

# Ethical issues at the start of life

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**ABSTRACT** – In this article the fundamentals of a Jewish ethic are set out, through which today's pressing medical ethical questions are then broached. Ethics derive from a basic view of humanity. The Bible teaches that man is created in God's image, and every life is therefore sacrosanct. Second, since life is God-given we are its guarantors, not its owners. Finally, monotheism sees God as above nature and not in it, so nature itself is not holy – man can, and indeed should, try to improve upon it. With reference to specific medical issues, the need to be wary of the erosion of the family unit and of personal identity is stressed. Concerning abortion and stem cell research, the point is made that an embryo is not a person but is a potentiality and therefore not an object to be used. Regarding genetic intervention, a line is drawn between the therapeutic and the eugenic. Every technology carries with it the possibility of diminishing or enhancing human dignity. What matters is how we use it. The way to use it is in a covenant with God, honouring his image that is mankind.

*It is the dream of every Jewish mother to have a doctor in the family. A splendid spoof announcement in the American Jewish press read: 'To Mr and Mrs Irving Greenberg, the birth of a son, Dr Max Greenberg.'*

## Fateful choices

There can be no doubt that new techniques in the treatment of infertility, that have arrived with such breathtaking speed in the past half-century, have transformed the situation at the inception of life more than at any time since *Homo sapiens* first walked on earth. In particular, the mapping of the human genome is possibly the single most fateful scientific achievement of all time. Centuries ago, the Jewish mystics said that the diversity of creation was due to the different permutations and combinations of the letters of the divine script. Since 'God said, Let there be . . . and there was,' it followed that existence must be a matter of language. In Judaism we speak of 'the book of life.' It now turns out that this mystical metaphor is no mere metaphor but the literal (in both senses) truth. The human genome, with its 3.1 billion letters of genetic code, a double copy of which

is to be found in every cell of the human body, is a book whose precise combination of letters give the human body its shape and complexity. The mystic intuition was correct.

So too is our sense of awesome responsibility for the choices we make in the light of this discovery. The Harvard scientist E O Wilson is surely right when he says that 'The prospect of . . . 'volitional evolution' – a species deciding what to do about its own heredity – will present the most profound intellectual and ethical choices humanity has ever faced'<sup>1</sup>. While preparing for this lecture, I went to see the new genetic research facility at the Hammersmith Hospital; I found it an enthralling experience to view some of this work, and to sense also the great seriousness with which those engaged in it are concerned about its ethical implications.

## A Jewish perspective

There is a long tradition, stretching back now more than two thousand years, of what we call the 'Oral Law,' namely the process by which, in each generation, we try to apply biblical ethics to everyday life. The London Beth Din, the Court of the Chief Rabbi, deals on an almost weekly basis with practical questions about *in vitro* fertilisation, surrogacy, stem cell research and so on. We have to weigh up the circumstances of each case in the light of our ancient ethical and legal traditions. These are immensely detailed, because we believe – in the famous words of architect Mies van der Rohe – that 'God is in the details.'

Judaism's broad vision of the nature of human life and of our place in the scheme of things is an essential part of the ethical enterprise. In contrast to much contemporary academic thought, we believe that one cannot divorce ethics from some fundamental view of humanity – by calculating consequences, for example, or attempting a mere cost/benefit analysis<sup>2</sup>. Though ethics must be guided and informed by science, it cannot be reduced to science; nor, indeed, can humanity itself.

In 1997 a distinguished group of scientists signed a declaration in favour of the permitting of human cloning. Among their remarks was the following: 'Humanity's rich repertoire of thoughts, feelings, aspirations and hopes seems to arise from electrochemical brain processes, not from an immaterial soul that operates in ways no instrument can

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discover . . . Views of human nature rooted in humanity's tribal past ought not to be our primary criterion for making decisions about cloning<sup>3</sup>.

