

SENATE OCCASIONAL LECTURE

‘Devotion, Daring and Sense of Destiny: Surveyors of the Early Commonwealth’

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During the decade that preceded Federation, the Australian colonies entertained a number of visiting dignitaries and international celebrities curious about the former British convict gulag that has so spectacularly reversed its grim early fortunes. None of the visitors was as popular as the American writer and humourist Samuel Clemens—Mark Twain.

In Australia on a world-wide lecturing tour in 1895 because of some ill-chosen investments, Twain took an avid interest in Australian culture and history. In the publication of his travels that followed soon after his southern sojourn, *Following the Equator* (1897), Twain observed with characteristic flair:

Australian history is almost always picturesque; indeed, it is so curious and strange, that it is itself the chiefest novelty the country has to offer, and so it pushes the other novelties into second and third place. It does not read like history, but like the most beautiful lies. And all of a fresh new sort, no mouldy old stale ones. It is full of surprises, and adventures, and incongruities, and contradictions, and incredibilities; but they are all true, they all happened.

When the many Australians who read *Following the Equator* over the next 100 years read this paragraph, they must surely have reflected, with satisfaction and pride, on a succession of historical milestones: the transformational Lachlan Macquarie years, for example, the opening up of the interior, John McDouall Stuart's epic quest, Lola Montez defiantly horse-whipping her newspaper critic in booming Ballarat, Eureka, the world firsts of the Australian labour movement, the sporting achievements of the cricketers, the rowers, Archer and Carbine, the Australian Constitution story, Federation itself, Gallipoli, Kokoda.

Few of Twain's Australian readers would have considered the Canberra story, the birth of the national capital, on their list, and yet the creation of the capital city of the fledgling nation fits Twain's description like a glove, especially the many yarns included in the Grand Narrative's first instalments: opium addict, journalist and convict short story writer William Astley, for instance, determined to achieve continent-wide interest in the so-called 'Battle of the

Sites' to find the country's ideal capital; Australia's second Prime Minister, Alfred Deakin, Prime Minister on three separate occasions, holder of the reins of power through key national capital selection years, and yet a man more passionately attached to the idea of raising the dead, than raising taxes; the third Prime Minister, Chris Watson, born in poverty on a ship in the bay of Valparaiso, Chile, destined to be the first labour leader of a modern democracy, whose intervention for Canberra as the best capital site was based in part on his love of ... trout; the many 'tours' of the enthused Senators and Reps, to obscure, mostly southern NSW towns and regions, full of high-mindedness, high aspirations and sundry hi-jinx; the ridiculous number of votes in the House and the Senate, that at one point gave the capital city nod to the Snowy hamlet of Dalgety in 1904, and at other confused and confusing moments to Tumut, to Bombala, and to the apple town of Batlow; the seemingly interminable process of locating a capital that exhausted seven Commonwealth Governments, five NSW Governments, two Royal Commissions, nine Commonwealth Ministers of Home Affairs, and involved four lapsed Bills and three Acts of the Commonwealth Parliament; the courageous rebel Victorian Senator James Hier McColl, who turned an 18-18 deadlock Senate vote between Tumut and a hybrid concoction called 'Yass-Canberra', into a 19-17 triumph, as Australia finally got a *Seat of Government Act* in 1908 that would hold its place—in favour of the hybrid. This was the result of a clever, last minute compromise thought up by Chris Watson and George Reid, Australia's fourth Prime Minister, that carried the day, and just enough of the doubters. I could go on, and did in a Senate lecture a couple of years ago.

There is little doubt that Twain's contradictions and incredibilites are everywhere apparent in the two lively decades of the emergent Canberra story up to the 14th December 1908, when the necessary royal assent for the *Seat of Government Act(1908)* made it law.

But what of the surprises, the adventures, the incongruities that the American so delights in? To locate them, we need today to turn our attention to the

next instalment of the Canberra story. Less colourful perhaps, but every bit as imposing, and surprising. Chapter the Second, if you like, which places an unlikely group, the Commonwealth surveyors, into our main frame—the men that respected historian Laurie Fitzhardinge termed, with affection and admiration, ‘the heralds of a new era’.

Now, with the utmost respect for the practical capabilities and talents of surveyors as a group, fair to say that theirs is hardly a profession with which one readily associates high adventure, surprises and assorted incredibilites. Yet these are exactly what you get in the minutiae of the saga of Canberra’s Commonwealth surveyors.

