Philosophy, medicine and its technologies

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Author's abstract

There is a need to bring ethics and medical practice closer together, despite the risk and problems this may involve. Deontological ethics may promote sanctity of life considerations against the quality of life considerations favoured by consequentialists or utilitarians; while talk of respect for life and the value of life may point to more qualified ethical positions.

This paper argues for a respect-for-life position, dismissing a utilitarian cost-benefit outlook as too simplistic; but an unqualified fixed principles approach is also ruled out, both because of its unacceptable consequences in individual cases and also because of its reliance on the slippery slope argument which, it is argued, is logically and psychologically deficient.

The case of genetic engineering provides an example in which the notion of respect may operate, but in which broad general principles also apply. A cautious conservatism towards accepted principles is recommended in the development of medical technologies.

Developments in medical technology over the last two decades as well as changes in the law have created a much livelier interest in medical ethics than prevailed in days when death was indisputable and unpostponable, and life, once established in the womb, could only be suppressed at the cost of drastic danger to the pregnant woman. The current situation is one in which humans, to cite a much-used phrase, have an opportunity, if they wish to take it, to 'play God'. Life may be created in the laboratory test-tube. The nature of that life can be altered by gene-splicing. Those who reach a point of death through the deterioration of a vital organ may have their lives prolonged by organ transplantation; those unable to eat and unable to breathe may be intravenously fed and artificially respiration; and when death is inevitable, the process of dying may be indefinitely prolonged. Possibly the balance of power between humans and nature is about to be restored by AIDS: an infectious virus illness of long latency and inevitable fatality which is beyond the reach of medical control or cure. This too, has already

produced legal and ethical dilemmas, though these are of a different order from the dilemmas that arise from medical advance.

Ever since the development of the first atomic weapons, and the doubts about their use expressed by the scientists who produced them, people have been aware that scientific advance divorced from ethical sensitivity is a Frankenstein capable of destroying its creators. In a different metaphor, it is Adam and Eve in the Garden of Eden choosing to eat of the tree of knowledge and neglecting to eat of the tree of Good and Evil. But philosophy in recent decades has itself posed a barrier to any linking of science and morality in the shape of the fact-value distinction. Empiricism, philosophy itself – the philosophy in which scientific advance is grounded – has firmly separated theory from practice: considerations about the nature of morality from decisions about what to do. Only recently, with the challenge to fundamental presuppositions of empiricism from logic (Quine, Putnam) and from philosophy of science (Kuhn, Feyerabend, Lakatos) has it become possible for moral philosophy to shake itself free of the restraints imposed on it by Hume, and pursued in the present century by both logical positivists and linguistic philosophers.

This transformation of philosophy has, as it happens, coincided with the perceived need of medical science to find an acceptable ethical framework for difficult practical decisions. Faced with new developments in intensive care, in cardiac resuscitation, organ transfer and the new techniques of reproduction, some philosophers have duly rushed in, as the philosopher David Lamb has put it, where neurologists or other medical professionals rightly fear to tread (1). It seems even, in some cases, that they have failed to apply the imaginative exercise of seeing that, unlike the debates of the philosophy classroom, the ethical arguments that win the day in medicine have serious and significant consequences in the lives of ordinary people. They may themselves, personally, for example, find ultimately that their dying is agonisingly prolonged as a result of arguments they have successfully urged about the definition of death, or the moral and legal constraints that should be placed on physicians. On the other hand, of course, they may have their life cut short because arguments in the other

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direction have won the day. Or, to change the example: because some ethical theorists have won a political argument centred on civil liberties in relation to the issue of testing for HIV infection, certain other individuals may be exposed to infection and die prematurely of AIDS, who would *not* have died had policies based on stressing responsibility for others won the day.

So, however they choose to use it, philosophers do have a new freedom; applied philosophy is accepted *within* philosophy and made welcome in many practical areas outside it. The skills that moral philosophers have to offer are their familiar weapons of argument and counter-argument, but the situations in which they must deploy these weapons are wholly novel: they are situations in which bad arguments can actually kill, or at least add needlessly to the sum of human suffering. There is a need for caution, then, and due consideration – for testing an argument in hypothetical application to one's own case, and for asking the question, previously considered inappropriate in philosophical discussion: 'Is what I propose to say likely to be useful or helpful to those currently confronting this problem personally?' It need hardly be said that such a question would retrospectively eliminate many of the articles that have been published on the subject of abortion.

