The Internet
A philosophical inquiry

Gordon Graham

Chapter 3, Chapter 8, & conclusion
(read for April 4)
For
Lindsay,
who took to computers,
and Murray,
who didn't
Contents

Acknowledgements x

Introduction 1

1 Neo-Luddites versus Technophiles 6
   The origins of Luddism 6
   Technophilia 9
   Critical realism about technology 14
   Surveying the issues 16

2 The radically new and the merely novel:
   how transformative is the Internet? 21
      The nature of the Internet 22
      The radically new and the merely novel 24
      Social transformation: using the Marxist model 27
      Television as a test case 31
      Will the Internet transform? 37

3 The Faustian bargain: assessing the value
   of technology 39
      Faust 39
      Technology as the servant of desire 41
      The constitution of the problematic 45
Contents

Means and ends 47
Cost–benefit analysis 50
The useful and the valuable 52
Moral freedom and political neutrality 56

4 The Internet as democracy 62
Direct versus representative democracy 62
The advantages of e-mail and the power of the web page 66
The value of democracy 71
Power to the people? 75
The Internet and the deficiencies of democracy 77

5 The Internet as anarchy 84
Positive and negative anarchy 84
The internationalism and populism of the Internet 86
Knowledge and ‘information’ 89
Knowledge as power 93
Freedom and reason 95
Moral anarchy and the Internet 99

6 Policing the Internet 103
Pornography and harm 105
Licensing and labelling 107
The morality of pornography 115
Pornography and legality 121

7 New communities 128
Individuals, communities and interest groups 128
Liberalism versus communitarianism 136
The potential for electronic ‘communities’ 141
MUDS, MOOS and GeoCities 146

8 Virtual reality: the future of cyberspace 151
The ‘bodynet’ and the ‘smartroom’ 151
The ‘virtual’ and the ‘real thing’ 154

‘Virtual’ as a kind of reality 158
‘Virtual’ achievements 160
The poverty of cyberspace 164

Conclusion 167

Bibliography 170
Index 174
3 The Faustian bargain

Assessing the value of technology

Faust

The story of Dr Faustus has captured many imaginations, most notably of course those of Goethe and Marlowe. A mediaeval legend seems to have got caught up with the real story of a sixteenth-century German necromancer and together they have fashioned the now familiar tale of the man who sold his soul to the Devil in return for unlimited powers, but for a limited time. In Marlowe’s version there is considerable pathos in the portrayal of Faustus approaching the end of his twenty-four years as master of all and realizing just what the bargain he had entered into really meant.

It is an image that is easy to apply to technological ambitions. The truly innovative technologist throws himself into a wholly new source of power – electronics, nuclear energy or genetic engineering, say – believing it to contain within it undreamt of sources of power, only to find as the future unfolds that the new technology has its down side, chiefly in the form of consequences which formed no part of the original (invariably over-optimistic) picture. Part of the problem about these Faustian bargains arises from the unpredictability of the future. How can we tell where our inventions will lead? And if we cannot tell this, how can we tell if the benefits will outweigh the costs? In The Greatest Benefit to Mankind, his monumental history of medicine, Roy Porter records, again and again, a pattern in which social and commercial advances brought in their wake diseases and epidemics which cut huge swathes through the populations which these advances could
have been, and were, expected to benefit. The advent of animal husbandry, for instance, though it secured more reliable sources of food, put people in close proximity to sources of sickness against which they had little natural resistance. Likewise, improved industrial production required a concentration of population which created conditions in which bubonic plague bearing rats could thrive. In fact Porter vividly describes the very development of medicine itself as an unceasing dialectic between the amelioration of known maladies and the consequential rise of new enemies to health.