Before I work into the argument of this paper, consider the spare facts surrounding Claude Stafford Vautin, the man apparently responsible for so much of the precious surveyor and broader community photographic record of Canberra’s early history, a hundred years ago, including a number of those now iconic shots atop the Big Ceremony podium: the Denmans, Andrew Fisher and King O’Malley, on 12 March 1913. Or rather, we think this cache of photographs was the work of Claude Stafford. The National Archives is of that opinion. However, the photos may just have been the work of his immensely skilled cartographer and photographer father Ernest, who put a bullet in his head at the Randwick Rifle Range, aged 59, in 1916.

The Canberra Vautin story, Claude Stafford and Ernest Stafford, gets a little curioser when we explore their common lineage: one direct forebear, Claude Stafford’s great great grandfather, Claude Theodore, was the aide-de-camp of Napolean Bonaparte. A related descendant, it appears, is one Paul ‘Fatty’ Vautin, proud Queenslander, former Australian Rugby League footballer and Channel 9 Footy Show host. Surprises, incredibilities indeed. I have a few more in store.

In this lecture, I will focus on a selection of the surveyors' Centenary stories—those men and their pioneer wives who, between 1909-10 and 1915, camped on the Limestone Plains and in the nearby Brindabellas and southern alps in order to survey the city within, and the border of, the new Federal Capital Territory, as it would be called at its commencement date, the 1st of January 1911. The FCT perimeter measured out a very big border. Surveying it accurately took years—and loads of ingenuity, devotion and, yes, even a little daring. Weather and water loomed large. Lifelong friendships were forged. Characters abounded. Egos too.

These surveyors a century ago had a keen sense of their role in the 'nation-building' project. In Canberra over a seven-year period, a period during which Australia became embroiled in the Great War, the surveyors undertook a specialist task. In the course of carrying it out, they rubbed shoulders, and shared their fires and camps, with like-minded Commonwealth and State politicians, geologists, meteorologists, astronomers, engineers, architects and military men. All relished the chance to be a part of something far bigger than themselves—a part of an endeavour destined to exert a lasting impact on the generations of Australians to come.

In today's paper, I will first recall a long-forgotten conference of Australian professional men that took place in Melbourne in 1901, a gathering which helps us to place the surveyors in cultural and industry context; secondly, I'll go into some necessary detail about the premier surveyor of his generation, Charles Robert Scrivener, his character, his influence, his aura, and his commanding role in the early Canberra story; next, I'll clarify the facts of the broader surveyor narrative, the other men of significance involved, and the reason why they were rightly regarded at the time as 'heralds of a new era'; fourth and finally, I will place these men amongst their professional and political peers in Canberra, during a period of years, pre-World War One, acknowledged and welcomed at the time as being consciously, programmatically 'nation-building'.

As Prime Minister Gillard searches for ways to formulate and progress a big-ticket issue agenda for 2011, she could do a lot worse than use, as a benchmark for action, the determination and courage of her Labor Party Centenary predecessor, Prime Minister Andrew Fisher, who, a hundred years ago made gutsy decisions for his adopted country that left a lasting legacy.

To gain some insight into the cultural milieu into which we place the first Commonwealth surveyors, we need to go back a few years before the watershed year 1909, back to 1901, the year of Federation. When the first Commonwealth Parliament was opened in Melbourne on the 9th of May, just down the road in Collins Street, and running for a full fortnight from the 6th of May to the 17th, a meeting of design and building professionals was already underway. The event's full title was: 'The Congress of Engineers, Architects, Surveyors, and Others Interested in the Building of the Federal Capital of Australia'. The design of Australia's new capital, all the participants agreed, was far too important to leave solely to the politicians. Experts must be called in on this matter of national significance, and the Congress was organised to signal such intent. Two 'Resolutions' were adopted by the Congress, a first insisting that design professionals must be fully involved in the selection of site, and a second, more portentous Resolution which needs to be quoted in full:

... in the opinion of this Congress it is important that the Federal Capital should be laid out in the most perfect manner possible, and that, to avoid the mistakes made in many cities of spoiling the plan by utilising existing buildings, it is desirable that in any site obtained, all obstructions be removed that would in any way prevent the adoption of the most perfect design.