Despite these caveats, however, the need to bring ethics and medical or scientific practice closer together overrides the risks involved. As a recent group of commentators on this issue has written: 'Almost every action within the medical setting either explicitly or implicitly contains two judgements, one ethical and one scientific, and there is constant interplay between what is technically possible and what is morally desirable' (2). There is clearly, then, a need for what the moral theologian Ian Ramsey called a 'human and not a tyrannical technology' (3) – a need, in other words, to attempt to marry or harmonise scientific expertise and moral sensitivity.

It is worth remarking, too, that today's discussions take place in the shadow of a single appalling precedent: that period just before and during World War II when certain medical professionals abandoned normal ethical sanctions and operated briefly, albeit under enormous pressures, in separation from the traditional and proper concerns of medicine. It is right to recall that brief phase of Nazi medicine as a counter to the arguments of those who might today wish to press ahead in various areas without restraint in the name of scientific progress.

But given that a need is acknowledged, there is less agreement about what should be the starting-point for the project of linking morality and medical science. Should that starting-point be ethical theory or medical practice? Is it, in other words, better to start by setting out broad ethical positions before going on to draw detailed practical conclusions? Or is it preferable to start from the standpoint of the particular: a problem-oriented or case-by-case approach? In deciding

between these alternatives, practical considerations may reasonably be allowed to play some part. When, for example, the goal is to initiate professionals-in-training into a concern for the moral aspects of their work, it is probably enough simply to ask which method is more *effective*, or is found more acceptable by those involved. And it may well be that the case-by-case approach – arriving at principles from the detail of particular instances – is right for these situations. But for forming a wider overview of the situation – for seeing things on a macro rather than a micro scale, as is necessary for legal or political decision-making, it may be that it is necessary to set out broad principles first and to move on from them to particular conclusions.

Again, where what is at issue is doctor-patient interaction, consideration of particular cases may be appropriate, but where a whole area of scientific research, such as, for example, genetic engineering, is in question, keeping one's eye on the detail may be a way of failing to see the wood for the trees.

In the end, however, it is likely that, provided the reasoning is sound, both these methods of approach will ultimately lead to the same destination. Ethical theory must complete itself in the realm of the particular; while close attention to the moral aspects of particular cases should in the end bring an understanding of certain broad ethical positions. Either way, the road to be travelled is likely to be via some broad but specifically *medically-oriented* principles such as those proposed, for example, by Gillon: autonomy; beneficence; non-maleficence, and justice ('fair adjudication between competing claims') (4).

For present purposes a combination of these methods may be most appropriate: starting with a specific example and seeing what broad considerations it involves. We might consider for this purpose an actual case cited by a consultant in Scotland: the sterilisation without her knowledge or consent of a young married woman whose first child had just been stillborn (personal communication). The case as described seems to flout most principles: the woman's right to make her own decisions; her right to information; the consultant's duty to respect these rights; the woman's loss of the child-bearing capacity, and so on. But when the consultant added further factual information: that delivery of the child had revealed an advanced stage of cancer and an urgent need to proceed to a treatment which necessarily resulted in sterility, it becomes clear that another principle was operating – most would say rightly in this case: a consideration of the practical consequences, together with a presumption in favour of producing the best or happiest outcome possible in the circumstances, irrespective of rigorist or legalistic considerations.

What this case reveals, then, is the central conflict to be found in very many instances and cases, between the autonomy principle and the principle of beneficence – between respect for patients' preferences or rights and

consideration of their *interests*. While this is characteristic of the ethical dilemmas that arise in the clinical setting, the area of medico-scientific research gives rise to another range of moral considerations. Both kinds of problem are involved, however, in situations which involve patients themselves in experimental procedures. In these overlap cases, there is, for ethics committees in hospitals, not only the problem of balancing the patient's autonomy against the patient's best interest. There may also be a need to balance the interests of current patients against those of future unknown patients – or to trade the good of many for the comfort or risk of a few. In these cases, the patient's autonomy and the need for informed consent may be set against the welfare of future patients – the greatest good of the greatest number – which may only be achievable by involving present individuals in experimental procedures, either as subjects or controls.

There are areas of research, however, which may pose ethical dilemmas without directly involving patients, and so without raising the issue of autonomy: such areas, for example, as genetic engineering and, in particular, the manipulation of human genetic material. A different way, then, of formulating the ethical issues may be needed to produce principles of the level of generality that is required to set these issues, too, in an appropriate moral context.