That is scientific reductionism at its worst. As I have written elsewhere: 'If human aspirations are no more than electrochemical brain processes, then a Rembrandt is no more than a mix of pigments on canvas, and a Beethoven quartet mere marks on paper'<sup>4</sup>. We are *both* physical beings whose movements can be described in terms of cause and effect, *and* intentional, self-conscious agents whose acts can only be understood in the language of purpose, meaning and imagination. In that still compelling biblical metaphor, we are 'dust of the earth,' but also within us is the 'breath of God'<sup>5</sup>.

## Languages of ethics

The pre-understandings we bring to bear on our scientific and medical work are important. In the case of Judaism, it is not difficult to say what that vision is. It originates, in the first chapter of the Hebrew Bible, in one of the most influential sentences in Western civilisation: 'Let us make man in our image, after our own likeness'<sup>6</sup>. Every human life is sacred and irreplaceable because each of us carries within us a trace of God's presence in the world.

From this follows a number of consequences at odds with today's secular culture. First, life is not ours. We do not own it. We hold it as trustees on behalf of God, the source of life. Therefore the voluntary relinquishing of life – whether by euthanasia, abortion or infanticide – is forbidden; or, to put it more precisely, is governed by considerations other than that key word of contemporary culture, autonomy. Jewish law respects the wishes of the patient. In the case of a child, it respects the wishes of the parents. However, those wishes are set within objective ethical restraints, one of which is that we are the guardians of life, not its owners.

Second, Jewish ethics is classically constructed in terms of responsibilities, duties and obligations rather than in the language of rights. Rights are important, but as a way of resolving ethical dilemmas they are worse than inadequate. They tend to render difficult choices insoluble. The most famous example is the abortion debate as it has played itself out in the United States in the past quarter-century. It has been presented as a clash of rights – the right to life of the fetus on the one hand, the right to choose on the part of the mother on the other. There is no way of negotiating a resolution to a conflict presented in these terms. Rights are non-negotiable. They are what Ronald Dworkin calls 'trumps'<sup>7</sup>. A conflict of rights is one in which neither side can or may compromise; can or may recognise the legitimacy of competing claims. A conflict of duties, on the other hand, is something with which we are familiar on a daily basis: a doctor's duty to her patients, for example, and her duty to her family. How much time do we spend on the one as against the other? We juggle with such competing claims all the time. They are not easy, but they are not insoluble. That is why abortion is better seen, as it is in Jewish law, as a conflict of duties to the mother and to the unborn child.

## Nature is not sacrosanct

Thus far, we are on familiar ground. However, the Jewish view has other consequences less well understood. As historians of ideas have long pointed out, the revolution of monotheism and the rejection of myth meant that, for the first time, God was seen not in nature, but as radically transcending it. That means that for Judaism, nature is not sacrosanct. This is important for the way we see medical research.

Recently, one of Britain's daily papers carried an article about the surviving Siamese twin Gracie Allard. The headline read, 'So who are we to defy God's will?'<sup>8</sup>. Now there was much in the article with which I agreed; and its author was not responsible for the headline. It does, however, encapsulate a view, commonly attributed to religious believers, that such techniques as *in vitro* fertilisation and genetic research constitute 'playing God' or 'defying God's will.' That is emphatically not a Jewish view. To the contrary, Jewish tradition interprets the phrase which speaks of humanity being 'in God's image and likeness' as meaning that we have been given the gift of being able to understand and discern. According to the twelfth century sage Moses Maimonides, himself a doctor of distinction and author of many medical texts, the pursuit of scientific knowledge is itself one of the ways in which we come to love and fear God. We come to understand the Creator precisely by deepening our understanding of creation.

One of the principles of Jewish belief is that the physician is given the mandate to heal. In the ancient rabbinic literature there is a fascinating dialogue, attributed to the early second century, between a rabbi and a Roman on certain medical procedures in Judaism. The Roman argues that such procedures are impious. If God had wanted us to be a certain way, He would have made us that way. The debate turns on the question: which are more perfect, the works of God or the works of man? The rabbi breaks off the conversation to give the Roman some bread to eat. He then gives him ears of corn. 'Which,' he asks, 'do you prefer eating?' 'Bread, of course,' replies the Roman. 'Did I not tell you,' says the rabbi, 'that the works of man can be better than the works of God?'<sup>9</sup>.