Every major technological and social innovation, it seems, is attended by unforeseen risks and disadvantages. This is the theme of Edward Tenner’s much more wide-ranging study referred to earlier, Why Things Bite Back, subtitled Technology and the Revenge Effect. Tenner examines four major areas in which technological innovation has been heralded as hugely advantageous and applied with vigour—medicine, agriculture, information processing and sport. In every case he records major deleterious consequences that were wholly unforeseen by the innovators. Some of these outcomes can properly be described as disastrous, yet the unpredictability of the future cannot be allowed to lead us into paralysed inactivity, and rarely has. Life, as we say, tritely but truly, must go on; for both good and ill, technology develops and, as Tenner remarks, the slightly boring truth is that ‘contemporary technology … is neither a miracle weapon nor a dud’ (Tenner, p. 199).

Still, is there any way in which we can adjudicate on such developments before plunging headlong into the latest technological abyss? In the introduction to this book I quoted a radio interview with Neil Postman. Postman offers us a test by which we should always assess the usefulness of technological innovation. Ask of any piece of new technology, he says, what is the problem to which this is a solution? In his book Technopoly Postman alerts us to deeper questions of a sort to which we will turn in due course, but in the interview he seems mainly concerned to expose the fact that people can fall in love with the technologically ingenious, or even the merely novel, and under the influence of this technophilia they overlook the all-important business of rationally assessing the value and merits of the technological devices in question. Their love of technology, we might say, is blind. Clearly, since there are such people, his point has rhetorical force. Even so, if we are really interested in such rational assessment, we need to ask: is the question Postman poses a good one?

To arrive at an answer it is necessary to begin by looking at some of its presuppositions. The first is this. As Postman here frames it, the question presupposes that the desire which any technological device aims to serve is prior to and independent of that device. This is even clearer in one of the nine tests for new technology which Wendell Berry offers us in What Are People For?: ‘[any new device] should do work that is clearly and demonstrably better than the one it replaces’ (Berry, p. 172). The thought behind both of these tests can be expressed as a variation on David Hume’s famous dictum: ‘Reason is and only ought to be the slave of the passions’ (a dictum that we will have reason to examine directly); technological innovations are and only ever ought to be the slave of independent problems.

Second, Postman’s question implies that the problematic character of any task that new technology might enable us to tackle is, so to speak, constituted subjectively. That is to say, a problem is defined as such by whatever we find problematic.

Third, it assumes that technological thinking is purposive through and through, that is, technology can be wholly characterized as means to ends—improved means to an unimproved end, as Thoreau once put it. This third assumption is one so many people share that it might almost be regarded as self-evident. Yet, as I think we shall see, it is an assumption that there is considerable point in questioning. The plan of this chapter, in fact, is to examine each of these assumptions in turn, and then apply some of the conclusions arrived at to thinking about the Internet.

Technology as the servant of desire

Is it true that the need which any technological device is intended to serve exists prior to and independent of that device? There is reason to think not. Postman’s question is a natural one, but we might as readily ask of any new piece of technology: what does this make possible that was not possible before? This is just as plausible a test for any innovative device, but it is a much less static one; it does not
assume a fixed set of desires and purposes. The question about new possibilities is also more in keeping with common experience, since it seems evident that we can and do form new desires and find new interests. In other words, we can *come* to desire things which formerly we did not desire, or even had no idea of desiring. From this fact, a fact which everyday experience appears to confirm, it follows that we can also come to *need* things that formerly we did not need, because, given our newly found desires, we have a use for the means of satisfying them, a use we did not have hitherto, and thus a need for things that we had no need of before.

From what do new desires (and hence new needs) arise? More information is one obvious source. I come to want things that I come to know about. I knew nothing of Chinese food until yesterday, say, but having discovered it, eating Chinese is added to the list of my desires. Now it is important to note that the value of new technology does not depend on the fortuitous advent of new desires. It is not as though desires conveniently spring into existence at the same time as new inventions. The availability of technology has the effect of *stimulating* new desires. I can come to want things not, as it were, directly but because I discover that there are means of accomplishing them. I never thought of holidaying in the Caribbean, let us say, until I discovered the availability of relatively inexpensive flights. Now that it is possible to travel long distances easily and cheaply, I come to want to do it. New technology presents new possibilities, and these new possibilities awaken new desires.