The term 'deontological' is commonly used to characterise the views of those who favour strict adherence to rules or principles above practical utility. But in medicine, it seems to be distinctive of a deontological approach that it stresses one basic moral intuition in particular: that of the *sanctity* of life (5). It is characteristic of a consequentialist position, on the other hand, which bases decisions on outcomes – an approach contrasted with the first as 'teleological' – that it regards *quality* of life considerations as decisive (6). And those who might wish to avoid philosophical absolutes of any kind but are nevertheless disturbed by the extent to which humans are prepared to manipulate nature or human materials, and to exploit it/them without limit for ends they deem to be desirable, may speak of a *respect* for life requirement (7). There may also be a presumption in favour of the *value* of life which equates with none of these, but is used to express the view, which sounds truistic but which is in fact a non sequitur – that life is worth living and should therefore be preserved at all costs (7).

The mention of costs here reminds us that there is another dimension to these ethical and medical arguments: the economic and the political. The standpoint of those who introduce cost-benefit considerations tends to be utilitarian or outcome-oriented. It usually involves appeal to quality-of-life considerations, and does not see the *value* of life as absolute or uncomputable.

For people who stand on the consequentialist side of the ethical debate the case-by-case approach to ethical judgement may be favoured not simply for

methodological reasons, but for deeper and more ideological reasons. They may wish to make the claim that all judgements are essentially individual and particular. And, despite the claims of some rule-utilitarians to the contrary, it would seem to be an essential aspect of the utilitarian position that consequences should be calculated in particular settings. They are relevant to an occasion and an instance. This applies even where following a broad rule is advocated for the majority of cases. Utilitarians who deny this have in fact unwittingly lined up with deontologists.

This emphasis on particular cases brings utilitarians close to the views of those who favour the kind of situation ethic advocated by some religious thinkers (8). Religion, on the whole, however, may be expected to be found in alignment with the approach to medical ethics that stresses the importance of principles. It is an extremely important force within medicine, first because there are a number of key areas where religious absolutism conflicts (a) with what some patients want, as well as with what has been conceded to them by law, such as, for example, abortion – and (b) with what some medical professionals would wish to offer but are not allowed to by law, such as the early termination of suffering by euthanasia in cases where death is inevitable. On the whole, religion operates as a conservative influence in medicine, since the pronouncements of the main religions on most subjects were formulated *before* the technological advances that have given rise to so many current dilemmas.

This is not, however, to decry a principled approach, far from it. On the contrary, some further considerations will be advanced here – and one argument in particular will be discussed – which might incline the uncommitted or undecided towards a principled approach in the modified 'respect for life' sense, and away from an uncritical acceptance of the notion that maximising welfare – doing the best for everyone in a particular situation – is the right way to proceed. These considerations will have special force when it comes to issues which are not directly part of the clinical person-to-person encounter, but relate to matters of the moral limits to scientific advance, as in the case of genetic engineering, and the growing number of possibilities of interfering with what human beings are in the habit of calling 'the natural'.

The first of these considerations concerns what the Greeks called *hubris* – an arrogance which takes the form of humans placing themselves on a level with the gods. Perhaps it was this sort of *hubris* that was referred to in the introduction to a medical ethics textbook which stated 'With the help of biological and behavioural sciences, human beings are seizing control over human nature and human destiny' (9).

The feeling that there is such a moral lapse, despite the fact that we appear to have no word for it in the English language, is expressed by contemporary commentators in such claims as that human life – and perhaps life in all its forms – is intrinsically deserving of

respect. David Lamb has used this notion of respect-worthiness to suggest that human material, such as embryos, or parts of the bodies of the dead, may be deserving of a modified degree of respect, as compared with actual human beings who receive full respect (10).

It may also be expressed in terms of feelings of outrage at certain developments. Mary Warnock advances this kind of consideration in discussing embryo research, speaking of 'barriers which should not be passed' and 'things which, regardless of consequences *should not be done*' (11). She cites Dr Robert Edwards as having argued that if the results of IVF research are beneficial (a) to the infertile or (b) to researchers into genetic disease and others with a legitimate interest, it must be right. Against this, Warnock insists 'No one's morality consists of nothing but a calculation of benefits and harms' (11).

These reservations are not, however, universally shared. For example, Diana Brahams, writing in the *New Law Journal*, speaks of the need to convert such wholly negative and destructive events as abortion into something of positive value. She would, it seems, advocate harvesting of parts from anencephalic neonates, from aborted fetuses, and from fetuses deliberately conceived for this purpose, where this might help another family-member. (She does not discuss the case of a pregnancy entered into for this purpose as a commercial venture.)

In pressing her case, Brahams uses another philosophical category rather than the one usually introduced, declaring that there is 'no logical objection to the use of fetal organs for transplantation' (12). This appeal to logic when ethics seems a doubtful ally is a striking new development in terms of the relation between philosophy and medicine. It is necessary to remember, however, that logic, being the science of tautologies, has nothing to say on *either* side of these or any other substantive issues.

