Normal Humanness, Change and Power in Human Assisted Reproductive Technology

An Analysis of the Written Public Submissions to the New Zealand Parliamentary Health Committee in 2003

Julie Park

Laura McLauchlan

Elizabeth Frengley

Assisted human reproduction legislation has provoked wide-ranging debate in all those societies that have enacted it. New Zealand is no exception. The public submissions to the Parliamentary Health Committee on the Human Assisted Reproductive Technologies (HART) Bill and Supplementary Order Paper 80 provided an opportunity to consider how those who wrote submissions conceptualised important aspects of being human. Using an anthropological discourse analysis approach, the authors analysed the New Zealand submissions. One reviewer comments: "The work provides important further information on the wider topic of cultural understandings of innovative technologies in New Zealand society"; another wrote "contemporary, contentious and of great public concern ... it opens up the topic for further research".

The Authors

Associate Professor Julie Park is a social anthropologist in the Department of Anthropology, The University of Auckland. She has research interests in New Zealand society and health and illness.

Elizabeth Frengley is a BA Honours graduate in Anthropology of the University of Otago.

Laura McLauchlan is a BA/BSc graduate in Anthropology and Physics of the University of Auckland.

Normal Humanness, Change and Power in Human Assisted Reproductive Technology:

An Analysis of the Written Public Submissions to the New Zealand Parliamentary Health Committee in 2003

Julie Park, Laura McLauchlan and Elizabeth Frengley

Department of Anthropology, University of Auckland

Table of Contents

Abstract

The public submissions made to the Parliamentary Health Committee on the Human Assisted Reproductive Technologies (HART) Bill and Supplementary Order Paper 80 are analysed in this report. Within this corpus, five major themes are identified: normality, humanness, natural versus social constructs, moral decline, and rights and power. The report is organised on the basis of these overlapping themes. Running throughout these five very general themes were two major discourses: one Christian-identified; the other, medical-scientific. A minor discourse of disability rights was also present.

Many submissions, from all three of the modes of discourse, expressed fear that assisted human reproductive (AHR) technologies were challenging the boundaries of normality. AHR technologies were seen in many submissions as potentially opening a door to eugenics and the commodification of humans. Such submissions often requested the establishment of more strict regulatory frameworks. The natural order lying behind kinship relations was seen to be greatly challenged by AHR in some submissions, particularly those which were Christian-identified. Many such submissions viewed the HART legislation as part of a general moral decline of society. While some submissions viewed AHR technology as distinctly unnatural, others asserted the naturalness of the human use and development of technology. The desire to have children was cast as natural throughout the submissions.

The right of offspring to know their origins emerged as a key issue. Questions of whether the production of children was a right or a privilege, and whether AHR was a constraint or a support, also emerged from the submissions. Adherence to human rights was seen as fundamental within the submissions, with differing conclusions about the correct use of AHR technologies, influenced by whether the authors viewed personhood as being established at conception or at some later developmental stage.

Placing our research into an international context, we note that the limited use of scientific (both social and bio-medical) evidence within the New Zealand debates contrasts greatly with the extensive use of such evidence within British Parliamentary debates. Other aspects of the submissions appear to be unique to New Zealand, including the emphasis upon the importance of whakapapa (genealogy) in the establishment of identity.

Acknowledgements

1 Introduction

1.1 Background

In 1996 and 1998, two New Zealand Bills covering largely the same material were drafted in relation to reproductive technologies. These two Bills were part of the ongoing public attention and discussion afforded to a range of biotechnologies. In 1991, for example, the Royal Commission on Genetic Modification produced its report; and three years later Atkin and Reid (1994) published a report based on extensive consultation *Assisted Human Reproduction: Navigating the Future*. The first Bill, a Members' Bill drafted in the name of Dianne Yates, was the Human Assisted Reproductive Technologies Bill, known as the HART Bill in short. The second, a Government Bill, was the Assisted Human Reproduction Bill. The two Bills languished until April 2003 when a Supplementary Order Paper (SOP 80) was drawn up in the name of David Benson-Pope, again bringing consideration of such issues to the forefront of legislative proceedings. SOP 80 attempted to reconcile differences between the two earlier bills. Where this was not possible, it proposed a way forward, e.g., it favoured guidelines over regulation. With this revision, there was a call for public submissions to the Health Select Committee . Those people who had made submissions on the earlier Bills had their submissions returned, and were invited to amend or resubmit them in view of the lapse of time and the new material raised in the SOP. All of these submissions were treated by the Committee as if they were on the HART Bill. The Select Committee also consulted Māori on the cultural relevance of the legislation and heard oral submissions.

The Bill dealt with highly contentious issues and with matters thought to be of considerable moment. Dianne Yates, commenting in 2003 on the SOP and the Bills, said that they raised "huge questions facing the modern world" including the fundamental one of "what it is to be human".[1] Stanworth (1987:18), writing about a wider range of reproductive technologies from a feminist standpoint, argues that such technologies are controversial

> because they crystallize issues at the heart of contemporary controversies over sexuality, parenthood, reproduction and the family; and that a concern for self-determination for women must engage, above all, with these struggles.

We believe that an analysis of the submissions on the Bills and the SOP can provide insights into some New Zealanders' core concerns in the area of assisted human reproduction (AHR) and reveal some of the assumptions made about reproduction and conception, human nature, persons, technology and society that people draw on to make their arguments.

1.2 Aim

The aim of this project is to identify and explore the major themes in the submissions, using the technique of discourse analysis. Whereas other studies have taken a discourse analysis approach to the issues of AHR (Rowland 1992; Mulkay 1993; Ginsburg and Rapp 1995; Ginsburg 1998; Franklin 1999; Hirsch 1999a; Hirsch 1999b), to our knowledge this is the first study to apply a discourse analysis approach to public submissions on such technologies. Franklin's (1999) paper on the British Parliamentary debates on a similar Bill, "Making representations", has been a helpful model, because Franklin used a similar analytical approach to a related body of material, and indicates areas for future research in New Zealand.

1.3 Representation

Although submissions to any Select Committee are made by members of the general public, they cannot be taken to be from a cross-section of the public. Nonetheless, they do provide an indication of the views, knowledges and understandings of a range of people and organisations. Of the 79 submissions on the Bill, only one was secret.

Thirty-two submissions were made by private individuals or (family) groups. One of the submission authors was a member of an email pro-surrogacy network, one was a donor-conceived person, and another was the son of a woman with Huntington's disease. Others did not reveal particular personal links to the issue. However, in the appendices of some of the submissions from organisations, narratives from people directly involved with AHR issues were included. A few other submissions might be from private individuals, but they were written on consultant or official letterheads.

The other submissions were made by organisations. These included: academic experts; religious groups and individual churches; statutory bodies, including ethics committees; a range of non-government organisations, which included environmental, anti-abortion and disability groups; and providers and 'consumers' of fertility services. Oral consultation with Māori and other oral submissions did not form part of the materials available for our analysis, except where written notes of the discussion were provided. However, advice provided on request to the Health Committee by government departments was included in the submission file. A list of the submissions and other official materials consulted is provided in Appendices 1 and 2.

As all consultation with Māori was conducted orally, we were not able to include submissions specifically identified as Māori within our analysis. Although none of the written submissions specifically expressed *kaupapa* Māori (policy and practices), identification of authorial ethnic identity was generally not possible anyway, making it difficult to estimate the extent to which the submissions represented an ethnic cross-section of New Zealanders. While some submissions wrote about Māori views, it was not possible to detect whether these views were provided by Māori people, and, indeed, the language used suggested otherwise.

1.4 Analysis

A comprehensive set of the 78 available submissions was obtained from the Parliamentary Library in Wellington and from the Internet. These ranged from handwritten notes on a single page to scholarly papers. Initially, we read the submissions and identified the general themes independently, and then we discussed our individual findings to reach a consensus. These themes were then expanded upon through the analysis of the related academic literature and further discussed. Having isolated five major themes within the submissions, a closer reading was undertaken. We then incorporated some of the relevant literature into this analysis, particularly a comparison with the debates around the parallel British Bill. At this point a further reading of the corpus was made by the two junior authors and the manuscript amended. Finally, when this manuscript was fully drafted, a complete reading of the total corpus was made by the senior author and some amendments made to the manuscript.

The mode of examination of these submissions was discourse analysis. In this paper we take 'discourse' to be "groups of related statements which cohere in some way to produce both meanings and effects in the real world" (Carabine 2001:268). While discourse analysis is an extremely broad area which typically evades definition (Wetherell *et al.* 2001), some basic features can be identified: the recognition of a variety of modes of communication as social

text (including written, oral and body languages); the identification of subject positions and their influence on perceptions; and the acknowledgement of people's active construction of reality (Potter and Wetherell 1990; Wetherell *et al.* 2001). A major focus of discourse analysis has been power relations, particularly with respect to domination. An emphasis on the use and expression of power/knowledge within discourse is an integral part of Foucauldian analysis (Carabine 2001).

We have used elements of Foucauldian discourse analysis, particularly with respect to the normalisation of specific AHR concepts. However, we have combined this with the concept of "interpretive repertoires", which was first articulated in the sociology of science by Gilbert and Mulkay (1984, cited in Edley 2001:197). In our analysis, interpretive repertoires were viewed as groups of relatively consistent language uses in relation to specific issues. Discourse was therefore viewed as a more over-arching concept, consisting of sets of interpretive repertoires. Within the submissions, three broad discourses — which we entitled 'Christian-identified', 'medical-scientific', and the smaller 'social model of disability' — were identified. As an illustration, within the Christian-identified discourse, a range of interpretive repertoires was deployed — for example, the "murder" of embryos, the equation of "divine creation" with "the laws of nature", and the "woman as (safe) container". It should be noted, however, that there was no strict delineation between the discourses. Whereas what has been identified as the 'medical-scientific' discourse did tend to support AHR, those submissions classified as part of the 'Christian-identified' discourse tended to give less support to AHR overall, but this was not always the case. By only loosely locating submissions, and the interpretive repertoires they employed in response to specific issues, within a more overarching discourse, our analysis was able to acknowledge the variation in individual response to various aspects of AHR (Edley 2001).

The social model of disability discourse was used in a small number of submissions. Such submissions expressed fears of genetic modification "curing [disabled people] out of existence",[2] and viewed disability as "an issue of a population group, such as gender or ethnicity".[3] We refer to this set of statements as the 'disability rights' discourse. Opposition to the emphasis on ways in which disability is socially constructed was evident in other submissions. The main concern was that "the social model tends to deny the need for biomedical solutions to disability" and is marked by "identity politics".[4] The existence of this discourse was also recognised in other submissions that did not specifically draw on it, but wished to acknowledge the rights and dignity of people with disabilities. From our analysis, the 'medical-scientific' discourse emerged as the dominant of the three. This dominance is evident in the normalisation of many of the views contained in the discourse, including the time at which an embryo becomes an 'individual'. The arguments within it tended to be put forward as self-evident, again indicating its normalisation. In response to this dominance, the main Christian-identified counter-discourse made greater use of scientific data to add legitimacy to their opposing views.

