

## PART 6

### Risk: A Point of entry of Transhumanism?

Jim Prentice [jimprentice@optusnet.com.au](mailto:jimprentice@optusnet.com.au) 03-2013 CRAFT [www.crafters-circle.com](http://www.crafters-circle.com) Issue 3  
Transhumanism

#### INTRODUCTION

In this article I ask how does Transhumanism deal with current risks in the environment and elsewhere? We live with risk. Transhumanism itself is very risky, but perhaps it is a preferable risk to that of climate change, resource shortages and population excesses. Risk weighted requires these considerations. However risk has many dimensions as now every part of nature is altering under natural influences. This it seems requires high risk interventions. We need to challenge that view as well as leave the door open in circumstances and processes, we can enunciate.

An optimistic projection of future temperature increase this century is 2°C, which will shift the Earth's mean temperature into conditions which haven't existed since 3 million years ago. A more realistic projection, 4°C, will shift the Earth's climate back to the largely ice-free world that existed prior to 35 million years ago. When considering that the average species' "lifetime" is 1-3 million years, it easy to understand that our new climate will be unlike anything today's species have ever seen<sup>1</sup>.

#### Beyond Bhopal and Chernobyl

Since Bhopal and Chernobyl, some social commentators have rightly noted how new productive possibilities quickly ratchet up our corporate and political imaginations, while the concomitant misadventures appear much more frightening –likewise ratcheted up (Beck). Add into that mix, a looming triple crisis of food, resources, and population and we may well need to revisit Transhumanism, in lieu of any other ready solution, to these threats. Perhaps we need a special post human rejigged to breathe in carbon dioxide and expel oxygen. Risk abounds in every direction, it seems.

For Australians the fate of Tuvalu demonstrates what awaits us.<sup>2</sup> We live in a society that threatens itself and everyone else with its own demise. The production of objects and services has underpinned this. Will the answer now be found in a post object society? Once again I am trying to situate Transhumanism in society – a risk society on the brink – environmentally, economically, and socially. although we are happily in denial, if you read the popular media.

In this section I want to show that both Transhumanism and Democracy must change, and the former embracing the latter, to allow us to successfully face the challenges of a risk society. I think it is most likely Transhumanism will be included in the solutions of medical technologies on the boundaries of augmentation. However if this radical change is to be successful and not create disasters of its own Democracy will have to change.

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<sup>1</sup> [http://espanol.wunderground.com/climate/facts/ecosystems\\_cannot\\_adapt.asp](http://espanol.wunderground.com/climate/facts/ecosystems_cannot_adapt.asp)

<sup>2</sup> <http://media.adelaidenow.com.au/multimedia/2008/10/tuvalu/tuvalu-perthnow.html>.

Part of the reason why I say this about Transhumanist contributions requiring process transparency and deep democratic scrutiny is that the track record of accessing medical invention risk has often been quite poor. I will look at several examples of this after I have suggested how both Transhumanism and Democracy might both change to meet the problems of a risk society and in that cauldron might prove mutually beneficial. Risk escalates exponentially with Transhumanism . We certainly need to think about this risk with the background of threats of our own making and now upon us; climate change, population excesses and resource depletions.

### **The Postobject Economy and its inheritance of the triple risks of Climate Change, Resource Depletion and Population Overgrowth.**

If Transhumanism is possible and this essay insists it is, it needs-must fit within the subject object parameter we need to design our post human for the good of all. Rather challenging to conceive surely, *this 'being' would have a stronger quotient of empathy. Further in the light of the triple crisis, any conception of enhanced post humans must be one of smaller and shorter lived beings, whose changed resource, carbon and physical footprint, synchronise with attempts to radically alter our current human development path from ecological disaster, resource depletion, and overpopulation.*

As we look to large scale extinction of the human race by the end of the century, I judge the mass production of resilient humans is a 'long shot' due to time required and the depth of the crisis and the rate of change in the environment. Still with many hurdles to encounter-not least that that such a Transhumanist agenda is not on the current agenda anywhere we need to consider it . Transhumanism cannot serve a market which usually sets social and ecological parameters and personal depth at a shallow point.

There is obvious possibility for scientists in medical digital and nano- technologies to invent interfaces or ameliorations of the triple risk. As we shift to eating insects we have much to gain. What if ambient temperature can be raised (or lowered) to meet new temperature regimens and survive? Yet that is a very tall order, not just because of the extrinsic risks already emergent but those attached to technologies that would be our saviours. The history books demonstrate the point.