In this gently humorous anecdote the rabbi intimates one of the more significant beliefs of Judaism, namely that in giving the universe to the guardianship of mankind, God invites us to become, in that striking rabbinic phrase, His 'partners in the work of creation.' This view derives from the first recorded command of the Bible, in which God tells mankind, 'Be fruitful and multiply; fill the earth and subdue it.' There is, in other words, a duty to master or conquer nature – a duty balanced by the phrase in the second chapter of Genesis that says that man was placed in the Garden 'to serve and protect it.'

There is religious value in much of the work currently being done in the treatment of infertility, research into the human genome, and experimentation to find cures for genetic disease. To the extent that we are subjects not objects, masters of our environment not its slaves, there is a gain in human dignity, perhaps the most fundamental value of the Hebrew Bible.

There can be no doubt that the effect of scientific research in

respect of birth, infant mortality and even our genetic makeup, represents a transition from fate to choice; and that, in Judaism, is a positive value. *Homo sapiens* is the choosing animal – the only being in the universe known to us to be capable of considered choice, and thus of moral agency and thus of moral responsibility.

There is a lovely passage in the Talmud about the meaning of suffering. In the course of a long and complex theological discussion, a story is told of how Rabbi Hiyya bar Abba became ill. Rabbi Yohanan came to visit him, and asked him, 'Are your sufferings precious to you?' 'Neither they nor their reward,' replies Rabbi Hiyya. Rabbi Yochanan thereupon heals him<sup>10</sup>. It is one thing to find meaning in suffering, another to accept it when it can be prevented. What can be cured is not precious: that seems to be the rabbinic view. In Judaism faith is not passive acceptance of the world. It is not the belief that nature is sacrosanct. To the contrary, God has made us guardians of His world for the sake of future generations, and in making us in His image, He has made us not merely as creations but also as co-creators.

### Treating infertility

Judaism attaches great significance to childbirth. The first command, 'Be fruitful and multiply,' is the command to have children. Time and again in the narratives of the Bible we experience the anguish of women unable to have children – Sarah, Rebekah, Rachel, Hannah, the Shunamite woman and others. I cherish the comment of one American Jewish parent who said, 'I find that now I have children, I can relate much better to God. Now I know what it is to create something you can't control!' I once said that Stephen Hawking was quite wrong in the famous closing pages of *A brief history of time*. To understand the 'mind of God' one does not need to be a theoretical physicist. One needs to be a parent.

Judaism has a marked pro-natalist orientation. This, combined with its desacralisation of nature, has meant that, by and large, Jewish religious authorities have welcomed AIH (artificial insemination using the husband's sperm) and *in vitro* fertilisation, if these are the only ways in which a couple can have children. It is possible that the same will apply to cloning, or nuclear replacement, though it is too early to speak of a consensus on this point. Specifically, there are no religious objections to the techniques as such, as being unnatural, or 'playing God' or 'defying fate.' The concerns of Jewish law lie elsewhere.

The first is the protection of the marital bond. We do not believe that the institution of marriage evolved by accident. It is the best way known to mankind of bringing together the biological drives of sex and procreation, and the ethical-cultural imperatives of nurturing children, caring for them during their years of dependency, and socialising them into emotional literacy, the give and take of reciprocity, and the memories and narratives that constitute the legacy of the past – education as the conversation of the generations.

It is our duty, as individuals and as a society, to protect as

## Key Points

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**Jewish ethics derives from its basic view of humanity that, as the Bible teaches, man is created in God's image and each life is therefore sacrosanct**

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**Life is a gift from God and therefore we are its guarantors not its owners – we must respect the life that has been entrusted to us**

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**Monotheism sees God as above nature and not in it. Nature, therefore, is not holy in itself, and it is man's duty to improve upon it, to increase his dignity and dominion**

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**As a result of the above we must use medical advances (such as genetic intervention) responsibly, for therapeutic rather than eugenic purposes**

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strongly as we can the precarious connection between parenthood as a genetic fact and parenthood as a social practice. That is why we have grave reservations about artificial insemination using donor sperm (AID), and *in vitro* fertilisation using either donated sperm or eggs. Indeed we view with deep concern the fragmentation of parenthood into its genetic, gestational and childrearing components – the phenomenon that is already testing to the limits our concepts of motherhood and fatherhood. I do not wish to suggest that it is medical science alone that is weakening the institution of the family. Clearly there are many factors at work, economic, sociological and cultural. However, our profound humanitarian commitment to the integrity of marriage means that the impact on it of any medical technology is a matter of fundamental concern.