Within the three discourses that we have identified, there was awareness of the existence of opposing points of view. This awareness and pre-emption of counter-arguments was utilised to dismiss opposing views or to place them in a broader context. Such awareness was also used to construct a sympathetic subject position, framing the writer as caring, e.g., about couples with "the misfortune to be infertile" (as in several largely anti-AHR submissions) or as non-exploitive in refusing commodification, or respectful of others' religious tenets (as in several largely pro-AHR submissions).

Both the dominant discourse and the counter-discourses claimed to be campaigning for the good of humanity, through the protection of human rights. However, differing definitions of

when humanity begins, or of whose human rights need protecting resulted in different views of which rights should be paramount — those of the embryos, those of the potential parents, or those of already existing or potential people with disabilities. As noted above, a similar phenomenon can be seen in Ginsburg's analysis of abortion in Fargo, USA, in which both pro-life and pro-choice campaigners framed their cause in terms of women's rights (Ginsburg 1998).

The three modes of discourse identified within the submissions to the HART Bill and SOP were seen to deal with issues which could be loosely grouped into five broad themes: normality; natural versus social constructs; humanness; moral decline; and rights and power. Within these five themes we have identified several interpretative repertoires. In carrying out this project, we found that these five themes, and the interpretative repertoires, were inextricably linked. While we have endeavoured to reduce repetition by placing the most pertinent issues under each thematic heading, it is important to note that such categorisation is artificial. Issues have been placed where most applicable, but the issues overlap between the themes.

2 Normality

A major theme in the submissions is that of normality. This was often quite explicit. People described their perceptions of what is normal and what is not, and how they felt that these new reproductive technologies fell outside the bounds of normality. Within this discursive theme, there were three particular foci: disability and disease; the boundaries of normality; and definitions of difference. In other submissions, the theme of normality was implicit. It was apparent in what people chose to comment on and what they passed over. This more pervasive construction of normality underlies all of the key themes discussed in this paper.

2.1 Disability and Disease

The identification of disability and disease itself implies a distinction between the normal and the abnormal. Two key contrasting interpretive repertoires accounted for this distinction. They were that disease and disability are the embodied experience of a naturally occurring medical condition, and that disease and disability are constructs created through social categorisation and social action.

The first repertoire was deployed to argue for the benefits of the new reproductive technologies. It was argued that technology could, mostly through pre-natal genetic screening, identify potential problems in the form of health defects and allow for the 'treatment' of them. For example, one concerned individual wrote simply that it "alleviates suffering from say a disease or sickness",[5] and a mother with Huntington's disease who hoped to use pre-implantation genetic testing explained that she was "not fighting for a genetically modified baby, just a healthy one".[6] People within this group viewed disability or disease as undesirable and avoidable through the use of these technologies.[7] It is significant that several of these submissions were from people personally involved with serious genetic conditions and the organisation representing them.

The other interpretive repertoire — the idea that disability as a disease and something to be avoided is a social construct — was used to argue that defects should be treated as something to be accepted and accommodated by society as opposed to being eradicated. This was spoken about in the submissions as the medical versus the social model of disability, and was advocated by concerned individuals as well as those from some families or groups affected by disabilities. It was an aspect of the disability rights discourse. The CCS, for example, argued that disability is not a health issue but an issue of a population group (that is, a human rights issue), and parents should be prepared to accept disabled babies.[8] The Disabled Person's Assembly[9] maintained that prevention of disability is offensive, and compared this to the offence caused to women when female births are prevented. This repertoire is commonly associated in the literature with disability rights groups (Rapp *et al.* 2001). These submissions were quite often personal pleas, urging legislators to take into account disability rights and to value disabled people. One individual argued that science and technology have "no ethical and moral place"[10] in the making of decisions of this nature. Another submission was from a man who told the story of his mother having Huntington's disease. He noted that that if reproductive technologies had been in place both he and his mother might not be alive.[11] Some people, using this approach, argued that these technologies should not be used at all, whereas others believed that they could be used to identify certain conditions and then have them dealt with in a manner other than termination.[12]

Here we find echoes of the concerns referred to by Taussig and her colleagues (Taussig *et al.* 2003) working with the Little People's Association of America. She coined the term "flexible eugenics" to refer to the idea that people with genetic disorders do not necessarily reject genetic and other tests, but wish to control and be selective about the uses to which those tests are put. Kaplan (1994) has suggested that pre-natal screening is generally concerned with the avoidance of disabilities in both individuals and society, and therefore inevitably has eugenic implications. This is particularly pertinent when one considers, as Faden (1994) has pointed out, that the emphasis in today's medical profession is on prevention, and that, as the number and type of technologies expand, so do the boundaries of prevention. Concomitant with this is a shrinkage in what counts as normal.

A number of submissions used or acknowledged both repertoires, and drew attention to the possible benefits and downfalls that technologies such as genetic screening could result in. These submissions stated that, while the rights of disabled people must be recognised, and social provision made for citizens with varied needs, it is essential to reject the views of minority disabled groups who would state it is wrong to identify and eradicate disorders. For example, the New Zealand Organisation of Rare Disorders (NZORD) advocated against allowing painful and deteriorating diseases to go unnoticed when the technology exists to identify these at such an early stage, as in pre-implantation genetic diagnosis.[13] The executive director of this organisation was at pains to point out that there is a wide range of views in the disability sector, and no one group has a mandate to speak for all. Further, he noted "increasing concerns at the emphasis on the social model of disability, and the way in which this model does not acknowledge the health issues that underpin many disabilities" or the "need for biomedical solutions to disability".[14] This approach seemed to accept that part of disease and disability is the way in which social provision is made, and the way in which people with these conditions are treated by their fellow citizens, but part of it is also the brute fact of pain and suffering that even society's best efforts cannot ameliorate. The widespread approach within the health social sciences (for example, Lippman (1994)) maintains that all diseases, disorders and disabilities are social products which people interpret and associate meaning with, but this does not imply for a moment that the pain is less severe or the suffering less real.

2.2 Fear of the Boundaries of Normality Being Transgressed

The majority of the submissions addressing issues of normality dealt with procedures or technologies that people felt were abnormal in the sense of being unnatural, and, therefore, that should be prohibited. Many of the submissions called for further items to be added to the Schedule of Prohibited Activities of the Supplementary Order Paper.

Most often mentioned were germ-line engineering and "designer babies", particularly in relation to research being carried out on embryos for both. Indeed, designer babies seemed to have replaced the test-tube babies that appeared so frequently in the British debates, perhaps signalling a partial eclipse of science by fashion as an interpretative resource. Germ-line engineering was seen as wrong because it altered gene lines for future generations, as well as for present ones, with unknown long-term effects. A Nelson couple, for example, wrote that the "Bill engenders alarm as it allows for changes to the evolutionary history of humans through inheritable genetic modification".[15]

There was overall negativity and fear within the submissions in relation to the possibility that consumers of reproductive technologies would be able to create designer babies. This

included all aspects of gene selection, from sex selection right through to the selection of desirable traits.

The creation of hybrids, for research purposes or otherwise, was another area of concern. The crossing of human genes with animal genes was deemed entirely unacceptable. Examples of this within the submissions include the Family Planning Association having "reservations"[16] about it, and the Interchurch Bioethics Council not wanting hybrids to be used or created "for any purposes".[17] The language used within these submissions — and 15 submissions refer to this aspect — highlights how worried people are that actions outside the boundaries of normality could be carried out and that these activities must be controlled.[18] Although the majority called for further prohibitions to be added to the Schedule, some had more general fears. One individual wrote "To reduce human beings to manipulated technological events is indeed playing at being Frankenstein"[19] (see also, Mulkay 1996). Other examples include fear of a "permissive framework"[20] and that too much would be left "open to experimentation".[21] This repertoire of normality is closely associated with those discussed in relation to kinship.

In addition to the concerns about unnatural technology and unnatural tampering with nature, there is the question of control and accountability (as Birke *et al.* 1990; Charo and Rothenberg 1994 discuss). That is, who is to be held accountable and where does accountability lie if there are so many actors involved in making important life decisions? The issue of control was one of the most frequently mentioned concerns in the corpus of submissions (see 'Rights and Power', below).

As long acknowledged by anthropologists (Douglas 1966), things existing outside the established cultural norms are often viewed as dangerous or threatening. Reproduction is an area with strongly delineated cultural norms, and hence challenges to these norms are frequently portrayed as societal threats. As Ginsburg discusses, pregnancy is a time in which women are viewed as liminal, only to be reintegrated socially with the birth of their baby. Failure to reintegrate (that is, through abortion) can be problematic to social cohesion. Reincorporation of the liminal person into the appropriate role serves to legitimate, for the subject and the observers, a particular interpretation of social reality as both necessary and irrefutable. A deviation from that outcome is a serious violation, because it exposes the possibility of alternative interpretations of not only a particular situation, but the whole cultural order as well (Ginsburg 1998:108). Developments in AHR clearly push the boundaries of established kinship and procreative relations and behaviours (Shore 1992). Just as abortion disrupts the script which travels from pregnancy to motherhood, so AHR disrupts the social script which travels not only from heterosexual intercourse to pregnancy (as in *in vitro* fertilisation (IVF)), but also from pregnancy to parenthood (such as within surrogacy). Disturbance of a script so central to what creates us as humans raises a range of questions as to what humanness fundamentally is, and the implications of such technologies for humans. Definitions of motherhood and fatherhood, discussed in the kinship theme, as well as definitions of what is meant by human, are greatly challenged, and so it is not surprising that so much discussion was centred on the risks and dangers of AHR.

2.3 Definition of Difference

The final interpretive repertoire within the theme of normality is the great emphasis within the submissions on defining what is normal or the same, through a clarification of what is different. Submissions, particularly those from individuals, recognised that the impending use of these technologies as a common-place occurrence would "bring pressure to bear on the women"[22] — women would become responsible for ensuring that they had healthy, normal

babies. This would lead to a distinction being made between a healthy or desired baby and an unhealthy one. The submissions were keen to alert legislators to the fact that women would be under increased pressure to use the technologies to ensure that they had healthy children, and that they could be faced with blame and guilt if they chose not to. These technologies could give women choice and control, but equally they could be used coercively, with women being pressured to continue pregnancies only where the embryo was declared normal by a medical specialist.

An important group of people constructed as 'not normal' by the discussions within the submissions were "people affected by infertility".[23] The way issues of fertility were discussed portrayed infertility as a disease, something which needs to be treated, thus implicitly pathologising those who are infertile. Stanworth (1987:15) noted the same ideology in Britain, with a remarkable quotation from Patrick Steptoe, the 'creator' of the first test-tube baby:

> It is a fact that there is a biological drive to reproduce. Women who deny this drive, or in
> whom it is frustrated, show disturbances in other ways.

Franklin (1997) suggests that the portrayal of infertile couples as 'desperate' re-embeds scientific technologies into everyday life, 'naturalising' them. Even so, the debate over reproductive technologies only compounds further the stigma of infertility (Pfeffer 1987), and this pathologising was evident even in the most benign New Zealand submissions.

