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HUMAN RIGHTS - THE CHALLENGE OF THE NEW TECHNOLOGY

Interdisciplinary Science Reviews, Vol 12 No 4 1987 p 31

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# Human Rights – The Challenge of New Technology

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Three important scientific developments, nuclear physics, biotechnology and informatics, have a profound potential to affect, improve or destroy human life. Many scientists are aware of these implications, but, the author argues, lawyers are not sufficiently involved in the debate about the effect of scientific progress on human rights. The present debate on human rights is still centered on those proposed by 17th-century philosophers. The role of the United Nations in the human rights debate is stressed, and relevant examples from other international discussions are cited. Telephone interception in the United Kingdom and the Canadian testing of US missiles are considered with reference to their legal implications for human rights. Legislatures, courts and the community must learn to address themselves to the fundamental questions of human rights, the author concludes.

The dynamic forces of science and technology affect the definition of human rights. It could scarcely be otherwise in the last years of the 20th century. Our time has seen many remarkable scientific and technological developments. They profoundly affect the individual, the social environment, the relationships of nation-states and the planet. They reach out into space. The dreams of scientists of yesterday become the fascinating achievements of today and the prospects of tomorrow.

## In the Steps of Schrödinger

In this review, an attempt will be made to illustrate – for no more is possible – the way in which some of the main scientific and technological developments of our time affect the traditional perceptions of human rights, expressed as they often are in language derived from the 17th- and 18th-century doctrines of the Rights of Man. Such prescriptions were based, quite frequently, on religious beliefs or writings on natural law. It is timely to look afresh at the definition of human rights and at the endeavour to catalogue them. It is not necessary to debate whether, as is claimed, the main scientific and technological developments themselves have a common origin in the remarkable insights into quantum physics derived principally from the work of Erwin Schrödinger in Germany in the mid-1920s.<sup>1</sup> Lawyers, by education and training, are typically uninterested in physics and mathematics. The definition and enforcement of human rights remains overwhelmingly the province of lawyers – most of them ignorant of the detail of modern technological developments and uninterested in the scientific theories that support them. Uncomfortably for

the lawyer, the nature of humanity, the organisation of society and the very persistence of civilisation are now profoundly and increasingly affected by the doings of the scientist and the mathematician. To persist with 'two worlds' in which lawyers cling to the familiar civil, political and economic rights, which were substantially defined before the scientific developments of recent decades, is to run the risk of failing to give attention to urgent problems of human rights, simply because these are so complex, controversial or unfamiliar. Alternatively, the risk is run that old statements of human rights, framed in earlier times, will prove irrelevant, incompetent or unacceptable when measured against the new and urgent problems which science and technology present.

## An Australian Bill of Rights

This review is timely for a number of reasons. Some of them are domestic; some are universal. In Australia, the debate about human rights has taken on a new focus by reason of two initiatives of the federal government. The first is the introduction into the Australian Parliament of legislation to enact an Australian Bill of Rights.<sup>2</sup> The second is the establishment of the new Constitutional Commission, whose terms of reference include a requirement to report before 30 June 1988 on the revision of the Australian Constitution to 'ensure (*inter alia*) that democratic rights are guaranteed'.<sup>1</sup> One of the advisory committees to assist the Commission is charged with the examination of 'individual and democratic rights under the Constitution'. At the end of January 1986 the Commission had its first meeting in Sydney.

contributions which they may make to human rights, defined as rights of fundamental or paramount importance essential to a decent and fulfilling human life.' Biotechnology relieves pain and suffering. It may help otherwise childless couples to the fulfilment of family life, itself the subject of many human rights guarantees.<sup>10</sup> Computers and the other developments of informatics promote the flow of information. Satellites enhance the right of free speech so that it may now extend far beyond the limited capacity envisaged in 1789. They permit leaders and individuals to speak instantaneously to hundreds of millions of people.

