and Business Studies and he and Ian Watson (marketing) led the movement to rename the course the Warwick MBA. As the number of business schools expanded and the polytechnics became universities the members of CUMS decided that the small club was no longer sustainable so CUMS fell on its sword. The members helped found the Association of Business Schools (ABS) but the collegiality of CUMS was lost in the process.

In the October of 1978 John Foster first appeared in my diary. I had secured a two year research grant from the SSRC, with support from David Chambers of LBS, to research into strategic planning. John, a Warwick mathematics graduate, was appointed to a research fellowship post and we had a productive relationship. We developed a framework for an effective planning process and carried out fieldwork (mainly John) examining the planning processes of a range of public and private sector organisations including Aston University, Reed International, Marconi Space and Defence Systems, the National Coal Board, WH Smith, Lambeth Borough Council, Pilkington Brothers, Tilcon, Warwickshire Area Health Authority and Williams and Glyn's Bank. We wrote case studies on the planning processes of the organisations and we were interested in testing the framework for effectiveness of planning processes and evaluating the impact of participation in the processes, building on my earlier research in the Netherlands. The research was published in the

Strategic Management Journal, Long Range Planning and the European Journal of Operational Research.

In December I attended a presentation by the Vice-Chancellor (Jack Butterworth) of the Peter Gilbert Memorial Prize to A.P. Jansen. The recipient was the one deemed the best student on the BSc Management Sciences taking account of academic performance and overall contribution. Peter Gilbert was an undergraduate student who sadly lost his life when he went missing from a cross channel ferry.

The School had developed a range of joint degrees with the science departments, German and later with the Law School, and the International Business degree with the language departments and the Language Centre. In 1978 a discussion was held into the possibility of a joint degree with Physical Education, but it did not come to pass.

I visited Mike Akers at the Triumph motor plant in Coventry. On driving up to the gate in my VW, the security man advised me to park out of site of the main entrance so that no director would spot the foreign body in the car park. The British motor industry was paranoid about foreign cars in those days (and they were out to get us, and did). Mike was later the Chief Executive Officer of Titan Europe Plc., a publicly traded company on the AIM market in London. I first met him on the MSc/MBA at Warwick and my visit was to set up a student project. He had a long period of employment with British Leyland including being the manufacturing director of Triumph Cars. I met him again much later when he joined the School's Advisory Board.

In the summer of 1979 I had my first meeting with Ford of Europe. I had received a letter (as Chairman) from the then Chairman of Ford UK (Sir Terence Beckett) inviting the School to be one of a small number of business schools to partner Ford making us a preferred source of business recruits and providing various opportunities for engagement through projects. Ford appointed one of their senior managers, Ivo Huybrechts, to be the link person and the formal relationship continued successfully for many years. The Ford link led to my only visit to the Motor Show at the NEC in Birmingham. I also recall attending a recruitment presentation by the RAF and consider it to be the most professional one I had attended up to that time, and possibly since. They had clearly developed the concept of frequently asked questions, and for every question put to them they had a well-considered response backed by slides.

Mike Simpson visited that summer in the role of external examiner for the MSc Management Science and Operational Research. Mike had helped found the Department of Operational Research at Lancaster and was Head following Pat Rivett's move to Sussex to attempt to repeat the successful launch and development of OR at Lancaster. Sussex proved to be a less supportive university for OR than Lancaster. I had been one of a number of non-residential full-time PhD students in OR at Lancaster during the sixties. I had managed to align my work closely with my job at the Pilkington R & D Laboratories at Lathom and as a result was the first of the non-residential students to graduate. Mike sent a letter to all the students saying 'it can be done' to encourage the ones in less supportive circumstances. In fact there was a high completion rate although the programme only ran for a few years. Mike was a highly respected member of the national and international OR communities, and a president of the OR Society. Sadly he died at a relatively young (60ish?) age.

A second name to appear in my diary on the same day as Mike was George Bain. George had joined Warwick as Deputy Head (to Hugh Clegg) and then Head of the Industrial Relations Research Unit at Warwick (not part of the School at that time). Hugh had retired as the Pressed Steel Professor of Industrial Relations and we were keen for George to move into the School as Hugh's replacement. George was reluctant as he had a view that the School was of mixed quality. However following a number of discussions and also some encouragement from the University senior management, George agreed to apply for the post and was duly appointed. This turned out to be the most significant event of my Chairmanship in terms of the School's later development, my own career and indeed George's. George was a hard negotiator and I recall him bidding for funding for a seminar series in industrial relations. His bid seemed to be rather high and was resisted by Brian Houlden who managed the budget for publicity and seminars. After acting as go-between for some time I eventually got the two to meet me together to resolve the matter. George agreed to accept half the amount, which was what he had wanted in the first place.

The summer of 79 also saw my first formal role in the OR Society as a member of its Awards Committee. One award was for the best paper in the Journal of the Operational Research Society (the Goodeve medal). Jonathan Rosenhead of LSE had written a paper using his robustness methodology to help his (step?) daughter select her school subject option choices. There was some discussion as to whether this was OR but the excellence of the paper carried the day. Despite the administrative duties I still found time to attend the Mathematical Programming Study Group at LSE on a regular basis.

Another professorial vacancy occurred due to the departure of Roger Kistruck. Roger had been on a fixed term contract as Professor of Management Information Systems. There were only two information systems staff at that time, and the OR Group did not have a professor. It was decided therefore to merge OR and IS creating the Operational Research and Systems Group and a professor was sought to head the Group. My application for the post was unsuccessful and Rolfe Tomlinson was appointed. Rolfe had been Head of the National Coal Board OR Department – the leading department in the country – and more recently had been seconded to the IIASA (the International Institute for Applied Systems Analysis based in Laxenburg, Austria). IIASA aimed to bring together researchers from the West and Eastern Europe at a time of tension between the West and the Soviet bloc. It now has a more global coverage and the UK is no longer a member. Rolfe had also been President of both the OR Society and the European Federation of Operational Research Societies. He brought a wealth of contacts, experience and expertise to the School. The story goes that about the time of his appointment the University instituted an early retirement scheme perhaps as a result of the Thatcher cuts. The view was that such a scheme had to be made available to every member of staff above a certain age. Rolfe duly received notification of his eligibility for early retirement on the day he joined the University. We now had an interesting governance structure in that Rolfe reported to me for some matters as Chairman of the School, and I reported to him for others as Head of the ORS Group. However I don't recall it being problematic. The Group was now about nine or ten strong with Geoff Stevens also having joined. Guy Fitzgerald, later a professor at Brunel and Loughborough, was also a member.

I had a number of meetings with the new Jaguar Chief Executive, John Egan. Jaguar at that time was part of the Austin/Rover Group, previously British Leyland (BL). John inherited a company which produced low quality expensive cars. A friend of mine, Jim Dyer, who owned a car of that vintage in Austin, Texas, used his car to run around town, but would not risk driving to Dallas. John decided that the key strategic objective for Jaguar was not to introduce new models, but to raise the quality of the existing range. He was successful in that mission, but equally importantly he was successful in publicising the improvement and thus saving the brand. In the mid-eighties Jaguar partnered the School in launching an evening version of the MBA.

During 1980 I was doing some guest lecturing at the Lucas Institute for Production Engineering at the University of Birmingham. About that time Birmingham were considering promoting Kumar Bhattacharyya to a professorship. David Whitehouse, a Warwick engineering professor, was an external assessor and supported the promotion. However the promotion was denied by the internal members of the board. David reported to Jack Butterworth and an appointment panel was rapidly set up. Dr. Bhattacharyya was duly appointed to a professorship at Warwick and founded the Warwick Manufacturing Group (WMG). I was in the interesting position of hearing a Birmingham version of events on my visits to the Lucas Institute, and Kumar Bhattacharyya's views of Birmingham when I met him at Warwick. Kumar had recently been awarded a significant grant by the EPSRC to set up the Integrated Graduate Development Scheme (IGDS), a part-time modular MSc course for graduates in manufacturing companies. Arden House, then a hall of residence, was converted for the course. The School was approached to help develop the course and we designed and ran three of the modules. Tom Watson led a module on influencing skills, I led one on corporate management techniques and the third was possibly a marketing module. After this early collaboration, relations between the School and WMG deteriorated. WMG became one of the engines of growth and development of the University and Kumar later became Lord Bhattacharyya.

In the early years the academic staff of the School were entirely white males. Diversity had begun with the appointment of Joanna Liddle to the Organisational Behaviour Group and the early 80s saw the appointment of Piyaseeli Bennett, an ethnic minority woman, to the Accounting and Finance Group. As the School developed and grew, it diversified significantly in gender, ethnicity and nationality.

