

REVIEW PAPER

An Intimate History of Leadership: Sydney University's Department of Geography, 1921–1997

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This paper was written to commemorate the centenary of the first Department of Geography in Australia, that at The University of Sydney. I was the last head before the Department was merged with Geology and Geophysics to form the School of Geosciences in 1998. With the exception of Marie Bentivoglio, I was fortunate enough to have met all the past heads and to have worked with or for six of them. The professional achievements of each are outlined, along with my personal observations of them. I emphasise the pivotal role of Sir Tannatt William Edgeworth David in the establishment of the Department. He introduced a course in Physical Geography in 1891 soon after his appointment to the Chair of Geology and some 30 years before the establishment of the Department of Geography, and was a major advocate for the creation of a free-standing department in 1921. Since the 1990s, geography departments have experienced mergers, reclassification and redistribution. The result is that there are now no free-standing departments of geography in Australia, with few remaining elsewhere.

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INTRODUCTION

Sydney University's Department of Geography, the first in Australia and one of the earliest in the world to offer a fully-fledged geography degree course (Stoddart 1986, pp. 45–46; Gale 1996, p. 4), existed as a separate entity for 77 years, from 1921 to 1997. In that period, there were ten heads of department (including one acting head for 17 months). Four of them were born in the UK, one, a woman, was born in Italy, and five were born in Australia. These five were all products of the regime established by Macdonald Holmes, the second and longest-serving of the heads. Since 1998, geography has been part of the School of Geosciences, alongside geology and geophysics. Despite their varied credentials, most of the heads had a background in geology and physical geography. Two remained essentially human geographers (Rutherford and Daly) and two were mainly physical geographers

(Dury and Langford-Smith), but most grasped the approach and tradition of man and land outlined by Thom (1987).

I was the last head (1990–1992 and 1994–1997). I worked with and for six of my predecessors. Although I never met Marie Bentivoglio, I was privileged to meet Griff Taylor twice and Holmes once. I present here my personal and professional views of them and their achievements, in part to commemorate the hundred years since the Department was established, but also to place on record the impressions of someone who was fortunate enough to have met all but one of these protagonists for geography. For the first three heads, my emphasis will be on their achievements, taking into account the judgements of others (Rose 1964; Powell 1990, 1993; Christie 1993; Canale 2017). For the rest, I shall attempt to provide a personal picture of their academic achievements, individual attributes and their approaches to the discipline.

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THE ORIGINS OF GEOGRAPHY AT THE UNIVERSITY OF SYDNEY

Any consideration of the ten heads of Australia's first Department of Geography would be incomplete without a discussion of the origins of geography at Sydney University. Gale has detailed these events, using university documents not cited by others to support his case (1997, 1999). The following discussion owes much to Gale's (1997) scholarship.

A Lectureship in Geology and Physical Geography at the University was endowed in 1877. However, the bequest was channelled into the maintenance of the existing geological chair and the funds have never provided formal support for teaching in geography. In 1889, the title of the Chair of Natural History was changed to that of Geology and Physical Geography. The Professor of Natural History, William John Stephens, announced that in spite of his new title he considered it his duty to continue giving his lectures in biology and zoology under the heading of physical geography. Fortunately, from the point of view of the development of geography at the university, Stephens died within 19 months of his titular change and in 1891, the Welsh-born geologist, Tannatt William Edgeworth David, was appointed to the position. David's courses on physiography dealt largely with topics that would be tackled today within departments of geography. For the first time, therefore, geography was being taught within an Australian university. Far more importantly, David's appointment was critical for the establishment of geography as a discrete discipline in Australia. Not only was he to be the teacher, mentor and, ultimately, employer of the first head, Griffith Taylor, but he was an enthusiastic supporter of both human and physical geography and a powerful advocate of the existence of a free-standing department of geography at the university.

The impetus for geography to emerge as a discipline in its own right in the university came in 1919 when the estate of the wealthy landowner, Sir Samuel McCaughey, a grazier, politician and philanthropist, made a large bequest to the university. This helped to endow several chairs. Edgeworth David requested funding for a Lecturer and Demonstrator in Palaeontology and a Lecturer in Geography. The Professorial Board, of which David was a member, put its weight behind the Lectureship in Geography and the post was eventually offered to Griffith Taylor.

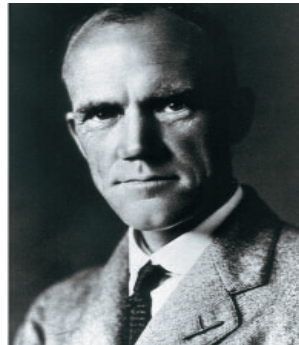
David's role in this was critical. He worked against considerable opposition to establish an independent Department of Geography at the University of Sydney. He did this at the expense of losing claims for

extra staff in his own discipline. He nurtured the new department, ensured its independence when it might have been tempting for anyone else to treat geography as part of a larger geological empire and, when Taylor resigned in 1928, he fought long and hard for the retention of geography and the replacement of Taylor. This at a time when powerful forces in the university were in favour of downgrading the discipline.

The strength of David's support for geography and the pivotal role he played in the establishment of the subject as a university discipline in Australia may be seen from his letter of resignation to the university, written on 21 July 1922 (a request rejected by the university authorities). In this David noted that he had achieved one of his '... cherished ideals, the establishment of a University School of Geography.'

David was a giant of a man in academia. He made major and economically important contributions to our knowledge of New England tin and Hunter Valley coal. He led two expeditions to Funafuti to investigate the origins of coral atolls, for which he was elected a Fellow of the Royal Society. He joined Shackleton's first expedition to Antarctica, making the first ascent of Mount Erebus and leading a sledging party to close to the South Magnetic Pole. He was knighted and received a DSO for his military service in the First World War.

