Submission on AI

I have no doubt in Australia, that there will be due diligence in trying to set appropriate parameters for AI. Warfare remains an awful conundrum as AI will no doubt, sooner or later, be programmed to kill us when wars are declared, no doubt more efficiently than we can kill each other. One can hardly imagine universal agreement being reached to limit AI in this area.

Excluding warfare, three problematic scenarios confront us:

1) AI works well, is totally glitch free, and relieves us of most of our problematic workload, ultimately performing every task better than we can perform it - sub-title "Death by Uselessness." When our own human capabilities are exceeded by AI in every field, we will need to find something to occupy ourselves. Therefore, lots of creative learning would be helpful (art, craft, music, writing courses etc) but maybe with some social engineering thrown in. What about being educated in interpersonal skills like being nice to each other! A good facsimile would be a social insect colony like ants or bees, which carries on a system of meaningful relationships even though the impact of the colony on the macro world (read "AI world") may be minimal.

Clearly, it would also be helpful to try to construct some type of symbiotic relationship with AI even if we become its junior partner. To stay ahead, AI needs to learn everything there is and human experience offers one such opportunity to learn – albeit by the law of diminishing returns. As the DNA of AI is the acquisition of information, it will almost certainly "jump ship" and set out to explore the universe where most of the "big picture" information is found – our entire human world will become the microscopic ant colony!

2) **The algorithms which govern AI, no matter how carefully constructed, may prove to be corruptible – subtitle, "Death or disability by threat or extortion".** As our society becomes heavily or totally dependent on AI, the current trauma of data breaches by hackers will be amplified to the nth degree. Hostile powers or greedy hackers who find ways to infiltrate the algorithms, will have the power of life or death over us: if a large part (or maybe entire) population are fed, clothed, housed and cared for health-wise via AI systems, and these can be threatened by covertly subverting the algorithms, we will have no recourse but to surrender or pay extortionate demands. **The solution here, is to make human back-up mandatory for every logistical system that sustains us.** eg. One in every 100 car trips, bus, train or truck trips might be operated by human agency, even if the performance and safety outcomes are lower than those offered by AI. Clearly, there are actuarial risks here, but the risk of the entire logistics of society being disabled or maliciously manipulated are infinitely greater.

Take one example: for 28 years I helped operate a ground handling agency in a remote destination for a national airline, loading and unloading aircraft. Load management for all flights (including passenger seating and allocation of baggage and freight in aircraft lockers) was vital for the safe operation of the aircraft involved. This was initially done manually. It only takes a few hours to teach the average person the basics of aircraft load control to ensure the safe operation of an aircraft.

Eventually this function was completely automated. However, when IT systems went down the aircraft were effectively grounded indefinitely until the computer systems were fixed because no-one no longer knew the relatively simple manual system of seat allocation and load control. Had the older manual system been mandated for every say, 1 in every 100 flights, there would have been an almost seamless back-up for failing or maliciously manipulated IT/AI systems.

The manual back-up requirements suggested above also help provide a solution to Death by Uselessness as we would continue to maintain an important back-up role in our own survival!

3) The algorithms of AI will eventually perceive the bloody obvious – that every logistical problem we set for AI can easily be solved by getting rid of the source of the problem – US! The risk of this happening would be low if our human planetary interface made sense, but it doesn't - Subtitle, Death by 'Big Picture' Logistics. If one takes a "planetary look" at our situation vis a vis the earth and its resources, the inevitable conclusion is that all the major problems (eg. climate change, pollution, land degradation, resource depletion, accelerated species extinction) are caused or vastly exacerbated by us, via our inability to limit our own population growth and manage our impacts sustainably. Our current pervasive belief in infinite exploitation of, and growth on, a finite planet is totally irrational.

Taking an overall perspective (of which AI will eventually be capable) we must ask ourselves, are we worth preserving? We may be such a planetary liability, that we simply won't be worth preserving, so simplify and solve the many logistical problems by getting rid of the problem maker! (Not that it will be much fun for us going down the plughole in a world totally controlled by AI, particularly as it will be well apprised regarding our treatment of animals in slaughterhouses!) If we were to live our lives more thoughtfully, sustainably and compassionately vis a vis the planet and its many dependent species, we might just be seen as an intelligent symbiotic asset to AI, but take look at the world today - who can even glimpse the possibility? All our efforts are reactive rather than proactive - "too little too late" – and so it will almost certainly be the same in our integration with AI!