I was not a regular conference attendee at this time although I did attend the EURO conference in Amsterdam in July 1980. I don't recall the academic programme, but do remember a reception in the Rijksmuseum, and the conference dinner taking place on the canals where Dorothy and I shared a table with Martin Beale and his wife and Stanley Zions and his wife (Stanley was a leading American academic).

I was contacted by Gordon Pearson, who had been one of the first intake to the BSc Management Sciences course. Gordon was now in charge of a peat bog at Chat Moss in Cheshire. The original Manchester to Liverpool railway ran across Chat Moss, and the line had to be built on wooden floats to stop in sinking. Gordon wished to increase the output of peat and as an operational researcher thought I might be able to help. I spent several days consulting on the project. I had been to a seminar by John Childs, a professor at Aston and Bradford, on socio-technical systems analysis and adopted that as a suitable way of tackling the problem. I produced a useful proposal

and also wrote a paper entitled 'OR on the peat bog: a case for qualitative modelling', which was awarded the Pergamon Prize by the Operational Research Society – I think for being the best applied paper published in the year (1983) in the Journal of the Operational Research Society. It has received four citations (references in other articles) on Google Scholar which means that it was ignored by the academic community as often happens with applied papers.

Emmanuel Thanassoulis was completing his PhD during 1981. He had compiled a weighty document and I was not able to persuade him to reduce it in length. At his examination the external examiner, Ailsa Land of LSE, decided that the thesis was in two halves that did not fit together very well so the doctorate was awarded on just one part. Emmanuel published articles from both parts and went on to have a very successful academic career at Warwick and Aston.

My term as Chairman of the School finished in the summer of 1981 and I did not stand for re-election. Thom Watson, a senior lecturer in organisational behaviour, who joined the School on the same day as me and Keith Sisson, was appointed Chairman after receiving sufficient nominations. Tom had also been a dedicated director of the undergraduate course and had served as Chair of the Faculty of Social Studies. Mike Southworth's name appeared several times in the diary that summer as I was supervising his master's dissertation. In the September I attended the Operational Research Society's annual conference. The autumn term was now relatively administration free and I continued to teach mathematical programming on the MSc, BSc Management Sciences and BSc MORSE. Other entries in the diary in the autumn term included table tennis (I played a little for the Staff team along with John Halliday (Politics), Robin Oakey and Gwyn Lewis (History)), Billie Jo Spears (at the Arts Centre), my PhD students Craig Baker and Robert Ashford, and John Foster. There was also another visit of the Science Research Council's Operational Research Panel. The Panel was responsible for allocating studentships to the MSc Management Science and Operational Research and the number awarded to Warwick steadily increased during the eighties.

My diary is blank for the rest of the 81-2 academic year. I had been awarded two terms sabbatical (study) leave and, with Dorothy and the children, was to spend it visiting the University of Texas at Austin. Warwick operated a genuine sabbatical system i.e. one term leave for each six terms of service provided that there was a viable plan. My contact at Texas was Bill Cooper an eminent scholar. Bill had spent most of his academic career at Carnegie Mellon University in Pittsburgh. I had met Bill in the late sixties when he and Abraham Charnes gave a ten day course at Lancaster University, held in the Lake District, and I attended as a PhD student. The story goes that Bill's wife, Ruth, an attorney, had tangled with the mafia and they had to leave town, initially to Boston. When I was planning my leave I wrote the Bill at Harvard to find that he had moved to Texas. When the invitation came to visit we had to look Austin up on the map. At the time of writing Bill was still active at 96, visiting the University (Texas) regularly (Bill died in July 2012 at the age of 97). We last met him at the Informs conference in Austin in November 2010. Dorothy and I had dinner with him at his retirement home and Bill attended a stream at the conference held in his honour.

We spent eight months in Austin, which was rewarding and challenging. We left a snowy England to be met with 80 degrees Fahrenheit. However it snowed in Texas two days later which caused considerable inconvenience. By the end of May the temperature regularly hit 100f although it was not humid and we acclimatised quite well. It is not surprising though that the population of Texas was relatively sparse before air-conditioning.

The move was by no means as hassle free as our move to Twente in 1977. We had to hire an unfurnished apartment and hire furniture separately. However, that did not include all the little essentials such as knives and forks, but the faculty at the University provided much needed equipment including bikes for the children. The University of Texas was highly bureaucratic. I had to wait in line for seemingly everything such as an office key and a car-parking permit as everything seemed to be controlled centrally, and as an alien had to report to the police. We had to find school places for the children although that was relatively easy. I also had to hire a car as it is more or less impossible to travel around Austin any other way – apart from the School bus system for the children. (At that time Austin was bussing children around the city to attempt to get a racial balance in the schools and as a result my daughter Joanne, then aged 10, was bussed several miles to her school in a black area although she did not find it problematic.) Our only concern was one day when we had put Joanne on the bus in torrential rain and we were concerned about flash flooding which was a regular occurrence. Within an hour the local television announced that all the Austin children had arrived safely at school. It took three weeks or so to sort everything out and during that period we were also concerned that someone might burst into the apartment and shoot us as there was about one murder per week in Austin. However we acclimatised and never felt threatened during our stay.

The faculty at Austin were very welcoming. Roy Harris, the Chairman of the Management Department met us at the airport and took us to an ice-cream parlour where the waitress kept asking Joanne to speak so that she could listen to her English accent. Bill Cooper and Jim Dyer invited us to their homes and during our stay we were invited by fourteen colleagues to their homes. We experienced many aspects of American life including a Tammy Wynette concert, a rodeo and a basketball match. One of the faculty took us tubing twice, and we also went to an outdoor concert to celebrate July 4th although Texas was never part of the British Empire. (None of the six flags of Texas is British). I often wondered whether visitors to Warwick were treated as well. I think the hospitality was partly because there were very few overseas visitors to Austin at that time. Dorothy was also looked after by the Baptist church which ran a programme for visitors to Austin. We went to one service at the church, specifically for visitors, where the gist of the sermon seemed to be that you could do what you liked during your life provided that you repented before you died. The church oozed wealth, but they were building an even bigger one next door.

There was of course an academic purpose to the visit. I developed my research into corporate/strategic planning, attended seminars and gave a course on strategic planning to graduate students which became the prototype for modules at Warwick. I found it disconcerting that I was the sole marker of the student work, with no second marker or external examiner. The students also frequently challenged their marks. One of the students was a Vietnam veteran and was very unhappy about the Falkland's conflict which took place at that time. The media and indeed my

colleagues were very pro-British about the conflict although I understand that wasn't the case on the Spanish speaking channels. The student was an anglophile and the highlights of the week for him were my lectures (mainly because I was English), and Brideshead Revisited which was being shown on the public service channel.

The University of Texas at Austin was a very good and well-resourced state university. They benefited from a land grant and oil revenues which could not be spent on staff. As a result they had excellent academic and sports facilities. The visit to Austin and UT had been a valuable life experience.

The academic year 82-3 was relatively quiet for me. Tom Watson was chairman and on my return from Texas there was some catching up to do. In September I had meetings with Gwyn Bevan, Craig Baker and Emmanuel Thanassoulis. Gwyn had not yet moved on and Craig was moving to the Audit Commission after completing his PhD. Emmanuel was to join the OR Group following the award of his PhD and he and I later developed a very fruitful research collaboration on data envelopment analysis and performance management. I also had lunch with Peter Walters from the Mathematics Department and am still in touch with Peter. We had a common friend in Robert Elliot who left Mathematics to take a chair at Hull before moving to Canada. Dorothy and Ann Elliot exchanged cards and in this way we have charted Robert and Ann's globetrotting ever since as they rarely spend much of the winter in Canada.

I resumed my mathematical programming teaching on mathematical programming II, a second year MORSE course (we tended to use programme and course rather than course and module in those days), on the MSc, the MBA and I had a 'lab' session with the second year undergraduate management scientists. I was teaching six or so hours per week on average. I was also involved in meetings in SIBS and the OR Group, but not in the wider University. As it was out of the cricket season my exercise consisted of popmobility led by Judy Hurrion. A course OR for engineers also appeared in the diary. For a time we taught on an MSc in Construction Management where I taught project scheduling. I collaborated with Rolfe Tomlinson on research into strategic planning and with Bob Berry on capital investment appraisal. There was a meeting of the Midlands OR Society at the Lanchester Polytechnic (now Coventry University) and I was also getting more involved with the national OR Society in particular joining the Society's conference committee.

In January 1983 I have a diary entry of 'Batman inaugural'. Batman was the affectionate name for Kumar (now Lord) Bhattacharyya and he gave his inaugural lecture on 31 January. I also continued teaching on the Warwick Manufacturing Group's Integrated Graduate Development Scheme.