There would be times in the years ahead when certain politicians, Labor and non-Labor alike, agitated for a downmarket, narrowly utilitarian, 'wattle and daub' capital, but for the most part—and certainly at the key moments—high aspiration was in the ascendant.

All thirteen papers presented at the Congress re-stated a commitment to world's best practice design. In his opening address, George Higgins purposefully recalled the splendour of Daniel Burnham's White City pavilions, at the World's Columbian Exposition in Chicago in 1893. Throughout his paper, Higgins addressed Australia's unique opportunity to build 'a model city', an 'ideal city', and his introductory words set the elevated tone for what followed.

Two points about this timely meeting need to be made: the fact that the first two papers in the published *Proceedings* were by surveyors, ahead of the engineers, architects and what today we would call landscape architects; and second, there was no sign of any 'grand-standing' by any of the professions. What do I mean? Well, in the twenty or so years preceding the conference, and in the decade following it, heated debate amongst the professions continued virtually unabated as to which one was best-suited to lead the relatively new 'science of town planning'. The architects would make the most audacious international bid for this premier status at the first international town planning conference (in London, in October 1910), but there was no sign of any antipathy amongst the Australians in Melbourne. All sang from the same song sheet, endorsed the same aims for the new nation's capital, and applied themselves to the task of articulating the role to be played by their particular profession. Surveyor R. Henson Broadhurst anticipated a very real problem to emerge in Canberra ten years later, when he stated that:

The surveyor, bearing in mind the trouble and litigation continually proceeding in the existing cities owing to the imperfections of the original surveys, proposes to himself, that, in the new city, the surveys shall be accurate, and the marking permanent.

It would be precisely the lack of such accuracy in the nineteenth century surveys of the Canberra region that continually undermined the work of the border surveyors, but more of that shortly. Surveyor Broadhurst, in delivering a paper of technical quality concerned with the laying out of the Commonwealth capital and emphasising the importance of issues such as sanitation, street width and intersection design, reflected the spirit of the gathering. He concluded by expressing his desire to see the Congress'

collective efforts ‘bear fruit in the improvement of the new city, to which we all hope to be able to point with pride as the outcome of Australian intelligence, aided by the experience of all ages’.

In the exhibition which I have curated, with the same title as this lecture, to be launched in the Presiding Officers’ Gallery of this magnificent building on 17 December, two weeks today, a copy of the rare Congress *Proceedings* is on display—along with Charles Coulter’s iconic watercolour of an imagined Lake George capital city looking to all the world like our own Venice. The Melbourne Congress *Proceedings* booklet included a black-and-white reproduction of Coulter’s ‘ideal city’.

It is testament to the impact of the 1901 Congress that, within a week of the *Seat of Government Act (1908)* being written into law, the Minister for Home Affairs in the Fisher Labor Government, Hugh Mahon, issued a set of visionary instructions to ‘District Surveyor Charles Scrivener’. The capital city to come would start with the contribution of the surveyors. We will never know who wrote those instructions, but we do have a pretty fair idea of what the writer had been reading. Channelling the 1901 Congress, Minister Mahon challenged his District Surveyor thus:

The surveyor will bear in mind that the federal capital should be a beautiful city, occupying a commanding position, with extensive views, and embracing distinctive features which will lend themselves to the evolution of a design worthy of the object, not only for the present, but for all time ...

While Mahon would soon drop out of our narrative, the recipient of his instructions, Charley Scrivener, was destined to fulfil a noble role—in the seven or so years following 1908, arguably the leading role on our national capital stage.

Charles Robert Scrivener was born in 1855 in modest circumstances in Canterbury, Sydney. At age 21, he was appointed by the NSW Colonial

Secretary as a cadet in the Trigonometrical Branch of the NSW Surveyor-General's office. Made a staff surveyor in 1901, Scrivener impressed his peers with an extraordinary work ethic, a passion for field work (the more rugged the terrain, the better), and meticulous attention to detail. These qualities were recognised, both in NSW and by those in the emergent Commonwealth Public Service who required a level of surveying skills commensurate with the national scale of the tasks ahead.

So when Prime Minister Deakin adopted a proactive stance on the capital site issue in the first months of 1904, it was to Scrivener and his surveyor colleague A.H.Chesterman that he turned to investigate capital site options in the southern alps and surrounding districts. Chesterman inspected ten sites around Tumut (a couple of which, incidentally, are magnificently represented in large Monte Luke photographs in the exhibition). Scrivener, on the other hand, looked at a range of sites in the Southern Monaro, among them the town of Dalgety.