THOMAS GRIFFITH TAYLOR (HEAD: 1921–1928)



Taylor (1880–1963) was the first head. He was born in England and came to Australia at the age of thirteen when his family migrated to Sydney. His secondary education was at Sydney Grammar and The King's School in Parramatta. In 1899, he took a job as clerk in the New South Wales Treasury before entering Sydney University, where he completed a BSc (Geology) in 1904 and a BE (Metallurgy and Mining) in 1905 (Powell 1990). During this period, he taught at Newington College. In 1907, as a Demonstrator in geology at Sydney University, he taught a course in Commercial Geography in the Department of Economics and Commerce (Gale 1997). In the same year he received an 1851 Exhibition Scholarship to work at Cambridge where he completed a BA

by research (Crone and Priestley 1964). He was a frontiersman who was a member of Scott's ill-fated 1910–1913 expedition to Antarctica (Taylor 1916). This earned him a King's Polar Medal, while his research on the ice-bound continent secured him a DSc from Sydney University. On his return, he married Sir Raymond Priestley's sister, Doris (Crone and Priestley 1964). In 1910, he was appointed Physiographer in the Commonwealth Weather Service, providing background data for the founding of Canberra (Taylor 1910, 1920). In 1917 and 1918, he taught physiography at The University of Melbourne.

In 1920, he was appointed McCaughey Associate Professor of Geography at Sydney. He took up his post the following year as the foundation head of the first geography department in Australia. For much of his time, this was a one-man show, with support from his sister, Dorothy Taylor, and Marie Bentivoglio. Student numbers varied from 70 to about 150 (Gale 1996, p. 4). His time in the post was tempestuous, taking on the Commonwealth and State Governments with their white-Australia policy and their belief that the country could support from 100 to 500 million people. His opposition to the population boosters was largely on environmental grounds. This led the West Australian Education Department to ban one of his books. There can be few geographers who have earned such distinction. It is hard to imagine where he found the time and energy to do so much teaching, publishing and fostering of his subject. It was his idea to found the Geographical Society of New South Wales (he was the inaugural President) and its journal, *The Australian Geographer*. During his time as head, he managed to produce 36 papers (Rose 1964). His stature went unnoticed by the University and he failed in his attempts to get a chair. He resigned in 1928 and was promptly appointed to a chair in Chicago.

Outside what had become his home land, he achieved world-renown, with anyone who studied geography in school or university knowing his name and using his texts. In 1934, he left Chicago for Toronto, where he was appointed Foundation Professor of Geography (although the precursors of the subject had been taught at that institution at least as early as 1844 [Warkentin 2008]). His publications after leaving Sydney included books on Australia (1931), environment and nation (1936), environment, race and migration (1937) and Australia again (1941). His contribution far outstrips that of all subsequent heads, with 20 books, several of which exceeded 50 editions, and over 200 papers, mainly as single author. In 1938, he became the President of the British Association for the Advancement of Science and in

1940, the President of the Association of American Geographers. In 1942, he was elected a Fellow of the Royal Society of Canada. He retired in 1951, but maintained his career as a consultant for research institutions in the UK and Australia.

Christie (1993) provided more details of his time in North America. It seems he did not enjoy Chicago. He did not like the factories and he described his domestic help as a 'coloured colossus'! He was a self-proclaimed Fabian socialist, a pacifist, favouring women's suffrage. He hated drink, the classics, opera, 'catholic religions', jazz and cricket. It seems he might have remained an Englishman at heart. He certainly preferred 'colonial' universities and I suspect he might have had an eye on Oxbridge for a chair. All this is strange because he got on well with US academics, notably William Morris Davis.

In retirement, he came back to Sydney and wrote his famous 'Sydney side scenery' (1958a) and 'Journeyman Taylor' (1958b). In 1954, he was elected a Fellow of the Australian Academy and in 1959, was appointed the first President of the Institute of Australian Geographers.

Griffith Taylor was a pioneer geographer of world fame. His breadth and wealth of knowledge in all aspects of a youthful science were amazing. He worked in all six continents and his name was well known throughout the world. I had the privilege of meeting him in Brisbane and Armidale. He seemed aloof and severe but, in earlier times, was renowned for his sense of humour. It is odd that he never received state honours from either the UK or Australia.

MARIE BENTIVOGLIO (HEAD: 1928–1929)



With the departure of Taylor to Chicago, Marie Bentivoglio (1898–1998) was appointed acting head to run the fledgling department until the appointment and arrival of Macdonald Holmes. Student numbers were about 140 in this period (Gale 1996, p. 4). Marie

was born in Italy and raised in a very talented family in Sydney. She liked geography at school, but thought that it should be more than lists of capes and bays. She made this very clear on many occasions (P.C. 1930). In 1916, she left high school to attend Sydney Teachers' College. She graduated BSc (Hons I and Hons II in Botany) in chemical geology

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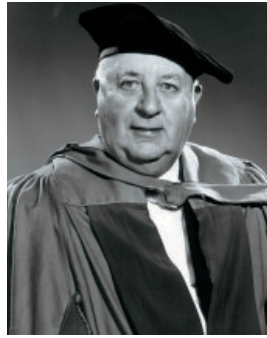
and geography at Sydney University. In 1920, she became the President of the Sydney University Club, no mean feat for a non-Australian-born female. In the same year, she lectured in geography at Sydney Teachers' College. A year later, she was the first Australian female to win an 1851 Exhibition Science Scholarship to Oxford University, where she became only the second woman to be awarded an Oxford DPhil (in her case, in mineralogy). Her results were published in the prestigious *Proceedings of the Royal Society* (Bentivoglio 1927). For light relief, she simultaneously completed a Diploma in Geography (1924). On her return to Sydney, she taught alongside Griffith Taylor and, with the help of Dorothy Taylor (Griff's sister), was acting head from July 1928 to November 1929. She published a school text (Bentivoglio and Friederich 1931). With the arrival of the new head, she continued at Sydney Teachers' College, but resigned during an 18-month visit to the USA, where she twice addressed the National Geographic Society and gave lots of lectures on Australia.

In 1922, some wag referred to her as an Italian-Australian flapper (Anon. 1922). With an influx of Italian migrants into Sydney from 1927, she taught English classes to help them adjust. She was a socialite, with her portrait painted by Dattilo Rubbo for the Archibald Prize. She was also an avid fascist and often offered her thoughts on this (Anon. 1932).

