Obituary Fred Henry George Gruen 1921–1997

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Professor Fred Gruen AO died on 29 October 1997, only weeks after his son Nicholas had accepted the Economic Society of Australia's highest honour, its Distinguished Fellowship award, on his father's behalf. Fred's acceptance speech (read by Nicholas to the Hobart meeting of the Society in September 1997) reviewed a career as an economist spanning half a century, neatly subdivided into 25 years as an agricultural economist, followed by a similar span as a general policy economist.

For three reasons, our tribute here to Fred can be brief:

- 1. The editors of the respective journals of the Economic Society of Australia and the Australian Agricultural and Resource Economics Society have agreed on a division of labour between the *Economic Record* and the *Australian Journal of Agricultural and Resource Economics*. This means that here the focus is to be on Fred's influence and role as an *agricultural* economist.
- 2. In a previously unpublished paper written for the Twenty-Eighth Conference of the Australian Agricultural Economics Society, Fred himself left us a testament about how he saw himself in this role. This paper is reproduced in full in this issue (pp. 177–89).
- 3. Not surprisingly given Fred's prominence as a figure in Australian public policy (especially in the Whitlam years), several notices of his passing have appeared in the national press, including an authoritative obituary signed by Max Corden. These sources (which are cited at the end of this obituary) provide a biographical overview of Fred's professional work.

We do not see our role as biographers in the broad sense. But we would like to add something to the overly modest account of his professional contributions that Fred gave in his reflections as published above.

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1. Fred Henry Gruen: the agricultural economist

Fred Gruen was an exceedingly productive agricultural economist in the fledgling years of the discipline in Australia. While his own account records some important milestones and correctly portrays his abiding concern with applying economics to real-world policy problems, it fails to give him proper credit for his contributions to the literature, to the science, and to the professional formation of the (mostly) younger people who were to become leaders in the discipline (and in economics more generally). As we both qualify as having been strongly influenced by Fred in the early stages of our respective careers, we conclude this obituary with some personal recollections of him.

According to Dillon and McFarlane's (1967) bibliography of Australasian agricultural economics, over the period 1947–60, Fred was the author of some 50 published articles, and joint author of about half a dozen more. Many of these were reports of empirical investigations, while others were articles written for a non-technical audience. While it is true that virtually all of this prodigious output was published by the NSW Department of Agriculture (his employer), most of it was well above the standards to be expected of a 'house journal'; indeed, the *Review of Marketing and Agricultural Economics* from the late 1940s onward set an enviable professional standard that achieved international recognition and attracted many papers from academic authors.

Farm surveys were used as serious research tools by Gruen and his associates. At the end of each farm survey (and Fred was involved in many in the 1950s), they wrote up and published a disciplined account of their findings that took account of existing literature, here and overseas, on the problem under focus. With the NSW Department of Agriculture's DMAE (Division of Marketing and Agricultural Economics) predating the formation of the (Federal) Bureau of Agricultural Economics (BAE), this set a precedent for quality which eventually became the norm for this kind of work.

In the early days of quantitative economics, practitioners 'did it hard'. The Marchant, Monroe and Frieden electro-mechanical calculators then available could, in principle, be used for serious number crunching, but not without enormous effort — one thought twice about attempting a regression with even two right-hand variables. Fred was quick to understand how different things could be when digital computing became available.

In the 1950s he became very interested in the use of superphosphate and in pasture improvement, writing a series of eight papers on this topic which contained a good deal of financial information gleaned from farm surveys. In some of these papers — see especially Gruen (1959) — Fred set about using the University of Sydney's recently acquired *Silliac* digital mainframe

to solve for the unique real root of a polynomial of degree 50 which would give the internal rate of return on investment in pasture improvement — an unimaginable numerical task under the previous technological regime. This method was applied to detailed hypothetical budgets stretching over 50 years in five different regions, and included aerial top-dressing (then still novel) as a strategy for improving pastures. He found rates ranging from about 6 to about 25 per cent per year, depending on the region and upon assumptions about extra labour requirements. For another article on the same theme (Gruen 1960a), he received the first prize ever awarded by the Economic Society¹ for the best article appearing in the *Economic Record*.

Although his abiding interest was in applications, Fred Gruen was prepared to work hard on theoretical problems. In an article published in the *Journal of Farm Economics* (Gruen 1961) he posed the question: Could technological 'improvement' in agriculture lead to lower farm incomes, and if so, under what circumstances? With unfavourable demand conditions, the answer is 'yes', as he explained for the lay reader in an article in the *Australian Financial Review* (Gruen 1960b).