In addition, in some submissions, people born through the use of these new reproductive technologies were discussed as though they were an entirely different or distinct group or class of people that had been newly created. One individual, who wrote a lengthy submission, believed that AHR could lead to the creation of "another sub class",[24] through a comparison with present members of society. This supposedly will lead to those children becoming "second class citizens".[25] The spokesperson for Family Life International claimed that offspring produced through the use of these technologies would be different as they will result in and from "the domination of technology over the origin and destiny of the human person".[26] Legitimacy was a key element of the interpretive repertoire of those largely opposed to AHR. In this interpretive repertoire, AHR was posed as a threat to the legitimacy and integrity of the human race, with the word "integrity" occurring frequently.[27] Turner discusses similar concerns about the blurring of boundaries as technology becomes more involved in people's everyday lives. With this increase, Turner argues, technology becomes a determinant in the "origins, shape and destiny" of human lives (Turner 1987, p.218).

The theme of normality was an important aspect of the submissions, as people used it to define what was deemed acceptable to them. The response from the Select Committee to these concerns before the final Bill was passed was to address them, but none of the prohibitions were altered, nor were the passages relevant to the identification of disability and disease.

3 Natural versus Social Constructs

What is 'natural' is defined by what constitutes its opposite, the 'unnatural' or 'abnormal', as discussed in the above review of the theme of normality. However, it can also be defined by contrast with social or cultural constructs. Themes of natural versus social/cultural were frequent within the submissions on the HART Bill. This issue of the natural has several interpretive repertoires associated with it. These include: the natural versus technological; science as a natural fact; and the unnatural commodification of humans. The boundaries between these categories were assiduously policed in the submissions.

3.1 The Natural Order and Self-evident Statements

The first broad interpretive repertoire invokes the idea that reproduction is the domain of the natural (or divine) and should not be subjected to technological intervention, or at least — witness the championing of dairy-farming methods, mentioned below — not those described in the Bill. Assertions of the association of the natural with the divine were featured in some Christian-based submissions, such as a clear statement from two individuals that the "natural laws of nature are the divine laws of creation".[28] The authors of the nine submissions that used this repertoire maintained that, as procreation was within the laws of Creation and nature, it could not and should not be interfered with.[29] Other statements of this type that were Christian- or God-based asserted that procreation was a natural process and therefore unnatural science and technology had no place in it. Examples from the submissions include dividing areas of reproduction up into a natural or "human right" and "unnatural/artificial".[30] A group of signatories to one submission, writing from Dannevirke, proposed that the involvement of donors in human reproduction "reduced human beings to the level of animals and thus eventually to slavery".[31] However, another individual who also talked about the "unnaturalness" of these technologies believed that we would be better off using "more holistic or organic methods" like those used within dairy herds.[32] Unfortunately, this was not further explained.

The second type of interpretive repertoire was 'science as natural fact'. The facts of science were concrete and irrefutable. Science described reality, whereas other offerings were opinion or interpretation. It is interesting that those submissions using scientific fact as their evidence did not generally back up their statements with references, and instead implied that science was fact enough. This included the decision in the Bill to allow experimentation on embryos up to 14 days after fertilisation, based on the development of the primitive streak at that time. From this fact of nature, revealed by science, sprang the idea that this is when individuation occurs. Similarly, those who opposed all HARTs made similar leaps in their arguments. For example:

> At the moment of fertilisation the gametes become one cell (embryo) separate from its mother and father. It is a new human being, thus assuming all human rights, it has forty six chromosomes.[33]

This reasoning process, detected in the New Zealand materials, of drawing a moral conclusion (the beginning of personhood) from a scientific fact (the primitive streak or having 46 chromosomes) was identical to that described by Strathern (1992) and Franklin (1999) in Britain, except that the New Zealand submissions rarely cited the scientific research, they just assumed it or accepted it. There is a further point of interest, also noted by Franklin in Britain: the authors of some submissions believe it is natural for humans to want to develop

technologies and use them and, because of this, the increasing use of technology is inevitable and natural.

The final type of interpretive repertoire drawing on the natural was found, interestingly enough, within the SOP itself. This is the decision that commercialism in any form in relation to procreation was wrong and therefore should be prohibited. For example, "valuable consideration" is an offence in relation to supply of human embryos or gametes (Part 1, s. 11(1)) or participation in surrogacy (Part 1, s. 12(3)). Only two submissions from individuals picked up on this and, in doing so, argued against it, drawing on the concept of a woman's right to choose whether or not to involve herself in the sale of her reproductive abilities.[34]At the time of the submissions process, the issue of commercial surrogacy was being investigated by the Law Commission. Some submissions noted this and did not comment further, while the rest accepted the SOP statement of the unnaturalness of commercial enterprise in this family domain which should be separate from the market. The Bioethics Council's submission and some others expressed regrets at the lack of attention to surrogacy in general in the Bill and the SOP.[35]

3.2 Kinship

Two main interpretive repertoires are identifiable within the theme of kinship used in the submissions. One is the idea of an easing or broadening of what is defined as a kin relationship, away from an emphasis on a biological relationship as the essence of kinship. For example, the only acknowledged donor-conceived person wrote that there was a "move towards openness within families raising children who are not biologically their own".[36] Legge *et al.* (2007) also detect a similar trend from their analysis of New Zealand case law on ART. This quotation approves this increased openness, but takes for granted that families normally will be raising children "biologically their own". The author participates in the same type of biological thinking about kinship that those opposed to AHRs also use. As Schneider (1987) has pointed out, this was an underlying assumption of (middle-class) Euro-American kinship, in which the family is imagined as a biological unit from which the social relations of kinship grow. While the idea of blood ties may have been replaced by that of genetic relationships, this idea of biological relationships being the natural basis of proper kinship — along with heterosexual marriage and the in-law relationship — is very apparent in the submissions.

Unnatural families were typically defined as those including parents past the usual reproductive age, solo parents, or same-sex couples, while normal was typically defined as committed heterosexual couples, frequently those in a marital relationship.[37] Therefore, a large number of submissions spoke against HART as it would allow these single parents or same-sex couples to have babies; a right they felt should be reserved for nuclear families. For example, people spoke of a child "deserving" both a mother and a father,[38] and one submission from a couple even went so far as to state that only couples pledging the next 16 years to the child they would create should be permitted to have children. A "secure family environment" is a right that should be ensured for that child.[39] One submission evinced such concern about the integrity of the family that it proposed that donation should not be permitted:

> The rights of donors should not be allowed. The involvement of a donor is a ghostly intrusion of the privacy and intimacy of marriage, and can only be a stumbling block to the security of the home and its participants i.e. the father, mother, child and ultimately the state.[40]

The submission from the Catholic Women's League and the 1999 submission from the National Ethics Committee on Assisted Human Reproduction stated that "family creation" should be the major focus of the use of these technologies.[41] Whereas there is little doubt that a sense of belonging to a family or place, and the experience of human relatedness, are intrinsic to human development and identity (Carsten 2000), these submissions assert that the nuclear family is the normal context for children. The Maxim Institute submission was quite confident in its knowledge of what a family is:

> The family is a natural, historical and universal institution, the primal social bond, rooted both in human biology and cultural conventions. The family can be defined in all corners of the globe and in all times as a man and a woman bonded in a socially approved covenant of marriage, to bear, raise and protect children; to provide mutual protection, support and enjoyment; to create a small domestic economy; and to maintain continuity with the generation. Families not individuals, form the natural social units of society.[42]

Thus the submission stated that casual relationships and single people were not families and should not benefit from HART.

The importance of knowing about one's donor for donor-conceived persons is assumed in those submissions that request and support provisions for information-gathering, storage and access regarding donors and persons who are donor-conceived. In addition, the submission from the combined Fertility Service Providers noted the "damaging effects of secrecy in families".[43] These provisions for information access are spelt out in detail in Part 3 of the Act, and no anonymous donations are permitted. As well as name and contact details, and physical and medical history details, the donor must provide details on "ethnicity and any relevant cultural affiliations" (s. 47(1)(g)), and "in the case of a Māori donor, the donor's whanau, hapu, and iwi, (i.e., extended family and descent groups) to the extent that the donor is aware of those affiliations" (s. 47(1)(h)). Thus, at the same time that AHRs create situations where Schneider's (1987) "code of conduct", in this case the care of a child, forge the kinship links, these provisions reinforce the importance of the "sharing of substance", in this case imagined and named as a genetic relationship but often extending into cultural heritage.[44]

Other submissions focused more upon the right of donor-conceived persons to have access to their heritage, often conceptualised as their genetic or biological heritage, rather than personal relationships with donors.[45] While access to this information was often justified in terms of a need to know about any inherited disease or, less commonly, a need to avoid incest, more often the argument was that knowing who you are and where you have come from is important to a healthy sense of self, to a sense of identity. It was therefore in the interests of the person born through HART that information about donors be safeguarded and conveyed to them at an appropriate time, and that parents inform their children of their origins. Frequent reference was made to the openness of New Zealand adoption information as a model.

The nature of the family was a key area of change that contributed to the sense of societal decline expressed by some individuals and groups. Some authors wished to protect the nuclear family of 'mum, dad and the kids' against anomalies, as they saw them, such as families with same-sex parents or a single parent on the one hand, and on the other hand families where the parental roles were split between three or more parents, such as sperm or egg donors, gestational surrogates, and so on. Although such arrangements result in more rather than less relatedness, as Edwards (2000) pointed out, this was seen as far from desirable by some authors. Other authors took issue with such viewpoints, wished to accommodate such changes and recognise the relationships involved (see also Legge *et al.* 2007), and were more concerned that the rights and responsibilities of those involved in this

new kinship, and especially those of the resulting children, be protected. A few submissions also debated and sometimes asserted the rights of older or non-heterosexual people or single people to access HART.

4 Humanness

Concern with the implications that the HART Bill might have for the people involved in the process, and for humankind in general, is a central theme of the majority of submissions. In discussing these issues, the authors invoke shared as well as contrasting interpretative repertoires. Those authors who viewed humanness as beginning at the moment of conception, as well as those who implied that the creation of humanness occurs at some later point, shared concern about the commodification of human life. Within the submissions, however, two separate interpretive repertoires emerged: one focusing on the legitimacy of donor-conceived people; the other concerned with the challenge of maintaining human integrity or humanness in the face of AHR technologies.

4.1 When Does a Human Become a Human?

A highly cohesive repertoire offered by both individual and institutional submissions of ostensibly Christian background surrounded the assumption of when human life begins. The language used was consistent between such submissions, with simple, explicit phrases such as "life begins at conception" and "all human life begins at the very time that the egg is fertilised" used repeatedly. One particularly arresting example was written by a group of 11 Dannevirke residents (Sub. 56A:2) [46]:

> At the moment of fertilisation the gametes become one cell (embryo) separate from its
> mother and father. It is a new human being, thus assuming all human rights.

Often, these claims were backed up by scientific evidence, such as the claim that all the genetic material which will govern the individual's life is present at the moment of conception.[47] Terminology such as "killed" or "murdered" was frequently used in these repertories when referring to the final outcomes for excess embryos, indicating the human status granted to the embryos.

As scholars analysing the British Parliamentary debates have pointed out, these arguments invoke what is presented as scientific description: "life begins at conception" (Strathern 1992:118) as proof of the beginning of human personhood. What they are debating is not how to understand personhood, but when the person — a physical, self-evident human being — begins. To do this, they move backwards and forwards from a cultural domain of personhood to biologically-defined definitions of cells and groups of cells, reading from biology to person. This is a non-relational concept of personhood: the embryo itself contains in its genetic code all that is required for a human being.