These developments also have significance for the modernisation of backward economies. Even nuclear fission may, under appropriate conditions, offer benefits to mankind faced otherwise with the ultimate depletion of energy based on fossil fuels. It is not my present purpose to enter the debate about the right to development and the duty of developed countries to contribute to the real expansion of human rights in the developing world by the transfer of hard technology.<sup>11</sup> Talk of human rights without effective guarantees of life, liberty, food, shelter and security may appear empty in countries where those rights cannot be guaranteed and where human rights are allegedly debased by the deprivation of access to technology which would be regarded as essential in a country such as Australia.

It is not necessary to be a Luddite or to be opposed to scientific and technological developments, simply because one is alert to the risks they pose for the fundamental rights of humanity. What is essential is that people who in 1987 profess an interest in human rights should lift their sights from the catalogue of concerns of the 17th-century philosophers – important though many of them still are – and interest themselves in the new challenges which science and technology present today. Happily, in the international development of human rights, this is beginning to happen, although slowly. Yet so far there is little evidence of more than a selective interest in the subject in Australia.

## International Developments

The intellectual and institutional developments in human rights in the second half of the 20th century have been described as a 'remarkable revitalisation and extension of the great 17th and 18th century doctrine of human rights'.<sup>12</sup> There is no doubt that, in part, the motive force behind this phenomenon has been the rising power and influence in the international community of the United States of America. The revolutionary origins of that country, the Declaration of Independence and the Bill of Rights adopted in 1790 profoundly affected, and continue to affect, the nature of American society. They influenced President Wilson's 14 points for a peace settlement in 1919. They explain President Roosevelt's call to the international community to uphold the Four

Freedoms – freedom of speech and expression, freedom of worship, freedom from want and freedom from fear. These goals, adopted as Allied war aims, in turn influenced the foundation of the United Nations Organisation. From the start, one of the objectives of that organisation has been 'to promote respect for human rights and fundamental freedoms'.<sup>13</sup>

Although there is much justifiable cynicism and disillusionment with the world body, now in its fifth decade, there can be little doubt that it has played a significant part in the development of an international jurisprudence of human rights. There is a 'paradox' pointed up by Egon Schwelb. One of the purposes of the UN, an organisation of governments, is the promotion and encouragement of respect for human rights. Therefore, the governments of the member states of the UN by the Universal Declaration of Human Rights and other human rights instruments have engaged 'in the task of protecting their own citizens against themselves'.<sup>14</sup> What is now necessary is a recognition of an additional paradox. Governments and other entities need protection themselves, lest they and the citizens and residents in their care lose rights hitherto regarded as fundamental to humanity (including even life itself) by reason of the potentialities of modern technology.<sup>15</sup>

Australia, and specifically Dr H. V. Evatt, took a leading part in the initiation of the early efforts of the UN to define and prescribe human rights.<sup>16</sup> The results of these efforts were the Universal Declaration of Human Rights (1948), the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights (1966).<sup>17</sup> There have been many other relevant conventions. Australia has the best record of any country of its region in ratifying and implementing, in its domestic law, these efforts of the international community to lay down universal rules of civilised behaviour. Other covenants include the Covenant on the Status of Women (1951), the Covenant on the Political Rights of Women (1953), and the International Convention on the Elimination of All Forms of Racial Discrimination (1965).

## The Universalist Approach

One of the consequences of the development of the notion of 'human rights' through the UN, with its rapidly expanding membership coming from all parts of the world, has been a noticeable shift in the debate. That shift has reflected the composition of the UN itself.

Whereas immediately after its establishment, reflecting the then overwhelming influence of the countries of Western Europe and North America, the concerns of the international human rights debate were still profoundly influenced by such human rights statements as the French Declaration of the Rights of Man and of the Citizen of 1789 and the American

tions raised and the moral dilemmas that are posed, many of which seem intractable.

For these and other reasons there has been little endeavour to reflect the major scientific and technological developments of the last 50 years, and their impact on human rights, in a conceptual way. Instead, old human rights instruments, developed for earlier times, are scrutinised for their possible utility in solving the controversies presented by the new technology. Piecemeal legislation is enacted. No Luther of jurisprudence has emerged to pull together the implications of nuclear physics, informatics and biotechnology for 21st-century man and woman.