Beyond these considerations, however, lies a yet wider context, in which the basic assumptions of Western medicine and science are challenged, either by the introduction of an Eastern or philosophically holistic perspective, or by, for example, a feminist analysis of the broad structures which shape the ethical setting for particular medical dilemmas.

One commentator has summed up the questions involved here in the following terms: 'What images of health, disease, normalcy, womanhood, sexuality, etc undergird the present delivery of health care and development of new biomedical technologies?' (13). She also asks: 'Should the new technologies be developed in the absence of basic nutritional, health and medical care in Third World countries?' (13).

These broader perspectives throw into sharp relief the extent to which a stress on autonomy and the rights of patients is part of a much wider liberal political perspective, based on a belief in freedom and self-determination. This is of course in itself an ethical stance, and one which would not necessarily command the support of people brought up within different

traditions, with different expectations and desires. This constitutes a reminder that ethics, culture – of which the practice of medicine is a part – and, again, religion, are a closely-woven cloth.

For all these reasons, then, the piecemeal approach of utilitarianism, with its simplistic practical assumptions, needs to be treated with cautious suspicion, or, at least, care. An unqualified principle-based approach, however, is equally suspect. This may best be demonstrated by consideration of one argument which plays a uniquely important role in principled approaches: the metaphor of the slippery slope.

This argument tends to make its appearance when a single paradigm case is used to break a general principle, taboo or restriction. For example, the case of a child born without limbs, hearing, sight or brain-function may be cited as justifying euthanasia for defective new-born babies. Defenders of the slippery slope argument then suggest that this constitutes the thin end of the wedge (or first foot on a slope) the end result of which is that cases bearing less and less resemblance to the paradigm lose the protection of the moral taboo. So, for instance, it may be that a child with a mild form of Down's Syndrome will not be kept alive, or that an adult paraplegic, who nevertheless wants to live, will have his or her life prematurely terminated.

The slippery slope argument take two forms: one a logical argument, the other a comment on human psychology. Its effectiveness varies according to which form is in question. It is scarcely valid as a logical argument, as an examination of its basic form shows: a certain principle, the argument suggests, entails a certain action towards which we may be sympathetic (letting a grossly handicapped infant die, for example). It also might *seem* to entail another action we do *not* approve of (killing a moderately handicapped infant, perhaps). The advocate of the slippery slope argument then reasons: since the second action is wrong, the principle must be wrong. And since the principle is wrong, the first action must be wrong, too. Set out like this, it is clear that the slippery slope argument involves a double fallacy: other considerations could make the second action wrong; and even if a principle is wrong, not all actions compatible with it are necessarily wrong.

As a psychological argument, however, the slippery slope argument is more effective. Humans may be more disposed to take larger steps as a result of practice in taking smaller steps. A little bit of killing may lead to a hardened moral sensitivity which permits in the end of a great deal of killing.

But most commentators seem agreed that psychologically a stand may be taken at any point on the 'slope' of some particular medical issue that is judged appropriate in the light of current knowledge and medical expertise. And unless this flexibility is permitted, anomalies arise and harsh consequences may follow.

For example, *anomalously*, abortion of an anencephalic fetus may be legally and morally permissible (because it is not potentially capable of meaningful life outside the womb – hence not to be regarded in law as *viable*) but once born, it must be treated for its brief existence as a life. And, *harshly*, in Ireland, for example, such a fetus must be carried to term (12).

So the slippery slope argument is ineffective in establishing that principles should never under any circumstances be violated. As commentators on Kant's rigoristic presentation of moral principles have seldom failed to point out, principles may be of greater or lesser degree of generality, and their exact formulation can make all the difference to their acceptability.

Formulations of an ethical position in terms of the concept of respect for life, then, may seem preferable to those put forward in terms of fixed principle, as permitting the degree of flexibility that is in fact needed here.

It is this concept, too, that seems most relevant to ethical discussion surrounding such issues as the new technology of reproduction, genetic engineering and the use to which human tissue and organs may be put. To take the issue of genetic engineering as an example, it may be denied that important ethical issues are involved here, on the grounds that what is being achieved by genetic engineering, is simply a more sophisticated version of what generations of rose-growers, dog-breeders and farmers have tried to achieve in more traditional ways. And indeed, where what is at issue is the production of frost-free varieties of wheat or heavy-cropping apple-trees, it may be hard to see that ethical issues do arise. And certain other problems – the creation through gene-splicing of pests, viruses or microbes – while they *do* give rise to problems, may be perceived first as *practical* problems, rather than as moral ones. Inevitably, though, they *become* moral problems if they can harm or endanger *people*. It may be said that if there is no *intention* to harm, even if the results are catastrophic, then the scientists responsible have done nothing morally wrong, unless they have also been careless. However, in a situation where the consequences of the release of a new organism are irreversible and essentially unpredictable, it could be argued that this constitutes morally blameworthy irresponsibility. As far as public policy is concerned, some countries have banned experimental releases of this kind of organism; some impose no controls at all, and others require reporting and the seeking of official sanction for individual releases. Because of the uncertainties, it would seem that the moral requirement of concern to prevent avoidable harm would justify the latter as the *minimum* position.