In the USA, she met and married a nobleman from San Remo, becoming Marie Spaldeschi. In 1938, she worked for the Selanesi Corporation, a group working with plastics (proto-gladwrap). She lectured on plastics at New York University from 1952 to 1960. She and her husband retired to San Remo in 1961, where he succumbed to cancer. She later returned to Sydney, making numerous donations to various bodies. In 1994, at the age of 96, she was awarded a DSc from Sydney University. Nearing 100, she returned to Italy to die. Canale (2017) wrote that she was an exceptional woman, way ahead of her time and that her services to geography ought to have been formally acknowledged.

JAMES MACDONALD HOLMES (HEAD: 1930–1963)

Holmes (1896–1966) was born in Greenock in Scotland. From 1914 to 1918 he served in the wartime Royal Navy (Powell 1983), before going on to study at the University of Glasgow, gaining a BSc in 1925 at the age of 29. He was a Demonstrator in geology while still an undergraduate. He lectured at Armstrong College in Newcastle from 1927 until 1929. In 1930, he was



appointed McCaughey Associate Professor at The University of Sydney. On arrival, he terminated the appointments of Marie Bentivoglio and Dorothy Taylor. This helped to promote later confrontations when Taylor retired and returned to Australia. In spite of the impact of the

Great Depression, he pioneered the development of a young, often neglected subject. He led the teaching of geography, both at the university and in schools. From 1930 to 1946, staff numbers varied from three to five. After, numbers rose to between five and seven (Gale 1996, p. 4). Student numbers were about 200 before 1946, reaching a low of about 120 in 1950, before rising to about 400 at the time of Holmes' retirement in 1963 (Gale 1996, p. 4).

Holmes received his PhD from Glasgow in 1935, but it was 15 years before he was promoted to the McCaughey Professorship. Powell (1983) summarised the areas in which he contributed. These included urban studies, regional planning and development, soil erosion and conservation, school texts and atlases, and current affairs. His corpus of work included nine books and 30 papers (26 in Australian and four in overseas journals). Among his books was a secondary school geography text (Holmes and Andrews 1932), an investigation of the geographical basis of government (Holmes 1944) and a history of the Royal Flying Doctor Service (Bilton et al. 1961). This is a broad palette and helped fledgling governments feeling their way in the new, federated nation. Some have criticized the depth of his scholarship, but it should be remembered that he was leading the way in what was still a young subject. In contrast with Taylor, his interactions with governments were positive. He enjoyed good relations with Premier McKell, who was interested in soil erosion. In the Second World War, he helped New South Wales with planning and, later, with soil conservation. This involved the application of Yeomans' Keyline system of enhancing soil fertility and using topography to determine the layout and position of farm dams, irrigation areas, roads, fences, farm buildings and tree lines. His help in establishing the Royal Flying Doctor Service in New South Wales is well known. His work alongside his wife with the Presbyterian church was also considerable. His students warmly recalled the way he nurtured undergraduates in the field (not forgetting the mandatory highland dancing in the evenings) (Thorpe 1967).

Holmes was head for 33 years, more than four times longer than anyone else. His impact on students, their research and their futures was enormous and it would take another paper to do justice to the geographers he trained and their influence here and overseas. He was an entrepreneur in organizing a very wide variety of courses using local staff and visitors (Bruce Ryan and Bruce Thom, pers. comm.). Generations of students passed through his small department. Perhaps his lasting legacy lies with those who took on leadership roles both at Sydney and in other departments. Powell (1983) described his use of students as technical assistants doing supervised research at the undergraduate level. Their help was not acknowledged. He was a pioneer in applied geography, which contributed much both to this state and others, including New Zealand.

I met him but once. His Scottish welcome to a newcomer to Australia was real and warm, made even warmer with 'a wee dram!'

GEORGE HARRY DURY (HEAD: 1962–1969)



My involvement with George Dury (1916–1996) was much more substantial than my transient contacts with Taylor and Holmes. He was the unofficial supervisor of my otherwise largely unsupervised PhD. At the time, I was based at The University of New England and I tried to visit Sydney once

a year to meet him. He would be available just before lunch, to which I was invited to join him in the Faculty Club. After an excellent meal and a good bottle of wine, he would dismiss me because he had a meeting to attend. He was probably 'doing a Wooldridge on me' (the great geomorphologist, Sydney Wooldridge, had supervised George's PhD: George estimated that he had received a total of 90 minutes of interaction during that time). He was an examiner of my thesis and, together with John Rutherford, 'interviewed' me for his job (he was on his way to take up a chair at Wisconsin-Madison). He was keen to see fluvial geomorphology continue.

He was born in rural Northamptonshire. His father, after time in the trenches, was a farm labourer. He won a scholarship to allow him to attend Daventry Grammar School. He studied for his BA from London externally (Chorley 1997). After graduating,

he trained as a school teacher before teaching at Elizabeth College in Guernsey. There, he mapped the land use of the island, before being reported as a spy to the Police. He escaped the island with wife and baby daughter on the last boat before the German occupation (Chorley 1997).

He then joined the RAF and worked in photo interpretation under David Linton, the doyen of mid-century British geomorphology. In 1944, he was awarded an external London MA for his research in Guernsey. George was a quietly spoken gentleman, though he once answered a snooty academic's 'Who are you?' with the reply 'I'm a midland English peasant. Who are you?' (Chorley 1997). He was a poet and a long-time admirer of the writings of Proust. He did all degrees the hard way (externally at London University). His footprint in Sydney was huge, with a lively mob of research students, many of whom later became leaders in various parts of the world. He was on very good terms with his post-graduate students, as a story from Mike Shepherd (formerly of Massey University, New Zealand) reveals. A party was being held in a Newtown terrace when the police intervened (there had been a noise complaint). George sobered up and went to the door to plead their case, which ended with the police apologizing for their intrusion. We remained corresponding friends until his death, a relationship that continued with Muriel, his widow, until she died.