It might seem nonetheless, on further reflection, that the obvious truth of this claim about new desires and the role of technology in helping to form them does not actually contradict the assumption behind Postman’s question. So long as wants and desires can be subsumed under general headings – the desire for nourishment, stimulation, entertainment, information, recreation and so on – then technological innovations do not create new desires in any deep or interesting sense. They only open up new ways of satisfying old ones, albeit old ones that admit of greater and more refined specification – holidays abroad and not just holidays, news pictures and not just news, and so on. The point, *contra* my criticism of Postman, is that in as far as these more specific desires can be subsumed under the same general heading, they are not really new. So, for instance, though an open fire and a microwave oven are technologically very different and generate notably different patterns of cooking and entertaining, their value derives from exactly the same underlying source – the desire to cook. Likewise, the appeal of computer games, despite the complex technology which they employ, is not fundamentally different to the appeal of simple board-games like Ludo.

So at any rate it might be claimed, and it is a rejoinder that needs to be examined with care. One thing we can say, however, is that its argumentative strategy – the strategy of subsuming specific needs under general headings – runs the risk of disguising those very differences that there is reason to think present us with genuinely new possibilities. Consider this example. It is plausible to attribute to human beings a general desire to engage in picture-making. In virtually every culture past and present the practice of visual representation can be found, and the cave paintings which archaeologists have uncovered suggest that this is a deep-seated feature of human behaviour which goes back a very long time. Nevertheless, to classify every form of visual art as simply another means of fulfilling this basic inclination involves us in ignoring significant differences between different forms – painting and photography, for instance. Because painting does not have the speed, or cheapness, or power that photography does, it does not allow the ordinary, not specially wealthy, person to make pictures of family outings or a record of their schooldays. These are applications of picture-making which the technology of photography has made possible. We can look back on our past visually, as previous ages did. Nowadays, however, we can relive it in a way that was denied to almost all members of earlier generations, since in the past portrait-painting was largely the preserve of the well-to-do. Furthermore, with the advent of the video camcorder, photography extends to the wealthy and not so wealthy alike a new possibility: re-experiencing the past through moving pictures. Now we can want to do, because we can do, something which previously we could not have wanted, except in the imagination.

The point to be emphasized is that, though the desire to make pictures may indeed be a basic feature of human motivation, the
possibility of satisfying it in new and easier ways alters the role of pictures and picture-making in our lives as a whole. Popular photography, indeed, may be said to have reversed the relationship between memories and picturing. 'Now, instead of merely photographing persons or scenes that were especially memorable or historic, [people can] photograph at random and then remember scenes because they had been photographed. Photography [has become] a device for making experience worth remembering' (Boorstin, *The Americans: The Democratic Experience*, p. 376).

What the example of photography shows is that technological innovation does not always leave the stock of desires as it was. Perhaps it hardly ever does, but almost always alters it by expansion. The invention of electric light was significant at first chiefly as a replacement for the candle and the gas mantle. But it also allowed the development of the spotlight and by extension the projector. In short, the new form of lighting did not merely perform the tasks of the old with greater efficiency and at lower cost: it introduced further possibilities. New technologies can alter the stock of desires at a deeper level also. An implication of the first assumption behind Postman's 'test' question is that the value of technology lies ultimately in its serving certain needs and that these needs can be characterized in an enduring and recurrent way. But in fact there is this further possibility: new technologies can alter our desires by altering our conceptions of those needs. Indeed, elsewhere Postman himself emphasizes precisely this point: 'What we need to consider about the computer has nothing to do with its efficiency as a teaching tool. We need to know in what ways it is altering our conception of learning ...' (Postman, *Technopoly*, p. 19).