During a parliamentary recess, Scrivener, District Surveyor Scrivener, was joined by the Prime Minister himself, keen to have a closer look at Bombala and Dalgety. Shortly after, Scrivener entertained two more VIP's: the former long-time Premier of Western Australia, renowned explorer and federal Government Minister John, later Sir John Forrest (whose Historic Memorials Committee portrait is in the exhibition), and former Boer War staff officer and Inspector-General of Works in the Home Affairs Department, Percy Owen.

Scrivener had begun rubbing shoulders, and sharing fires, with the nation's leadership. He made a deep impression on them at the time, and they wouldn't forget it. When the time came to survey in more detail the selected Yass-Canberra site, at the beginning of 1909, it was to Scrivener, once again, that the Labor Party looked. Deakin, Forrest and Owen so loudly sang his praises as the only possible choice that Fisher opted for him despite the recommendation coming from the other side of the political divide, and, more

relevantly, despite the genuinely impressive claims of several NSW Government surveyors, including Arthur Lloyd, who had done so much of the substantive work in the years from 1905 to 1907, as Greg Wood highlighted in his recent exhibition at the National Library, entitled 'Far Sited', and in several *NLA News* articles.

Many years later, coinciding with the opening of the Provisional Parliament House in May 1927, Col. Percy Owen OBE discussed the roots of the Canberra story in a delightful memoir for the *Sydney Morning Herald*. He recalled with fondness the 1904 excursion in which he participated—the delegation traversing the Victorian countryside, Croajingalang, Delegate, Bombala, Buckley's Crossing (the old name for Dalgety), Kiandra, Yarrangobilly Caves, Gadara and Tumbarumba. Owen vividly remembered the campfire chats, 'full of anecdote, poetry and reminiscences', as he put it. For Owen, Charley Scrivener excelled:

... a man ... eminent in his profession, and with a thorough knowledge of the region selected by the Parliament. I met him in Melbourne, and travelled in his buggy with a pair of horses ... Scrivener ... had a strong personality. He was frugal, indomitable, a martinet, but withal genial and lovable.

It's about as complete and insightful a summary of the man as we get from any source. For his part, the experience Scrivener personally gained in 1904, imposing his character on, and influencing men of considerable ability and, more important, real political power, would serve him well when the succession of political delegations to Canberra began in earnest in the first months of 1909, and continued right up to his retirement in 1915.

Acting quickly on Mahon's detailed set of instructions for the capital, in the first weeks of 1909 and with characteristic efficiency, Scrivener produced a preliminary report on the Yass-Canberra site by 25 February. He remained 'lukewarm' about the extended site as a whole, but, as he wrote, he 'regarded the Canberra site as the best that can be obtained ... being prominently situated and yet sheltered, while facilities are afforded for storing water for

ornamental purposes at a reasonable cost'. Furthermore, a capital in Canberra, he wrote, 'would probably lie in an amphitheatre of hills with an outlook towards the north and north-east ... ' Walter Burley Griffin enthusiasts in the audience might now recognise the American's source for his much-quoted remark about Canberra's mountain panorama. The first page of Scrivener's hand-written preliminary report, I should add, is in the exhibition courtesy of the National Archives.

When establishing the first surveyors' camp in Canberra, in February 1909, Scrivener did so in consultation with Minister Mahon and Colonel David Miller. Miller, like Owen, served in the Boer War, as an officer with the Imperial Bushman's Contingent. He was appointed as the first secretary of the Commonwealth Department of Home Affairs in November 1901, and would remain in that position for over a decade, until he was appointed as the first Administrator of the new Federal Capital Territory in later 1912. Miller was an intimidating government bureaucrat and an uncompromising adversary. Surveyor Arthur Percival, about whom we are about to hear more, remembered Miller in two words: 'gruff and frightening'. This seems to have been the common consensus.

Scrivener, Mahon and Miller chose the first surveyor camp on Kurrajong Hill (now Capital Hill) on 2 March 1909. A matter of days later, the Federal City 'Members' Camp' was established nearby as a base for the first visiting delegation of federal politicians. Boer War veteran Col. Miller, it appears, ran the camp with rigid discipline, one of the seventeen participating parliamentarians, NSW MHR Jimmy Catts, laconically observing at the time that 'if there is one special feature about the camp, it is its strictly business appearance and military setting'. The camp is recreated for us in a series of postcard photographs by the Yass printing firm of Howard and Shearsby, all of which are reproduced in the exhibition.