After the war, George taught at Enfield Technical College and enrolled as an external PhD student at London. In 1949, he obtained an Assistant Lectureship at Birkbeck College and turned his attention to the origin of misfit valleys, leading to his promotion of the concept of underfit streams. His paper in the *American Journal of Science* (Dury 1954) attracted the attention of Luna Leopold, probably the leading fluvial geomorphologist in the USA, and led to his time as a staff scientist with the US Geological Survey. In this period (1960–1961), he researched underfit streams, culminating in three magisterial professional papers (Dury 1964a, 1964b, 1965), which helped his appointment to the McCaughey Chair at Sydney in 1962.

The period 1962–1969 saw 15 papers (Chorley 1997) and two additional areas of interest: duricrusts in arid landscapes and the reorganisation of New South Wales secondary school geography for the Wyndham Scheme (his wife, Muriel, had been one of Her Majesty's Inspectors of Schools in the UK) (Biddle 1997). During this time, student numbers increased from about 400 to 660, while staff numbers ranged from eight to 17 (Gale 1996, p. 4).

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He and Trevor Langford-Smith teamed up to study deep weathering profiles in western New South Wales and Queensland. George and John Rutherford did an incredible job, through published papers and school visits, to update the secondary syllabus in geography. In Wisconsin, he continued to work on both US and Australian geomorphology. He published nine books in his nearly 100 contributions. Particularly innovative and successful were his texts, 'The face of the earth' (1959), a Pelican paperback that passed through many editions, and 'An introduction to environmental systems' (1981).

In 1979, he retired to Risby, near Bury St Edmunds in the UK. There he grew vegetables and enjoyed his time with Muriel; he also had dining membership at Sidney Sussex College, Cambridge. London University awarded him a DSc, but he received few other accolades. He was undoubtedly the leading climatic geomorphologist of his time and he never hesitated in doing things his way. Chorley (1997) concluded his obituary with the following words, 'He was an expansive and visionary scholar, a misfit in many ways but never an underfit, in that his resilient spirit continuously overtopped the many confines with which fate continually surrounded him.'

George Dury was not a pioneer in the traditional sense, but he did lead the way in quantitative and climatic geomorphology and in producing some of the leading scholars in his field. He is the only one of the heads (and indeed the sole representative with Australian links) to appear in Barbara Kennedy's (2006) 'Cast of Principal Characters', a list of those who invented modern ideas of the Earth. He was a great asset to Sydney University. The university and the nation were lucky to benefit from his services to geography.

JOHN RUTHERFORD (HEAD: 1969–1970)



John Rutherford (1925–2002) was a quiet, earnest bloke from regional New South Wales. He was born in Maitland and educated at East Maitland High School before receiving a bachelor's degree in economics and geography

(Hons I) from Sydney and a PhD from the Australian National University (ANU).

In 1950, he was appointed Research Officer with the New South Wales Department of Agriculture, where he was an agricultural economist for 10 years. On leave of absence at ANU, he studied irrigation in the Murray Valley for his PhD thesis. Here he met Trevor Langford-Smith; they became life-long friends and combined to write 'Water and land' (Langford-Smith and Rutherford 1966; Langford-Smith 2002). His vast experience with irrigation showed that governments had placed too much emphasis on high-intensity farming in irrigation areas and not enough on the planned integration of irrigated and dry-land farming. Such an approach would make water-resource use more effective and less damaging in terms of pollution and salinisation. He made his move to academia in 1960 as a Lecturer, becoming successively Senior Lecturer and Associate Professor. In 1969, he became the first Australian-born Professor when he was appointed to a second chair in geography. Unfortunately, ill health intervened and he reverted to Associate Professor until his early retirement in 1986. With the departure of George Dury in 1969, John had to take over a much-enlarged department, with 13 to 16 staff and over 700 students (Gale 1996, p. 4).

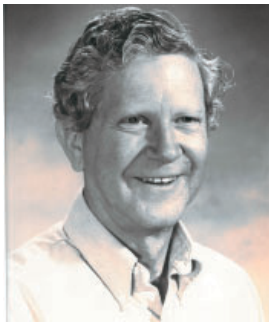
His health caused major concerns and he was often on sick leave, but he fought back to help wherever and whenever possible. He was a gentle person with quiet and measured diction, but did not suffer fools. His lectures were meticulously prepared and backed up by the wealth of his experience. His teaching was systems-based and avoided the traditional regional approach. He lectured mainly in agricultural geography. His help to honours and graduate students was immense and important.

John was very helpful to me when I arrived in Sydney in 1970. His character was shown by his determination to fight his illness with the help of his wife, Nancy. I knew more about this than most because of similar problems faced by my late wife.

In later active times, John spent two sabbaticals in Israel, where drip irrigation was widespread and helped minimize the use of scarce water resources. He also worked on paddy farming in Malaysia. Notable publications included a monograph on rice farming (Rutherford 1984) and papers in the *Annals of the Association of American Geographers* (Rutherford 1964) and on agriculture in the Sydney region (Rutherford 1966).

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DAVID STANLEY SIMONETT (HEAD: 1970–1972)



David Simonett (1926–1990) was born north of the Harbour Bridge. He was an Old Falconian, having been educated at North Sydney Boys High School. His bachelor's and master's degrees were followed by the first ever PhD in geography in Australia.

After some lecturing at Sydney, he was awarded a Visiting Fulbright Scholarship at the University of Maryland. This was followed by a spell at the University of Nottingham and a long period at the University of Kansas before he took up the McCaughey Chair in 1970. He arrived here full of hope, having been promised funding for an extensive program of remote sensing, including the use of a US aircraft to collect data.

He was a corporate chairman, leading much as a CEO. He made a point of knowing each of his staff well, understanding their functions and encouraging their aspirations. He was well known for wandering around the Department dictating his papers into a portable tape recorder. He made relationships more personal, with interesting dinner parties for a select few at a time. At one time, he took me aside and told me to improve my relationships with a fellow staff member, who had made him aware of our problems. Although he was in Sydney for less than two years, he was a dynamo around the building, with a booming voice using what came to be known at the University of California, Santa Barbara as 'Simonettisms'; 'you have got to make a connection, God damn it!' and 'don't worry, he won't cut your balls off!' (Golledge and Tobler 1993). During this time, student numbers reached nearly 800.

