WHEN THE OWL SCREECHES: PROTECTING HUMAN REMAINS¹

CHERRYL WAEREA-I-TE-RANGI SMITH*

Within New Zealand, over 500 Maori chiefs signed the Treaty of Waitangi in 1840. In effect, the Treaty was a document that allowed British settlement of New Zealand. In subsequent decades of signing the Treaty, some Maori did go to war as the intentions of settlers became clearer that 'sharing' the land or according Maori governance over their own lands was not what settlers had in mind. The Treaty, however, remains as the most clearly recognized statement by Maori that hapu (sub tribes) of New Zealand remain as self-determining peoples today. The context of writing this article is one where there is a great deal of anger by Maori at the introduction of the foreshore and seabed legislation, which will deny Maori the right to enter the court to establish customary rights over the foreshores and seabed within their customary territories. As one non-Maori observer has noted about the effects of the legislation:

The only property the Crown assumes control of is land customarily owned by Maori which could in the future be recognised as freehold property. It is, clearly, a racist law. Maori are the only people affected by it.³

Prominent Maori academics, Maori judiciary, Maori bureaucrats and Maori MPs condemned the progress of the legislation and prominent figures have stated that 'civil war' was a likely outcome when the Bill was passed. This article however is not about the foreshore. But it is about something as fundamental as the right to gather food and maintain our connections to the sea. It is about human tissue and the increasing research interest in human genes, human tissue and human body parts. Legislation is making its way through parliament that will impact on how New Zealand deals with biotechnologies and as this article outlines, the usage of human tissue.

Like other Indigenous communities, Maori have stories that they tell about the importance of ancestral remains. Alongside the stories of the removal from lands, few issues cause such hurt as the stories that are told of the removal of human remains from gravesites, the seizing of bodies from funeral

^{*} Dr Cherryl Waerea-i-te-rangi Smith is of Ngati Apa, Te Aitanga A Hauiti and Ngai Tumapuhiarangi descent, and lives in Wanganui, her mothers tribal area. Dr Smith is a Maori academic/researcher who has been involved in writing and speaking on genetic issues, in Maori communities, and nationally and internationally since 1999. She is Co-Director of the Te Atawhai o te Ao Research Institute in Wanganui, New Zealand. Her Ph.D was written on *Maori Knowledge and the University*.

¹ The author provides a glossary of relevant Maori language at the end of this article.

² H Mead, Tikanga Maori: Living by Maori Values, (2003).

³ Danny Butt, academic and media consultant, *The 5 Minute Foreshore and Seabed: a Pakeha Perspective and Summary*, (May 2004) http://www.dannybutt.net/foreshore.html>.

ceremonies for examination, the removal of body parts from deceased relatives without consent. Stories of these events have been told since colonisation began and have continued up until the present day.

Interest in the biological parts of Indigenous peoples has been around for a few centuries now. Some interest was for 'curiosity' or 'artifact tourism' and the other line of interest was for research purposes. For Maori, the body after death is still sacrosanct, it still remains tapu and in fact there is an increase of care and reverence for the body of someone who has died.⁴ In many of our tribal traditions the most demeaning and offensive actions taken against enemies were those that involved the desecration of body parts.

The purpose of this article is twofold. Firstly it will identify and describe some of the new ways in which human tissue has become a research object for a variety of purposes. Secondly, it will investigate the implications and the challenges for Indigenous Peoples in this era where new forms of political and economic value are attributed to human tissue.

'It's life Jim, but not as we know it'

Today, human life can be created from dead and frozen tissue, it can be created outside the womb and it can be created from copies of genetic material taken from human tissue. Not only have boundaries between life and death changed, but also there has been the crossing of species barriers. Experimentation is currently underway which can blur the lines between animal, human, plant, virus and other life forms. Xenotransplantation is one such development that is currently researching ways of growing human replacement organs inside animals. An example of xenotransplantation is the growth of human organs inside animals, such as pigs, in order to supply organs for humans. Stem cell research is another method to create body parts. Current methods employed by stem cell research involve the taking of cells from the embryo to grow human tissue, resulting in the death of the embryo. In this model of stem cell research, human life is created and destroyed for research purposes. The creation of hybrid embryos between human and others is also a current research possibility.