In the Spring Term of 1983 a new undergraduate course appears – 'Analytical Aids for Strategic Planning'. This was developed from my research on strategic planning with John Foster, my collaboration with Rolfe Tomlinson (who co-taught the course) and my corporate planning course that I had taught in Texas. The shorthand title of the course was Aids, but when the medical condition Aids occurred we changed the title to OR in Strategic Planning. The course was aimed primarily at MORSE third year students although it was also available to SIBS undergraduates. We later developed MSc and MBA versions. On Rolfe's retirement Frances O'Brien became involved and became the lead person when my administrative duties became

dominant. When I was a Pro-Vice Chancellor Frances, Maureen Meadows and myself would meet to decide who would teach which slots on the courses and the starting point was the few gaps in my diary between the blanket of meetings.

In the September of 1982 Russ Ackoff, a leading founder of academic OR, addressed the Annual OR Society conference at York (I was not present). His thesis was that OR had lost its way, lost its focus on practice, and had become simply a poor man's branch of mathematics. Russ published two papers on the topic in the Journal of the Operational Research Society, in which he did recognise that OR in the UK was in rather better shape in that respect than in the US. Nevertheless his views had resonance and as a result Rolfe, George Mitchell (National Coal Board), Maurice Shutler (Monopolies and Mergers Commission) and others set up the Club of York to consider the issues. They met regularly at Warwick as Rolfe hosted the meetings and indeed they later renamed themselves the Club of Warwick. Dorothy and Joan Cooper provided the lunches and their catering business now began to take off, providing lunches across the University and to some extent elsewhere.

In the summer of 1983 I resumed cricket for the university staff. Ledisi and Neil Buxton also enter the diary on a number of occasions and I assume I was supervising their master's projects. I visited London Business School in September and I suspect it was to act as external examiner for one of David Chambers' students. David was also the internal examiner and in those days the supervisor also acted as an examiner. The student was an African prince and when we referred his thesis for further work David suggested that it might have been the first time anyone had seriously challenged him.

After two years as Chairman, Thom Watson stood down to become Chair of the Faculty of Social Studies.

By 1983 the School was becoming established as a significant part of the University. The undergraduate programmes had developed strongly and the masters were in steady state. Research was variable across the School. There were two reports which were to affect the development of the School significantly. A report by the UGC was mixed and in particular suggested that the professoriate were not providing sufficient leadership (although they had in the past) and there were areas of indifferent research performance. About the same time the FME reported that a business school needed at least 30 academic staff in order to cover the range of subjects adequately. At that time the School had 32 academics. So although the School had progressed throughout the 70s and into the 80s it was ripe for a step change in its development.

Part 3: 1983-1989 Professor, the Bain Era - the transformation of SIBS to WBS

The School of Industrial and Business Studies (SIBS, the School, the Business School, later formally Warwick Business School (WBS)) was established in the mid to late 60s and by my arrival in 1970 a good foundation had been laid. The founding members of the School, including Brian Houlden (Chairman (sic)), Hugh Clegg, Derek Waterworth, Bob Tricker and Hylton Boothroyd, had established the Masters' courses in Industrial Relations, Management and Business Studies and Management Science and Operational Research (MSOR). The BSc Management Sciences had its first intake of 25 students in 1969. The research tradition in industrial relations was being established by Hugh Clegg and Richard Hyman to be joined by George Bain and briefly and sadly Allan Flanders. Research was also developing in other subjects. There were also a number of doctoral students and executive short courses. The School had been recognised by the Foundation for Management Education (FME) as one of three business schools (along with Aston and Bradford) to receive grant support following the establishment of London and Manchester Business Schools. However the University suffered some turbulence in 1969 which affected its embryonic reputation. One indicator of the effects of this was that in 1970 we could only recruit 18 students of sufficient quality onto the BSc Management Sciences.

From the nadir in 1970 the School (and the University) developed steadily during the 70s. The existing courses increased in their popularity. The BSc Accounting and Financial Analysis had been established during Roger Fawthrop's period as Chairman, joint degrees with science departments were developed and the Operational Research Group participated in the BSc Mathematics, Statistics, Operational Research and Economics (MORSE), a multi-departmental venture led by the Statistics Department, chaired by Jeff Harrison.

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At the time of his appointment as Chairman of the School, George had little business school experience (IRRU was not part of the School and for a number of years was a Social Sciences Research Council (SSRC) research unit located at Warwick). He consulted within and outside the School, became an active member of the Committee of University Management Schools (CUMS) and led the development of a strategy for the School. He produced a detailed document entitled 'The future size and shape of SIBS'. The key elements were to grow the size of the School and simultaneously raise the quality of research across the School. The former involved adding to the portfolio of masters courses, and the latter external appointments across the School but particularly in marketing, organisational behaviour and manufacturing strategy. He sought to refresh the professoriate by seeking to gain promotion for Keith Sisson, Richard Hyman and myself and recruiting Robin Wensley, Peter Doyle, Chris Voss, Gibson Burrell and Bob Galliers to professorships. Richard and I were appointed to personal professorships and Keith was appointed Professor and Head of the Industrial Relations Research Unit following the resignation of Willy Brown. Keith's appointment was contentious. The SSRC were reducing their funding of IRRU and returning it to the University. They wished to see an external appointment to manage the possible decline of IRRU and had a nominee on the electoral board (Sir Douglas Haigh). However the Vice-Chancellor made it clear that the appointment was in the gift of the University and Keith was duly appointed. The electoral board met on a Saturday morning, followed by a lunch, and I only just made it in time for the kick-off at Coventry Rugby. (Keith had played in the front row for Wasps before moving to Warwick).



Seven Heads of SIBS/WBS – Brian Houlden, Roger Fawthrop, Derek Waterworth, Robert Dyson, Thom Watson, George Bain and Robin Wensley.

For me the summer of 1983 was much as usual. A two week family holiday in Wales was taken at the beginning of August. Supervision included Neil Buxton's dissertation. I joined a meeting with Thom Watson about the possibility of a joint diploma in management studies with the Lanchester Polytechnic (later Coventry University). This did not go ahead although we did have a short-lived collaboration later. I had a number of meetings with Ledisi which may also have been dissertation supervision. I also reserved some time to work with Rolfe Tomlinson on a consultancy project for Shell on strategy support tools. Rolfe and I also published a paper entitled 'Some systems aspects of strategic planning'. I also met with Emmanuel Thanassoulis and Robert Ashford who had both completed PhDs and then joined the Operational Research Group as lecturers. In September I attended the OR Society's annual conference.

The academic year 83/4 began much as before. Teaching commitments included mathematical programming for the MSc MSOR and the BSc MORSE, quantitative methods on the BSc Management Sciences and methodology to the MScs – I am not sure what I taught them on that topic. In addition to the strategy research with Rolfe and John Foster (I think John had left by then but our research was being published in 1983), I was collaborating with Bob Berry and Robert Ashford on capital investment appraisal. I also continued to teach on the Warwick Manufacturing Group's Integrated Graduate Development Scheme.

With the cricket season having finished, my main exercise was participating in popmobility along with Marcus Miller (Professor of Economics), a few other males and a hall full of female students. I tried to go twice a week and felt good physically as a result. It was also entertaining. The class was led by Judy Hurron the wife of my colleague Bob.

My involvement with the Operational Research Society increased, being a member of the Conference Committee and later being elected to the Council of the Society. I was also a member of the Readers Advisory Panel which awarded the Pergamon Prize for the best applied paper in the Journal of the Operational Research Society – one year I was the recipient for a paper “OR on the peat bog, a case for qualitative modelling’.

During the Autumn Term I attended the School’s departmental meeting, Resources Committee and the Executive Committee. I also had several meetings with George Bain. George was not one for casual conversations – except in the pub he frequented. As Chairman I had encouraged staff to meet for coffee together with little success. George solved the problem by employing someone to provide free coffee and biscuits. Although George thought it beneficial for people to meet informally in this way he was not particularly comfortable himself, or did not have the time, and used to only make brief appearances. Every meeting with George would have an agenda even if it were not explicit. It was said that with George every discussion was a negotiation. The Executive Committee meetings became frequent towards the end of term when I suspect we were agreeing the strategy document. Having agreed the broad strategy, George would begin each year with a list of strategic initiatives, and tick them off at the end of the year.

In the December of 1983 I was interviewed for a professorship at Manchester Business School. I was not invited to visit before the interview and I suspect I was there only to ‘validate’ an internal appointment. It was said that MBS did not make an external appointment to a professorship for seventeen years which perhaps contributed to their losing the status as one of two leading UK business schools – the other being London Business School (LBS).