He was generous to me in that he gave me a research assistant for half a year. This was Derek Sinclair, who was my assistant on a project on the Darling (and still a friend). He also wanted to start graduate teaching the American way. To this end he invited me to teach an honours' year class on Water and Man. This was to count as a substantial portion of the 4th year marks. For the first half, I taught a course about man and water, involving research techniques. In the second half, each student prepared a seminar based on their own research. He also organised Reg Golledge to give a course to all members of staff on quantitative geography; it was over the heads of most of us!

After less than two years of getting nowhere with his aims, David resigned to become a director of the Land Satellite Corporation in Washington. Later, in 1975, he became the Foundation Chair of the new geography department at the University of California, Santa Barbara, becoming part of the Australian brain drain with Reg Golledge, the cognitive specialist. Together they established a large and prestigious department (Reg and I had been Demonstrators together at The University of New England in 1960). He recruited many others to develop one of the top schools in the USA. His legacy lives on in a department with 28 faculty members, 10 in administration, 22 specialists/post-doctoral, 99 graduate and over 200 undergraduate students. In 1982, he became Dean of Graduate Students. He died at only 64 years in 1990.

David's initial research was in land use and soils (Simonett 1957), but he seized the opportunities offered by remote sensing and became a major player in the burgeoning discipline. His academic output included over 100 papers, several books and numerous government reports. He was the founding editor of the journal *Remote Sensing of the Environment*. His books included Lintz and Simonett (1976) and Simonett and Ulaby (1983). He published notable papers on radar remote sensing (Moore and Simonett 1967) and space-craft photography (Simonett et al. 1969a, 1969b).

Given what he achieved at Santa Barbara in 15 years, one wonders what he could have done in Sydney with more support. He was known as an academic's academic and he knew what leadership and management meant, eventually doing things his way. It is sad, but I suspect he was 20 to 30 years ahead of his time in Sydney.

TREVOR LANGFORD-SMITH (HEAD: 1973–1975 AND 1979–1981)



Trevor Langford-Smith (1916–2011), like John Rutherford, progressed through the ranks from Lecturer to McCaughey Professor. His father was the Anglican minister at Summer Hill. Trevor was educated at Trinity Grammar School before arriving at Sydney

University in 1939. His honours thesis was on soil erosion control in western New South Wales, working with Macdonald Holmes and Harold Maze.

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From 1940 to 1942, he was with the Soils Division of the CSRI in Adelaide. There, under the direction of Professor Prescott, he studied soils, geology, geomorphology and land use north of the Mount Lofty Ranges. He was able to incorporate this work into an Adelaide MSc, supervised in part by Sir Douglas Mawson and Dr Charles Fenner (Thom 2012).

From 1943 to 1945, Trevor served in the RAAF as an air-photo interpreter, with a year in the Territory of New Guinea, after which he moved to Canberra and worked as a senior geographer with the Commonwealth Public Service in regional planning (Chapman and Dragovich 2012). There, like many others, he was frustrated at having to deal with state officials, but the capital proved a boost to his life. He and Merle started a family and enjoyed skiing, music and doing a BA. In 1953, he took leave from what had become the Department of National Development to take on a Research Fellowship at the Australian National University. There he did a major study on the land use of irrigation settlements. For this he was awarded his PhD (1959), his fourth degree. Later, he combined with fellow PhD researcher, John Rutherford, to write 'Water and land' (1966).

Trevor returned to his home university as a Lecturer in 1956 and remained there until his retirement in 1981. He was appointed to the McCaughey Chair in 1973, immediately becoming head for the first of his two spells in that position (1973–1975 and 1979–1981). He became well known for his dedication to teaching, research and administration. He was meticulous in his mapping, and in the analysis of literature as a context for his own work.

Trevor made it clear to me that if he had been on the selection committee for my position, I would never have been appointed. I had not published enough. This was true because at The University of New England, I had been teaching, doing a part-time PhD, helping to care for a sick wife and raising three children. I was also heavily involved in Armidale's creek problems, which led to the demise of the city council. Trevor was in some ways a disciple of Dury and I think he expected me to be the same for him. At one stage, he wanted me to be his staff man in dumpy levelling of beach ridges. I had done over 200 miles of tacheometric surveying for height control in the Bellinger Valleys for my thesis. I reminded him that I was appointed to teach and research in fluvial geomorphology and had no wish to work on Trevor's coastal or arid problems. I think in time he realised this. David Simonett understood our problems, advising me to improve relations with Trevor. When

I was lumbered with the headship, he graciously offered to help if he could. We eventually became more friendly, comparing treatments for our mutual ailment – glaucoma!

He, like me, was very much a family and cultural man, he because of his religion and upbringing and me because of my sole-parenting role. This and the harsh life he had at Trinity Grammar were apparent in the memoirs that he compiled towards the end of his life (Langford-Smith 2008).

Trevor did not publish a lot by modern standards, but he was very proud of his work on the dead river systems of the Murrumbidgee (Langford-Smith 1960) and his vigorous academic debate with Bruce Butler (CSIRO) about the prior streams of that area, played out in a series of short articles in the *Australian Journal of Science* between 1960 and 1962. He also took pride in founding the Coastal Studies Unit, which became pre-eminent in the world, staffed by leading coastal experts like Don Wright, Bruce Thom and Andy Short.

He helped found the Institute of Australian Geographers, in which he served as Secretary and President (1975–1977). He was a Councillor for the New South Wales Geographical Society, as well as its President (1972–1974). Later he was the first Chairman of the New South Wales Coastal Council (1979–1981). He retired in 1981.

In retirement he became a travelling geographer, with visits to Asia, Europe and South America, the highlight being trekking in the Himalaya (Thom, 2012). It is disappointing that he did not produce a 'Journeyman Langford-Smith' for more to enjoy. He will be long remembered for his work in establishing the Coastal Studies Unit and being the founding chair of the New South Wales Coastal Council, as well as for his love of fieldwork and his meticulous presentation of it.