All of this research has advanced because of rapid developments in biotechnology or what is more commonly called genetic engineering. This technology provides a means for the crossing of genetic material or information from one species to another. While some government documentation in New Zealand has argued that this is a natural occurring process just like yeast production, there are clear lines here – none of the research named above would be able to be done if there was not scientific intervention and complex laboratory processes undertaken. Human tissue does not cross of its own accord into other species.

In the numbers of hui that have been held around the country, the first question asked by Maori is why would anyone undertake this research in the

⁴ Mead H *Tikanga Maori: Living by Maori Values*, Huia Publishers, Wellington NZ, 2003.

first place? World wide, the research developments can be classified into three areas, the creation of life for example human assisted reproduction, the enhancement of life for example research into genetic disease treatment and the extinguishment of life, for example biological weaponry.

These developments have completely transformed what it is now possible to do with human tissue and raises completely new questions about the boundaries between life and death. Never before has so much power over the creation of human life and human tissue been held in the hands of scientists and industry.

Great promises are being made. If we were to listen to many of the fiercest advocates of this research – then we would believe that the hungry will be fed, that pollution will be fixed, that the blind will see, and the lame shall walk. Within the medical and science fraternity a number of scientists themselves are embarrassed by the grand claims made with some of the promotion of biotechnology and genetic engineering, and coalitions of physicians and scientists have formed oppositional groups.

Protecting Our Remains

As Indigenous Peoples the introduction of new biotechnologies, raises new questions for us. One important question is how do we ensure the protection of human genetic material in a way which is consistent with our cultural beliefs and practices? Many Indigenous Declarations call for the protection of human genetic material and human remains. As early as 1995 Maori and Pacific Island concerns were being raised in New Zealand about the ownership of human genes and the information that could be extracted from the human gene⁵. Maori who attended the *Whose Genes Are They Anyway Conference* 'were unanimous that tissue and other body material taken from Maori belong to Maori' and that Maori want full prior informed consent for the use of such tissue. They were clear that human cells and parts of cells have the ability to reproduce and manifest whakapapa.

Since 1999 I have attended over a hundred meetings with Maori throughout the country at which discussion of genetic engineering has taken place. The initial response in hui is one of being shocked at how far research has gone. They have then expressed their opposition. The opposition has come from making assessments from Maori ways of thinking about the issues, Maori ways of gauging appropriate technology.

Clear opposition is being expressed about these new technologies. Questions raised include: Why would you undertake such research? What risks are being created for future generations? These are not new questions for Indigenous peoples but new technologies are presenting new challenges. Can we keep safe the future generations? Maori have been vocal in their concerns about the developments. Carl Mika, a Maori lawyer, who made a submission for the

⁵ See for example, D Baird, L Geerling, K Saville-Smith, L Thompson, T Tuhipa, *Whose Genes Are They Anyway: Report from the HRC Conference on Human Genetic Information*, 1995.

review of the human tissues legislation made a number of comments about how Maori see human tissue. He noted eurocentric views emerge in the legislation that makes some clear assumptions about the ways that 'the human body' and 'death' are seen:

At para B7.1, for instance, there is an attempt to equate 'tupapaku' with 'deceased'. However they do not necessarily coincide. This raises questions of whether 'death' in a Western sense correlates with Maori stages of the spirit moving to Hawaiiki. There are stages of death in a Maori sense, which occur after a body is pronounced 'dead' by Western medicine. Hence any collection of tissue pursuant to the Human Tissues Act 1964 may well occur while the person is still alive in a Maori sense. This is clearly unacceptable and needs further research.