I note that in the Spring Term of 1984 MBA teaching was added to my portfolio. The title of MBA (Master of Business Administration) had recently been adopted for the MSc Management and Business Studies. MBA was becoming the accepted title for post-graduate general management degrees and Ian Watson and John Charnock persuaded the rest of us to adopt the title although there had been some opposition. There had been a debate at the time as to whether it was what was taught that mattered, or what was left out, but in the end it was agreed that the degree should have a broad coverage with the more specialist work left to the MSc and MA courses. The term also saw the second run of an undergraduate OR and strategy course (courses later degenerated to modules) which I taught with Rolfe Tomlinson. It followed on from my teaching of strategic planning at the University of Texas in 1982 and our joint research. The course was aimed at the MORSE students but was also available to students from other departments including SIBS. It was entitled ‘Analytical Aids to Strategic Planning’ and was affectionately known as Aids. However we changed the title to “OR for Strategic Planning” following the spread of the medical condition. Later Frances O’Brien and Maureen Meadows joined the

course team. Three books were spawned and there was complementary research. Frances became the course leader and it still runs successfully today with Martin Kunc having joined Frances. I continued to teach on the course until my retirement from full-time work.

In January, one of my meetings with George was to discuss the possibility of introducing a Japanese dimension to the School. Ian Gow had approached the School with the proposition to set up a Japanese business policy activity. Ian had been in the merchant navy and had spent time in Japan. It looked an interesting proposition and Ian was duly appointed. Later in his career Ian was a professor at Nottingham and became the founding President of the University of Nottingham's Ningbo campus in China. Ian credits his successful academic career to George and me for giving him a chance to start an academic career at Warwick.

My diary returned to the state of congestion as when I was Chairman, with a portfolio of teaching, a deep involvement in the management of the School, and a growing engagement with the Operational Research Society (I was now also a member of the Society's Education and Research Committee). In order to attempt to create space for research (on capital investment appraisal with Bob Berry) I note that my diary for the first week of the Easter Vacation has 'NO MORE MEETINGS' across the top of the page. I also collaborated with Robert Ashford and Stuart Hodges in this field. Stuart had succeeded Roger Fawthrop as the Professor of Finance. I also had a number of meetings with Craig Baker who would have completed his PhD by that time. Craig worked initially at the Audit Commission and then became a successful consultant and a long-standing member of the School's Advisory Board.

The governance structure of the School was developing as the School grew. The School (departmental) Meeting was the sovereign body where the major decisions were made by a vote if necessary. University regulations stated that departments must meet at least once per term and the constituency was the full-time, permanent academic staff. Later when other members of the School (administrators, contract researchers, secretaries) were invited, the voting membership remained the same. The core governance structure of the School was now the School Meeting, The Executive Committee, Finance and Resources Committee (FRC) and the Academic Planning Committee (APC, but not sure about the title). The membership of the Executive Committee was broadly based across the programmes and subject groups to ensure key matters were subject to a range of views. Major initiatives would be evaluated for their academic content by the APC and for financial and resource implications by FRC. The proposal and evaluations would then be considered by the Executive Committee and a recommendation made to the School meeting. If the proposal were controversial a vote would be taken and the decision made on that basis.

As the School was growing during this period, there was unallocated surplus each year. The first call would be additional academic posts to the Groups to support the increase in teaching, and any necessary administrative posts. The demands of the various versions of the MBA that were developing required strong administrative support. Beyond that bids were invited which would have included, for example, research support, expenses for seminar speakers, additional travel and conference attending and computing equipment. The Executive committee ran a resource allocation scheme where each member proposed how they would like to see the

surplus allocated to the competing bids. The individual proposals were then aggregated and the allocation made on that basis. One year Richard Hyman proposed that the entire surplus be allocated to a particular bid, so his 'vote' was discounted.

It was during this period that the '1000 hours system' for workload balancing was formalised. The principle was that all academic staff should spend 1000 hours per year on teaching and administration with the rest of the time available for research and consulting or other remunerated activities such as teaching on executive programmes. The system involved awarding hours for teaching, teaching preparation and administrative duties such as academic director, group head or course selector. There was some debate as to whether the more able researchers should have a reduced teaching/admin load but this was resisted as the aim was to have a research culture across the School rather than concentrated on a minority of staff. The exception was where a member of staff secured outside funding to work on a particular research project. This was relatively rare however as the research councils at that time did not fund the salaries of the principal investigators on their projects as it was assumed the funding to the University from the University Grants Committee was sufficient to allow time for research. This was known as the dual funding system for research. The research centres, which did not have a teaching remit, were expected to be self-funding although the School did provide funding from time to time to cover short term funding gaps. The allocation of teaching and administration was delegated to subject groups, but the allocations were monitored by a subset of the Executive Committee to ensure that the allocations were fair, particularly for probationary staff who had a reduced load.

In May 1984, I record a meeting with Ian Bell of the then Lanchester Polytechnic (now Coventry University). We had had several contacts with John Egan (later Sir John) the Chief Executive of Jaguar during my period as Chairman of SIBS. Jaguar had been working with the Lanchester on the engineering front and had discussed the possibility of a part-time, evening MBA. We were approached to join in the discussions and Ian and I led the development of a joint MBA which would be based at Warwick leading to a Warwick MBA. Other local companies were involved including Massey Ferguson. The proposal was accepted by the system, the route being the School Meeting, the Social Studies Faculty Board, the University Academic Policy Committee and finally the Senate. George hosted a celebratory dinner on 27th November 1985 at a Randolph's restaurant in Warwick with the participants including Ian Bell, myself and representatives from the sponsoring organisations. At the dinner Mike Kinski, the Jaguar Personnel Director, announced that now he had helped set up the MBA his boss, John Egan, had told him to enrol. Mike had a previous qualification from the Lanchester Polytechnic and was duly awarded the MBA with distinction. Following his time at Jaguar, Mike had numerous roles including Group Chief Executive Officer at Stagecoach Holdings, Chairman and Chief Executive at Manweb Electricity and more recently Chairman of Infinis and of the Odeon and UCI Cinemas Holdings. The teaching began in room A 0.23, in the FME Building, still the School's 'flagship' lecture theatre at that time, but as developments took place it later moved to the new MBA Teaching Centre and was taught in M2. Chris Voss took over as Academic Director and was uncomfortable with the Lanchester connection. The Vice-Chancellor of the Lanchester, Mike Goldstein, also thought that the University was taking too large a slice of the revenue. A divorce was agreed and the course became wholly a Warwick offering. It continued for many years

although recruitment became difficult. There was a period when Brian Houlden and Elizabeth Ballantine energetically engaged with local businesses to secure recruits but eventually the programme was closed due to a combination of the demise of large manufacturing companies in the area (including Massey Ferguson) and the attraction later of other part-time variants of the MBA.

The summer of 1984 was much as before including a two week holiday, meetings with Bob Berry and attendance at the OR Society Annual Conference and Conference for University Management Schools (CUMS). I also record a meeting with Rolfe Tomlinson, the Operational Research and Systems Group Head about Amanda, followed by Amanda's party. Amanda was Amanda Stickley the Group Secretary. I wonder if the party was in connection with her wedding which we attended. I also met with Ken Richardson. Ken was an academic at Monash University in Melbourne, but still had family in England. We had an arrangement where Ken would visit us in the spring and teach on our undergraduate quantitative methods course and this went on for several years. One year I had put Ken in the teaching plan (presumably I was Group Head at the time) but Ken did not appear. I had not checked he was coming that year. There was a last minute panic whilst a replacement teacher was secured.

The first week of term in October 1984 gives a good record of my activities at that time. On Monday morning I met the incoming MSc class and spent time on preparing MSc teaching and Vice-Chairman (to George Bain) duties. I note another three periods on Vice-Chairman duties during the week. Tuesday began with a two-hour meeting of the MBA Executive Committee. At 2.30 I had a meeting with George on budgeting. At 4.00 I gave a lecture on the Mathematical Programming II course to the MORSE students and in the evening there was a party for the new MSc and MBA (full-time) students. On Wednesday at 9.00 I met with George to discuss our bid to the University for Academic Equipment and I attended a seminar in the Accounting and Finance Group at lunchtime (possibly connected to my research with Bob Berry). On Thursday morning I gave lectures to the MBAs and the MScs and at 2.00 presented our bid for academic equipment to the University Academic Equipment Committee. At 4.00 I gave another lecture on MPII. On Friday I spent the first hour preparing for what would be my first lecture to the Evening MBA class. At 10.00 I gave a lecture on OR methodology to the MScs and at 2.00 a lecture on the Analytical Aids to Strategic Planning course. The week finished with a meeting with Marion Newlands, but I can't recall the topic. That seemed to be a fairly typical term-time week with not much room for research.