MAURICE TIMOTHY DALY (HEAD: 1976–1978, 1981–1984 AND 1993–1994)



Maurice Daly (1939–2021) or Maurie, as he preferred to be called, was born in Penshurst. He attended the Marist Brothers School at Kogarah before going to Sydney University, where he obtained a BA (Hons I) in 1962 and a PhD in 1965. He served in many

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places before being appointed a Senior Lecturer at Macquarie University. In 1976, he was invited to fill the second chair at Sydney, which had been vacated by John Rutherford. He became McCaughey Professor in 1983 and resigned in 1994 to become a fulltime consultant. He was a professor in the Department for 18 years, two years longer than Macdonald Holmes.

He specialized in economic geography, with emphases on variable real estate values, the role of economics in the Pacific Rim and local government funding. After leaving Sydney, he moved to Newcastle University where he was involved with the Hunter Valley Research Foundation (Daly 1967, 1970). He then went to Canada as the Director of the Atlantic Provinces Economic Development program of the Department of Energy and Technical Surveys in Ottawa. In 1968, he was a consultant for the Sydney Regional Plan and a visiting lecturer on land economics in the Department of Town Planning at Sydney University. In 1972 and 1973, he was the Director of the Rockefeller Foundation program on regional development in Nigeria. Before taking up his chair here, he had been a consultant to the Australian Government's Department of Urban and Regional Development.

Maurie had a good sense of humour. He was a sociable and affable being, friendly with staff, graduates and undergraduate students, a marked change from the more serious Rutherford and Langford-Smith. He was also a good sportsman, making plenty of runs and taking wickets when the department took on either the University of New South Wales or Macquarie University. In a sense, he was the only 'true blue' Aussie head and he was a pleasure to work and socialise with. I was impressed by how much he had achieved and in so many places. With his love of a cleansing ale, good wine and fine food, he was a bit of an anomaly among the oftendour back catalogue of department heads.

At Sydney University, as well as being head, he held at least fourteen other positions. Notable among these were Director of the Planning Research Centre, Foundation Director of the Research Institute for Asia and the Pacific, Director for the Centre for Peace and Conflict Studies, Chair of the Vice-Chancellor's Advisory Committee on Asian Studies and the Vice-Chancellor's representative at the Association of Commonwealth Universities 1990 Annual General Meeting in London. He was also a member of many other boards and committees.

Professor Daly's written output was large, with some 13 books and more than 250 journal articles,

official reports and monographs. He addressed a large number of Australian and International conferences, as well as the local media. His book, 'The brittle rim: business and finance in the Pacific Rim', co-authored in 1990 with Professor Mal Logan, Vice-Chancellor of Monash University, was runner up in the Premier's prize for non-fiction. 'Sydney boom, Sydney bust' (1982) is still cited for its insight into 140 years of real estate changes. He wrote books on techniques and concepts in geography (Daly 1972), on Sydney's economic development (Daly 1999), on Asia's economy (Daly and Logan 1998) and Australia's economic geography (O'Connor et al. 2001). He published notable papers in *Urban Studies* (Daly and Webber 1973) and *Environment and Planning A* (Daly 1984).

After resigning his chair in 1994, he formed Daly Research Systems Pty Ltd, for which he was the chief consultant. Between 1994 and 2008, he consulted around the world for large companies and state and local governments. This involved work in Japan, China, Hong Kong, South Korea and many countries in Europe. During these times he was a visiting scholar or fellow at the University of Southern California, the London School of Economics (twice) and US Information Services, Washington.

He and I were in totally different branches of geography. However, there was a period when the whole department worked very closely with Maurie. This was in the preparation of a report for the Faculty of Science outlining the department's achievements and plans for the 1994 Departmental Review. This involved many meetings and even weekend retreats. This was the only time in my 28 years at Sydney when the whole department came together (normally individualism prevailed). We worked hard to produce a document to support geography, which was often regarded by the university's administrators as an inferior subject. Maurie's lead in this operation was enormous. Nevertheless, the department was not privy to what Maurie said in the review. The first thing I knew was that he had resigned with immediate effect to pursue his consultancies. I was told to return from France, where I was researching, to attend the review and was ordered to take charge again.

Maurie was a charming man who sought to get on well with everyone. His contribution to geography and related fields was enormous. It was sad to learn that he had been unwell in recent years. While adding details to this offering on 12 April 2021, Maurie's wife, Liz, informed me of his death the previous day. This was very sad news. He will be sorely missed.

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BRUCE GRAHAM THOM (HEAD: 1985–1989)



Bruce was born in 1939 in Sydney and educated at the Scots College. In 1960, he obtained his BA (Hons I, shared University Medal) from Sydney University. Seven years later, he was awarded his PhD in coastal geomorphology by Louisiana State University (Baton Rouge). In 1980, he was appointed to a

Fellowship at Churchill College at Cambridge. Since then, he has been awarded medals, life memberships and fellowships, as well as becoming a Member of the Order of Australia (AM). His fellowships include those of the Institute of Australian Geographers and the Australian Academy of Technologies and Engineering (the only geographer to achieve this). He is the recipient of the Macdonald Holmes Medal of the Geographical Society of New South Wales and the Griffith Taylor Medal of the Institute of Australian Geographers. He is a life member of the Institute of Australian Geographers, the Geographical Society of New South Wales and the Surfrider Foundation of Australia (Honorary). In 1989, he was the only geographer on Prime Minister Bob Hawke's Science Council. His awards also include patronships of the Australian Coastal Society and the Pittwater Environmental Trust.

With the exception of Simonett, Bruce was the only head to have sought higher administrative positions, becoming Pro-Vice-Chancellor (Research) at Sydney in 1990 and Vice-Chancellor at the University of New England in 1994–1996. Since then, he has held a multitude of positions. These are too many to detail, but notably include foundation membership of the Wentworth Group of Concerned Scientists (2002–), chair and member of the National Committee for the International Geosphere Biosphere Program (1987–1993), chair of the Organising Committee, 26th International Geographical Congress, Sydney, 1988 (1985–1989), President of the Institute of Australian Geographers (1986–1989) and Chair of the New South Wales Coastal Council (1998–2004).