Further on he commented that Maori views of the human body extend beyond a 'corpse' and the division of body and spirit, which does not exist in Maori terms:

To conceive of the collection of human tissue as only impacting on the physical 'body' is likewise naïve. Maori have long known that the body is an extension of many dimensions and is therefore symbolic of tipuna and atua. The collection of human tissue therefore has greater implications than just those which arise for the physical dimension. Whakapapa, its mergence with future generations and the integrity of those who have passed on are also affected. So 'body', which to a Westerner is merely physical, can never be separated from the spiritual in a Maori sense. ⁶

As biotechnology increases its range and scope, governments such as New Zealand are attempting to legislate for new biotechnologies and in some cases technologies that have been allowed to proceed with no laws in place. In a number of key landmark cases the research is being undertaken before legal or ethical regulations have gone into place⁷. Within New Zealand the government is reviewing two key pieces of legislation – the *Assisted Human Reproduction Act* and the *Human Tissues Act*. Both pieces of legislation consider the legal usage of human tissue in the light of new biotechnologies.

When it comes to legislation, the human body is dealt with across a range of different laws. If a new organism containing human material is imported into the country, it comes under the *Hazardous Substances and New Organisms Act* (HSNO Act 1996) that is environmental legislation. Foetuses are specifically excluded from the *Human Tissues Act*, which covers the use of body parts and bodies for research. The fragmentation of the parts of the body

⁶ Carl Mika, "Submission", *Submission to Human Tissues Review*, New Zealand Ministry of Health, 2004.

⁷ Agresearch, a Crown research entity, applied for approval to place human genetic material into cows. Even though it was widely opposed by Maori, including the Maori advisory group asked to consider the application, it was approved in 2000. Even though no legislation had been developed, the government did not move to stop the research. In a similar case PPL Therapeutics were given permission by the regulating body to place human material into sheep in 1999 despite united opposition by Maori advising the Authority.

under different legislation makes Maori concerns over protection hard to track. Added to this is the fact that the policy and regulation of the different areas is fraught. Scientists or ethics committees can be put in the position of making decisions over human genetic material hard to track. Policy and regulation also currently allows for some very big decisions to be made by ethics committees or scientists that can potentially affect the whakapapa or intergenerational ancestry of a Maori whanau. An example of how surrogacy can potentially affect intergenerational issues is if another generation such as a mother carries a baby for a daughter. The scientific developments are running very fast and there is very little awareness or discussion in our communities of such precedents already having been allowed.

The Challenge of Having a Voice in the Debates

Most of the time there is little consideration of what Indigenous People think about matters such as scientific developments. Indigenous Peoples have often been positioned as 'anti-progress' in many arenas because of their strongly articulated stance on matters such as the protection of sacred places, protection of languages, protection of environmental areas and cultural sites. Economic development is usually considered of higher value and concern both at a national and regional level. Current government policy in New Zealand is showing that the government is removing reference to specific Maori concerns and are moving towards needs-based policy development. This represents a significant shift and has serious implications for New Zealand's Treaty obligations. In short, it negates New Zealand's Treaty of Waitangi obligations to Maori as Indigenous People.

Allied to this is our ability to have a voice that is heard. Within New Zealand, Maori are a large enough Indigenous population, an estimated 15%, to have our voice heard on a number of matters. We have voiced our concerns over genetic research and development in a number of areas and there is now a significant body of Maori writing that critiques the development of genetic engineering. However, many would argue that despite the fact that Maori have voiced concerns, little has happened, changed or had an impact. Much is made of the handful of Maori voices who have said that they see nothing wrong with genetic engineering.

