

## KJ Arrow (23 April 1921 – 21 February 2017): A personal tribute

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Ken Arrow, regarded by legions as the greatest economist of the second half of the 20th century, died on 21 February 2017, aged 95. I could not presume to write in detail about his economics, not only because I am not competent to do so but also because Vela Velupillai has written an authoritative evaluation of Ken's contributions for *Nature* and Richard Holden has written a splendid tribute for the *Australian Financial Review*. Richard's essay includes helpful guides to Ken's principal contributions. I would like, though, to place on record my memories of episodes from our long friendship which dates from September 1963.

Ken and I were on leave in Cambridge in 1963–1964, he on leave from Stanford as a Visiting Fellow at Churchill, I on study leave from Adelaide. We subsequently met at Stanford and Cambridge over the years and in recent years have exchanged emails on mutual interests and issues.

In 1963–1964, we spent 1–2 hours of week days in Full Term in the Faculty tea room chatting over morning coffee and afternoon tea. We rarely talked about economics; Ken was a Renaissance person, a polymath, interested in and most knowledgeable about literature, politics, other disciplines and also people. (He never got on top of cricket – I once batted for the whole afternoon on Churchill's cricket ground while Ken walked his two tinies around the boundary. He subsequently told me he had not noticed that a cricket match was being played, let alone that I was performing heroics in the middle!) If we did discuss economics, it was usually because I asked for his help to get on top of some trivial (to him) puzzle I was then working on. On one occasion, though, he challenged a result of mine based on an arithmetic progression. I was able to convince him that I was right – is this a unique event?

Ken was a 'compleat' democrat in his contacts with people. I often introduced visitors or graduate students to him in the tea room. He gave them his full attention, asking them about their work and unobtrusively making suggestions. He never looked over their shoulders to look for an important heavy to talk to, in contrast to some of the others to whom I introduced people.

What most impressed me was Ken's basic humanity, sympathy, kindness, compassion and warmth, together with his well thought out, balanced yet progressive political views. In 1963, Ken was a dove on Vietnam, while Bob Solow, who was also on leave in Cambridge as the 1963–1964 Alfred Marshall Lecturer in Economics, was a hawk – as were many of the Cambridge Faculty too. (Bob changed his mind in 1965.) I was horrified by this most immoral of wars and especially Australia's role in it as one of only two respectable US allies. So to have Ken on the same side was reassuring, to say the least. I subsequently found out that Ken was also a 'cautious' socialist. His April 1978 lecture to the Third Lionel Trilling Seminar at Columbia is entitled 'A cautious case for Socialism'. It is a wonderfully thought out autobiographical essay, containing his original and then developing views and setting out the economic and philosophical reasons for his stance. The ending is typical Ken:

It would be a pleasure to end ... with a rousing affirmation one way or the other. But as TS Eliot told us, this is not 'how the world will end'. Experiment *is* perilous, but it is not given to us to refrain from the attempt. (p. 480; emphasis in original)

I was not surprised that Ken had these views for at the end of 1963 he gave a talk to the 'secret seminar'<sup>1</sup> from the proofs of his classic article, 'Uncertainty and the welfare economics of medical care', published in the *AER (American Economic Review)* in December 1963. The article is built around the concept of moral hazard and is a most persuasive argument in support of the ideals of the British National Health Service (NHS). (I understood it was also influential when Obama Care was being designed and implemented.) I gave lectures at Cambridge in 1964 and 1965 on the NHS. Ken's article was the core source of the approach I took and the criticisms I made of other alternative approaches to the economics of medical care.

On 21 March 2011, I emailed Ken that I had

just received the Feb. 2011 *AER* with the centenary symposium in it. I was delighted to see that your 1963 paper on 'Uncertainty and the welfare economics of medical care' was in the top 20. When I lectured on social economics to Part I at Cambridge in the 1960s, your article was my starting point in defending the NHS and criticising IEA (Institute for Economic Affairs) pamphlets for using the market in the provision of medical care. You won't remember but I heard you present the paper from its proofs to the secret seminar in 1963 in a room in King's. To my shame (I had been taken to dinner by Richard Kahn at the Arts Theatre Restaurant beforehand and we had a lot to eat and drink) I fell asleep during your talk, as did Joan Robinson. We were both sitting on a couch not far from where you presented the paper. There was a warm fire and a very warm atmosphere.

One of the most daunting experiences I have ever had was, at Joan Robinson's request, to sit in on the exchanges she was having with Ken and Bob and also Frank Hahn on capital and growth theory. I was supposed to ensure fair play, but the protagonists were so quick and cerebral that, for most of the time, my absorption was akin to that of a stuffed mullet's. It was only when I had to read the huge literature on the issues in order to write the 1969 survey article 'Some Cambridge controversies in the theory of capital' that Mark Perlman had commissioned me to do for the newly formed *JEL (Journal of Economic Literature*) that I began to get a glimmering of what the discussions had been about.