At the Wednesday meeting with George, Wolsey Hall appeared in my diary for the first time. There were meetings in the following weeks also. They were to discuss whether to pursue the opportunity to develop a distance-learning version of the MBA. Wolsey Hall was a correspondence college based in Oxford and they had brought a proposition to the University for an MBA. Derek Waterworth, the Professor of Marketing, was the original champion in the School. Derek had a London University external degree and the original proposition was that we would define the syllabus, based on our existing MBAs, and examine the students, and Wolsey Hall would employ authors for the study notes, who might be Warwick staff, and run a tutorial system. But the School would have no responsibility for that side of the business. The proposal was greeted with some scepticism in the University and I recall attending a meeting of the Faculty Board where George presented the proposals.

They were eventually agreed after much debate and an insistence that the residential summer school should be compulsory rather than optional as in the original proposal. Mel Hirst took on the role of Academic Director. The programme was launched on those lines with the summer school being offered at Warwick, but for some years also in Singapore and Hong Kong as the programme had an international intake. The launch also pre-dated the Open University MBA.

I acted as a tutor on the Part A Quantitative Methods course and marked scripts, which came directly by mail, on Saturday mornings. I also co-ordinated the Part B Operational Research study notes authored by Roy Johnston, Bob Hurrion and myself. I had meetings with Colin Lewis, a professor at Aston University, at that time and I think he also made a contribution. A problem with the Wolsey Hall responsibilities soon arose. The study note authors were remunerated on a royalty basis with a fixed small payment per student taking the course (module) and the authors had contracts to that effect. It soon became clear that the Part A authors would receive considerably more remuneration than the Part B and C authors due to the significant student drop out during Part A, and the optional structure in Parts B and C. George had to employ all his significant negotiating skills to secure a more equitable system.

Roy Johnston took over from Mel Hirst as Academic Director working with Cathy Marion and later Suzanne Alexander, the Administrative Director. After its successful launch the programme went from strength to strength with an annual intake of 300-350 students. I recall Roy always arguing for a figure at the lower end of the range, I suspect so that he could always exceed the target. There were growing concerns about the Wolsey Hall operation particularly after some of the founding staff there left. Also whenever there were complaints from students, whatever the source, the School was seen as being responsible as they were studying for a Warwick MBA. Eventually Roy and Suzanne, with help from the School and University senior management secured a buy-out of the Wolsey Hall share of the business. There had been concern in the University and elsewhere as to whether a programme of this kind was appropriate for a research-intensive university. However successive accreditation bodies supported the initiative and these days distance learning, now often on-line, is commonplace. The programme is ranked as one of the best in the world.

The DLMBA programme also led to a boost in Dorothy and Joan (Cooper)'s catering business as they provided lunches to 2-300 people on the induction days. The growth in activity in the School also meant more catering for appointment panels and other lunchtime events. They were also engaged by various other departments including Continuing Education, Biological Sciences, Physics, Computer Science and Mathematics.

In 1984/5 Robin Wensley and Peter Doyle's names appear in my diary for the first time. On Derek Waterworth's retirement the University agreed to a replacement appointment to a professor of marketing. Robin and Peter were both senior lecturers at London Business School. They were very different characters with Robin being a reflective academic and Peter the archetypal MBA teacher. Peter claimed that when he first started teaching his topics included market and consumer behaviour models but realised the MBAs were not particularly interested so he went on to teach strategic marketing with great success. They were both interviewed for the post, and unusually

in those days, it was agreed that both should be appointed as they were considered excellent candidates with complementary skills. Peter was to take over the full-time MBA in the following October and he expressed a wish to double the size of the programme to 120 students. Brian Houlden was the current recruiter to the programme and not wishing to be outdone by Peter increased the intake to about 100. Unfortunately when the students turned up in October it was clear that they would not fit into A0.23 so the first week of term was spent seeking larger lecture theatres all over the campus including at Westwood and Gibbet Hill. With the expansion of students and staff, extensions were built to Social Studies and later an MBA teaching centre built across Gibbett Hill Road attached to Radcliffe House. Later Peter proposed that we increase the full-time MBA from 120 to 240 (It had been recruiting up to 140 students). The proposal was supported by the Executive Committee but many staff were uneasy about such a large MBA and the proposal was voted down at a School meeting. Not many years later the full-time market weakened and in recent years the intake has been 50-60.

1984/5 was also the genesis of a new research interest. Rolfe Tomlinson drew my attention to a paper on a topic called data envelopment analysis (DEA) by Abraham Charnes, Bill Cooper and Eduardo Rhodes published in the European Journal of Operational Research (A journal I later edited). Bill had been my host at the University of Texas at Austin in 1982. DEA was concerned with identifying the most efficient units (schools, bank branches, pubs, universities) in a homogeneous set where the units are characterised by multiple inputs and outputs. Rolfe had also invited Bob Thrall, one of the pioneers of DEA to give a seminar at Warwick. (I kept in touch with Bob, and in 1996 visited him at his base at the University of Hawaii.) Shortly afterwards Ross Tristem the Deputy Director of the Audit Commission approached me asking whether DEA might be useful in identifying efficient local authorities. The remit of the Audit Commission at that time was to identify best practice and spread it across the local authority sector in a developmental way. (They had agreed not to publish league tables). Ross was interested in whether DEA could provide an objective assessment of efficient local authorities to complement the perceived wisdom at the Commission e.g. Solihull was perceived good, Liverpool poor. Emmanuel Thanassoulis expressed an interest in the topic and John Foster, who had worked with me on strategic planning, was to be seconded from his post at Kingston Polytechnic for a year to the Audit Commission. We undertook a study for the Commission and this was the beginning of a fruitful collaboration for Emmanuel and me. We published a number of papers together, some jointly with John Foster and later with Aziz Boussofiane who was recruited to a Leverhulme Research Fellowship. We also recruited a number of PhD students and together and separately had a number of well-cited papers and made a significant impact on the field of DEA and performance management, continuing our research into the next century.

On 7 May I note a meeting called by Mike Shattock, the Registrar, to prepare for a visitation of the University Grants Committee. Peter Moore was the Chair of the UGC and previously Principal of the London Business School. Peter had also given a talk at one of the CUMS meetings. The visitation took place on 3 June and George and I represented the School at the meeting with departments. Most of the entries in my diary are my own, but occasionally, such as the meeting with the UGC, one appears in the distinctive writing of MaryAnn Wallace, the Chairman's secretary.

MaryAnn had served several chairmen efficiently and effectively, before moving with George to London Business School.

In the summer of 1985 there were a number of entries referring to the Staff Cricket Club, but only one fixture actually named – viz. Alvis. Alvis was one of Coventry's leading manufacturing companies and I had visited it to see the armoured personnel carrier production line. The cricket ground was next to the factory. Now the area is a shopping centre.

I visited Swansea University that summer as external examiner. I had been invited by Bryn Gravenor, the Head of the European Business School at Swansea. They had a very extensive exchange system with European Universities. Bryn had been the Deputy Director of R&D at Pilkington in my time there, and when I announced that I was leaving to move to Warwick he declared that 'academia is not for me'. He took a professorship at Swansea soon afterwards. The students at Swansea could write their exams in either English or Welsh but I was never aware of a Welsh script, which presumably would have had to be translated. I think the majority of students at Swansea were in fact English. I also acted as external examiner for a PhD at the London School of Economics.

In July Jim Dyer stayed with us overnight. We had become friends with Jim during our stay at the University of Texas. Jim drove a Jaguar in Austin, Texas but it was of the unreliable vintage and he only used it around town and used his other car for long distances. Jim was touring Britain with a friend in a Morgan, and later owned one. He was an expert in multi-criteria decision making.

On the 17th July Dorothy and I were invited to a garden party at Buckingham Palace. An invitation went to the University each year and was passed to me as a newly promoted professor. Despite being hosted by the Queen there was a very long queue at the ladies toilets!

In June I had a meeting with Nigel Slack. Nigel recently reminded me that although I had had a hand in his appointment at Warwick I had also been involved earlier in rejecting him. I suspect 1985 was the time we appointed Chris Voss rather than Nigel. When Chris left to move to the London Business School, Nigel was appointed to a professorship. Bob Johnston was appointed to a lectureship in 1985, and he and Nigel built up the Operations Management Group in the School. Sadly Bob died in post and Head of Group in November 2012 and Alan Harrison a member of the Group who moved to Cranfield died at about the same time. In July there was also an electoral board for a professorship in accounting. Until then we had a single professor spanning finance and accounting. Tony Steel, a relatively young lecturer from Lancaster University was appointed as Professor of Accounting. Tony remained at Warwick until his untimely death in 1995.