He was head of geography at Sydney between 1985 and 1989, having been the Foundation Professor of Geography at the University of New South Wales Faculty of Military Studies at Duntroon (1977–1984).

Prior to that he was a Senior Lecturer at Sydney in 1976 and a Research Fellow and Senior Research Fellow in the Department of Biogeography and Geomorphology at the Australian National University (1973–1975). After completing his PhD, Bruce was the Field Director at the Sun-Arctic Research Laboratory at McGill University (1967–1970).

My roles in his organisation of the 26th International Geographical Congress, which was a great success with the opening at the Sydney Opera House, were interesting. I was both chauffeur and sommelier, picking up VIPs from the airport and selecting Australian wines for a dinner hosted by Bruce and Irene.

Bruce was and still is a workaholic. He is an avid reader of research material (he even read my PhD thesis!) and a great listener. He has a commanding authority and a powerful voice. People listen and take note of what he has to say. My first memory of Bruce was at a 1960 conference in Brisbane, where after a dull presentation (its content I cannot recall), Bruce got up and gave what effectively amounted to another paper, criticizing what we had heard. I am sure than many others in that room felt that we were hearing a voice of the future. The man, having listened, is quick to assimilate what has been said and put it into context, no matter what the subject matter. He is good at assessing what needs to be done and how it should be developed. What has made Bruce count in all kinds of areas is an ability to communicate to intelligent people. A major fault of many academics is that they only talk to others of like persuasion.

His *curriculum vitae* lists about 170 papers, which include reports, but not his efforts with the Wentworth Group or his blogs. About half of his papers have been published in Australia where his influence has been greatest, the rest are in international outlets. Bruce made much use of team research right from the start, with nearly two-thirds of his papers being multi-authored. He has published mainly in the field of coasts, their dynamics and management (Thom 1965, 1970, 1974, 1984, 1992, 2019; Thom et al. 1992; Wright and Thom 2019), but more recent works range widely across the spectra of geography, law, climate change and related subjects (Thom 1986, 2001, 2004, 2009, 2014, 2018; Thom et al. 2018). Bruce is a man of his times, able to utilise modern technology and fit in with teams of like-minded researchers. In trying to assess the impacts of heads (given the different times, conditions and facilities through the 100 years since the department began), Bruce would clearly rate very highly in his contributions to geoscience, but other pioneer feet have preceded him and us.

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ROBIN FREDERICK WARNER (HEAD: 1990–1992 AND 1994–1997)



I was born (1932) and raised in rural Leicestershire, where my parents were poor. In primary school, an evacuee teacher stimulated my interest in learning, allowing me to win a Hanbury Scholarship to attend Market

Harborough Grammar School. This parallels the early life of Dury; he needed a scholarship to attend Daventry Grammar in neighbouring Northamptonshire. A serious road accident caused me to miss the School Certificate for a year. I took that examination later, while studying maths, physics and chemistry for the Higher School Certificate.

My connection with geography was accidental. It was my fourth best subject after art, maths and chemistry. I had hoped to fly in the Royal Navy but, after the accident, I failed to meet aircrew medical standards. I abandoned school in 1949 and, after failing to find a job in art, with national service due, I joined the RAF where I trained in accounts. In my third year, I was posted to West Germany to lead a liaison team helping reserve squadrons.

After discharge, I worked in accounts, and then used my School Certificate to get into Alsager Teachers' College, where I majored in maths and geography. I then used my Teachers' Certificate to enter Birmingham University's Honours School of Geography, where I specialized in geomorphology with Gordon Warwick MBE, with help from Leonard Wills and Sir Frank Shotton FRS. First Class Honours allowed me to think of research.

In my second year, I married Ruth Hoegel, a German, double-certificated nurse. After some local teaching, I was invited by Professor Gilbert Butland to take up a Demonstratorship at The University of New England. While a Lecturer (1961) and Senior Lecturer (1968), I did a PhD part-time on the Bellinger valleys (1968), largely unsupervised, but with some help from Dury.

After study leave in 1968 at Hull with Roy Ward, I was offered a Senior Lectureship in Sydney. Here I taught courses in geomorphology, hydrology and climatology. In early 1972, my wife died, one of many victims of Harry Bailey's deep-sleep therapy. This put a stop to my work on the Darling because, with

three children to raise, research had to be undertaken nearer home on the Georges River, in association with student fieldwork projects (Warner et al. 1977) and as part of a dye study supported by the Australian National University (Warner and Ingle Smith 1979).

While Bruce Thom was Head (1985–1989), I was promoted to Associate Professor (1985). When he left to become Pro-Vice-Chancellor, I reluctantly replaced him as head, with the assurance that it would only be for three years. I suspect that this was to give Maurie Daly a break after his two spells as head. During Bruce's headship, departmental accounting had changed to a 'one-line system'. This proved nightmarish when the new system often failed. I was thankful for my RAF experience.

After three years, I was happy to pass the headship back to Maurie. This gave me the chance to go to France to begin research on the River Durance. During this period, I was President of the Institute of Australian Geographers (1994–1996), being appointed a Fellow in 2010. In the winter of 1994, I was recalled from France to attend the departmental review. Daly was frustrated with the review and resigned the headship to concentrate on consulting. I was ordered by the Deputy Vice-Chancellor to take over again until the end of 1997.

In 1996, the oldest Department of Geography in Australia celebrated 75 years in the presence of Gavin Brown (Vice-Chancellor), Susan Dorsch (Deputy Vice-Chancellor) and Helen Beh (Dean of Science). Stephen Gale prepared a booklet to commemorate this (Gale 1996).

Increased stress precipitated the diagnosis of a leaky aortic valve. In early 1997, I had open-heart surgery for a valve replacement. Deidre Dragovich managed the department during my recovery.