On the other hand, where the use of any technology will enhance the family, we are inclined wherever possible to rule in its favour. To take one example: our rabbinical court has permitted surrogacy in the case of one young woman whose uterus was removed but who was still capable of producing eggs. Her eggs were fertilised, using her husband's sperm, and implanted in the womb of a surrogate mother who eventually gave birth to triplets. Our only question in that case was this: since the genetic mother was Jewish but the surrogate mother was not, did the children require a formal act of conversion to be Jews? The answer was that since there exists a doubt in Jewish law as to whether motherhood is defined in terms of genetic contribution or gestation (or both), the children would require conversion to eliminate the doubt.

No less real is our concern at the lack of knowledge, in the case of either sperm or ovum donation, as to the identity of the donor(s). It is fundamental to human identity to be able to know who one's parents are. The first question Moses asked of God was not 'Who are You?' (that was his second question) but 'Who am I?' Of course the plain meaning of the verse is, 'Who am I to be worthy of the great task of leading the Israelites to freedom?' But beneath the surface is a sense in which Moses is asking about his own identity. He was, we recall, raised as an Egyptian prince and adopted by the daughter of Pharaoh. There was, in his mind, a fundamental existential doubt. 'Am I a

member of the royal family that rules the most powerful empire of the ancient world, or am I a Hebrew, a member of a nation of slaves?' There can be no more fateful question than 'Whose child am I?'

Each of us has an inalienable right to know whose child we are. This is so not merely in order to avoid a possibly incestuous relationship (in Judaism, a major concern), but also because – as we see in so many cases of adoption or absconding fathers – a failure to know who one's parents are is a lacuna at the core of our identity. For that reason we cannot give our approval to any fertility treatment that uses donor sperm or eggs.

## The status of the embryo

What then is our view of the status of the embryo or fetus prior to birth? This will, of course, affect our views on abortion and the use of embryos for research. There is a large literature on the subject; therefore I will mention only one fascinating detail – a point at which, rather like seeing a cell divide, we see a civilisation divide. In *Exodus* 21:22–23 we find the following law:

*If men who are fighting hit a pregnant woman and she miscarries but there is no serious injury (ason), the offender is to be fined whatever the woman's husband demands and the court allows. If, however, there is serious injury (ason), you are to take life for life.*

What this passage shows is that causing the death of a fetus is not the same as causing the death of a person. The first verse specifies that if the fetus dies, the offender must pay financial compensation. The second states that if the woman dies, the offender is guilty of a capital crime, namely murder. Feticide therefore – though wrong and forbidden – is not homicide, because the fetus is not a person. Personhood, in Jewish law, begins at birth, defined as the emergence of the head during the birth process. Until then, the fetus is life, human life, a potential person, but not an actual person. We therefore have duties to the fetus. Abortion is forbidden in Jewish law. Indeed, with very few exceptions, Jewish authorities will not permit abortion even when we know that the fetus suffers a genetic condition such as Tay Sachs disease. There is no concept in Judaism of a life not worth living. Even a brief restricted life beset by handicap is a gift not to be refused. However, because the fetus is not a person, our duties to it may be overridden by our duty to an actual person, namely the mother. Abortion is therefore permitted to save her life, and in some cases to protect her health.

Of great historical interest, however, is that the Septuagint – the translation of the Hebrew Bible into Greek in the third century BCE – renders the word *ason* not as 'casualty' or 'serious injury' but as 'form.' This gives a completely different meaning to the passage. The first verse, in which there is compensation, refers to the miscarriage of an 'unformed' fetus. The second, which speaks of a capital crime, refers to a 'formed' fetus, in other words one sufficiently developed to have a recognisably human shape. This, then, is the source of the teaching of the Church, from Tertullian onwards, that at a certain stage the fetus is a person and that then abortion is a form of homicide<sup>11</sup>.