In anthropology, the person is a cross-culturally variable construct, an analytic category. Strathern (1992:119) writes "a person cannot in this sense be seen without the mediation of analysis". Yet for authors of these New Zealand submissions, and some British Parliamentarians, this is definitely not the case.

Leaving aside for the moment this leap from a construction of biology to one of personhood, and staying with biological sciences, the science of human development suggests a more complex picture than "life begins at conception". Birke *et al.* (1990) discuss this simplified science strand of debate in the context of a broader discussion of the medicalisation of reproduction. They make several points. First, that life is a continuous process with no beginning or end, except for extinction of the species. The same point about continuousness was made on different grounds by an experimental embryologist, Johnson, to the British

Association for the Advancement of Science in 1990, described by Strathern (1992:118). Johnson explained that a person's birth begins with primitive gametes in their embryonic parents, and also depends on extra-genetic influences right from the start. Secondly, Birke *et al.* indicate that there is a good deal of uncertainty after fertilisation. Will the embryo implant? Will it survive? Will it become twins? Few fertilised ova make it to babyhood. And, thirdly, and as Johnson has also remarked, the genetic code is not enough. The embryo needs to implant to survive, and its development is influenced by relationships with its environment. At this stage, its environment is its mother. Her actions and intentions, her past and present health, her social and physical environment, and the environment of her parents and grandparents — as life history theory in biological anthropology has amply demonstrated (Adair *et al.* 2001; Schell and Denham 2003) — all have a part to play in the development of embryo to foetus to baby.

There was no explicit counter to this 'human life begins at fertilisation' repertoire in the submissions. Those that interpreted the beginning of human life as some time after the moment of conception did so only implicitly. This view, as offered in the submissions of both (largely non-Christian-identified) individuals and public service organisations, was typically expressed through the condoning of practices such as IVF, which creates and typically discards excess embryos as part of the process. Further implying this view is the use of terms such as "discard" or "got rid of", suggesting a non-individual person status for the embryo. It may be that specific reference to the already existing British legislation which had enshrined the 14-day limit on embryo experimentation or implantation of *in vitro* embryos removed the necessity for explicit justifications. The requirement, however, for an explicitly stated definition of 'individual' was voiced in one submission from an individual and another from the Health and Disability Commissioner,[48] suggesting that they shared a categorical approach to personhood. However, this was not thought necessary by the Select Committee.

Aside from the normalisation of the view that 'life begins at some time other than conception' making explicit statement of such views unnecessary, apparent legal contradictions as to the definition of 'personhood' may have encouraged such views to remain implicit. England's 1984 Warnock Report defined personhood as beginning at 14 days (see Shore 1992:297), the time of individuation, when the cells of the then eight-cell cluster differentiate and the primitive streak appears, again using science to justify a moral category. As noted above, as human development is continuous and of increasing complexity, a variety of stages might arbitrarily be taken as an indicator that a culturally (legally) defined person has come into existence. Clearly, this 14-day definition is in conflict with abortion laws, which allow the abortion of a 26-week-old foetus (Shore 1992). As the proposed New Zealand legislation adopted a similar 14-day stance on personhood, pro-IVF submissions place emphasis on the humanity of the couples affected by AHR rather than argue the humanness of embryos, thus allowing for a compassion-based mode of expression despite differing definitions of the personhood status of embryos.

4.2 Pre-emptive Arguments: Natural Families and Compassion

A focus on the need to recognise the involvement of human adults within the AHR process, and the need for awareness of the impact of the legislation upon such individuals, is seen in many of the largely pro-AHR submissions. The importance of acknowledging suffering couples was a major issue in the submissions of fertility providers and counsellors in particular,[49] with the "loss" and "stress" faced by infertile couples emphasised.[50] Within this

repertoire, emphasis was placed on the naturalness of such couples.[51] For example, the President of a Fertility Society wrote:

> The majority of members are *couples* who, due to fertility limitations have trouble in creating a *family*.[52] [emphasis added]

Such emphasis on the naturalness of the potential AHR counters the oppositional rhetoric of many submissions deriving from groups such as Family Life International, and SPUC, as well as from individuals, which opposed the creation of "unnatural families"[53] and feared that AHR would facilitate such transgressive social formations. It has the effect of pathologising infertility and normalising the heterosexual couple wishing to have children.

Just as awareness of criticism of the unnaturalness of AHR can be seen in the natural family interpretive repertoire of largely pro-AHR submissions, an awareness of potential accusations of heartlessness can be seen in the attempt of many (both individual and organisation-linked) authors of generally anti-AHR submissions to create a caring/sympathetic profile,[54] such as this from Family Life International:

> … we feel deeply for those unfortunate couples that are unable to conceive, or unable to carry a child …[55]

Such disclaimers also suggest agreement with the construction of infertility as pathological. Both pro- and anti-AHR submissions expressed compassion; however, the focus of their compassion was, respectively, the couple or the embryo-person.

4.3 Commodification

Relative consistency in the terminology surrounding issues of commodification was seen in both the submissions of those generally opposed and those generally supporting the HART Bill. Terms such as "exploitation", "objectification" and "commodification", images of "people as products", humans as "laboratory experiments" or "baby-factories", and the idea of disposability emerged frequently in the submissions.[56] Patenting of bodies and genetic material was also raised as a concern,[57] as was allowing reproductive technologies to become a "monopoly of private companies".[58]

Many submissions found the idea of commercialisation of surrogacy distasteful or "repugnant",[59] with terms such as "brokers"[60] used to emphasise the commercialism of such an arrangement. Donation, similar to blood or organ donation, was the preferred model (see Strathern 1992:128). However, a series of submissions (largely from fertility providers, but with some from individuals) focused on differentiating between recompense for "legitimate expense" and commercialism in surrogacy arrangements.[61] The reasonableness of such payments was emphasised, with a clear division being made between actually paying a wage to the surrogate mother, and ensuring that the surrogate or donor was not "out of pocket".[62] In the two submissions taking an outright pro-commercial surrogacy stance (both such submissions were presented by individuals), imagery likewise focused on distancing compensation from commodification/commercialism within surrogacy agreements, and emphasising the service element of surrogacy.[63] A woman who was a member of a surrogacy email network wrote:

> Payments of benefits to a surrogate are "compensation" for services rendered and not a fee to sell the baby. … Fertility specialists and personnel can be paid for their services, for their expertise, for their role in helping another party "reproduce" and yet a surrogate in providing the same service cannot?[64]

19

4.4 Identity

Put bluntly, there were two main views of human identity which were readily apparent when submissions referred to the time at which an embryo, foetus or baby becomes human:

- a fully human person is created at the moment of fertilisation, because all the genetic material that determines a person is present at that time;

- a fully human person is created only some time after fertilisation, though a process of development, sometimes conceived of as physical development, sometimes as a much more complex process of ongoing interactive development.

Occasionally a submission used both concepts of humanness to support the different arguments being made. For example, in an initial submission from the Nathaniel Centre (Catholic Bishops) the first view was used to argue against HART, and in an invited supplementary paper to their oral submission, the second view was used to argue for the importance of both parents for a baby to develop into a fully human person.

Other arguments set the limits to the human, for example, by agreeing with the proposed outlawing of the creation of animal-human hybrid embryos, and the transplanting of an embryo from humans to another species and vice versa.

A concern that emerged in a group of largely pro-AHR submissions was the critique of the dehumanising implications of the use of the term "donor offspring" within the Bill, and the Bill's application of the infantilising term "donor child" to adults. These submissions instead favoured the use of terms such as "donor-conceived offspring"[65] or removing the prefix 'donor' when speaking about a child resulting from the use of a "donated" gamete.[66] Whereas, as discussed in the 'Normality' section, submissions from individuals and organisations generally opposed to AHR tended to focus on the threat from AHR technologies to the integrity of humanity *as a whole* and to the embryo, concern with identity issues of persons conceived through AHR technologies tended to be expressed by generally pro-AHR organisations and individuals.[67] The Select Committee response was to agree that terms such as "donor child" were inappropriate when applied to an adult, but the committee retained the use of the expression "donor offspring" despite concerns about the depersonalising nature of the term.[68]

4.5 Discussion

Both largely pro- and largely anti-AHR submissions emphasise the importance of the care of humans within the AHR process. However, differences in the definition of 'human' led to different views on the best way in which to ensure the care of the humans involved. Parallels appear in Ginsburg's study of the debate surrounding abortion in Fargo, USA, in which both pro-choice and pro-life campaigners saw their work as an effort to enhance women's positions (Ginsburg 1998:218).

The highly normalised assumption of the naturalness of the desire to have children went largely unquestioned throughout the submissions. However, different interpretive repertoires placed different limits on the means considered appropriate for producing a child. This normalisation of the naturalness of the desire to reproduce even extended to its being treated as self-evident within the Select Committee responses to the submissions. The hegemonic status of such a view warrants further analysis, particularly with respect to how such normative values may play out within the health system. Along with the assumption of the

naturalness of the desire to reproduce was a repertoire which apparently inevitably pathologised infertility and sometimes pathologised the infertile who were frequently described as 'desperate'. However, there was also some counter-discussion on whether parenthood was a right, a gift or a privilege, and therefore to what extent the taxpayer-funded health system should support infertile individuals to realise the goal of parenthood.

Both pro- and anti-AHR submissions were united in the assumption that the desire to reproduce is a natural human (especially female) desire. It has been argued, however, that such an assumption of the natural desire to bear children is, in fact, a result of societal pressure to fulfil the parental (especially maternal) role (Birke *et al.* 1990), and is historically and culturally variable. This was recognised in the Warnock Report:

> Childlessness can be a source of stress even to those who have deliberately chosen it … . They may feel that they will be unable to fulfil their own or other people's expectations. They may feel excluded from a whole range of human activity and particularly the activities of their childrearing contemporaries.[69]

Typically, however, while largely anti-AHR submissions did sympathise with the plight of the involuntarily childless, they did not see such misfortune as justification for the use of AHR technologies.

Concerns about the increasing commodification of humanity were also found on both sides of the AHR debate. Stanworth (1987) has associated some of the explanation for the commodification of women in AHR with the development of technologies, such as ultrasound, which render women's own information less vital, such as her knowledge of time of conception or her experience of quickening (Duden 1993:80). Increasing technologisation, particularly with respect to genetic engineering (and the consequent 'patenting') of plants and animals, has led to commercial gain through reproductive biotechnologies (Rowland 1992:217). In combination with the commercial transactions involving surrogacy and gamete (particularly ova) donation, concerns for the increasing role of money in human reproduction have been identified in other analyses of discourse surrounding AHR (Rowland 1992; Ginsburg 1998; Hirsch 1999a; Hirsch 1999b).

5 Moral Decline

Pervasive throughout the submissions was the idea of AHR technologies creating a moral "slippery slope", with the seemingly inevitable creation of a society with lowered moral and ethical standards. While a considerable proportion of the 'moral decline' rhetoric was expressed by Christian-identified individuals and organisations, statements invoking fears of eugenics, particularly in association with germ-line engineering, were found within a wide range of submissions.