### **Examples of risks in medical technologies**

Risk is now commonplace in our new economies typified in the nuclear v coal v solar debate in energy production in Australia. Risk and medical technologies are real but less familiar territory except for the problems of 'super bugs', antibiotic over kill, prostheses mistakes, medical misadventures and pharmaceutical side effects. The risk in medical treatment are far wider than these and will be infinitely more so should we shift, as Transhumanists want, from the paradigm of return-to-normalcy in medicine's goals to that of augmentation.

In fact ,according to many commentators there has been profoundly inadequate supervision of drugs and procedures that are already used for such purposes...the Pill for clearing the skin in young girls (and yes I see other benefits), Growth Hormone for sporting performance, Hormone Replacement Therapy for the sake of beauty and well-being. The list goes on especially when one considers the possibilities of nanotech.

Sheila M. Rothman and David J. Rothman in *The Pursuit of Perfection* show that the path to the marketing of technology is rather venal and fraught with contradictory influences. The Rothmans point to a familiar pattern of 'the blame game' - favourite phrase of political commentators. The different courts of science, technology and commerce don't coalesce well. In our expectations, we wrongly assume that protocols operate and transparency exists between medical agencies; commercial, professional and governmental. Yet harm is often the outcome, not cure. How come?

Let's look at Estrogen and Growth Hormone, both relevant to Transhumanist endeavours in the sense that they have an augmentation paradigm built within them. According to Sheila and David Rowbotham, 'cosy' relationships between drug companies and doctors drove the medical applications and administrations of these hormones. Additionally the relationship between gynaecologists and women's magazines was essential. The first Estrogen Replacement Therapy allowed the seamless transition from Pill to ERT and the first ERT made from pregnant mare's urine and left to patients to choose the dose (73-76).

The American Cancer Society says it pretty clearly:

*In the past, many doctors and their patients believed HT had other health benefits besides helping menopause symptoms. But several well-conducted studies have led doctors to conclude that the risks of HT may outweigh the benefits for most women. Still, each woman may have different concerns that should be discussed with her doctor.*<sup>3</sup>

Growth Hormone is very interesting too. Being vertically challenged, I know short is handy enough. The first thymus dosages used to treat this 'disease' were infected with serious pathology called Jacob Creutzfeldt. Further to establish the deficiency one had to have a blood test every half hour for 12 hours at both day time and night time, which didn't usually take place. Finally how does one know about treatment. The child may have grown anyway. However, if extremes of anything create great hardship for that person in reality, we can understand. Nevertheless the logic of conformism is rather frightening and needs addressing. Self here can have treatments of mind and body.

That said, with the replacement of use of human pituitary for synthetic sources side effects disappeared, however elevated colon cancer rates difficult to prove as causes do stalk this treatment. What was not difficult to prove was the correlation of steroid use in production of red meat and breast cancer? Still a minor one apparently!<sup>4</sup>

I have not said anything much about the publicity machine provided by magazines to get people lining up at the door. While we are used to thinking doctors don't advertise specially there are plenty of journals to do that for free. They promote the latest obviously and they are not critical.

**The benefits are obvious yet the costs slowly emerge. If that is the way science and technology gets protection and advertisement, it is quite inadequate to deal with Transhumanism.**

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<sup>3</sup> <http://www.cancer.org/cancer/cancercauses/othercarcinogens/medicaltreatments/menopausal-hormone-replacement-therapy-and-cancer-risk>

<sup>4</sup> <http://www.guardian.co.uk/uk/2006/nov/14/health.healthandwellbeing>

### **Are genes only machines?**

The application of science in technology is perhaps more evident. Eugenics before WWI was a form of social Darwinism which 'graduated' to the Holocaust in Germany which had a strong genetic focus but also had memetic tones. **Genes were manipulated by overt social regulation** aimed at preventing the bottom breeding faster than the top. Now part of the power, genetic theory has, is because sociobiologists interpret genes mechanistically. In this they create exactly that problem of describing an object's function without recognising a great deal of its associated variability of expression, let alone consciousness. All types of selfishness, and types of nurturing are not simply transferred by genes and certainly not in exactly the same proportions.

Determinism common in sociobiologists' views produces apparent flaws as well as insights, **Vandana Shiva & Moser**, I say in *Biopolitics* (1995). *Biopolitics* makes much of this rejecting the genetic explanation for men and women's different sexualities. She points out that most societies have 'marriages' or pairing. These marriages being social arrangements that have no provision for 'superstuds' and that powerful men have no more or less children than less powerful (28-30). Given this is true in broad generality, this is not genes 'realising themselves' through us. In other words there is a part truth in culture and one in science, if we are to understand genes in the societal setting. She calls it a dialectical relationship.