The USDA forecasting project led by Fred at Monash in the mid-1960s (and mentioned by him in his reflections published above) was to lead to the use of transformation frontiers becoming a standard tool in economy-wide models that incorporate a disaggregated treatment of agriculture. In these models changes in the price ratios among the different farm products lead to changes in the product mix without anything necessarily happening on the inputs side. It was the empirical implementation of the CET (constant-elasticity-of-transformation) multi-product technology for the estimation of supply in the different broad-acre zones recognised in the BAE's surveys (Powell and Gruen 1968) that led to the adoption of a similar approach by the Impact Project (Vincent, Dixon and Powell 1980) in the construction of the ORANI model of the Australian economy (Dixon, Parmenter, Sutton and Vincent 1982; Dixon, Parmenter, Powell and Vincent 1983).²

¹ Then the Economic Society of Australia and New Zealand.

² There were other contributions by Fred to the Impact Project. In the early 1970s he jointly led an ARC-funded project with one of us (Powell) which was designed to give H. David Evans the chance to extend his general equilibrium work (Evans 1972) on the effects of the Australian tariff. Although the project was curtailed when Evans left the project (and Australia) in 1973, it did important groundwork for the Impact Project's launch in 1975. At the ANU as Director of the Centre for Economic Policy Research, Fred gave the Impact Project both moral and financial support during a period when the then Secretary of the Treasury (John Stone) did his best to sink it.

2. FHG the man

Turning now to our recollections of Fred the person, the intellectual, the mentor and friend, we recall some of the impacts that he had on our lives.

John Dillon: 'As a timid raw graduate starting my first job in 1952, I shared an office with Fred at the DMAE. Never before had I met an intellectual. I was way out of my depth but was treated ever so kindly by him (though once when I was filling in at lunch-time bridge he did tell me that I was "either a genius or an idiot"). Every day I was agog listening to discussions between him and, in particular, Alan Lloyd, Ross Parish, the late John Rutherford, George McFarlane and Harold Levien, the editor of a then newly established journal of political and social analysis, Voice, which Fred strongly supported.³ Only once did I see him get upset. That was at the end of a lengthy strenuous debate between him and Ross Parish on the merits of some book when Fred asked. "Have you read the book?" and Ross replied, "No, but I've seen a review." And, as if it were vesterday, I remember him refusing proferred payment from a Dutch businessman for whom he had provided information, saying: "It's part of my job in the Department." Aided and abetted by the protective environment provided by Charlie King, the Division's Chief, and Peter Druce, Deputy Chief, the DMAE during the 1950s was an exhilarating place to work — "A special place, . . . an academic nest within a government service organization" as George McFarlane (1993, chapter IV) describes it.

'Fred was the unit's intellectual leader and inspiration. He brought to our work (i.e., to our self-chosen research agendas), as did many of his *Dunera* colleagues elsewhere, a dose of Continental European intellectualism with its emphasis on questioning and a critical attitude that was catalytic in its influence and, I believe, did much to ensure the strength of the agricultural economics profession's development in Australia. Reflecting on my own professional career, I owe Fred more than I can say and am proud to recognise him as a major good influence in my life. Indeed, I've never approached a major matter without thinking: "What might Fred do? How would he tackle this?".'

³ Voice (the first issue of which was published in December 1951 as Aim) was an independent monthly published in Sydney from April 1952 to August 1956. It had a peak circulation of about 6,000, and was supported strongly by the late H.C. Coombs. The editorial committee consisted of Harold Levien (founder and editor), Fred Gruen, Alan Lloyd and Alan Manning (a wheat farmer). [We are grateful to Mr Levien for these details.] It is certain that Fred was a regular unsigned contributor to Voice.

Alan Powell: 'Fred was my mentor at two crucial stages of my career: first, during the late 1950s when I was still an undergraduate, he stimulated my interest in quantitative microeconomics at the University of Sydney's Agriculture School where he did some adjunct teaching; then in 1965 when he recruited me as a finishing Chicago post-doc to Monash University. When I arrived in Melbourne after a particularly harrowing boat trip from Europe which had left my pregnant wife in hospital in Aden in the middle of a civil war, Fred shared with me a written account of his experiences aboard the Dunera, alongside which my own trials as a seafarer faded into insignificance.⁴

'As with John Dillon, Fred's cosmopolitan culture also swept me off my feet. He was generous in inviting junior colleagues and students to restaurant meals, and I owe my first experiences of Indonesian food (which was to become an important component of my diet) and of vichyssoise to him.

'After he moved back to Canberra, Fred continued to quietly encourage me, as he had done at Monash. I am sure that my rapid promotion there was in no small measure due to his support. From Canberra he supported my early attempts in the mid-1970s to get the Impact Project going, and continued to support it through difficult times.

'I saw Fred shortly before his operation in 1996 and after his recuperation. His gentleness, warmth and humour shone through then, as always. These characteristics will long be remembered by those who mourn him, both inside the agricultural economics profession and at large.'

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⁴The story of the deportation in 1940 from Britain to Australia of (technically enemy alien) European refugees aboard the transport vessel *Dunera* is told in Pearl (1983); Bartop (ed.) (1990) is a documentary resource book on the *Dunera* affair, produced in association with the Jewish Museum of Australia.

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