At the end of August 1985 I joined a group of academic staff, led by Paul Bolton the Academic Registrar, on a recruitment visit to Hong Kong. We hired rooms in the Hong Kong Arts Centre and interviewed students wishing to join our undergraduate courses. The University had only seriously entered the overseas market when the Government withdrew financial support and insisted that full cost fees were charged. The majority of the students were looking to study either in the Business School, or the Economics Department although other faculties were represented. I recall the

group included Brian Sadler (Economics), David Elworthy (Mathematics), Sam Liu (?) (Arts Faculty), and possibly Keith Godfrey from the Engineering Department. Mike Shattock (Registrar) also joined the party either on that occasion or the following year. Sam had grown up in Hong Kong and one evening showed us some of the sights he remembered. Unfortunately due to the rapid development much had changed beyond recognition. He took us to a sports club where he had expected to find a cricket field. There wasn't one, so Sam suggested that perhaps they rolled back the tennis courts to create a cricket field. In fact the cricket club had relocated out of town. One evening we visited a floating restaurant. Mike Shattock generously ordered drinks at the bar, mainly gin and tonics. He was a little surprised at the price (I wonder whether he ever got remunerated through the rigorous expense system policed by Irene Blood). We were also entertained by Ann and Keith Houghton. Ann had been an administrator at Warwick and assisted with recruitment in Hong Kong. (She was also Lady Vice-President of the Guild of Undergraduates at Liverpool University in my first year there). Keith had been the Registrar at Aston University and had assisted John Foster and myself with our research giving us access to the Aston strategic planning process. He was the Registrar at the Hong Kong Polytechnic. They took us for a sail on their boat and Keith also took us to a Nationalist Chinese village in Hong Kong. I wonder what happened to the village when Hong Kong reverted to China. I remember that to walk up the main street of the village we had to walk between a couple and their television.

Also in 1984/5 Tim Hart of Lucas appears for the first time. Rolfe Tomlinson had met with an IBM Users Group based in the West Midlands. Members included Tim Hart, John Leighfield (Istel), Alan Bryce (GKN) and Noel Kirkwood (TI). They were interested in developing a modular master's programme for their information technology staff which would develop analytical, information systems and management competences. A Management Committee was established which also included Jim Rushton, the Deputy Registrar, George Bain, Gordon Foster of the Engineering Industry Training Board, Ursula Whitehouse of the Manpower Services Commission, Dick Harrison (Lucas) and me and meetings were held during 1985/6. I was appointed Academic Director. We started with a clean sheet of paper for the syllabus as there was no full-time course to act as a starting point. The course was to be an MSc in Business Management Systems (BMS). Modules were to cover analytical and systems methodologies, general management and strategic, management and systems approaches to management functions. For each module we formed a small team of academic and industry staff. We were also able to recruit additional information systems staff to the ORS Group namely David Grimshaw and Andrew Martin, and Francesca Coles was recruited as the Administrative Director. The course would be residential and the first module was planned to run in the first week of the opening of Radcliffe House, a residential training centre on the campus, and it took place on the week of the 3 November 1986. In planning the course an initial difficulty occurred over the cost. The original estimate was based on the Warwick Manufacturing Group's IGDS. However there were two significant cost differences. The WMG staff were mainly teaching-only staff whereas the WBS staff were also researchers. We taught fewer hours and were therefore more expensive. Secondly the IGDS was taught in Arden House, a converted student hall of residence and was of a lower standard and cheaper than the bespoke hotel standard Radcliffe House. The cost of the BMS was thus rather higher than the original estimate and this caused some difficulty on recruitment. The course ran successfully for several years

and won an Industry Year Award for successful collaboration between industries and universities in 1986. On his appointment as Professor of Information Systems, Bob Galliers took over as Academic Director. Eventually recruitment dried up from the sponsoring companies and the course was closed. The School also launched the Integrated MBA with a similar residential modular format headed by Chris Voss. This course also had a consortium of organisations supporting it, including the Metropolitan Police. Again the consortium could support viability only for a limited number of years. However the experience we had gained with the two courses facilitated the launch of an open residential modular version of the MBA, now the Executive MBA, which was highly successful, with Francesca moving on to be the Administrative Director.

I recall one meeting of the Management Committee of the BMS at which Tim Hart got rather exasperated, perhaps over the inflating budget. He fired at me 'those who can do, and those who can't teach'. I retaliated with 'those who understand teach, those who don't do'. He took offence but John Leighfield smoothed things over. John had had a first contact with the University through Bob Hurrion's work in visual interactive simulation where Bob's ideas were turned into commercial computer software at Istel (John's company, previously BL Systems). John later chaired the School's Advisory Board and became Chair of the University Council and a Pro-Chancellor.

The first Vice-Chancellor, Jack Butterworth, retired on September 30th 1985 and was replaced by Clark Brundin. The contrast in management styles was stark. Jack had a very 'hands on' style of management, initially too 'hands on' for some with the result that a governance structure was developed following the Sargent report of 1969. This clearly defined the roles and responsibilities of the various university bodies. Jack continued to lead the University through the 70s and early 80s and by the time of his retirement a strong foundation had been laid for the future growth and success of the University. Clark in contrast adopted a more presidential role allowing considerable freedom for the senior officers and academics to lead developments.

In the Autumn Term of 1985 I note a meeting of the Science and Engineering Research Council's (SERC, later EPSRC) OR Panel. I joined the Panel that year and our agenda was to allocate MSc studentships to the various courses. We visited the institutions and made an evaluation of the courses and allocated the studentships following the evaluations. The courses were located at Lancaster, Southampton, Imperial College, Birmingham, LSE, Strathclyde and Warwick. Imperial College was being given reducing numbers as their OR activity was diminishing, and at LSE there was a problem that they were reluctant to include a summer project but eventually agreed under the threat of losing studentships. The studentships covered both fees and living expenses and by the peak in about 1990 Lancaster were receiving 22 studentships and Warwick 20 with smaller numbers allocated to the other courses. Eventually the EPSRC decided that supporting MScs was not a priority and funding was withdrawn. That year, as Academic Director of the MSOR programme, I also interviewed about 40 applicants to the MSc, mainly from the UK, one of whom was recorded in the diary as a Miss Meadows whom would have been Maureen Meadows. Maureen later joined the academic staff and then moved to the Open University. She also collaborated with France O'Brien and me on research and the OR and strategy modules. We now have few UK students on the MSc. The entries of students in my

diary were made, I think, by Christine Laidler, the ORS Group secretary, the MSc course being administered by the Group in those days.

IBM was keen to increase its university business and connections, and in May 1986 held an academic conference – in Monte Carlo. The invitation for a Warwick participant went to John Forty who as a Pro Vice-Chancellor had responsibilities for computer policy. He felt that it would be inappropriate to attend as it might affect his approach to procurement. John moved on to become Vice-Chancellor at Stirling University. The invitation was then passed on to Rolfe Tomlinson, who couldn't attend, and then to me. I had no responsibilities in that area at the time (although I did take on the IT policy role in later years). The invitation extended to Dorothy. At the airport we met Bryn Gravenor and his wife from Swansea (I had worked with Bryn at Pilkington's in the 60s) who were on the same venture. We stayed in the Hotel Loews (now the Fairmont) which is the hotel the Formula 1 circuit runs under. It was a luxury conference and particularly notable for the ability of the restaurant at the hotel to deliver a thousand filet stakes, perfectly cooked, almost simultaneously. I don't recall much of the content of the conference. The conference was held in term-time so I had to miss two lectures, an OR Society Council meeting, Chris Voss's inaugural lecture, a Professorial Board meeting and a BMS Management meeting. The Professorial Board of the University was responsible for setting policies on appointments, probation, promotion and later appraisal and development of academic staff and had a committee that dealt with continuing and completion of probation and promotions to senior lecturer. It also was responsible for the electoral boards for promotion or appointment to reader or professor. All professors were members, but they did not all attend, and they were also the constituency for the nomination process for Pro Vice-Chancellors.

The summer of 1986 has familiar entries in the diary including George Bain, Stewart Hodges, Bob Berry, Rolfe Tomlinson, Ross Tristem and Lesley Williams (School Administrator). Jenny Hocking appears for the first time also. Jenny had been a member of the University administration and moved to the School as the senior administrator, a post that she held with distinction into the next century. Jenny developed a strong administrative structure which was crucial in supporting the academic development and growth of the School. Jenny was to be awarded an MBE for her services to higher education. I also had meetings with Brenda King and Elizabeth Hicks, MSc students. I met Michael Norman, a consultant. Michael was working on data envelopment analysis (DEA) and with Barry Stoker wrote an excellent applied book on the subject. I also had meetings with Maria Guedes, my first Portuguese PhD student.