If the politicians were whipped into line by the frightening Miller, they could at least gain some pleasure of from the meals produced by their imported parliamentary chef. Life was not nearly as salubrious for Scrivener's mob. They, like their leader, worked sixteen hours a day, every day, for two solid months to assist in the production of what is usually referred to as Scrivener's *Second Report*, dated 22 May 1909. It hardly surprising that a Board appointed by Minister Mahon in March 1909 fully endorsed the controversial *Report* because the Board of mates comprised Col Miller, Lt Col Owen (by then the Director-General of Public Works), Col Walter Liberty Vernon, the NSW Government Architect and yet another Boer war vet, and ... Scrivener himself. Conflict of interest protocols, it seems, were not a strong suit in the first years of the Commonwealth Public service. Scrivener had a veritable army of supporters for his work. A clique of colonels.

Time does not allow me to cover the issues raised by the *Report* in any detail. However, it is clear from Scrivener's correspondence that the issue of water storage always loomed largest for him. In the *Second Report* he rejected the water flow estimates for the Cotter River supplied by the authoritative voice of NSW Chief Engineer for Harbours and Water Supply, E. M. De Burgh. A robust correspondence resulted between the NSW and Commonwealth Governments, as bureaucrats from both sides poured over the water catchment statistics of the Canberra site in minute detail. This exchange is given an extra layer of complexity when you factor in that the government of Alfred Deakin took over from Fisher right in the middle of it, in May 1909; and a further layer of complexity when, despite the *Seat of Government Act (1908)*, and despite the busy, focussed activity of Scrivener's team, throughout the second half of the same year the anti-Canberra lobby in the Federal Parliament, made up mostly of Victorian politicians sensing for the first time that the capital might actually leave their State, mischievously expanded their militant efforts to quash the *Seat of Government Act*.

Yet despite the chronic insularity of much parliamentary discussion, Prime Minister Deakin and his Home Affairs Minister, George Fuller, were committed

to establishing the first infrastructure of the chosen capital site. Hence, on 6 December 1909, with the NSW land package having finally been gifted to the Commonwealth, Minister Fuller alerted his leader to a pressing practical issue: the need now to have 'territorial boundaries ... accurately determined on the ground'. The acquisition of land in private hands, by the Commonwealth, must proceed in a dignified way. Both Fuller and Deakin refused to countenance anyone but Scrivener for the delicate job ahead. Certainty and precision were essential, for all parties.

Fuller appointed Scrivener as the first Director of Commonwealth Lands and Surveys. For his part, Scrivener was set on getting exactly the men he wanted, and he succeeded: quality individuals such as Percy Sheaffe, who started the border survey at Mt Coree in wintry June 1910, worked on it accompanied by his wife for the next three years under exacting conditions, and eventually became a Chief Surveyor; 'Happy' Harry Mouat, the man who rarely smiled, but who worked assiduously on the border survey from October 1913 to May 1915, and who would later become the Commonwealth Property Officer; 'Fast' Freddie Johnston, proud owner of one of the FCT's first cars (a Model T Ford), who surveyed the border for three months in 1915, and who eventually became the Commonwealth's fourth Surveyor-General; and Arthur Percival, who mostly worked on the technical aspects of the city's survey, and who was appointed to the role of Commonwealth Surveyor-General in 1929, and served for a lengthy fifteen years in that position.

On the 8th January 1910, the Federal Capital Survey Camp was established on the site of the 1909 camp, Sheaffe and Percival joining Scrivener's team on 19 January. The sum of technical tasks confronting the relatively small group has been well-summarised by Scrivener biographer Terry Birtles: 'a triangulation survey of the territory; preparation of the close contour survey; demarcation of the territory boundary and water catchments ... ; engineering surveys for water supply, sewerage pipes, roads, the railway and bridges; confirmation of cadastral boundaries of privately owned land to be acquired; and pegging out land boundaries at Jervis Bay'.