The result is a widening gap between Maori people and policy makers/government. This has partially been exacerbated by the solidarity of opposition to the government's most recent and infamous deviation from Treaty obligations – the Foreshore and Seabed legislation. But it also relates to issues in the area of biotechnologies. The widening gap between Maori and policy makers has led to a growing disbelief among Maori in the trust that they can participate and influence public life sufficient to see themselves reflected in the current regulatory process. An inventory of events that have led to this distrust comes from a number of areas:

- The numerous consultation processes e.g. Foreshore and Seabed legislation where Maori are ignored despite a widespread clear expression of views;
- The Royal Commission on Genetic Modification which failed to take note of Maori submissions in any significant way beyond listening.⁸ The much lauded Royal Commission on Genetic Modification in 2001 found that New Zealand should 'proceed with caution' with biotechnology developments despite the fact that:

A significant number of Maori responded to the Commission.... The submission hearing process occurred from October 2000 to March 2001. The four-member Commission read 11,000 public submissions, heard evidence from more than three hundred experts, held fifteen public meetings, of which two were national hui (meetings) with Maori, and a series of ten regional hui with Maori throughout the country.⁹

- Government documents that mention Maori viewpoints have also produced 'double speak' pointing out that 'Maori have concerns about the technologies' but that 'Maori have a range of opinions'. There is also the usage of 'universal' positions, that state that Maori views are no different from other community views despite the re-iteration by Maori that their views stem from tikanga (Maori world views).
- Also in this area, is the increase in the usage of public relations companies to manage how the public perceives unsavoury messages. The spin or 'managing dissent' of decisions, policies, reports and actions that will be publicly unpopular is becoming more common. Such government spending is a feature of the biotechnology area but also of recent cases such as the use of toxic chemicals for possum control and aerial spraying for apple moth.
- The neutralising of Maori opinion by saying that a range of opinions exists among Maori even though only a couple of people expressed another opinion.
- The assertion that the group that were consulted and expressed the opinion were radicals. Marginalising of oppositional voices has come in the form of saying that the critics are not the real leadership, or the process was captured by activists. Currently some key Maori figures in the judiciary, academia and public service have all been publicly criticized as radicals when they have voiced concern over the foreshore and seabed legislation despite their many years loyal service in their work.

⁸ P Reynolds, Nga Puni Whakapiri: Indigenous Struggle and Genetic Engineering (Ph.D Thesis, Simon Fraser University, 2004) and J Hutchins, Te Ukaipo Te Whakaruruhau, (PhD Thesis, Victoria University, Wellington, 2003, Unpublished).

⁹ P Reynolds, Nga Puni Whakapiri: Indigenous Struggle and Genetic Engineering above, n 8, 116.

The Challenge of Seeing the Forest for the Trees

Much of the discussion about genetic engineering research that takes place, when outsiders do come to discuss the issues with us, is that of the 'ethics' of biotechnologies. By focusing on the small picture of ethics especially individual rights we don't see the bigger issues at stake. The small picture involves discussing issues such as 'what if your child could be saved from... (insert terminal illness)' or 'what if your child needed a heart transplant, would you care if the replacement heart was grown inside a pig? Do you have a right to say that someone else shouldn't want a heart grown inside a pig? In this type of discussion no body wants to look like the heartless person who is going to say, no the research shouldn't go ahead if there may be a cure. There are big stakes in this particular debate. Names such as the late Christopher Reeves and Michael J Fox, who have such illnesses are high profile advocates of the use of stem cells (which are taken from embryos) to find cures to their diseases. On the other hand the Pope, who had the same disease says that the life of a fertilised egg is still a life and should not be destroyed for research purposes, as does George Bush. When we lift the lens higher and take a broader view than these emotive and disease specific examples, Maori have a strong interest in broader issues.

We have seen this type of debate before and we are told that we are the heartless ones who don't want to offer our genetic material for the good of all. This is the same argument used for the appropriating of Indigenous knowledge of medicinal native plants and other cures that have been commercialised by pharmaceutical companies. Many Maori concerns arise out of Maori philosophies and assessments of the science itself and whether or not it accords with beliefs about our collective roles in Creation. Other Maori opposition has been voiced that questions the science itself and the scientific risk.