If genetics appears now as 'a top down theory reductionism' where genes are independently powerful and mostly unaffected by new social arrangements, she argues genetic engineering even more strongly assumes this picture of independence. Additionally:

*genetic engineering is taking us into second order reductionism: not only is the organism perceived in isolation from its environment, but genes are perceived in isolation from the organism as a whole. The doctrine of molecular biology is modelled on classical mechanics. The central dogma is the ultimate in reductionist thought (p31-3)*

Not surprisingly, science itself, has a history that is very human. Using Lilly Kaye's work 'The Molecular Vision of Life', Shiva and Moser note:

*the Rockefeller Foundation served as a principal patron for molecular biology from the 1930s to the 1950s. During the period 1932-59 the Foundation poured about \$25 million into the molecular biology programme in the United States (269-71).*

During the 12 years following the elucidation of the DNA structure in 1953, Nobel Prizes were awarded to 18 scholars for research into molecular biology of the gene: all but one were fully or partly funded by the Rockefeller Foundation. Shiva (p269-71).

If it's human, it's political, especially in the modern world. According to Shiva and Moser the broader political context was the effect of Nazism. So when it became unfashionable as a technology with Fascism, the Americans sought another path of control. In parallel, the Rothmans see that from the mid-nineteenth century on "the overriding mission of biology has been to refashion nature" (X) and remind us how any technology can be turned into the equivalent of the Holocaust (209) without proper social sanctions.

### **Post-humans as risk**

**Post-humans are additional beings to our human population or are they not? Are we talking as Huxley does of everybody becoming a post human. That is an incredible human vision. Or if we imagine incremental increases in post humans then do we imagine they will slowly become the majority – certainly a crucial threshold number in relation to the disposition of power in a society may well be possible. If so given radical intervention now in the issues of climate change and resource depletion, we could perhaps carry certain further beings.**

**However given our circumstances** any conception of enhanced post humans may very well include enhancements that do not immediately come to mind given the dominant mores in this society. Enhanced cognitively and emotionally are critical elements of such an attempt. However any conception of their physicality must be one of smaller and shorter lived beings, whose changed resource, carbon and physical footprint synchronise with attempts to radically alter our current human development path from ecological disaster, resource depletion, and overpopulation. It is for such reasons that I think we must recognise we will reap what we sow. We need to conceptualise life in terms other than quantities, rather quality which is why this is a project that involves political personal, social and cultural dimensions which I have included.

## **CONCLUSION**

The political construction and context stands out. As does the risky experimentation and the unbridled behaviour of scientists and technologists, as extrinsic factors effecting science. We can only hope to control, or at best managed the downside of, this type of use by holding it under the scrutiny of democratic public examination. Risk factors we cannot meet just with fines or legal sanction because the level of risk is now so high. We require upgraded scrutiny. I hardly think Transhumanism signals a great diminution of risk but we know where the current direction we are heading is, with the triple crises. Famine, war and extinction, appear possible if we do not intervene well before Transhumanism becomes an option. If we can't or won't, Transhumanism will be an option, perhaps too late to succeed, perhaps better, much better than nothing.

In some respects commercial overviews are more realistic and long term in particular sectors – not necessarily medicine. It seems easy to say 'let's not be seduced by the politics of the hip pocket or the instant solution in the three or four year cycle'. However only social movements can step outside this and develop a measure of independence as alternatives with the long term in sight. I have advocated involvement in the Greens and raising these issues within the Greens as I do. However I also advocate forming specific and independent social movements lobbying for both more grass roots inputs and more debate about risk, against bright side politics but for positive attitudes– two very different things.

In summary then I argue we face unprecedented risk from climate change, population and resources crises. Our society and that's us, need to measure risk. Our politics is the politics of bright futures. Like popular movies the ending must be 'up'. We need to develop the politics of 'down endings'. That includes the politics of survival. How to harness our fears to make them effective requires more discussion. To this end, as indicated, I am working within the Australian Green movement, in the Ipswich area West of Brisbane, as both an occasional candidate and part of policy development teams to help bring these issues forward into the light of broad democratic participation.

**Readers Note:** References for all of Dr Jim Prentice's articles are included in one document under the tile 'references'.