5.1 Change and Control

The rapidity of development of AHR technologies was highlighted in both pro- and anti-AHR submissions. However, the interpretive repertoires that surrounded such ideas of rapid change varied widely. Many of the largely pro-AHR submissions, while acknowledging the change in technology, tended to see such change in a positive light, and used language suggesting that, with appropriately "dynamic legislation" or "responsible societal governance", it would be possible to "keep pace" with such technologies.[70]

This was not always the case, however. For some who could be categorised as largely pro-AHR — such as MP Dianne Yates, who introduced the 1996 Bill and was on the 2003 Health Committee — concern about the pace of AHR technologies is coupled with concerns for the future.

> The technology is running ahead of ethical and legal considerations and needs to be controlled because of possible consequences for future generations.[71]

Her reference to future generations is echoed in many of the submissions.

Concerns about the pace of technological change, especially coupled with conceptualisation of technology as outside of human society and human control, led many authors of the submissions to express relief that legal guidelines or regulations would soon be available to act as guides or brakes in this area. Others were not so sanguine, and used their submission as a platform to express their unhappiness about societal decline, HART being just one example of unwanted change to the natural order of things as they understood it. As Stanworth (1987) suggested, HART does crystallise issues at the heart of contemporary controversies.

Largely anti-AHR submissions, principally (but not exclusively) authored by Christian-identified groups or individuals, tended to portray such change as dangerous and a threat to society. In such submissions¸ language focused on the increasing domination of society by technology through science's increasing "power over bodies".[72] The submission from Family Life International states:

> Artificial insemination creates insurmountable ethical dilemmas, representing the domination of technology over that most human act of sexual love and procreation.[73]

> [The use of any AHR techniques] … establishes the domination of technology over the origin and destiny of the human person.[74]

Such submissions emphasised the need to *control* the technologies used, also using images of pace, and questioning the ability of "legislation or ethics to keep up" with the new technologies.[75] In the process, technology becomes a thing in itself, perhaps a force of nature, rather than another aspect of human culture created and worked on by fellow human beings

who might be expected to have some ethical responsibilities and to share moral values with their community.

In the arena of germ-line engineering (and, to an extent, pre-implantation selection), however, it was not only those generally opposed to AHR who employed imagery of technology outstripping the pace and controls of society. A shared interpretive repertoire that was focused on the rapidity of development, and the need to control germ-line engineering in particular, was found in a range of submissions.[76]

GE Aware's submission focused not so much on technology itself, but on the progressive wresting of control of reproduction away from women and, through the use of these technologies, into the hands of corporations, commodifying reproduction in the process.

> These technologies can be seen as the latest trend to control reproduction, first removing the 'Earth Mother' to replace her with the expert scientist, ultimately the corporation's commodities.[77]

The National Council of Women pointed to the vulnerability of would-be parents, and the possibility of less-than-ethical fertility services, as well as to the speed of developments in its argument for the need for timely legislative controls. The construction of women or would-be parents as "desperate" rather than rational is common in AHR debates.

> With technology still moving faster than governments are willing to deal with social, moral and ethical issues the field is left wide open for the desperate to be taken advantage of by the unscrupulous.[78]

5.2 Risk and Danger

In largely anti-AHR submissions (typically Christian-identified), a "risk" and "danger" based terminology was frequently associated with images of the increasing power and developmental pace of AHR technologies. Such interpretive repertoires often contained expressions of concern for the physical, psychological and often spiritual wellbeing of those (mothers and offspring) involved in AHR techniques.[79] Those submissions taking a 'life begins at conception' stance frequently expressed concern about the "danger" of IVF treatments for the embryos involved.[80] "[P]sychological devastation", "psychological scars" and "emotional risks" were associated with the results of AHR techniques.[81] However, even for those generally in favour of AHR, emphatic statements pointed out the need for adequate counselling and mental health care.[82] Using AHR was seen as an important decision with serious implications and as a major life event.

Supporting imagery of the danger of AHR, several submissions emphasised the safety of non-AHR techniques, utilising portrayals of the womb or "natural mother" as a safety zone. These submissions simultaneously construct the woman as a passive (if safe) container and have nothing to say about her dignity. Instead, the focus is on the embryo. The first extract is from an individual, the second from Family Life International.

> That … all embryos be treated with respect that a born person can expect from a professional such as a scientist or doctor; meaning all embryos be inserted into the woman and so kept out of danger until birth takes place.[83]

> No zygote or embryo is safe from anything if they are outside the sanctuary of the mother.[84]

5.3 Future-proofing

Issues of risk, danger, change and control within a broad range of submissions were often accompanied by terms regarding the concern for the future and the need to protect future generations.[85] Specifically, the phrase "future-proof" occurred repeatedly.[86] While terms expressing fears for the future tended to be used within submissions largely opposed to AHR technologies,[87] this was not always the case, and within some largely pro-AHR submissions (authored by individuals, fertility providers and disability organisations), a desire to future-proof legislation to protect non-traditional families or potentially disabled foetuses was also expressed.[88]

5.4 Moral Decline of Society

Unwanted change in kinship formed an important part of the interpretive repertoires of moral and social decline in these submissions. Despite, or perhaps because of, the statistical trends that show that single-parent families and other varied household arrangements for the raising of children are greatly on the increase, the authors of many submissions tried to shore up the nuclear family by wanting AHRs restricted to heterosexual couples only. In this they were in line with the British Warnock Committee which believed that children were better off born into two-parent families, and therefore a woman without a male partner should not have access to AHRs (Stanworth 1987:24) However, authors of other submissions countered these arguments and pointed to ways to safeguard the rights of same-sex parents through related Acts. Officials advised that restriction of HART on the basis of marital status or sexual orientation would contravene the New Zealand Bill of Rights Act and was outside the scope of the SOP.[89] Jeanette Edwards's research in Britain (2000) has shown that AHRs both create and assist kinship ties, as the birth of a child produces significant social relationships (Edwards 2000). However, these relationships may not be recognised as correctly familial by some sections of the population.

The likelihood that AHR technologies could, indeed, be used by non-traditional families was one of the reasons why some submission authors saw AHR as part of a process of moral decline. "Slippery slope" imagery was regularly employed in submissions that used AHR technologies to represent the perceived decline of society in general, as this example from a Christian parish group makes clear.

> With recent changes to the drinking age, family constitution, prostitution reform, homosexuality, we seem destined to head down a path that will lead to disarray in our communities and the country as a whole.[90]

An individual author was more concerned about the law-making process itself, also seen to be in decline: "Poor laws will lead to poorer laws and will ultimately fail".[91]

The final quotation is not specific, but presumably refers to the treatment of cells or embryos and foetuses. By equating the embryo with a born person, the woman author uses the legislation to represent a slide towards slavery.[92]

> I regard the bill and SOP's as heralding a huge retrog[r]ade step for our society towards the days of slavery and bondage where the rights of one person were abrogated to the absolute power and authority of another, thus rendering the former powerless and unprotected by law.[93]

With respect to research on embryos, the same link was made between the use of technology and eventual societal demise: "any society that goes down this track eventually collapses".[94]

5.5 Eugenics

Both generally pro- and anti-AHR submissions formed a united interpretive repertoire with regard to fears of eugenics. Fears of "ethnic cleansing" and the creation of "designer babies" were expressed with respect to germ-line modification, and, in some cases, to pre-implantation diagnosis.[95] References to Nazi Germany were frequent.[96] Legislation which permitted the controlled use of some AHR technologies, as well as legislation which would introduce a complete ban, was invoked as protection against these feared uses. Only one submission explicitly dismissed the creation of "designer babies" as a possible concern resulting from AHR technologies. The intervention of this medical expert tempered the view that scientists had built up sufficient knowledge of human genetics to enable the extremely rapid development of genetic technology.

> There is sometimes a belief that in the near future, we will be able to enhance our children genetically and be able to select for certain characteristics such as beauty, intelligence or sporting ability … at the moment scientists know almost nothing about which genes might be involved in this.[97]

While HART was recognised in many submissions as a tool that individuals and couples could use to form families, some submissions noted that this tool could also rebound on women, who might in future be blamed for bringing less-than-perfect children into the world. Similarly, in some disability rights discourse, HART was seen as potentially exacerbating the discrimination and invalidation experienced by people with disabilities. Within all three discourses, some uses of HART — what these were varied — were recognised as having eugenic potential and were to be forbidden.

5.6 Discussion

In the area of AHR, it seems likely that the perceived lack of control of individuals over the use and development of the new technologies is likely to feed the idea that AHR technologies are dangerous. As noted above, this construction of technology as supra-human is embedded in many submissions. Technological developments in AHR are indeed relatively rapid and complex, and the locus of control for such development lies largely with scientific and/or commercial research establishments located outside of the general public's everyday life, and so viewed as somehow outside of society. With the view that science is something inaccessible, non-human even, people's sense of power to influence the course of its development is diminished, and anxieties regarding the outcomes of the use of such technologies are heightened. In addition, the pace and complexity of scientific development means that not only is there a race to socially control such technologies, but even "keeping pace" with understanding what the technologies are may prove challenging.

Calls for future-proofing (regardless of what exactly was desired to be future-proofed) typically made appeals to legislative and political powers to provide control. While such direct address to legislative and political forces to protect society is not surprising, considering that the submissions are directed at a governmental Select Committee, the degree to which submissions emphasise legislation as *the only hope* may reflect the view that science, as such a powerful and inaccessible force, can be matched only by law.

In the absence of such future-proofing, fears lead to slippery-slope-type assumptions. Although common throughout the submissions, such logic has been critiqued for its dependence on a series of conditional arguments, any one of which may be dubious (Epstein

1999:139–40). For example, typical eugenics slippery-slope arguments, as found in the submissions, proceed from the use of germ-line engineering as a cure for genetically linked disease to the manipulation of genes for non-disease purposes, to the creation of a Nazi state. Such an outcome clearly depends on the ability of scientists to identify genetic bases not only for disease but for qualities such as beauty and intelligence, and then leaps from these scientific capacities to the establishment of fascism.

The submissions which adopted 'moral decline of society' rhetoric were not authored by those groups or individuals who have been or are likely to be directly personally affected by AHR technologies. The readiness of those articulating this interpretive repertoire to tack issues of perceived societal decline onto the issue of AHR, and the silence of direct participants in ART, raises the question of why those who are personally relatively distanced from the technologies feel entitled to make such extensive comment, and why those who are personally directly involved have largely remained silent in these submissions.

 Such increasing public awareness of, and engagement with, foetal issues has been discussed at length by several authors (Petchesky 1987; Duden 1993; Franklin 1997; Ginsburg 1998; Thompson 2001). Public identification with foetuses, and increasing maternal invisibility and marginalisation, have been linked to technological developments, such as foetal 'imaging' (Petchesky 1987; Duden 1993:14), and the widespread showing of these images on film and television and in magazines, along with the instructions on how to 'see' them. The highly publicised use of life-support systems to maintain legally brain-dead pregnant women until their babies are viable and can be born by Caesarean section have also been cited as contributing to the public foetus and the invisible mother (Stanworth 1987:38; Rowland 1992:194). Marginalisation of fathers is increased by AHR technologies, too, with use of donor sperm exacerbating pre-existing anxieties about the separation of 'genetic' and 'social' fatherhood (Strathern, 1992:149), or even allowing social fatherhood to be entirely by-passed (a fear expressed in many submissions). The relative invisibility of parents, particularly the relegation of women to an 'object/container' status (Stanworth 1987:51), allows not only for public comment on the embryo/foetus itself, but for the *tabula rasa* embryo to enable the projection of a wide range of societal ills.