Ken and his wife Selma were devoted to one another. They adopted two children when they were in their 40s. In 1965, I was at a party at the Arrows' home in California for the annual summer meeting of mathematical economists at Stanford. Mrs Arrow dragged me away from the festivities. One of the children had a fever, she was extremely worried and thought that I, then a father of  $2^{2/3}$  children, would be able to advise on what to do – such trusting faith!

My great friend Bob Wallace was on leave from Adelaide in Stanford in 1965. Ken told him that the boys in his classes at secondary school were all geniuses except one – he became a millionaire.

Ken and I differed in our evaluations of Joan Robinson. Ken had written a favourable essay in one of George Feiwel's volumes about Joan after she died in 1983, but he had been rightly very upset when Joan was unforgivably rude to Moses Abramovitz, something Joan at times was prone to be. In an email exchange (2 November 2010), I urged Ken to have a look at Prue Kerr's and my 2009 intellectual biography of Joan. Ken's response was typical:

As you know, I think, 'The Accumulation of Capital' was very ingenious and required a high order of intelligence, but was, nevertheless totally misdirected. However, we probably differ on that matter. She certainly had admirers, I had dinner two years ago, in Tokyo, with my old friend, Hirofumi Uzawa, and he was full of admiration for Joan. So I have to agree that people, like you and Hiro, whose opinions I respect, have different views than mine, and this must give me a degree of uncertainly in my assessment of her. I will certainly consult your and Kerr's book. (3 November 2010)

I have never got on top of game theory, but I had been comforted by Abu Rizvi's splendid sceptical article, 'Game theory to the rescue?' (Rizvi, 1994) and felt that I need not fret too much. However, after I read Ken's essay on John Harsanyi's contributions (Arrow, 2001), I am now not so sure!

One of Ken's projects in 1963–1964 was writing *General Competitive Analysis* with Frank Hahn. I remember hearing them say that although at first they thought stability problems could be solved just as uniqueness ones had been, they had come to realise this was not to be, a typical example of their intellectual honesty.

I was very sorry to have missed seeing Ken, as it now transpires, for the last time, at the memorial for Frank in Churchill in 2011 – I had a prior commitment in London on the day. I was delighted that he liked my tribute to Frank (Harcourt, 2013, 2016), e-mailing (10 November 2013) that it was 'very well put and very discerning'. I was honoured that he endorsed a selection of my essays published in 1992 (Sardoni, 1992) and that he wrote the Foreword to the third of my *Festschrift* volumes, which was edited by Claudio Sardoni and Peter Kriesler and published by Routledge in 1999. In it, he wrote a discerning account of the seminar that Stan Wong gave at Cambridge on his rational reconstruction critique of Paul Samuelson's revealed preference theory (Arrow, 1999: viii).

When Frank Ramsey died at the age of 26, Joan Robinson told me it was as if a light had gone out in Cambridge. Ken's death has had, I feel sure, a similar effect on his huge number of admiring friends. But his deep insights and contributions, backed up by precise logic and heavy mathematics, will continue to illuminate generations of economists to come, as will, I sincerely hope, his humanitarian ideals. It was an extraordinary privilege to have known him.

## Note

1. The seminar run by Richard Kahn and Joan Robinson to which you had to be invited and which excluded some of the Cambridge Faculty who were not thought to follow the Cambridge Keynesian tradition.

## References

- Arrow KJ (1963) Uncertainty and the welfare economics of medical care. American Economic Review 53(5): 941–973.
- Arrow KJ (1978) A cautious case for Socialism. Dissent Fall 25: 472-482.
- Arrow KJ (1999) Foreword. In: Sardoni C and Kriesler P (eds) Keynes, Post-Keynesianism and Political Economy: Essays in Honour of Geoff Harcourt, vol. 3. London; New York: Routledge, pp. xvii-xviii.

Arrow KJ (2001) John C Harsanyi 1920–2000. Economic Journal 111: F747–F752.

Arrow KJ and Hahn FH (1971) General Competitive Analysis. Amsterdam: North-Holland,

- Harcourt GC (1969) Some Cambridge controversies in the theory of capital. *Journal of Economic Literature* 7(2): 369–405.
- Harcourt GC (2013) Frank Hahn 1920–2013: a tribute. Cambridge Faculty of Economics Newsletter, Autumn, 9. In: Halevi J, Harcourt GC, Kriesler P, et al. (eds) Post-Keynesian Essays from Down Under. Volume III: Essays on Ethics, Social Justice and Economics: Theory and Policy in an Historical Context. Basingstoke: Palgrave Macmillan, pp. 273–275.
- Holden R (2017) Kenneth Arrow: an immortal among economists. *Australian Financial Review*, 24 February, p. 37.

Rizvi SAT (1994) Game theory to the rescue? Contribution to Political Economy 13(1): 1–28.

- Sardoni C (ed.) (1992) On Political Economists and Modern Political Economy. Selected Essays of G.C. Harcourt. London: Routledge.
- Velupillai K (2017) Kenneth J Arrow (23rd April, 1921–21st February, 2017). *Nature* 543 (30 March): 624.

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