



Above: Mr Turnbull and Mr Netanyahu make a triumphant entry at The Central Synagogue in Bondi Junction.
PHOTOS: JAMES BRICKWOOD



Roza Simota and Solomon Lew, left; Politicians Michael Danby MP for Melbourne Ports, Energy Josh Frydenberg, Tony Abbott and Margie Abbott, right. Below: Mr Netanyahu speaks.



By the way the Golan will never go back to Syria!

Benjamin Netanyahu

The Israeli Prime Minister, on his third visit to Australia but first in an official capacity, demonstrated the political charisma and retail political nous that helped him win four terms as the state's leader. He leaned easily on the podium, told jokes and stories. His speech was a mixture of high-handed rhetoric and lower-handed political red meat for his supporters. "I want you to walk the streets of the old city in Jerusalem and hike in the Golan – by the way the Golan will never go back to

Syria!" Mr Netanyahu declared, to huge applause. "Israel is a beacon of freedom, of tolerance, of purpose in a very dark expanse that I hope, and I believe, as many Arab leaders understand, that Israel is not their enemy but an indispensable ally in warding off the barbarism that threatens all of us." Mr Turnbull, meanwhile, put the crowd in no doubt about his views on the UN and Israel. He didn't need to even mention the opposition's conniptions over the Palestinians to draw a contrast with a Labor Party unsure about its policy towards Israel's neighbours and facing political pressure in a number of marginal ALP seats with proportionally high Muslim populations. "My government will not support, any more than the government of John Howard or the government of Tony Abbott would, a resolution so one-sided, attributing fault only to the state of Israel, that has no contribution to make to the peace process," he said. "That was an unfortunate resolution, we regret it and we dissociated ourselves from it in our public statements and right here in this shul [synagogue]."

October 2017 marks the 100th anniversary of the Battle of Beersheba during World War I, where Australian light horsemen broke through Turkish defences, taking the garrison town and in doing so effectively paved the way for the fledgling Zionist movement in what became British Palestine. Mr Turnbull revealed he would be travelling to Jerusalem to take part in centenary memorials. For those who make the trip, Mr Netanyahu promised, "we'll get a horse for every one of you".

THE GREATEST EVER

Obituary Kenneth Arrow, economist, 1921-2017



Kenneth Arrow made arguably the 20th century's second-greatest intellectual contribution.

Earlier this week Professor Kenneth Arrow, Nobel Laureate and Stanford faculty member, passed away. He was widely, and rightly, regarded as the greatest economist of all time. And although he will be missed, his intellectual legacy is perhaps more relevant today than ever before.

Arrow made numerous contributions, but two stand out.

In his doctoral dissertation at Columbia University, Arrow grappled with the issue of how corporate boards of directors might make decisions. As he struggled to see how they could turn individual preferences into a coherent collective choice he discovered a remarkable fact: there is no principled way to do so – in any setting.

The genesis of his logic dates back to the 18th century French mathematician the Marquis de Condorcet. Condorcet considered three people (Ms 1, Ms 2 and Ms 3) and three alternatives (A, B and C). Suppose Ms 1 likes A more than B and B more than C. Ms 2, however, likes B more than C and C more than A. Finally, Ms 3 likes C more than A and A more than B.

Suppose we have a majority vote to decide which option to pick. If we pit A versus B then two of the three people (Ms 1 and Ms 3) prefer A. If we pit B versus C then two of the three people (Ms 1 and Ms 2) prefer B. And if we pit A versus C then two of the people (Ms 2 and Ms 3) prefer C. So our mini society prefers A to B, B to C, and C to A. Whoops!

This "cycling" seems very undesirable. Worse still, if we have a runoff (say A versus B and then the winner versus C), the order of the voting matters. With this paradox, Condorcet showed that some voting rules seem to be problematic.

Arrow, however, went much further. He stipulated that any rule that aggregated individual choices into a collective (or "social") choice should satisfy four principles or axioms. Roughly put: (i) no person's choice should exclusively determine the social choice; (ii) the social choice should account for all possible individual preferences; (iii) in comparing any two alternatives another option should not matter; and (iv) if all individuals rank one option above another the social ordering agrees.

Hard to disagree with any of those. Yet, in an epoch-making monograph published in 1951, Arrow proved that it is impossible to aggregate individual preferences into a social choice without violating at least one of those four axioms. No rule – not assigning points to choices, not Australia's "Hare-Clarke" system, nothing you can think of – will do the trick.

This result, known as 'Arrow's Impossibility Theorem' has had breathtakingly large implications for democratic systems. Any system has at least one major problem. We have to give up on something important to make collective decisions. Political scientists and economists have been left in a tail-spin – trying to figure out which is the least bad thing to give up on, why, and when.

It is no overstatement to say this is probably the second-greatest intellectual contribution of the 20th century – behind Einstein's theory of General Relativity. But Arrow didn't stop there.

The work for which he received the Nobel

Prize in Economic Sciences in 1972 (the youngest ever recipient at age 51) concerned another age-old problem. Arrow, along with French economist Gerard Debreu, provided an elegant and comprehensive mathematical proof of Adam Smith's notion that competitive markets lead to an efficient allocation of resources.

As with all economic theories, the conclusion is true under a set of assumptions. The importance of the mathematical rigour, though, is that one can't question the logic – it is inescapable – only the assumptions.

Two of the most important assumptions behind Arrow's proof of what became known as the "First Fundamental Theorem of Welfare Economics" are that markets are complete and that all parties have symmetric information. In practice, of course, neither of these two things hold.

But by highlighting the way in which these assumptions are crucial, it focused the attention of economists on settings in which they are violated. Pollution is a notable example. Without a market for, say, carbon-dioxide emissions, the overall economy will not deliver an efficient allocation of resources. In particular, there will be too much carbon emitted. A carbon tax (or emissions trading scheme) creates this missing market, and rescues Adam Smith's invisible hand.

Markets need help, too, when it comes to information asymmetries. As fellow Nobel Laureate George Akerlof subsequently showed, if one party knows more than another (perhaps about their health, or the quality of the car they wish to sell) then markets can break down. Modern health systems, such as "lifetime community rating" in Australia or "Obama-Romney care" in the US are designed to address this problem.

Far from being an apologist for unfettered markets, Arrow's work showed when government interventions can help, and when they hurt. No ideology – just the immutable logic of mathematics. Our current crop of politicians would do well to read his work.

Kenneth Arrow was a social scientist the likes of which we will not see again soon. He illuminated the biggest issues of the age: voting and markets, and counted four fellow Nobel Laureates among his PhD students. He was the very model of modern social scientist.

If Ken Arrow had been a religion, I would have converted.
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