Governmental documents responding to the Health Select Committee focused on the unlikelihood of the use of germ-line engineering to create a designer being: "Any such approach remains science fiction for the foreseeable future".[98] However, as a result of the deep concern expressed in such a large number of submissions, the Select Committee recommended that germ-line modification should be placed on the list of prohibited activities.[99] Fears of psychological danger, and accompanying suggestions for the implementation of mandatory counselling, were not acted upon on the grounds that the legislation was not the appropriate place to put a requirement for counselling.[100]

6 Rights and Power

The final major theme raised by the submissions on HART focused on issues surrounding the rights and power associated with these technologies and decision-making about them. More specifically, whose rights should be paramount and whose rights should just be considered, and where the power of this decision-making should rest. There are three main interpretive repertoires within this theme, one of which is the clarification of specific terms used within the piece of legislation.

6.1 Rights

Under the subject of rights, two major interpretive repertoires could be discerned: the 'right to life' of the embryo or unborn child, and the 'right to choose' for adults. Authors within the right to life repertoire urged that everything should be done to ensure that birth is the final product of procedures, and they fully supported the statement in the Bill that the child's welfare was to be paramount. This included a minority who argued that where conception is not very likely amongst new technologies — for example, in *in vitro* fertilisation — the technologies should not be used.[101] This argument was defended within the submissions because the "right to life is the most basic of all rights".[102] Therefore the embryo needs protection, particularly as it is the most dependent and vulnerable of all beings.[103] On the other hand, the rights of people to choose included the choice to have children and the choice whether or not to use the technologies which are available to assist in this aim.[104]

A few people expressed concern that the rights of all individuals involved in the process should be addressed and protected.[105] There were also a significant number of submissions concerned with the rights of donor-conceived people,[106] particularly the right of such people to know the identity of their donors. Quite a few submissions questioned the age of receiving information as a donor-conceived child;[107] however, the Bill was not altered on this matter due to privacy issues (the age therefore staying at 18 years). Joychild and Hall (2005) later wrote a report on legal parenthood, stating that it is "in the child's interests to have an accurate knowledge of its genetic lineage".

An interesting aspect within this topic is that some submissions talked about the "fundamental right" to be able to have children,[108] whereas many others argued that in fact it was a privilege, not a right, to have children.[109] Other submissions raised concerns that AHR technologies would increase the pressure on women to produce perfect offspring.[110] Turner argues that the expansion of the medical arena into society results in a regulation of bodies that means being healthy is being a good citizen (Turner 1987:225). The new reproductive technologies have increased individuals' power in relation to procreation (King 1994), but in doing so may have extended the historical marginalisation of women and their reproductive capabilities (Weiner 1995).

6.2 Clarification of Specifics

Several submissions, and especially those written by bodies such as the Law Commission, were concerned with clarification of specifics within the legislation. This included clarification of terms, guidelines, structures and so on.[111] For example, there were requests for definitions of terms such as "foetus"[112] and "dignity".[113] As well, there were requests for

clarification of nomination processes,[114] what training would be provided,[115] and what constitutes an "established" procedure.[116] The majority of submissions addressing issues such as these were doing so in an attempt to improve the Bill by making it more specific.

6.3 Power

Finally the issue of power — who holds it and how much of it — was given prime consideration by many submissions. The main issues within this area were that the Minister of Health held too much power for one person, and that the make-up of advisory and ethics councils/committees needed definition. The guideline (as opposed to regulatory) approach of the Bill was a major concern expressed in many of the submissions. The repeated requests made for governance of AHR to be by a regulatory framework, rather than by the guideline approach of the Bill, reflected concerns that AHR technologies would not be answerable to the concerns of the public or to democratic process.[117] Many submissions mentioned that there should be an appeal mechanism for the decisions made, to ensure that committee decisions could be questioned. Submissions also talked about the need for public consultation within the process.[118]

A number of submissions raised questions about the mention of Māori within the Bill, hence singling them out as a separate group and in need of separate consideration. Finally, a number of submissions raised concerns over the length of the approval period, which would mean that people wanting to use the technologies were going to be stalled for some time.

The issues of rights and power in relation to the new reproductive technologies are very important ones, as they clarify who the technology is in place to benefit and who is protected by its legislation. The number of submissions and also the overall cohesiveness of the arguments attest that it is an important area for the writers of the submissions.

7 Discussion and Conclusion

When we embarked on this analysis, we hoped for some enlightenment on New Zealanders' core concerns about an area of life that had been described as raising fundamental questions about, *inter alia*, being human, sexuality, parenthood, reproduction, and the family. As we reflect on what we have learned, we find that the submissions to the HART Bill and SOP are a rich ground for this analysis. They contained surprises as well as confirming some of the expectations raised in the literature from other nations' debates on related issues. Our analysis was limited to the written submissions from the general public. It is worth noting again that these submissions cannot be taken to represent the opinions of a representative cross-section of the public. However, the concerns that they raise are likely to be widely shared among sections of the New Zealand population.

7.1 Comparisons

Having read several discussions and Franklin's (1999) analysis of the British Parliamentary Debates, we expected to find in the submissions many pages of scientific evidence about embryology, and a great deal of evidence about the origins of human life, the nature of the individual, the effects of HART on families, and so on. We did not. While these matters were present in the submissions, they were more often asserted than argued. That the New Zealand process took place considerably later than in Britain might provide some explanation. For example, the "14-day" argument about differentiation of the embryo was in legal existence, so perhaps those writing submissions did not see the need for much further debate: they either accepted an argument or simply rejected it. In addition, significant reports, mentioned in the introduction, had been produced on matters relevant to HART. However, there may also be some national differences in debating style and also in citizens' relation to science. Nonetheless, we were aware that we were comparing New Zealand public *submissions* with British parliamentary *debates*. A next step in our study of HART should be to examine the New Zealand Parliamentary Debates relating to the successive Bills and the SOP to try to address the contrasts between the findings of our analysis and those published for Britain and other countries.

In the submissions, too, there is reference to some aspects of New Zealand society which are unique. One is the existence of Māori culture and the emphasis on whakapapa, and whether or not Māori interests should be given particular consideration in HART. Another is the small size of New Zealand's population; another, the small number of fertility clinics, which have been self-regulating in association with Australia and have practised non-anonymous donation for some years. Small population size was sometimes linked to the importance of openness; whereas the small number of fertility clinics was used to argue against the need for bureaucratic regulation, and for more flexible guidelines: a contrast with the method of dealing with HART adopted in most other countries. These points also suggest that a close reading of the New Zealand Parliamentary Debates might reveal more fully developed arguments based on New Zealand's particular situation, history and character, and thus contribute to the ethnography of New Zealand as well as to the specific issues that HART raises.

7.2 Reflections on the Process of Enacting Law on HART

Our work on these submissions has impressed us with the robustness of this part of the democratic process. The authors of the submissions expressed firmly held views. These were frequently diametrically opposed in terms of the outcomes that they wanted. The Health Committee's role was to formulate its position in the light of an assessment of the submissions, and the Bills and SOP before it. Each submission was analysed by the Committee and officials, a summary of the key points made, and the Committee's response was prepared. Some points were dismissed because they were thought to be self-evident (such as the need for a definition of 'individual') or because they had never been entertained in the Bill and SOP (such as commercial surrogacy). Although such issues were not substantively dealt with, that all issues raised in submissions became matters of public record in the Departmental Report of the Ministry of Justice[119] is highly encouraging in terms of adherence to democratic process. The process of making submissions can, of course, be criticised as favouring those literate in English and the middle classes, but oral submissions were also possible. Given the written submissions received, however, it is difficult to see how they could have been treated in a more comprehensive and respectful way by the Committee process. Our proposed examination of the Parliamentary Debates should assess whether this next phase in the law-making process is consistent with the Committee stages.[120]

References

Adair L. S., C. W. Kuzawa, and J. Borja, 2001. Maternal energy stores and diet composition during pregnancy program adolescent blood pressure. *Circulation*, 104(9):1034–39.

Atkin, W. R., and P. Reid, 1994. *Assisted Human Reproduction: Navigating Our Future.* Wellington: Department of Justice.

Birke, L. I. A., G. Vines, and S. Himmelweit, 1990. *Tomorrow's Child: Reproductive Technologies in the 90s.* London: Virago.

Carabine, J., 2001. Unmarried motherhood 1830–1990: A genealogical analysis. In M. Wetherell, S. Taylor, and S. J. Yates (eds), *Discourse as Data: A Guide for Analysis.* London: Sage Publications in association with The Open University, pp.267–310.

Carsten, J., 2000. *Cultures of Relatedness: New Approaches to the Study of Kinship.* Cambridge and New York: Cambridge University Press.

Charo, A. R., and K. H. Rothenberg, 1994. 'The good mother': The limits of reproductive accountability and genetic choice. In K. H. Rothenberg and E. J. Thomson (eds), *Women and Prenatal Testing: Facing the Challenges of Genetic Technology.* Columbus: Ohio State University Press, pp.105–30.

Douglas, M., 1966. *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo.* London: Routledge and Kegan Paul.

Duden, B., 1993. *Disembodying Women: Perspectives on Pregnancy and the Unborn.* Cambridge, Mass.: Harvard University Press.

Edley, N., 2001. Analysing masculinity: Interpretive repertoires, ideological dilemmas and subject positions. In M. Wetherell, S. Taylor, and S. J. Yates (eds), *Discourse as Data: A Guide for Analysis.* London: Sage Publications in association with The Open University, pp.189–228.

Edwards, J., 2000. *Born and Bred: Idioms of Kinship and New Reproductive Technologies in England.* Oxford: Oxford University Press.

Epstein, R. L., 1999. *Critical Thinking.* Belmont, CA: Wadsworth.

Faden, R., 1994. Reproductive genetic testing, prevention, and the ethics of mothering. In K. H. Rothenberg and E. J. Thomson (eds), *Women and Prenatal Testing: Facing the Challenges of Genetic Technology.* Columbus: Ohio State University Press, pp.88–97.

Franklin, S., 1997. *Embodied Progress: A Cultural Account of Assisted Conception.* London and New York: Routledge.

Franklin, S., 1999. Making representations: The parliamentary debate on the Human Fertilisation and Embryology Act. In J. Edwards, S. Franklin, E. Hirsch, F. Price, and M. Strathern, *Technologies of Procreation: Kinship in the Age of Assisted Conception.* London and New York: Routledge, pp.127–165.

Ginsburg, F. D., 1998. *Contested Lives: The Abortion Debate in an American Community.* Berkeley: University of California Press.

Ginsburg, F. D., and R. Rapp (eds), 1995. *Conceiving the New World Order: The Global Politics of Reproduction.* Berkeley: University of California Press.