So our broader question can be partly framed as, whether we have any real say at all over the progressive development of the research. And the bottom line for any group in questions of participation in projects or policy is whether the group can refuse to participate or co-operate - can we say no? In New Zealand the Maori Congress raised the issue of the Treaty right of Maori to veto the research before the Royal Commission on Genetic Modification. The Royal Commission dealt with that issue by ignoring the question. And importantly, at this point in time the Treaty is under attack and is gradually being reduced in importance by the current government.

The Challenge of Knowing Who is Driving the Impetus for the Industry

Crucial to any decision about participation is information about the nature of a project, the stakeholders and their aims. In relation to biotechnology projects, this information has changed and developed rapidly. Industry research and interest is increasing because of the lucrative markets that could be developed from such research. For some groups the perceived 'value' of human tissue has now changed. Indigenous Peoples, their blood, tissue and genetic

materials are considered valuable, especially if the groups are isolated or have genetic traits of interest. Not only the genetic material is of interest but so too is the information that is drawn from the genetic material.

Information on research is often infused with claims that medical cures will result, but most of the research is focused on identifying genes and the development of 'products' rather than 'cures'. This is clearly because, while the development of 'cures' might bring good 'spin', it is the development of the actual 'products' that bring the economic returns. Some clear distinctions need to be made by the biotechnology industry and government between 'product; development e.g. another type of asthma inhaler or another type of insulin and 'cures'.

All research should be checked against cultural and ethical standards. It does not follow that all medical research is necessarily good research or that there are good checking mechanisms before all medical research is undertaken. While the definition of good research may be difficult to pin down, we have less trouble identifying research that is less than good. For instance, there are a number of high profile cases where medical research was shown to be unethical.

The commercial dynamics of the biotechnology industry create particular pressures which impact on individual researchers and national regulatory bodies. Researchers, in particular, those with industry links are also creating a demand for the usage of human tissue, as the value increases. Privatising of researchers has required them to attract funding and biotechnology is a huge area of investment that creates pressure from 'vested interest' parties for the regulatory framework to allow easier access to human tissue.

Human remains are also of interest in the field of population genetics. For the geneticists it is the continuing story of trying to find out about our origins. Despite the fact that Maori have very specific and detailed oral records of the origins of ourselves, there is still the view that we do not know where we come from, or if we do then we must have it wrong, or that we are in doubt until science can provide 'real' proof. The assumption remains that we are yet another wave of immigrants who came here, just like the colonial settlers, only a few hundred years earlier, therefore we were just 'lucky' that we found the country first. Much is made of the seven waka migrations from the Pacific. In our oral histories, this is only one line of origin, there are dozens, that pre-date the seven waka migration. There are origins that stem from rivers, from birds, from mist, from earlier arrivals. All of this oral testimony has meant little as the seven waka migration continues to be continually told to us as the real, and worse, only arrival story.

All over the world fictions are being created about 'the journey of man'. Much of this journey is linked to a supposed progress from the Dark peoples to the progressed Developed world. Population genetics or the search for origins of people contains such myth making. It is a new spin on the theories that have for a long time presented the story of the progress of man. It is now being put as a 'genetic narrative'. According to this version, our apparent common

genetic heritage makes us supposedly all alike when you scratch the surface. The stories of course fail to tell important facts, namely those that involve relations of power, economic disparity, poverty, political unrest, inequalities and poor health.

The Challenge of Monitoring the Research and the Use of Human Tissue

One of the biggest issues for Indigenous communities is that of getting information. While there are a handful of Indigenous people in the world engaged in some type of monitoring genetic research developments there is still much to be done. Indigenous networks are already dealing with broad issues of health and poverty, environmental degradation, cultural survival. The most active Indigenous organization working for the protection of Indigenous communities against biopiracy is the Indigenous Peoples Biocolonialism Council that has for many years tracked cases of biopiracy or the theft of human samples from Indigenous communities.