## Nuclear Physics

Concern about the impact on human rights of nuclear fission derives from the unprecedented force of weapons of mass destruction which are the technological product of this remarkable scientific development. Without human life, talk of civil and political rights and even of social and economic rights is pointless. Therefore, concern about the manipulation of nuclear fission in the form of weapons quite naturally attracts the attention of those anxious about the future of human rights. The obvious dangers to human life include the deliberate detonation of nuclear weapons by governments or terrorists, accident or sabotage at nuclear power stations and the long-term pollution of the environment by radioactive materials which escape from weapons, power stations or their waste products. But as Sieghart<sup>23,24</sup> has pointed out, there are other, less obvious, dangers. They include the risk that the very safeguards which may be introduced for the purpose of controlling the dangerous proliferation of nuclear material may lead to 'an insidious, gradual and deleterious change in the nature of free societies'.

The sixth report of the British Royal Commission on Environmental Pollution (chaired by Sir Brian Flowers, FRS) was clearly concerned about the risks, both direct and indirect, which would attend a significant proliferation of plutonium-fuelled power stations.

What is most to be feared is an insidious growth in surveillance in response to a growing threat as the amount of plutonium in existence, and familiarity with its properties, increases; and the possibility that a single serious incident in the future might bring a realisation of the need to increase security measures and surveillance to a degree that would be regarded as wholly unacceptable, but which could not then be avoided because of the extent of our dependence on plutonium for energy supplies.<sup>25</sup>

To some, the supply of cheap electricity from internationally reliable fuel suppliers is a matter of para-

mount social need. Others have expressed their fears by the aphorism that they would 'rather read the Bill of Rights by candle light than not to have it to read at all'.<sup>26</sup>

The need to protect the rights of the many from the risks of the deranged terrorist or determined blackmailer having access to nuclear material has already produced international reactions with consequences for human rights. In October 1979, the International Atomic Energy Agency announced that after two years of negotiations, some 58 nations had agreed on the text of the first international Convention on the Physical Protection of Nuclear Material. Article 5 establishes a comprehensive international network for 'cooperation and assistance to the maximum feasible extent' in 'coordinating recovery and response operations in the event of any unauthorised removal, use or alteration of nuclear material and in the event of credible threat thereof'.

The implications of this Convention, and a future and more stringent condition that may be imposed as nuclear installations proliferate in the world, for an open society and for civil liberties, are already the subject of much concern.<sup>27</sup> The writers are not necessarily supporters of nuclear disarmament or opponents of uranium mining. Many are simply concerned lawyers who consider that the delicate balance of civil liberties will be profoundly affected, and even mortally undermined, by the measures that society will have to take in order to protect itself against the enormous risks involved in nuclear material proliferation. The concern is with the 'creep effect': for example, between 1976 and 1979, a period in which there were no additions to the United Kingdom civil nuclear power program, the strength of the British Atomic Energy Authority's special constabulary increased by 50%, from 400 to 600. Sieghart points out that this is the only police force in the UK (save for certain units at airports lately so authorised) to carry automatic weapons and whose Chief Constable is not answerable to any elected assembly.<sup>28</sup>

## Missile Testing and the Canadian Charter of Rights

In Canada, a recent decision of the Supreme Court illustrates the way in which, in the absence of human rights measures specific to scientific and technological issues, attempts will be made to use other, more general, statements of fundamental rights in an attempt to promote a desired policy relevant to the new technology. In *Operation Dismantle Inc & Others v The Queen & Others*,<sup>29</sup> the appellants sought to challenge the decision of the Canadian Federal Cabinet to permit the testing by the United States of America of cruise missiles in Canadian territory. The appellants invoked section 7 of the *Canadian Charter of Rights and Freedoms*. That provision states:

Everyone has the right to life, liberty, security of the person and the right not to be deprived

tion made possible by scientific developments. Thus, guarantees of 'human dignity' in Articles 1, 5, 6, and 29(1) of the Universal Declaration of Human Rights may be affected by foetal experimentation, experiments on human subjects, *in vitro* fertilisation, embryo transplantation, genetic manipulation, the sale of organs for transplantation and so on. The promise of the right to life, as in Article 3 of the Universal Declaration, raises inevitably the question of when human life, to which that guarantee applies, begins. A new focus to this controversy is provided by claims to abortion on demand, *in vitro* fertilisation and embryo transplantation. The assertion of a right to 'life' also raises the issue of the quality of life. Is it life of any kind which is absolutely guaranteed? May not those who enjoy the 'right' opt, in certain circumstances, for its termination?