Hirsch, E., 1999a. Afterword: Glimpses of moments in the 'circuit of culture'. In J. Edwards, S. Franklin, E. Hirsch, F. Price, and M. Strathern (eds), *Technologies of Procreation: Kinship in the Age of Assisted Conception.* London and New York: Routledge: pp.122–126.

Hirsch, E., 1999b. Negotiated limits: interviews in south-east England. In J. Edwards, S. Franklin, E. Hirsch, F. Price and M. Strathern (eds), *Technologies of Procreation: Kinship in the Age of Assisted Conception.* London and New York: Routledge: pp.91–121.

Joychild, F., and S. Hall, 2005. New issues in legal parenthood: Frances Joychild and Susan Hall, the Law Commission, introduce the Commission's latest report. *New Zealand Law Journal* (May 2005):132–33.

Kaplan, D., 1994. Prenatal screening and diagnosis: The impact on persons with disabilities. In K. H. Rothenberg and E. J. Thomson (eds), *Women and Prenatal Testing: Facing the Challenges of Genetic Technology.* Columbus: Ohio State University Press, pp.49–61.

King, P. A., 1994. Ethics and reproductive genetic testing: The need to understand the parent–child relationship. In K. H. Rothenberg and E. J. Thomson (eds), *Women and Prenatal Testing: Facing the Challenges of Genetic Technology.* Columbus: Ohio State University Press, pp.98–104.

Legge, M., R. Fitzgerald, and N. Frank, 2007. A retrospective study of New Zealand case law involving assisted reproduction technology and the social recognition of 'new' family. *Human Reproduction* 2007 22:17–25.

Lippman, A., 1994. The genetic construction of prenatal testing: Choice, consent or conformity for women. In K. H. Rothenberg and E. J. Thomson (eds), W*omen and Prenatal Testing: Facing the Challenges of Genetic Technology.* Columbus: Ohio State University Press, pp.9–34.

Michelle, C., 2006. Transgressive technologies? Strategies of discursive containment in the representation and regulation of assisted reproductive technologies in Aotearoa/ New Zealand. *Women's Studies International Forum* 29:109-124.

Mulkay, M., 1993. Rhetorics of hope and fear in the great embryo debate. *Social Studies of Science* 23(4):721–42.

Mulkay, M., 1996. Frankenstein and the debate over embryo research. *Science, Technology, & Human Values* 21(2):57–176.

Petchesky, R. P., 1987. Foetal images: The power of visual culture in the politics of reproduction. In M. D. Stanworth (ed.), *Reproductive Technologies*: G*ender, Motherhood and Medicine.* Cambridge: Polity Press in association with Blackwell, pp.57–80.

Pfeffer, N., 1987. Artificial insemination, in-vitro fertilization and the stigma of infertility. In M. D. Stanworth (ed.), *Reproductive Technologies*: *Gender, Motherhood and Medicine.* Cambridge: Polity Press in association with Blackwell, pp. 81–97.

Potter, J. and M. Wetherell, 1990. *Discourse and Social Psychology: Beyond Attitudes and Behaviour.* London: Sage Publications.

Rapp, R., D. Heath, K. Taussig, 2001. Genealogical dis-ease: Where hereditary abnormality, biomedical explanation, and family responsibility meet. In S. Franklin and S. McKinnon (eds), *Relative Values: Reconfiguring Kinship Studies.* Durham and London: Duke University Press, pp.385–409.

Rowland, R., 1992. *Living Laboratories: Women and Reproductive Technologies.* Bloomington and Indianapolis: Indiana University Press.

Royal Commission on Genetic Modification, 1991. *Report of the Royal Commission on Genetic Modification.* Wellington: Royal Commission on Genetic Modification.

Schell, L. M., and M. Denham, 2003. Environmental pollution in urban environments and human biology. *Annual Review of Anthropology* 32:111–34.

Schneider, D. M., 1987. *A Critique of the Study of Kinship.* Ann Arbour: University of Michigan Press.

Shore, C., 1992. Virgin births and sterile debates. *Current Anthropology* 33(3):295–314.

Stanworth, M. D. (ed.), 1987. *Reproductive Technologies: Gender, Motherhood and Medicine.* Cambridge: Polity Press in association with Blackwell.

Strathern, M., 1992. *Reproducing the Future: Anthropology, Kinship and the New Reproductive Technologies.* Manchester: Manchester University Press.

Taussig, K.-S., R. Rapp, and D. Heath, 2003. Flexible eugenics: Technologies of the self in the age of genetics. In A. Goodman, D. Heath and M. S. Lindee (eds), *Genetic Nature/Culture: Anthropology and Science Beyond the Two-culture Divide.* Berkeley: University of California Press, pp.58–76.

Thompson, C., 2001. Strategic naturalizing: Kinship in an infertility clinic. In S. Franklin and S. McKinnon (eds), *Relative Values: Reconfiguring Kinship Studies.* Durham and London: Duke University Press, pp.175–202.

Turner, B. S., 1987. *Medical Power and Social Knowledge.* London: Sage Publications.

Weiner, A. B., 1995. Reassessing reproduction in social theory. In F. D. Ginsburg and R. Rapp (eds), *Conceiving the New World Order: The Global Politics of Reproduction.* Berkeley: University of California Press, pp.407–24.

Wetherell, M., S. Taylor, and S. J. Yates (eds), 2001. *Discourse as Data: A Guide for Analysis.* London: Sage Publications in association with The Open University.

Notes

1   Sub. 14a.
2   Sub. 74, p.4.
3   Sub. 40, p.5.
4   Sub. 64, p.3.
5   Sub. 2, p.6.
6   Sub. 7, App. 2.
7   Subs 2, 7, 14, 36, 64.
8   Sub. 40.
9   Sub. 74, p.2.
10   Sub. 35, p.1.
11   Sub. 36.
12   Subs 20, 35, 44, 59, 74.
13   Sub. 64, p.2.
14   Sub. 64, p.2.
15   Sub. 46, p.1.
16   Sub. 26, p.2.
17   Sub. 49, p.2.
18   Subs 2, 7, 8, 11, 12, 14, 18, 19, 20, 24, 28, 62, 64, 68, 72.
19   Sub. 35.
20   Subs 8, 11, 28.
21   Sub. 12, p.1.
22   Sub. 2, p.10.
23   Sub. 7, p.3.
24   Sub. 2, p.5A.
25   Sub. 2, p.5A.
26   Sub. 68, p.25.
27   Sub. 68, pp.18, 26, 44, 49; Sub. 54, p.9; Sub. 28, p.1; Sub. 25A, p.2.
28   Sub. 57, p.1.
29   Subs 7, 9, 15, 30, 52, 56, 57, 62, 68.
30   Sub. 7, p.7.
31   Sub. 56, p.1.
32   Sub. 6, p.1.
33   Sub. 56, p.2.
34   Subs 46, 67.
35   Sub. 61, p.4; Sub. 73, p.8.   .
36   Sub. 1.
37   Sub. 32, p.2; Sub. 55, p.3; Sub. 10, pp.1–3; Sub. 57, p.1; Sub. 68, pp.24, 54, 55; Sub. 73, pp.5–6.
38   Sub. 10.
39   Sub. 32.
40   Sub. 56, p.1.
41   Sub. 60, p.1; Sub. 78A, p.1.
42   Sub. 73, p.6.
43   Sub. 66.
44   The submission, attached to Sub. 66 from a 'donor-conceived person', repeatedly used the term 'genetic history' to refer to what she also called 'information about their birth origins' (p.2). The right to this information, she reported, had been found by the 1994 Medical Advisory Council on HART Report to be supported in the Treaty of Waitangi.
45   Sub. 49, p.5; Sub. 61, p.2; Sub. 78a, p.4.
46   Sub. 9, pp.3–4; Sub. 15, p.1; Sub. 20, p.2; Sub. 56, p.1; Sub. 56A, p.2; Sub. 58, p.1; Sub. 62, p.2; Sub. 68, pp.2, 16.
47   Sub. 18; Sub. 20, App. C; Sub. 56A, p.2; Sub. 58, p.2; Sub. 65, pp.2–4; Sub. 68, passim.
48   Sub. 44, p.3; Sub. 65, p.2.
49   Sub. 63, p.1; Sub. 7, p.17.
50   Sub. 63, p.1; Sub. 7, App. 1; Sub. 66, p.8; Sub. 16, p.1.
51   Sub. 63, pp.1, 3; Sub. 7, App. 1, p.6.
52   Sub. 63, p.1.
53   Sub. 32, p.2; Sub. 55, p.3; Sub. 10, pp.1–3; Sub. 57, p.1; Sub. 68, pp.24, 54, 55; Sub. 73, pp.5–6.
54   Sub. 68, pp.33, 40; Sub. 10, p.1; Sub. 20, p.4; Sub. 56A, pp.1–2.

55   Sub. 68, p.33.
56   Sub. 68, pp.5, 16–17, 21; Sub. 70A, p.2; Sub. 8, p.2; Sub. 14A, p.3; Sub. 15, pp.3–4; Sub. 32, p.2; Sub. 49, p.4; Sub. 56, p.1; Sub. 20, App. C, p.2; Sub. 25A, pp.2, 4; Sub. 11, p.2; Sub. 73, p.9.
57   Sub. 73, p.10; Sub. 14A, p.3.
58   Sub. 11, p.4; Sub. 73, p.10; Sub. 28, p.1; Sub. 29, p.1; Sub. 38, p.2.
59   Sub. 74, p.2.
60   Sub. 66, p.16.
61   Sub. 66, p.16; Sub. 26, p.3; Sub. 78, p.4; Sub. 3, p.1; Sub. 4, p.3; Sub. 7, pp.20–22; Sub. 13, p.2.
62   Sub. 7, p.20.
63   Subs 46, 67.
64   Sub. 67, pp.2–3.
65   Sub. 1, p.2; Sub. 22C, p.1.
66   Sub. 41, p.3.
67   Sub. 1, passim; Sub. 22, p.27; Sub. 22C, pp.1, 4; Sub. 41, p.3; Sub. 64, p.1; Sub. 66, p.11.
68   HART/MOJ/8, p.16.
69   Warnock 1985, as cited in Franklin 1997, p.90.
70   Sub. 25A, p.2; Sub. 64, p.2; Sub. 26, p.5; Sub. 50, p.2; Sub. 31, p.2; Sub. 78, p.1;
     Sub. 7, App. 1, p.11.
71   Sub. 14A, p.6.
72   Sub. 73, p.10.
73   Sub. 68, p.6.
74   Sub. 68, p.25.
75   Sub. 73, p.4.
76   Sub. 25A, p.1; Sub. 27, p.1; Sub. 60, p.1; Sub. 77, p.2.
77   Sub. 25A, p.4.
78   Sub. 19, p.1.
79   Sub. 68, pp.36–40; Sub. 53, p.1; Sub. 73, p.10; Sub. 15, p.1.
80   Sub. 68, p.37; Sub. 20, p.4.
81   Sub. 68, pp.39–41; Sub. 10, p.1; Sub. 53, p.1.
82   Sub. 7, p.17; Sub. 16, p.3; Sub. 14AW, p.16; Sub. 4, p.1; Sub. 19, p.3; Sub. 20, p.A2; Sub. 22, p.28 ; Sub. 41, p.8.
83   Sub. 2, p.5A.
84   Sub. 68, p.18.
85   Sub. 1, p.3; Sub. 8, p.1.
86   Sub. 5, p.1; Sub. 40, p.6; Sub. 61, p.2.
87   Sub. 8, p.1; Sub. 37, p.1; Sub. 45, p.2.
88   Sub. 1, p.3; Sub. 26, p.4; Sub. 13, p.2; Sub. 40, p.6; Sub. 61, pp.1–2, 5.
89   HART/MOJ/8, p.8.
90   Sub. 5, p.1.
91   Sub. 65, p.4.
92   Sub. 5, p.1; Sub. 65, p.4; Sub. 58, p.1.
93   Sub. 53, p.1.
94   Sub. 58, p.1.
95   Sub. 74, p.3; Sub. 58, p.1; Sub. 59, pp.1–2; Sub. 68, pp.15, 21–22, 31, 50, 52; Sub. 70A, p.1; Sub. 72, p.2; Sub. 8, pp.1, 6; Sub. 11, p.2; Sub. 20, p.10; Sub. 25A, pp.2–3; Sub. 27, p.1; Sub. 28, p.1; Sub. 29, p.1; Sub. 33, p.1; Sub. 37, p.2; Sub. 42, p.1; Sub. 45, p.2.
96   Sub. 58, p.1; Sub. 59, pp.1–2; Sub. 68, p.21; Sub. 29, p.1; Sub. 42, p.1.
97   Sub. 50, p.4.
98   HART/MOH/15, p.2, quoting the Human Genetics Commission.
99   HART/MOJ/8, p.41.
100 HART/MOJ/8, pp.7, 54.
101 Sub. 68.
102 Sub. 21, p.1.
103 Subs 2, 10, 15, 19, 21, 23, 39, 74.
104 Subs 14, 37, 61.
105 Sub. 14.
106 Sub. 1.
107 Subs 1, 4, 7, 16, 22.
108 Subs 7, 37.
109 Subs 9, 54, 73.