However, the view that only the prevention of harm is involved here becomes less convincing once one moves away from the area of plants and micro-organisms and considers the creation of animal hybrids; or the creation of anencephalic clones for

spare-part surgery – or of a race of giants, or of a low-intelligence slave class. Even on such subjects, however, ethical opinion is divided. Jonathan Glover argues that the genetic alteration of human-kind is not morally objectionable, providing only *willing* parents donate their genetic material (14).

But R M Hare has reportedly argued that the possibility of genetic misfits – Chernobyl-type disasters in the genetic area – means that it would be wrong to experiment with human material. D H M Brooks, on the other hand, argues that there could be no moral objection to the creation of a happier society by the development of a race of willing slaves endowed with appropriate emotions (15).

On the whole, however, it seems right that interference with human genetic material should come under a special taboo – one which might also cover treatment of dead human tissue. While organ removal is widely regarded as ethically acceptable – in the case of kidneys, its endorsement is almost a moral requirement – there will be limits most people would acknowledge. (Would anyone be prepared to see human tissue made into high-protein food for calves, for example?). So it seems that a moral sensitivity does in fact operate in these areas which is neither deontology – expressible in terms of principles – nor teleology – a matter of undesirable consequences. In this in its negative form what Warnock expressed as 'outrage'; in its positive form what others have expressed as 'respect'?

I should like to suggest that it is not precisely this but rather something capable of a more rational formulation. What these issues involve is competing views of human nature: what humans are; what they may become; and how they may best find their fulfilment. Another way to put this is to say that common to many ethical and religious theorists is a certain conception of human flourishing. In practice, an understanding of human nature in its various historical and cultural settings, as well as of human beings as biological organisms, suggests an ethical framework in which this flourishing is most likely to be achieved. As J S Mill put it, in the last chapter of *Utilitarianism* (16), this may after all involve adherence to certain principles of broad generality – the principle of justice, for example – that human beings have come to value over millenia. So, while repudiating narrowly principle-based approach in human affairs, we are no doubt right to be as the moral theologian Ian Ramsey put it, 'cautiously conservative towards the principles we already hold' (17).

These are not only principles for life, but also for death and dying. And indeed, in death and suffering, religion and medicine find a common focus. In expressing reservations, in feeling instinctively that it would be right to hold back, or at least to move only with caution in areas of technological advance that may affect human nature itself, we may be rightly holding on to what we know, and wisely hesitating about the plunge into the unknown. For, as David Lamb has

pointed out, the issues are not insignificant. On the contrary, in his words: 'At stake is the *idea* of the humanness of our human life and the meaning of our embodiment, our sexual being, and our relations to our ancestors and descendants' (7).

Thirty years ago, a leading spokesman of the Christian religion was prepared to defend human manipulation of nature in strong terms. In 1958 Ian Ramsey wrote: 'The only sense in which the "unnatural" is wrong is that according to which "natural" is the perfection of creation towards which we aspire; and the knowledge whereby we are enabled to control the actual and mould it after the image of the ideal comes to us by the grace of God working through the devotion of human investigators. If it enables us to deflect the course of gametes into channels through which they will contribute to the making of a better civilisation than would result from their being left alone, it is showing us the way to use actual "nature" for the creation of the ideally "natural" ' (18). He added that interference with nature may not be a *failure* of reverence, but rather that *refusing* to interfere might itself be a kind of irreverence – ignoring, as he put it, God's guidance to doctors and technologists.

But thirty years have passed since then and thirty years have seen many changes which could not have been contemplated when Ramsey was reflecting on these themes. I do not think that, writing today, anyone with ethical sensitivity could pronounce so firmly in favour of unqualified further advance in medicine and its technologies. The ethical test to apply in all such developments is that these should not merely perpetuate the life of a biological organism unwilling to accept its necessary mortality, but that they should harmonise, too, with a higher notion of human existence – human existence which at its best, acknowledges its own transitoriness. This principle operates not merely to suggest self-restraint in the development of medical technologies but also to govern practice in the person-to-person encounters of

clinical medical practice.

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