Developments in the knowledge of human fertility raise new questions about the language of other guarantees of human rights, expressed before the modern technology was available. Can Article 16(1) of the Universal Declaration, with its guarantee that men and women of full age have a right to marry and 'to found a family' provide support for a claim to *in vitro* fertilisation, embryo transplantation, artificial insemination, surrogate parenting and womb leasing, transplantation and the like? Is the guarantee of special care and assistance for motherhood and childhood in Article 25(2) relevant to the new procedures available to overcome infertility? Is the guarantee of adequate health and medical care in Article 25(1) the basis for a claim of access without limitation to these expensive new techniques?

The Victorian Parliament in Melbourne, apparently alarmed by advertisements offering surrogacy arrangements,<sup>45</sup> has enacted legislation making it an offence to advertise surrogate arrangements and rendering any such contracts void and unenforceable. Such legislation has also been presented in the UK. But in the UK such laws could be challenged in the European Court of Human Rights as violating the guarantee of family privacy (Article 8) and the guarantee of the right to found a family (Article 12).

The provision of Article 18 of the Australian Bill of Rights that 'every human being has the inherent right to life and no person shall be arbitrarily deprived of life' occasioned an expression of concern by the Australasian Episcopal Conference of Bishops of the Roman Catholic Church. Referring to the provisions of clause 9(3) of the Bill, as originally drawn, in which it was stated that the rights and freedoms applied only for the benefit of 'natural persons,' the Bishops expressed anxiety lest the guarantee in Article 18 should be construed to exclude the unborn.<sup>46</sup> As a consequence of this expressed concern the Bill was later amended. In its present form, clause 9(3) states that, 'the rights and freedoms set out in the Bill of Rights do not apply for the benefit of bodies politic or corporate.'

The Attorney-General stated that this was all that had been intended by the original clause and the

reference to 'natural persons'.<sup>47</sup> But the Government rejected an Opposition amendment designed to assert that human life exists from the moment of fertilisation. The President of the Australasian Episcopal Conference has indicated that the Government's amendment to the legislation falls short of allaying all of the Bishops' concerns. They are doubtless mindful of the fact that, in the US, the constitutional right to privacy has been interpreted as conferring, in certain circumstances, a right in the mother to an abortion on demand.<sup>48</sup>

The existence of human rights statements obliges legislatures, courts and the community to address themselves to fundamental questions. In the present context, these include the definition of human life, the rights of the community to protect itself from dangers such as typhoid and the AIDS virus by measures which diminish the rights of others,<sup>49</sup> eugenics<sup>50</sup> and the triage decisions that are daily made in hospitals to provide expensive health care to some but not to others, who will then die.<sup>51</sup> They state the standards against which must be measured the rights of parents in respect of their children,<sup>52</sup> the rights of the mentally ill and of the community to endeavour to change their human behaviour,<sup>53</sup> the rights of the mentally retarded,<sup>54</sup> the rights of those addicted to psychotropic drugs<sup>55</sup> and so on.

In the international community, increasing, and sometimes effective, attention has been given under the aegis of the WHO to certain commercial practices which have a seriously deleterious effect on the life and health of millions of human beings. The largely successful effort of the WHO to promote the International Code governing the marketing of breast milk substitutes has reduced the largely unnecessary and undesirable sale of these products in the developing world, where they all too frequently led to infant mortality and malnutrition.<sup>56</sup> But allegations persist of the sale of hazardous materials and products in developing countries even after these have been withdrawn from sale or superseded in the developed world. The continuing sale of Dalkon shield contraceptive devices, long after their withdrawal from the US market, as a means of exhausting supplies in poor and developing countries is specifically alleged.<sup>57</sup> The promotion of cigarettes and other tobacco products in developing countries, as a response to declining sales in traditional markets, will be seen by some (in the light of medical evidence of their danger to health) as a significant assault upon public health and thus upon the human rights of millions to live a decent life.