The Septuagint precedes the birth of Christianity, and appears

to represent a divergent strand of Judaism, one that had no influence on the mainstream but which did have considerable influence on Christianity, namely the 'Alexandrian' tradition that developed among the Greek-speaking Jews of Alexandria in Egypt. Its most famous representative was the first century philosopher Philo, whose own interpretation of the passage anticipates the Christian reading:

*But if the child which was conceived has assumed a distinct shape in all its parts, having received all its proper connective and distinctive qualities, he [the man who caused the miscarriage] shall die; for such a creature is [already] a man, whom he has slain while still in the workshop of nature, which had not thought it as yet a proper time to produce him to the light, but had kept him like a statue lying in a sculptor's workshop, requiring nothing more than to be released and sent into the world<sup>12</sup>.*

Here, then, is the origin of the early Christian tradition. Not for the only time in history, a parting of the ways turned on the translation of a single Hebrew word.

Opposition to abortion in Judaism is thus strong but not total. It is not permitted for mere convenience; nor for reasons of family planning; nor (according to most authorities) because the fetus carries a genetic handicap or disease. However, some authorities are more lenient in the early stages of pregnancy, especially within the first forty days, during which it is, according to one talmudic statement, 'mere water.'

This brings us to the question of the status of embryos created *in vitro*, or in a petri dish – a crucial factor in the permissibility of the use of embryos for research purposes, such as current work on stem cells. A pre-implanted embryo is a form of human life, and we therefore owe it the respect due to human life. However, it is not a person, and our duties to it are not those we owe persons. Jewish law would therefore not permit the creation of embryos specifically for the purpose of research. It would, however, permit the use of embryos for research if they were created for a legitimate reason – for example, during the course of *in vitro* fertilisation – and would otherwise be destroyed.

I want to be quite explicit on this point, because some months ago my support for a committee of the House of Lords to consider the question of stem cell research was construed in some circles as opposition to that research. That is not the case. (Subsequently to the lecture, the Court of the Chief Rabbi gave written and oral testimony to the Lords' committee, indicating our support for stem cell research, provided that embryos were not created specifically for research purposes.) We welcome this research as heralding the possibility of identifying and ultimately treating genetic disease. The Jewish voice is therefore an important one in the current debate, because it says that the biblical concept of the sanctity of life – one of the most humanising propositions in Western civilisation – is a nuanced one. It does not categorically oppose embryo research. It views the decoding of the human genome and the prospect, however distant, of treating genetic disease as a momentous enhancement of human dignity. If we are bidden, as we are, to care for the handicapped, how much more so are we mandated to cure handicap if we can. Opposition to abortion does not depend on viewing the fetus as



a person, nor do the relevant biblical texts – as understood by Judaism for more than 2000 years – bear this interpretation.

## Genetic intervention

What then of genetic intervention and cloning? Here we come to some of the most fateful questions in the future of medicine, indeed of human life itself. There would, I think, be widespread agreement that there is an important line to be drawn between therapeutic and eugenic interventions. It is one thing to aspire to a cure for conditions that will prevent a child from having a normal life expectancy and the full use of his or her faculties. It is another to contemplate designing a child to order as it were – to provide compatible tissue for transplantation, for example, or to replace (by replicating) a child who has died, or to approximate to its parents' vision of an ideal child (blond, blue-eyed, and brilliant). The real question will be: Can we draw such a line in practice? How will we distinguish between curing disability and improving ability? Or between remedying impaired intelligence and enhancing merely average intelligence?

Even if we find it possible to draw such a line, will we be able to implement it? Are we faced with the so-called slippery slope? Is it inevitable that once something can be done, it will be done? Will purely market forces drive research in eugenic directions? If individuals are willing and able to pay for such a procedure, will they find someone willing to perform it? Given the Internet, mobility and globalisation, will all attempts at regulation fail, because though something may be generally forbidden, somewhere in the world, however covertly, it will be taking place?