Progress was swift. By the end of February, nearly 24 miles in the transverse of the survey was completed, 94 miles of contours had been defined, a meteorological station established and instruments installed to gauge creek flow and evaporation. In March, 17 tons of building material had arrived for construction of temporary premises. The first wave of essential Commonwealth infrastructure was off to a flyer in the hands of a group united by common purpose and collectively devoted to the work in hand.

We have an excellent feel for this Scrivener working camp courtesy of several sources: the classic photographs taken by Claude Vautin, the 'Government Photographer' as Scrivener called him, who so elegantly captured the men, their wives and partners, and the times, in a number of black-and-whites both posed and not (virtually all of them will be on show in the exhibition); the letters to his children of prolific letter writer and caring father Charley Scrivener, particularly to his daughter Ethel; the diaries of Arthur Percival, still in the possession of the family, two of them on display in the exhibition, and all of them presently being transcribed by Percival's grandson, Geoff Pryor, former *Canberra Times* cartoonist extraordinaire; and, of course, the plethora of government correspondence and Hansard transcripts readily available. Percy Owen would recall that '*The camp in time became comfortable and was always a joy. The party was not big—Scrivener, his assistants, the cook and chainmen, and for a while a full-grown black snake under the floor of Scrivener's tent. That snake did not survive long*'.

The bush humour alive in the camp undoubtedly contributed to its smooth running and *esprit de corps*. There is a terrific photo in the exhibition of two visiting Senators to the camp, J.J.Long and Arthur Rae, hamming it up for the cameras as they mock shape up, Marquis of Queensbury-style, to demonstrate their conflicting views on the capital site's merits. Also on show is an enlarged copy of the front page of the then *Daily Telegraph* broadsheet, featuring an article entitled: 'With the Senators at the Yass-Canberra Federal Capital Site'. We learn that one delegation of Senators embarked on a two-day tour of

inspection of the Canberra site on 26 and 27 July 1910. The group included, as the Sydney paper put it, a few 'Victorian malcontents' determined still to sink the Canberra site if possible. The majority of those present, however, were in agreement with one of their fellow-Senators when he declared to an accompanying journalist that 'to resurrect [the capital site] question [now] ... is nothing short of political body-snatching'.

This same group had a comic mishap on the second day of their visit, lapped up by the media, when NSW Senator Alan McDougall, being rowed by the ever-vigilant Scrivener across a particularly frisky Cotter River, found himself, along with the experienced and wilderness-wise Commonwealth Director of Lands and Surveys, in, not on, the Cotter. Months later, when Senator McDougall presented his report of the Canberra visit to the Senate on the 15th September, he admitted to being 'greatly surprised at the roaring stream which I saw at the junction of the Cotter and the Murrumbidgee', and then, more surprised, he found himself actually testing at first-hand 'the quality of [said] water'. The *Daily Telegraph* reporter noted in passing that Mr Scrivener 'gave a fine example of a backward somersault into the water' and that Senator McDougall, once he had arrived at the bank, and was swathed in a 'huge rug ... provided a fine impersonation of a Maori chief'. The *Daily Telegraph* pictures that accompanied the article effectively caught the spirit of proceedings, while the hirsute appearance of virtually all the Senators in the sizeable group photograph would surely have had each and every one of them highly competitive in our, thankfully concluded, 2010 'Movember'.

But it was not all smiles, humour and hi-jinx. Far from it. At various points in his diaries, Arthur Percival refers to 'grafti[ing] hard'. Mr Surveyor Percival enjoyed a punt, a smoke and a quiet, reflective whisky, but such methods of relaxation were thinly interspersed between exhausting, non-stop toil—in Percival's case, for example, we know that a standard day was 7.30am to 6.15pm, then 8pm to 11.00pm, every day. This surely was devotion above and beyond.

On the border, Sheaffe worked just as hard, in even more demanding terrain. ‘In places’, he later wrote, ‘the country encountered was so rough that the party carrying out the survey had to crawl on all fours, measure over precipices, and descend in one mile about 1550 feet’. Two of Sheaffe’s original Field Books on display in the exhibition confirm the validity of this memory down to the last inch. And yet this didn’t stop Sheaffe reminiscing in later age that the national capital chapter of his life was his most treasured, and certainly his most significant achievement. In his article on Canberra, entitled ‘Selection and Design’, that appeared in a *Sydney Morning Herald* supplement to mark the opening of the Provisional Parliament in 1927, Sheaffe probably voiced the sentiments of all his surveyor colleagues who worked on the national capital in the first years, when he wrote sagely:

As the home reflects the occupier, so Canberra should reflect the Australian people. Its growth is our responsibility. Great as the responsibility is, let us resolve with grit and determination that the best traditions of our race should be upheld.