## Conclusions - Scientists, Lawyers and Human Rights

It is not coincidental that many of the leaders of the battle for respect for individual rights in countries where they are most grievously denied are scientists. Yuri Orlov, sentenced to seven years' hard labour and five years of 'internal exile' for publicising alleged

35. OECD Guidelines, 34 p 5
36. ALRC 22, *ibid.*
37. ALRC 22, Vol 2, pp 265-268; 302-304.
38. L. Bowen (Attorney-General), address to the 7th National Conference of Australian Society of Labor Lawyers, Melbourne, 3 August mimeo p. 3 (1985).
39. *Malone v Metropolitan Police Commissioner* [1979] Ch. 344.
40. ECHR, series A, No. 28, 2 EHRA 214.
41. Australia, Senate Standing Committee on Constitutional and Legal Affairs, *A Bill of Rights for Australia?*, AGPS papers 65-66 (1985).
42. UNESCO, Proceedings of the Symposium on Science Policy and Biomedical Research, Paris, February 1968. Science Policy Studies and Documents, No. 16, p. 42. See Brand,<sup>7</sup> p. 361. See also general discussion in 'The Challenge to Human Rights Posed by the Development of Science and Technology: Protection of Human Beings and Their Physical and Intellectual Integrity in the Context of the Progress Being Made in the Fields of Biology, Medicine and Biochemistry', *European Ministerial Conference on Human Rights, Vienna 19-20 March 1985*, Council of Europe, Strasbourg (1985).
43. R. Wilson, Life and law: the impact of human rights on experimenting with life. *Australian Journal of Forensic Sciences* 17, 61 (1985).
44. The Nuremberg Code is set out in Annas, Glantz and Katz, *Informed Consent to Human Experimentation. The Subject's Dilemma*, p. 279, (1977). The Declaration of Helsinki is Appendix F in J. K. Mason and R. A. McCall Smith, *Law and Medical Ethics*, Butterworths, London (1983).
45. *Cf In re a baby*, *Times Law Report*, 15 January 1985, p. 8 [Lacey, J.]. *Cf* M. D. Kirby, From Hagar to Baby Cotton - Surrogacy. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 25, 151-158 (1985). See also note in *Australian Law Journal* 60, 6 (1986).
46. As reported in *The Age*, 31 October (1985).
47. *The Age*, 13 November (1985).
48. *Roe v Wade*, 410 us 113 (1973); *Do v Bolton*, 410 us 179 (1973). See discussion in Wilson,<sup>20</sup> p. 67
49. R. Baker, Eugenics and human rights, in Bandman and Bandman,<sup>9</sup> pp. 98, 99.
50. *Buck v Bell*, 274 us 200 (1927).
51. J. F. Childress, To kill or let die, in Bandman and Bandman,<sup>9</sup> p. 128. see also Brand,<sup>7</sup> p. 353.
52. *Cf Gillick v West Norfolk and Wisbech Area Health Authority and Another* [1985], 3 WLR 830 [HL]. See note in *Australian Law Journal* 60, 50 (1986).
53. H. E. Peplau, The right to change behaviour: rights of the mentally ill, in Bandman and Bandman,<sup>9</sup> pp. 207, 218.
54. S. C. Hayes and R. Hayes, *Mental Retardation. Law, Policy and Administration*. Law Book Co. Ltd, Sydney, p. 27 (1982).
55. Brand,<sup>7</sup> p. 353.
56. M. D. Kirby, The role of law reform in bioethics: the case of breastmilk substitutes. *University of New South Wales Law Journal* 6, 57 (1983).
57. *Divan*,<sup>11</sup> p. 35.
58. E. Callen, B. R. Cooper and J. Parmentola, Science and human rights. *Technology Review*, p. 21 (1980).
59. *Ibid.*, 26.
60. *Ibid.*, 28-127.
61. Sir Andrew Huxley, Presidential Address to the British Association for the Advancement of Science, in Callen et al.,<sup>58</sup> p. 30 (1977).