At the end of September 1998, I decided that I had had enough and, like Daly, I resigned to concentrate on consulting and my French research. I had been consulting since the 1970s to forge links between geomorphology and engineering companies. This was at an international level in Papua New Guinea at the Fly River's Ok Tedi mines (Pickup et al. 1979), at the federal level at Ranger Uranium mines (Pickup et al. 1987; Warner and Wasson 1992) and at the state level with several engineering companies (Gutteridge, Haskins and Davy 1980). I also served on two New South Wales Government expert panels. The first was for the Cocks River (Young et al. 2000, 2001). I was appointed to the second by the State Attorney General for three years of investigations of environmental flows along the Hawkesbury–Nepean River. The result was a major report on 'Water and Sydney's Future' (Hawkesbury–Nepean River Management Forum 2004).

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About half of my published work has been done in retirement (1998–2014). I was involved with three books (two edited and one as a co-author), 40 journal articles (sole author in 30), 16 chapters in books (sole author in nine) and numerous other reports for governments and engineering companies. My work on the Durance has produced at least six papers (for example, Warner [2000, 2006a, 2006b, 2012]). My research on New South Wales rivers has emphasised the nature and roles of flood-dominated and drought-dominated regimes, inspired by Geoff Pickup in his PhD research (Warner 1987, 1994, 1995; Erskine and Warner 1988). At the university, I helped to introduce the environment stream to geography.

In hindsight, I have been lucky to be a geographer by default. Lasting friendships were formed with international leaders in river research and I have been able to satisfy my curiosity about landscape. I was never a workaholic; I worked mainly for the good of my depleted family.

DISCUSSION

The first head, Taylor, was an adventurer and pioneer who, while in charge of the department, ruffled many governmental feathers. He did not seek to endear himself to anyone, and pointed out forcibly the environmental limitations for potential population growth and his disdain for the white Australia policy. This may have contributed to his failure to get a chair. His approach was in marked contrast to that of Macdonald Holmes who got on well with the state government, by working in areas of soil conservation, planning and the role of geography in government.

Holmes' reign of 33 years was more than four times longer than any other individual and his impact was enormous. All five of the Australian-born heads of the department were products of the Holmes' era, although their tenure accounted for less than 30% of the 77 years that the department existed. His students formed a significant proportion of the Sydney staff and the core of the department established (in the late 1940s) at The University of New England. Andrews and Logan moved south as foundation professors of geography at Melbourne and Monash respectively, the latter becoming Vice-Chancellor, while John Holmes was part of The University of New England core before becoming a long-term professor at Queensland.

George Dury followed Holmes and in his seven years achieved much, with an impressive graduate output including Ted Hickin (Simon Fraser), Athol Abrahams (Buffalo), Bob Young (Wollongong) and

Steve Riley (Macquarie University and University of Western Sydney). He and John Rutherford did much to reform the geography syllabus in secondary education. With Trevor Langford-Smith, he contributed to our understanding of weathering and duricrust development in desert climates.

John Rutherford was a gentle man whose contributions were limited by ill health, while home-grown David Simonett was thwarted by the lack of funding for his ambitious plans. He introduced teaching at the fourth-year level, but he lasted less than two years.

Maurie Daly was the longest-serving professor. He was head three times. His prodigious output included dozens of books, papers and consulting reports. He was able to forge a link with what was an often socially disparate department to prepare a report for a Faculty of Science review. After a critical review (no one knew the details), he resigned to become a high-powered consultant.

Trevor Langford-Smith, like Rutherford, came through the ranks to become a Professor. He was a perfectionist, serious, with a fleeting smile. He was meticulous in most of his endeavours, making important contributions to our knowledge of desert soils, weathering and coastal geomorphology, and becoming the first chair of the Coastal Council. His output was limited but of high quality.

Bruce Thom was the next professor. He had earlier been the Foundation Professor at the Australian Defence Force Academy in Canberra. He was a flamboyant leader with a powerful voice. He was the first head to have a one-line budget. This made the job more difficult because he had to balance both salaries and maintenance budgets. After four years as head, he moved on to become Pro-Vice-Chancellor (Research) and then Vice-Chancellor at The University of New England. In retirement, he has maintained his output and was rewarded for his contributions with an AM.

I suspect that in my first period as head, I was considered a stop-gap, whose role was to give Daly a rest (he had been head twice). In my second period I was perhaps even more of a stand-in, with the School of Geosciences well on the agenda and no professors of geography available to take on the role. During my 28 years in the Department, I tried to carry on Dury's tradition in first fluvial and then environmental geomorphology, the latter enhanced by the development of a third teaching stream in environmental studies. My graduates were of high quality, including Pickup, Martens and Petrozzi, the latter two now in charge of their own environment companies. I inherited Milne and Page from Dury, the former now a leader in remote sensing and with

an AO. Fieldwork in boats, involving water quality, gauging and surveying formed an important part of my teaching, while study leaves at Hull, the University of California, Los Angeles and Massey helped broaden the scope of my teaching.

Since the 1990s, geography departments have experienced mergers, reclassification and redistribution. The result is that there are now no free-standing departments of geography in Australia, with few remaining elsewhere. Geography still exists as an element of integrated environmental and geoscientific schools in many of the country's universities. Nevertheless, the question of whether geography can survive, let alone stand alone, during this period of mutation remains to be answered.

CONCLUSIONS

The ten heads of the Geography Department covered a wide societal range, from an aristocratic Italian to two self-confessed English peasants. In between, there has been an Antarctic explorer who pioneered world geography, a long-serving Scot who developed geographic learning in Australia and New Zealand, while holding onto his national heritage, four Sydneysiders privately educated, one Catholic stalwart from South Sydney and one country lad from the Hunter Valley. Their legacies have been mixed, with Taylor leading in terms of sheer volume of output and Macdonald Holmes in producing so many departmental and university leaders. George Dury inspired a graduate class, many of whom become world figures in fluvial geomorphology. The legacy of Simonett was greatest at the University of California, Santa Barbara, while Trevor and Bruce's impacts led to the dominance of Marine Studies at the University. Maurie Daly made great contributions to government and planning. I have had the privilege of knowing almost all and writing about their work, as well detailing some of my achievements – a reluctant leader and a geographer by default.

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