These are difficult questions. What matters at this point is that we reach as much clarity as possible on basic parameters. As I see them they are these: First, nature is not sacrosanct. It would be absurd not to attempt to find cures for diseases that have a clear genetic basis. That is part of the physician's mandate to heal, and of the human mandate to 'perfect the world under the sovereignty of God.'

Second, we are the guardians, not the owners, of creation. One of the wisest elements of biblical ethics is its sense of limits. We find this in the concept of the Sabbath – the one day in seven in which we are commanded to rest, and the one year in seven in which we are bidden to let the land rest. This tells us – not merely tells us, but also bids us to live the truth – that there are limits to our exploitation of natural resources. There is also a series of biblical laws – among them the prohibition of mixing milk and meat, of sowing a field with diverse kinds of grain, and of wearing garments of mixed wool and linen – which are clearly designed to protect the integrity of nature: warnings, if you like, against 'transgenic' life forms. The non-Jewish philosopher Roger Scruton makes an interesting observation in his book *Animal rights and wrongs* about BSE or 'mad cow disease':

*The Jewish law which forbids us to seethe a young animal in its mother's milk may have little sense, when considered from the standpoint of a hard-nosed utilitarianism. But our disposition to hesitate before the mystery of nature, to renounce our presumption of mastery, and to respect the process by which life is made, must surely prompt us*

*to sympathise with such an interdiction. And these very same feelings, had we allowed them to prevail, would have caused us to hesitate before feeding to cows, which live and thrive on pasture, the dead remains of their own and other species<sup>13</sup>.*

There is a fundamental difference between linear time as it appears in the Bible – as the long journey to redemption – and as it was secularised from the seventeenth century onwards, with the rise of science, into the concept of 'progress.' They are different narratives; they give rise to different emotions. The story of redemption creates hope. The story of progress creates optimism. The difference between them is the concept of limits. The religious mind is always conscious of limits. The universe is not ours; our will is sovereign only within the arena of the permissible; we are guardians of the world for the sake of generations not yet born. The Enlightenment, driven by the early achievements of science, was predicated on the idea of virtually limitless possibilities. Only relatively recently have we come to realise that such an attitude, unchecked, can lead to disaster.

The history of the human presence in the natural world is marked by devastation on a massive scale. Since 1600 108 bird species have become extinct, and the rate is rapidly accelerating: some 1,666 of the 9,000 in existence are currently listed as endangered. Another estimate is that one half of the world's total of 30 million species of life will become extinct in the course of the twenty-first century<sup>14</sup>. These facts should certainly give us pause for thought in considering the genetic engineering of life forms, if not as a prohibition, then certainly as a warning. An ancient rabbinical comment on creation has become highly germane. When God created the world, they said, He told the first humans: 'See how beautiful are My works. All that I have made, I have made for you. Therefore be careful that you do not ruin My world, for if you do, there will be no one to restore what you have destroyed'<sup>15</sup>.

The third parameter I wish to express by way of a radical reading of one of the most enigmatic passages in the entire Bible, the story of the binding of Isaac. We recall that God commands Abraham to offer up his son, and then, as he is about to do so, says 'Stop.' Hundreds of interpretations have been offered of this strange episode, but for reasons that go beyond the confines of the subject at hand, I found myself compelled to give a new one, one that I believe best accords with the Jewish tradition as a whole. We recall that Abraham and Sarah longed for a child. Abraham's first words to God are, 'O Sovereign Lord, what can you give me seeing that I remain childless.' They wait, and time and again are disappointed. Finally in old age the child, Isaac, comes. What God is saying to Abraham by way of the trial is this: I want you to offer him up to Me, not to kill him but to renounce ownership in him. Once Abraham acknowledges that Isaac belongs to God, then God can give him back. *We do not own our children*. That is the point of the story and the crucial fact of parenthood. Even though we bring our children into existence, we may not design them to our tastes, produce them to our specifications, impose on them our image of what they should be. In order to preserve that essential space of independence and integrity, there must be some non-volitional element in

conception and birth, something that constrains us from genetic intervention other than to cure disease.