The second major issue is that genetic engineering is a global, international enterprise. Initiatives that are felt to be stymied by tight regulation in one country will move to other countries where the scrutiny, is less intense. The promotion of free trade, means that governments around the world are moving to reduce barriers to free trade, this includes barriers such as policy and regulations that protect food safety standards, health standards, agricultural standards. Across countries under the World Trade Organisation there are moves to harmonise regulations and legal frameworks between countries to promote 'free trade'. Australia and New Zealand has such an agreement called Closer Economic Relations or CER for short. New Zealand, politicians such as Finance Minister Michael Cullen and Commerce Minister Margaret Wilson are moving towards quickening the development of a "seamless trans-Tasman market where businesses need only comply with one set of rules". Australian buyers in recent years have been doing some serious spending in New Zealand, with an estimated \$30billion investment. Among the Australian purchases have been banks, railways, major media companies. For Maori, who take very seriously the Treaty of Waitangi, harmonizing regulations with Australia without reference to the Treaty of Waitangi is a breach of the Treaty. But also the danger exists for 'harmonisation' of laws, policies etc to the lowest common denominator when it comes to protecting Indigenous rights.

To illustrate the mobility of transnational companies an example of this in New Zealand is the move to the Pacific of medical research that was not approved in New Zealand. A New Zealand based company Diatranz which was undertaking controversial xenotransplantation research (animal to human genetic transfer) by implanting live pig cells into human patients for diabetes research caused a storm in New Zealand. The company was forced to stop research when the Ministry of Health banned it because of the risk of potential viruses. As a result Diatranz went to the Cook Islands and to Mexico, countries where the regulations are not as strict. Within the Cook Islands, local

community groups opposed the research noting that while diabetes is a problem, that if the research was disallowed in New Zealand, then the Cooks people were being used as guinea pigs. Diatranz has since changed its name to Living Cells Technologies and listed on the Australian Stock Exchange in August of 2004. The company is still producing the pig cells in New Zealand but is carrying out trials with insulin producing pig cells being inserted into monkeys in Singapore with the intentions of applying for human trials in the U.S. The company also transplants brain cells into monkeys with Huntingtons and liver cells into monkeys with haemophillia.

The Challenge of Keeping Your Eye On The Ball: Resurgence of Old Theories

There is a growing body of literature that examines the links between science and race, science and patriarchy, science and homophobia, science and eurocentrism. Those who contribute to that body of work examine past theories of science and race, racism and science and the treatment of women by science. An important feature of the work that many of the, now-recognised-ascrackpot-theories of race, were once done by mainstream, well respected scientists of the day. Their work included studies which measured apparent indicators such as skull size to determine intelligence, and big toe size to determine whether a woman was a prostitute.

Early race theories in colonisation supported the view that body parts were also a way of determining the intelligence or the value of a person. *The Great Chain of Being* pointed to physical features as being markers of primitive or advanced cultures and Indigenous peoples were found to be wanting. In New Zealand, one such medical experiment, conducted in the early decades of the 19th Century, was undertaken by ship's surgeon Arthur S Thompson who weighed and measured the amount of millet that would fit in a Maori skull. He used the amount of millet seed to ascertain 'intelligence'. He concluded in his book *The Story of New Zealand Past and Present: Savage and Civilised* (1859) ¹¹ that Maori were inferior in intelligence because their skulls held less millet seed than the more intelligent British.

There is a worrying familiarity to the views of the twenty first century that researchers should target Maori genetic material to look for the smoking gene, to look for a predisposition to diabetes, to look for the alcohol gene. This view of Maori as being genetically predisposed to the kinds of diseases frequently associated with economic disadvantage are yet another form of race based science. Such research lifts the burden off the state, off colonisation and places the blame on Maori individuals, on their ancestors and marks them as tainted. At the turn of last century, Maori were being targeted for their dirty homes and villages and the response by the state was to burn homes down and

 $^{^{10}}$ Stephen Jay Gould, *The Mismeasure of Man*, (1981) and Harding S (ed) *The Racial Economy of Science* (1993).