In September I gave a talk on DEA at a European Summer Institute at the University of Kent organised by Valerie Belton. The ESI was on multi-criteria analysis and the participants were one young researcher from each member country of the European Federation of Operational Research Societies. (Some years later we organised an ESI on DEA at Warwick.) They were particularly good vehicles due to the high calibre of the participants. Valerie was later a professor at Strathclyde University, the President of the UK Operational Research Society and the European Federation of Operational Research Societies. I tried to attract her to Warwick on a number of occasions but the hills in Warwickshire were not high enough to satisfy her passion for walking and climbing.

September also involved the OR Society Annual Conference, meetings of the OR Society Council and the Education and Research Committee, a meeting of the Committee of Professors of Operational Research (COPIOR) and teaching on the External (DL) MBA summer school.

In the Autumn Term, teaching and administration carried on much as before but with the launch of the BMS course. We had gone from an idea and a blank sheet of paper to the course's realisation in twelve months. In the Spring Term, Emmanuel Thanassoulis and I worked on a research proposal for the Leverhulme Trust. It was supported by Ross Tristem of the Audit Commission and Maurice Shutler of the Monopolies and Mergers Commission. The application was successful and we were able to appoint Aziz Bussofiene and as a research fellow. The Spring Term also saw the appointment of Gibson Burrell to a professorship in organisational behaviour against a very strong field. Like Tony Steele, Gibson had been a lecturer at Lancaster University. Keith Sisson and Richard Hyman gave their inaugural lectures that term, and I gave mine on 28th April. The lecture was published as the first article in the first issue of OR Insight and was entitled Operational research: the academic-practitioner interface. The preface, I think written by the editor Stephen Ward of the University of Southampton, stated 'Professor Dyson addresses the conflict that arises between the 'ends' orientation of the operational research practitioner and the 'means' orientation of the academic. He argues that OR in practice should be more orientated to designing decision-making processes and more concerned with the intellectual quality of management, and suggests that models have a key role to play here. Professor Dyson concludes that the most effective development of operational research as a subject will come through exploiting the potential of the academic-practitioner interface through continuing collaboration between OR practitioners and academics.'

In the Summer Term of 1987 John Mingers appears in the diary. John was on the first cohort of the BSc Management Sciences. Following some years in industry and the polytechnic sector John joined the School as a lecturer. He went on to head the ORS Group and was appointed to a professorship. He later moved to the University of Kent to the post of Associate Dean. John's expertise was in soft systems/soft OR, a non-mathematical branch of OR which has a strong following in the UK but not so strong internationally.

The academic year 1987/8 was relatively in steady state following the development of the Distance Learning, Evening and Integrated MBAs and the MSc in Business Management System which were all now operational. My own activities were also in relative steady state. In the summer I met with Craig Baker, Maria Guedes, Bob Berry and Jenny Hocking. Jenny was the School's senior administrator and led the development of an effective School administration. I also interviewed Colin Hayward, Peter Grieves, Paul Furnox and Derek Shreve one afternoon, applicants for the BMS course. Brian Hollocks also visited the School. Brian worked in the steel industry and was an expert on simulation. He was also at that time Chair of the EPSRC OR Panel. In the Autumn Term the Panel visited Lancaster and Warwick to evaluate the MSc courses. I met with Rob Bryer, possibly about the School's finances, which Rob was engaged with. Rob came to the School as a PhD student supervised by Roger Kistruck and later joined the staff as a lecturer in accounting. At the time of writing Rob was a professor of accounting and probably the longest serving member of the School still in post. Rob made a significant contribution to the

School's finance operation and was well known for his critical approach to accounting and his work on accounting history. My teaching load seems to have reduced as I only record Mathematical Programming to the MScs, Operational Research for Strategic Planning to the undergraduates and a BMS module in the Autumn Term. The range of School and Operational Research Society meetings continued and I visited Liverpool University where I was the University representative on the Court (being a Liverpool graduate). I list an entry for Graham Pyatt at 5.15 on 2nd of November. Graham was a professor in the Economics Department when I joined the University. He left to join the World Bank for some years before returning to Warwick. The entry may have been for his second inaugural lecture. I certainly remember going to it on economic input/output models. (I am assuming he gave one when first appointed to a professorship). In December I list jury duty. I was indeed called for jury service to Warwick Crown Court, and although I attended most days for a fortnight I was never actually called for service. I did serve on a jury in Coventry years later.

In the Spring Term I note a visit to meet Frank Land at the London Business School with George Bain. Frank was a leading information systems professor. (His wife Ailsa was a professor in OR at LSE and had been my PhD examiner). The meeting was to seek advice on a professorial appointment at Warwick and Frank recommended Bob Galliers, then at Curtin University in Perth, Australia. Bob was duly appointed and took on the Academic Directorship of the BMS course and later became Dean of the School. My external examining duties had moved from Swansea to Kingston where John Foster was then located. In July Dorothy and I attended the EURO conference in Amsterdam, notable for the reception in the Rijksmuseum and the dinner on a boat cruising round the canals in the company of Martin Beale and Stanley Zionts and their wives. Martin had jointly supervised Robert Ashford's PhD with me, and was the only operational researcher to be elected a Fellow of the Royal Society. Stanley was a leading US academic.

On 31 August 1988 George, Chris Voss, Gwynneth Rigby and I visited Coley Porter Bell, to discuss a logo for the School. The proposal was for a W with a razor blade cutting it with the slogan 'At the cutting edge of theory and practice'. Chris corrected the alignment of the razor blade. Gwynneth accompanied us in her role as the University Communications Officer and later became Lady Bain. On arrival one of the women, it seemed to be an all women establishment, took the coats from the three males but left Gwynneth to fend for herself.

Teaching, administration and meetings of the OR Society and the ESRC OR Panel continued in 1988/89. One addition to the School meetings was the Troika which met frequently. This was a meeting of George, Robin Wensley and me plus Jenny Hocking the School Administrator and the purpose was to ensure that the business of the School was moving forward. I also suspect that George was seeing Robin or me as potential successors as he was in the final year of his second three-year term as Chairman and was planning to move on.

Following my inaugural lecture on the academic practitioner interface, and my membership of the OR Society's Education and Research Committee, I decided to see if I could strengthen our collaboration. I met with people from a number of companies including Bill Hancock at the National Coal Board and John Hough, both

prominent members of the OR community. John took me round the Rolls Royce aero engine production line at Derby and he pointed out that the main wear and tear of an engine occurred in starting and stopping. It has caused me to wonder whether the car engines that cut-out when the car is stationary will have a reduced life. The only tangible outcome of my meetings was collaboration with Lucas, one of our BMS partners. We developed a successful proposal for an EPSRC Teaching Company Scheme. The proposal was to develop a performance management system at the Lucas Rists factory where they produced the electrical wiring systems for cars. Lin Fitzgerald, a management accountant, joined me as an academic supervisor. We appointed a fellow to work full-time on the project, based at the factory near Stoke on Trent, a recent graduate of the MSOR degree. The project was to run for three years with two fellows on two-year overlapping contracts. The project was not a success. The industrial supervisors changed; Lin became ill and had to withdraw from the project; the fellow was of East German lineage and when the Berlin Wall fell resigned to go to Germany; we found it difficult to recruit good candidates to replace him and to the other fellow post and the M6 was being widened which made communications very difficult.

There are several entries of 'Book' in my diary. The OR and strategy modules were available on the MSOR, the Executive MBA and to the undergraduates. We had no specific text book and gave the students photocopies of some key articles and lists of others accessible in the library. I was the lead teacher at this time and decided to produce an edited book to support the modules. I had a proposal accepted by Wiley for a book which would be a collection of readings apart from the first chapter on the process of strategic planning/decision making that I authored which acted as co-ordinating theme for the chapters on tools and techniques that followed. I co-authored two of the readings also. The book was entitled 'Strategic Planning: Models and Analytical Techniques' and sold a few thousand copies. The book contained what I then saw as seminal papers in the field, including: Heinz Wehrich on the TOWS matrix (a development of SWOT analysis); Arnaldo Hax and Nicolas Majluf on product portfolio matrices; David Hertz on risk analysis; Steven Schnaars of scenario planning; Thomas Naylor on corporate modelling; Colin Eden on cognitive mapping; John Morecroft on strategy support models and Jonathan Rosenhead on robustness analysis. It was an interesting experience trawling the literature for suitable articles and then obtaining permission from the copyright holders. In later years when Frances O'Brien joined the teaching team and became the lead teacher we edited two further books on similar lines although the third one was completely written by a network of people in the field many of whom met frequently at Warwick. It contained considerable innovative material but did not sell as well as the book of 'classic' readings.