110 Sub.2, p.10.
111 Subs 7, 17, 19, 21, 26, 31, 41, 50, 61, 63, 66, 72, 76, 77, 78.
112 Sub. 17.
113 Sub. 61.
114 Sub. 63.
115 Sub. 77.
116 Sub. 50.
117 Sub. 8, p.1; Sub. 9, p.7; Sub. 12, p.1; Sub. 14A, passim; Sub. 19, passim; Sub. 22A, passim; Sub. 23, p.1; Sub. 45, passim; Sub. 49, p.2; Sub. 66, passim.
118 Subs 1, 2, 3, 4, 7, 9, 14, 15, 16, 17, 20, 21, 22, 24, 31, 34, 35, 46, 49, 54, 59, 60, 61, 62, 63, 69, 72, 74, 75, 76, 79.
119 HART/MOJ/8 PART TWO: Clause by clause analysis of submissions.
120 As this manuscript was being readied for publication, we belatedly discovered that Carolyn Michelle (2006) published an important paper on public discussions on ART in New Zealand.

Appendices

Appendix 1: Submissions

Submission Number	Description	Organisation/Location
1	Individual	Donor-conceived person
2	Individual	Wellington
3	Individual	Wellington
4	Academic	University of Canterbury
5	Individual	Saddleview Community Christian Church, Dunedin
6	Individual	Not stated
7	Group	FertilityNZ
8	Individual	Ownworld Consulting, Auckland
9	Pastoral council	St Patrick's Pastoral Council, Greymouth
10	Individual	Titahi Bay
11	Individual	Wellington
12	Individual	Taupo
13	Group	Zonta Club of Wellington
14	Member of Parliament	Hamilton East
15	Group	Nathaniel Centre and New Zealand Catholic Bishops Conference
16	Counsellors	Fertility Associates
17	Group	Abortion Law Reform Association
18	Group	Christian Heritage Party of New Zealand
19	Group	National Council of Women of New Zealand
20	Group	NZ Society for the Protection of the Unborn Child Inc.
21	Individual	Gore
22	Group	Women's Health Action Trust, Auckland
23	Group	Rural Women New Zealand
24	Individual	Nelson
25	Group	GE Aware, Nelson
26	Group	NZ Family Planning Association
27	Group	Physicians & Scientists for Responsible Genetics New Zealand
28	Individual	Not stated
29	Individual	Auckland
30	Member	Lower Hutt Society for the Protection of the Unborn
31	Academic	Faculty of Law, Victoria University of Wellington
32	Individual	Wellington

33	Individual	Wellington
34	Group	Leader's meeting of Trinity Methodist Church, Howick-Pakuranga
35	Individual	Auckland
36	Individual	Adult son of mother with Huntington's
37	Individual	Individual
38	Individual	Individual
39	Individual	Auckland
40	Group	CCS.
41	Law Commissioner	The Law Commission.
42	Scorpius Consultants	Lincoln University (but not on letterhead)
43	Group	Orakei, Auckland
44	Health and Disability Commissioner	Wellington
45	Individual	Nelson
46	Individual	Wellington
47	Academic Researcher	University of Otago School of Medicine
48	Individual	Wellington
49	Group	Interchurch Bioethics Council, Palmerston North
50	Academic	University of Otago School of Medicine
51	Academic	University of Auckland
52	Individual	Lower Hutt
53	Individual	Lower Hutt
54	Group	Friends of the Earth, NZ
55	Individual	Not stated
56	Group	Dannevirke
57	Group	Dannevirke
58	Individual	Not stated
59	Group	GE Free New Zealand
60	Group	Catholic Women's League of New Zealand
61	Group	Bioethics Council
62	Individual	Wellington
63	Group	Auckland Infertility Society Inc.
64	Group	NZ Organisation of Rare Disorders
65	Individual	Hamilton
66	Group	New Zealand Assisted Reproductive Technology (ART) clinics
67	Individual	Part of pro-surrogacy email network
68	Group	Family life International.
69	Group	Health Research Council and Health Research Council Ethics Committee

70	Individual	Auckland
71	Private	
72	Individual	Auckland
73	Group	Maxim Institute
74	Group	Disabled Persons Association New Zealand Inc
75	Human Rights Commission	Human Rights Commission
76	Group	NZ Law Society
77	Individual	Hamilton
78	Group	National Ethics Committee on Assisted Human Reproduction.
79	Group	National Advisory Committee on Health and Disability Support Services Ethics

Appendix 2: Government Documents

Abbreviation	Description	Prepared By
HART/MOJ/2	Initial briefing to the Health Committee on proposed amendments to the HART Bill.	Ministry of Health in consultation with Ministry of Health and the Ministry of Research, Science and Technology
HART/MOJ/3	Information for Health Committee on stem cells and germ-line genetic modification.	Ministry of Justice
HART/RST/5	Expert comment of the definition of hybrid embryo in the SOP to the Human Assisted Reproductive Technology (HART) Bill.	Academic from University of Otago Medical School
HART/MOH/6	Information for the Health Committee on the roles of the national ethics advisory bodies.	Ministry of Health
HART/MOJ/8	Supplementary Order Paper 80 to the Human Assisted Reproductive Technology Bill: Departmental Report.	Ministry of Justice in consultation with the Ministry of Health and the Ministry of Research, Science and Technology
HART/MOJ/10	Preliminary advice on Supplementary Order Paper to the Assisted Reproductive Technology Bill.	Crown Law Office
HART/MOJ/11	Advice on Supplementary Order Paper to the Human Assisted Reproductive Technology Bill.	Crown Law Office
HART/MOH/12	Guidelines for the storage, use and disposal of sperm from a deceased man.	National Ethics Committee on Assisted Human Reproduction
HART/MOH/13	Import and export of embryos — overseas legislation.	Ministry of Health
HART/MOJ/14	Summary of significant amendments to HART SOP.	Ministry of Justice
HART/MOJ/17	HART SOP — the paramountcy principle	Ministry of Justice
HART/MOJ/18	Te Puni Kōkiri comments on the HART SOP.	Ministry of Justice and Te Puni Kōkiri

Research in Anthropology and Linguistics is a refereed series dedicated to the five subfields of Anthropology (Archaeology, Biological Anthropology, Ethnomusicology, Linguistics and Social Anthropology) with a regional focus on New Zealand, the Pacific, and Australasia. RAL was initially established in 1995, an outgrowth of *Working Papers in Anthropology, Archaeology, Linguistics and Maori Studies* (discontinued in 1990).

In 2005, two separate series were distinguished, RAL Monographs for longer contributions with significant theoretical and/or methodological contributions to the discipline published in hard copy and RAL-e published on the web and available without charge with a focus on disseminating technical data and details of substantive results. Both the monographs and the RAL-e are peer-reviewed.

Preference is given to research undertaken by staff and students of the University of Auckland, Departments of Anthropology and Applied Language Study and Linguistics, but other manuscripts that deal with subjects of special interest to anthropologists are also considered. The issues in each series are numbered consecutively as independent contributions and appear at irregular intervals.

Prospective authors are referred to the RAL page of the Department of Anthropology web site for the current Monograph and RAL-e style guides: http://www.arts.auckland.ac.nz/anthro/

Research in Anthropology and Linguistics
Volumes currently available may be ordered from:
The Secretary
Department of Anthropology
University of Auckland, Private Bag 92019
Auckland, NEW ZEALAND
Phone: 64 9 373-7599 x 84645; FAX: 64 9 373-7441. Email: RAL@auckland.ac.nz

Research in Anthropology and Linguistics Monographs

1 *Protecting Historic Places in New Zealand.* Harry Allen. 1997. Out of print.

2 *Consuming Identity: Modernity and Tourism in New Zealand*. John Taylor. 1998. $20.

3 *Raurimu Frontier Town 1900-1925*. Kate Hill. 1999. Out of print.

4 *Holiday Communities on Rangitoto Island*. New Zealand. Susan Yoffe. 2000. Out of print.

5 *Australasian Connections and New Directions: Proceedings of the 7th Australasian Archaeometry Conference*. Martin Jones and Peter Sheppard (editors). 2001. $35.

6 *A Polymath Anthropologist: Essays in Honour of Ann Chowning*. Claudia Gross, Harriet Lyons and Dorothy Counts (editors). 2005.

7 *Oceanic Music Encounters — the Print Resource and the Human Resource: Essays in Honour of Mervyn McLean*. Richard Moyle (editor). 2007. $40.

8 *The Social Ecology of New Technologies and Haemophilia in New Zealand:* A Bleeding Nuisance *Revisited.* Julie Park and Deon York. 2008. $25.

RAL-e

1 *Geoarchaeological Investigation of Aboriginal Landscape Occupation in Paroo-Darling National Park, Western NSW, Australia.* Simon Holdaway, Patricia Fanning and Justin Shiner.

2 *Normal Humanness, Change and Power in Human Assisted Reproductive Technology:An Analysis of the Written Public Submissions to the New Zealand Parliamentary Health Committee in 2003*. Julie Park, Laura McLauchlan and Elizabeth Frengley.