¹¹ Arthur S Thompson *The Story of New Zealand Past and Present: Savage and Civilised* (1859).

to ban traditional methods of healing through the tohunga suppression legislation.

The reductionism of the complexity of health issues to be only genetically determined is deeply concerning. Such reductionism has implications on funding of health priorities and research. What areas will be funded and what wont? Funding to culturally based services are endangered by reducing health issues to genetic dysfunction. Simplifying of causal factors of health to a simple one off answer diminishes the work that public health, community and Maori are doing. Reductionism deflects attention away from cultural difference, away from economic hardship, from political status, from unequal social development, from the issues of self-determination.

Some of the biggest questions not yet answered is the potential usage of the technologies to select out the 'unfit'. In a number of applications of the technology, in particular genetic screening there are assessments being made about who is unfit. Groups who are already marginalized are potentially more vulnerable such as gay, lesbian, disabled and of course Indigenous groups. The issues of racism, sexism and homophobia have not gone.

The Challenge of Being Seen As Just A Saboteur

When it comes to giving parts of the body to science or specimens for medical purposes, Maori donation rates are low. This includes the donating of bodies to medical schools; the donation of sperm, eggs and organs such as kidneys, livers, hearts, corneas is also low. There is a long recognised reluctance of Maori to donate body parts. Some of the reasons for this have already been noted such as the tapu of the body.

Biotechnologies and their proposed medical uses come in the wake of Maori distrust of medical processes through unethical practise that is still fresh in the minds of Maori. Examples of this kind of unethical practice include:

- The removal of organs from bodies without the knowledge or consent of the whanau;
- The continued claim to ownership of the human remains of our ancestors both within New Zealand and overseas in museums;
- The failure to recognise whakapapa and to consider the rights of hapu and whanau within legislative and consent frameworks, collective as well as individual consent rights;
- Issues of release of the body as soon as possible for tangi following death by accident or sudden death is an area where there is more work to be done;
- 'Seizure' of bodies by police following sudden death and cot death;
- Removal of specimens or undertaking of research without full, prior informed consent;
- The insistence on keeping whanau away from a deceased relative while 'procedures' are undertaken following death and not allowing for the presence of whanau who want to stay with the body.

The Challenge of Western Science

Many writers have written on the problems of the grand narratives of science. In recent decades there has been some healthy critique of the science tradition and its complicity with patriarchal/eurocentric/white privilege. In recent years, however, we have seen a sudden upsurge in grand narratives about science which in some have adopted a view which elevates science almost to the old familiar "science is God" position.

The almost missionary zeal with which a number of Western countries have introduced and defended genetic technologies has overtones of this position. This is despite large public anxiety and concern showed in polls in the U.K, in New Zealand and the European Union (EU) for example over the growing of genetically engineered (GE) food. The current case against the EU who is attempting to resist the importation of GE crops says that trade is more important than what people inside the country think.

Alongside of the outmoded 'science is God' paradigm has come a resurgence in genetic determinism. Indigenous people have an important role on this resurgence. Research that seeks to find the alcohol gene, the obesity gene and the smoking gene are all serious projects that once again have tried to implicate populations, in particular Indigenous ones to a 'predisposition' to alcohol, diabetes etc. These arguments are very powerful diversions from issues of poverty, of scarcity, of geographic and identity dislocation, of degradation of food and environment¹².