A second naming issue (following the MBA) arose during George's chairmanship. There was a proposal to change the name of the School from 'The School of Industrial and Business Studies' to 'Warwick Business School'. Although 'business school' was the most widely used title internationally the proposal was controversial as many academics, and particularly those in George's own subject group – Industrial Relations, thought the term too business friendly and not representative of much of the work of the School. A compromise was reached in which we would use SIBS inside the University and WBS externally. This soon led to confusion both internally and externally and finally the SIBS title was dropped although it was still used by the

University in 1989. Whether the confusion was the only reason for dropping SIBS, or the persistence of George and others to change to WBS was the main factor is debatable. My own preference at the time was for 'School of Management' although it would also have raised similar objections and was a less common title.

There was relatively little structural change during this period, but the Industrial Relations and Organisational Behaviour Groups were joined to form IROB which was the School's leading academic group for the next three decades. The merger came about due to the emerging importance of human resource management which was an interest of both of the groups. As part of the merger George proposed that Andrew Pettigrew, one of the School's leading researchers should join the Marketing and Strategy Group. Andrew's research had been moving more and more towards strategy. He was initially against the move but later came to terms with it.

Whilst there had been considerable development of academic programmes during the six years of George Bain's Chairmanship, there was a parallel thrust to raise the research profile across the School. The growth in programmes and student numbers provided the income to appoint additional research-active academic staff and this was paralleled by the growth of the research centres and units. Apart from the long-standing Industrial Relations Research Unit, Andrew Pettigrew had developed the highly successful Centre for Corporate Strategy and Change and Stewart Hodges the Financial Options Research Centre. These two centres were funded by a consortium of organisations in addition to securing research council funding. Ian Watson had also developed the Small Business Centre although at that time it focused on management development rather than research. Ian sadly died in post, and David Storey took over the Centre and introduced a strong research dimension. The Centre was later renamed the Centre for Small and Medium Sized Enterprises.

This focus on research turned out to be highly significant due to the introduction of a Research Selectivity Exercise (RSE) by the University Grants Committee. The UGC allocated funds to universities for teaching, broadly related to student numbers with a weighting for science, engineering and medical students, and for research. The latter funding was to allow the academic staff to have relatively light teaching loads thus leaving time for research. How the research funding was allocated was not transparent so the RSE was introduced with the intention of rating the quality and quantity of research and sharing the research funding on that basis. The first RSE results were announced in 1986 based on 1985 data. It was something of a trial evaluation and did not affect the research funding significantly although later exercises were used to allocate all the research funding. The RSE required all academic staff to be submitted and up to two of their publications. There was also a count of other outputs and the values of research grants and numbers of research students were also submitted. By 1986 the academic staff in the School had increased from 35 or so earlier in the decade to 50, the increase being the consequence of the new teaching programmes and an increase, particularly in overseas students, in numbers on the existing programmes. The majority of academic staff submitted to the 1986 RSE had been in post during the seventies but in the drive to raise the research capability across the School were supplemented by key appointments including: Peter Nolan and Linda Dickens in industrial relations (Linda was previously in the Industrial Relations Research Unit); David Wilson and Barbara Townley in organisational behaviour; Robin Wensley, Peter Doyle and Phil Stern in marketing;

Chris Voss and Bob Johnston in operations management; and Tony Steele and Phil Moon in accounting. The School was awarded a 'star' for its research quality, the highest rating which was awarded to only one or possibly two other business schools.

A second RSE took place in 1989, based on 1988 data, the last year of George's chairmanship and indeed his time at Warwick. At the time I was a member of the University's Academic Policy Committee which had a broad remit and included receiving and commenting on each department's submission to the RSE. The Committee was chaired by Terry Kemp, a Pro Vice-Chancellor, with the membership including the chairs of the faculties (Viv Little (Education), Derek Urwin (Social Studies), Noel Carr (Science) and David Thomas (Arts), plus one other member from each faculty viz: Rolf Shwarzenberger, me, David Crout and Chris Thompson).

The growth in academic staff and in research staff in research centres and units in the School had continued. Again all permanent academic staff (62 by now) had to be submitted plus 26 research staff on permanent or long contracts. The School's submission opened with the following statement:

'Historically, the School's research strengths lay in three areas: industrial relations, operational research and organisational behaviour. When the UGC visited the School in 1982 it drew attention to the narrow base of research activity and suggested that this should be broadened and strengthened across a wider range of subjects. This assessment together with the changing environment which higher education began to face in the 1980s, led the School to implement a programme of expansion and renewal designed to strengthen research activity across all subject groups by, amongst other things, appointing new professors (Gibson Burrell, Peter Doyle, Robert Dyson, Stewart Hodges, Richard Hyman, Anthony Steele, Chris Voss, Robin Wensley), lecturers and research staff, and creating new research units and centres. In short, our objective was to become a research-led school.'

The RSE had many features in common with the previous Research Assessment Exercises, although the total count of outputs had been dropped, and with the forthcoming (2014) Research Excellence Framework. One difference was the requirement then to submit all permanent academic staff which avoided the game playing of how many and who to submit. Under the current rules it would be possible to submit a minority of staff and receive a high quality rating which clearly would not apply to the whole department. Four articles can now be submitted for each academic rather than two, which is perhaps a better reflection of the quality although it becomes problematic for people writing books. Also newly appointed staff shared their outputs between their current and previous institutions rather than all the outputs being attributed to the current unit as now, which makes poaching staff just before the deadline highly attractive.

Submissions to the 1989 RSE that became well cited (referenced in subsequent publications) included: Andrew Pettigrew's book 'the Awakening Giant' about ICI, although the company went to sleep again some years later, and his work on the transformation of the firm; Robin Wensley's on diagnosing competitive superiority; Chris Voss's on the implementation of information technology and success and failure in advanced manufacturing technology; Gibson Burrell's on modernism, postmodernism and organizational analysis; Stuart Hodges' on the evaluation of compound options; Richard Hyman's on strategy or structure in capitalism; Linda Dicken's on unfair dismissal; David Storey's on new firm formation and with Kevin Keasey on the performance of small firms; Peter Doyle and John Saunders' on market segmentation and positioning; George Bain and Peter Elias' on trade union

membership (Peter was a member of the Institute for Employment Research); Keith Sisson's on the management of collective bargaining; Richard Whittington's on fragmentation strategies and the rise of small units; Paul Edwards' on workplace relations and with Paul Marginson on managing industrial relations; Peter McKiernan's on sharpbenders (rapid growth companies); Bob Hurrion's on visual interactive modelling; Roy Johnston's on the variance of lead time demand (with Jeff Harrison, Statistics); and myself and Emmanuel Thanassoulis' on data envelopment analysis. The research grants and contracts income had grown from £188k in 1983/4 to £910k in 1987/8. The only measure that had flat-lined in the period was the number of doctoral students which stayed in the low thirties throughout the period.

The evaluation of research in the RSE was by peer review with panels of academics assessing the quality of the research outputs. Research quality was rated on a five point scale with the highest point 5 being awarded to departments which exhibited 'Research quality of international excellence in some sub-areas of activity and national excellence in virtually all others'. In the Business and Management unit of assessment only two institutions were awarded a rating of 5 – Warwick and the London Business School. (Manchester Business School, established with a significant endowment from the Foundation for Management Education along with London Business School was rated only a 3.) Warwick Business School was established as a leading research-led business school. It also meant that coupled with the relatively large submission Warwick received a significant share of the research funding allocated by the Universities Funding Council (as it was now named).

The success in the RSE of the Business School had also been matched by other departments in the University with the following also being awarded a 5: Biological Sciences, Mathematics, Statistics, Computer Science, Engineering, Economics, Politics and International Studies, Sociology, French and History of Art. The RSE scores could now be converted into a league table. One produced by the Financial Times, based on the average score weighted by size of department, was as follows:

Cambridge	4.7
Imperial College, London	4.6
Oxford	4.6
University College, London	4.3
Warwick	4.1
London School of Economics	4.0
Bristol	3.8
University of Manchester Institute of Science and Technology	3.7
York	3.7
Manchester	3.6

Remarkably Warwick had moved from perhaps a trailing university in 1970 to a leading one in 1989, outranking all the 'new' universities (Sussex the original front runner in this category was ranked 12th), all the major civics (e.g. Manchester) and all the midlands universities (Birmingham was ranked 21st). Warwick has remained in the top ten of most UK league tables into the 21st century. The School of Industrial and Business Studies had been transformed into a leading business school (Warwick Business School) with a strong undergraduate programme, specialist master's courses, a strong full-time MBA with various part-time variants, and an excellent research capability.

In the summer of 1989 George Bain left Warwick to become Principal of the London Business School, Robin Wensley was elected Chair (Head) of the Business School and I was elected a Pro Vice-Chancellor of the University.

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