Judaism's early sages gave a remarkable definition of *gevurah*, the word that in Hebrew means might, or courage, or strength. The conventional definition of might is the strength to overcome one's opponents. The rabbinical definition is that it is the strength to overcome oneself<sup>16</sup>. The strength of a civilisation lies not only in its ability to conquer opposition, but also in its ability to practise self-restraint: in what it can do but chooses, for ethical reasons, not to do. That is the case in our ability, present or potential, to change the genetic constitution of our descendants.

### Covenantal responsibility

Let me therefore close by citing two authors, one an American Methodist, the other a self-professed atheist, both of whom, however, are drawn to the moral power of a single word that lies at the heart of the Jewish view of the relationship between humanity and God. The Methodist is an American scholar, William May, who recently published a book called *The physician's covenant*<sup>17</sup>, subtitled, 'Images of the healer in medical ethics.' In it he analysed three images or metaphors which have shaped the self-understanding of the medical profession. The first is the physician as parent, caring paternalistically for the patient. The second is the physician as fighter, fearlessly battling disease. The third is the physician as technician, master of diagnosis and cure. He, however, prefers a fourth, namely the biblical concept of *covenant*. The physician, he suggests, should see him- or herself as a partner in a collaborative enterprise, involving the patient, fellow members of the profession, and God. The biblical ethic of covenant, he says, 'does not deny the reality of disease, suffering and death or our tremor before them but puts them in the context of a power that encompasses them'<sup>18</sup>.

Every technological advance brings in its wake two opposing dangers. One is caricatured in the Bible in the story of the tower of Babel – the hubris that says, we have godlike powers, therefore let us take the place of God. The other is the paralysing fear that says: in the name of God, let us not use these godlike powers at all. Both, I believe, are wrong. Every technology carries with it the possibility of diminishing or enhancing human dignity. What matters is how we use it. The way to use it is in covenant with God, honouring His image that is mankind.

The professing atheist, E O Wilson, is drawn to the same word. He ends his book *Consilience* with this judgement: 'If we should surrender our genetic nature to machine-aided rationation, and our ethics and art and our very meaning to a habit of careless discursion in the name of progress, imagining ourselves god-like and absolved from our ancient heritage, we will become nothing.' He precedes it with these arresting remarks: 'In the course of it all we are learning the fundamental principle that ethics is everything . . . We are adults who have discovered which covenants are necessary for survival, and we have accepted the necessity of securing them by sacred oath'<sup>19</sup>.

We need what I call the three Rs – reverence, responsibility

and restraint. If we have these, we will achieve great things.

### References

- 1 Wilson EO. *Consilience*. London: Abacus, 1998, page 305.
- 2 Putnam H. *The many faces of realism*. LaSalle: Open Court, 1987.
- 3 Quoted in Kass LR. The Moral Meaning of Genetic Technology. *Commentary*, September 1999, page 38.
- 4 Sacks J. *The good society: social challenges of the twenty-first century*. The 23rd St. George's House Annual Lecture, St. George's House, Windsor Castle, 2000.
- 5 *Genesis* 2:7.
- 6 *Genesis* 1:26.
- 7 Dworkin R. *Taking rights seriously*. London: Duckworth, 1978.
- 8 *Daily Mail*, 18 June 2001.
- 9 *Midrash Tanhuma*, ed. Buber, *Tazria*, par. 7.
- 10 Babylonian Talmud, *Berakhot* 5b.
- 11 Feldman D. *Marital relations, birth control and abortion in Jewish law*. New York: Schocken, 1974, pages 251–267.
- 12 Feldman, *ibid.*, 258.
- 13 Scruton R. *Animal rights and wrongs*. London: Demos, 1996, page 108.
- 14 Diamond J. *The third chimpanzee*. New York: HarperPerennial, 1993, page 361.
- 15 *Kohelet Rabbah*, 7.
- 16 *Ethics of the fathers (Avot)*, 4:1.
- 17 May WF. *The physician's covenant*. Louisville: Westminster John Knox Press, 2000.
- 18 *Ibid.*, 28.
- 19 *Consilience*, 332–333.

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