Human Assisted Reproduction Technology

Within debates about human tissue, human reproduction issues are often separated out into other areas. Beside the review of the Human Tissue legislation in New Zealand, the *Human Assisted Reproduction Bill* is before Parliament as this article is being written. The draft legislation approves pre-implantation genetic diagnosis, a genetic screening technique which requires the creation of an embryo, removal of cells to screen the embryo for suitable or unsuitable traits. It is the first stage to 'designer baby' technology which can potentially allow genetic screening of embryos for other traits. A number of groups have been opposed to the technology including disability rights groups, religious groups and others. The definition of 'disease' can be subjective. But also the legislation proposes that instead of banning set technologies, the Bill will establish a Ministerial advisory committee to issue guidelines to a national

¹² See F Cram, L Pihama and G Barbara, *Maori and Genetic Engineering Research Report*, International Research Institute for Maori and Indigenous Education (2000), and the Ph.D theses of P Reynolds, *Nga Puni Whakapiri: Indigenous Struggle and Genetic Engineering*, above n 8, and J Hutchins *Te Ukaipo Te Whakaruruhau* above n 8, and submissions made to the Royal Commission on Genetic Modification, and reports of Nga Kaihautu Tikanga Taiao expressing concern over the placing of human genes into cows.

ethics committee for assessing applications which leaves gaps for political whim. It means once again that precedents will be allowed through an ethics committee process. Maori have been critical of ethics committees because they often have token Maori membership, do not understand the importance or relevance of tikanga, can make assessments primarily medical, scientific, western philosophical basis and fail to understand Maori. Stem cell research although also concerning embryos will be dealt with in other legislation.

Conclusion

This paper has scoped a range of issues about human tissue and how research and interest in using human tissue is developing. For Indigenous Peoples there is much to consider. For Maori in Aotearoa, the interplay between Maori and the government is fraught as the Treaty is sidelined when it comes to the question of the country allowing the development of new biotechnologies. Our understandings are completely different of bodies, death, dying, birth and so on. The politics of engagement has meant that discussions taking place in communities in 'consultation' are set within some much bigger interests. As Moana Jackson noted during the Royal Commission on Genetic Modification, Maori were listened to with 'an exquisite politeness' but it made no difference to the outcomes. In recent weeks, Maori academic Dr Paul Reynolds called on Maori to stop engaging in consultation processes over biotechnologies, stating that his scrutiny of the governments approach to consultation with Maori was farcical and was co-opting Maori voices into a pre-set agenda. He pointed to an agenda of governments and industry wanting to proceed with development of technologies regardless of what was said. 13

While government processes are one thing, what is happening within our own communities is more critical. In any discussion of this type it is important to understand what it is possible for Indigenous communities to do. Firstly it is important to keep a clear eye on what is coming towards us, that can be a simple as joining an Indigenous mailing list such as that of the Indigenous Peoples Council on Biocolonialism, noticing what new research developments are appearing, inviting people in to talk to communities about protection of human tissue. It is also important to monitor which companies/organisations are undertaking what research within your own community. Raising awareness of the usages of blood samples, sperm, eggs, saliva, body parts is important as is the development by Indigenous communities of protocols of protection. Many of the approaches for samples are being done under the umbrella of research for particular diseases, such as diabetes or cancers. Communities themselves need to formulate their own ways of protection, whether that be developing charters, protocols, however that may be done, to ensure that we have discussed among ourselves the changes that are occurring and we are clear about what lines we want to take. If our communities remain uninformed, we are weak, because outsiders or individuals can then present our views to the

¹³ Simon Collins, 'Gene Consultation With Maori Only Tokenism', *New Zealand Herald*, September 2004, 19.

world, individuals who do not bother to ask their communities for guidance or individuals who do not understand the world-wide struggles by Indigenous Peoples to ensure health and well being for those yet to come. If engaging in discussions it is important also to continue to affirm our own views of the sanctity and care of the human body and the collective decision making of our communities.

Glossary of Maori Words and Terms

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Hapu – sub tribe;
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whakapapa – inheritance, lineage, ancestral connections;

hui – a meeting;

tikanga – the rights and wrongs of something;

tangi – Maori funeral ceremony;

tupapaku - a body at a certain stage of death.