Sentiments such as these relentlessly drove a generation of professional men in the ‘nation-building’ years in Canberra prior to the Great War, not only the surveyors, but those with whom they regularly engaged on big, national projects. Griffith Taylor was one. A leading twentieth-century, internationally recognised geographer, celebrated Antarctic explorer, protégé of the legendary Professor T.W. Edgeworth David, mate of the even more legendary Douglas Mawson, and for our purposes today, brilliant if eccentric physiographic surveyor of the FCT, Thomas Griffith Taylor had a lifelong interest in his nation’s capital city. He took to heart the life-lessons inculcated into him by his mentor, Prof. David: namely, saturate yourself with as much learning and specialist training as you can get, and put those skills, when ready, to work for the nation. So when the call went out from Melbourne in the first years of the new century for physiographic surveyors to study the meteorological and physiographical qualities of the competing capital sites, Taylor’s hand was first in the air.

He wrote his first scholarly article on Canberra in 1907, and followed this up with superb and extremely detailed analyses of Canberra's geography in 1910, and again in 1914.

Taylor's work had seamless connections with the brand new Commonwealth Bureau of Meteorology. Throughout 1906, the House of Representatives in particular witnessed a series of high-quality debates on meteorology and weather. Andrew Fisher, Joseph Cook, John Forrest and James Hier McColl were just a few of the parliamentarians who took an intense interest in the subject and its application to a future capital, ahead of the formation of the Bureau. This interest was the catalyst for the appointment of Henry Ambrose Hunt on 1 January 1907 as the first Commonwealth Meteorologist. Griffith Taylor and E.T. Quayle would, a few years later, collaborate with Hunt to produce a landmark volume, *The Climate and Weather of Australia*, published in our big year, 1913, the first Australian textbook on what one contemporary South Australian newspaper memorably described as 'the romance of the upper air'.

Hunt, Taylor and Scrivener saw a great deal of Pietro Baracchi in Canberra during the pre-War years because Baracchi, the Victorian Government Astronomer, was called in to manage the siting and erection of the James Oddie Telescope at Mt Stromlo. Baracchi and Scrivener chose the location in March 1911, and by September the road to Stromlo was completed and the telescope in place—enabling 'the meridian to which all surveys would be referred to be determined', courtesy of a fixed point on the summit. King O'Malley, a serial dreamer of ambitious dreams, the Minister for Home Affairs in the Fisher Government from 1910 to 1913, a man bent on making Canberra, as he creatively put it, 'hum', O'Malley was one step closer to achieving his national infrastructure goal of putting 'the Astronomical, Meteorological, and Solar-Physical Observatories ... in one single compound', in the nation's capital.

When Charles Scrivener retired as the first Commonwealth Director of Lands and Surveys, the entire surveying and professional fraternity in Canberra turned out to bid him farewell—actually, there were apparently a number of Melba-like farewells. Three Claude Vautin photos in the exhibition capture the mood nicely. On 28th May of the same year, ‘Happy’ Harry Mouat and ‘Fast’ Freddie Johnston met at Mouat’s R87 corner mark in the deep south of the FCT to finally complete the five-year survey. It was the end of an era. Just seven weeks earlier, the diggers of the 1st AIF ran up the steep cliffs of the Gallipoli Peninsula and headlong into Turkish soldiers fighting for life and country. Australia would be forever changed as a result.

Fred Johnston, by then a retired Commonwealth Surveyor-General, wrote a book published in the early 1960s called *Knights and Theodolites*, an account of his family’s surveying dynasty in Western Australia. It’s a pretty dour read, but the Foreword catches the attention, where a surveying colleague of Johnston’s, Robert Fitzgerald, writes rather nostalgically:

We of the Surveying Fraternity are conscious of a long history behind us, of which, however, most of us know next to nothing ... no-one outside our little freemasonry will ever really understand ...

In the exhibition to be opened here in the Parliament in a fortnight, the ‘little freemasonry’ gets a Centenary hour or two in the sun. It is richly deserved. Charley Scrivener, and the many prodigiously talented men that he hired, left an indelible mark on the city, and the Australian Capital Territory containing it.