Consider by way of illustration of this the example of health. Eric Matthews has drawn a useful distinction between 'wide' and 'narrow' medical technology, the former referring to practical techniques in general and the latter to techniques devised and constructed from what he calls 'fully scientific' knowledge. Matthews argues that in the case of medical technology, whereas wide technology appeals to an independent general desire for health, the distinguishing mark of the narrow technology of the modern period is the impact it has had on our concept of health. The result is that what human beings conceive of themselves as desiring when they desire a healthy life is different now from what it was in previous periods. It is not merely the means of securing it that have changed, but the thing secured.

Health comes more and more to mean, not just the normal, species-specific functioning of the human organism (within the constraints of the 'natural order') but the state which medical care ought to achieve for us (which breaks those constraints) ... health becomes, not the best one expects given the limitations of human life, but freedom from those limitations themselves.


I am not here concerned with the cogency of the argument in this particular case, only with its being a plausible exemplar of the idea that the relation between technology and the ends it serves is not as we might naturally assume it to be. The ends we seek are sought in part because we have the means to seek them, and how we conceive of those ends is itself influenced by the technology which we have available to us to realize them. If Matthews is right, for a long time the concept of health was conceived as something to be obtained within natural boundaries; with the advent of scientific medicine, it becomes something which transcends them.

**The constitution of the problematic**

The upshot of all this is that, except in a few restricted cases perhaps, technology should not be regarded as the handmaiden of human needs and desires, but a highly important contributor to their formation. Consider now the second presupposition — that a technical problem is constituted by what we already find problematic. In many instances, it is true, technological progress consists in finding better ways of accomplishing given tasks. Nevertheless, such improvements, even when accurately described as increases in efficiency, may be revealed by and not merely embodied in the technology. For example, it seems plausible to think that the most immediately perceived benefit of keyhole surgery was its ability to accomplish more efficiently the precise tasks which the more
invasive surgery of older methods also attempted. But keyhole surgery has also been found to speed the healing process by requiring far shorter periods of hospitalization, a result partly of psychological as well as physiological factors. The original aim, let us say, was to spill less blood, but the final outcome is considerably better than this from the point of view of successful treatment. There is no good reason to suppose that we could have anticipated this in advance of adopting the new technology, and this is why it is right to say that the improved benefits were revealed by and not merely embodied in the new technique.

The truth of this observation might be thought less consequential than initially appears. Is it not the case that effective and speedier recovery from illness was what was sought throughout? This is a query related to the earlier discussion of generalized needs. The point is that we can allow that new techniques reveal a greater improvement than was at first anticipated, and on a wider front, while at the same time continuing to hold that their value resides in their increased ability to address what was regarded as problematic all along, in this case illness. Now in the particular example of keyhole surgery, this may be so. I shall not argue the case. It is much less clear that the same point could be made about every possible example.

It is not even generally true of medicine. Medical technology, in fact, seems to me replete with examples of innovations that alter the parameters of the problematic. Before the invention of life-support machines, for instance, the question of whether a persistent vegetative state (PVS) is tantamount to death was not a problem. Anyone who was in such a state would in a very short time be dead in the normal way. What the new technology revealed was a gap between life at a purely biological level and life at a conscious level, for with the assistance of technology the former could continue when the latter was at an end. Is this life or death? And what do we do about it? Here we have a new problem, it seems, something which was not problematic before.

An objector might persist; there is still an underlying continuity, the concern with preserving life and preventing death. But this is just the point. Is the preservation of someone in a persistent vegetative state the preservation of life in the relevant sense? We think life worth preserving because life is valuable. What this new technology did was to put in our hands the possibility of sustaining ‘life’ whose character is such that its value is questionable, and precisely because this is so, the obligation to preserve life in the form of PVS is much less clear than it was. Before, we knew what the duty to preserve life implied; now we do not.

In short, technology may start out as a new means to an old end, but its development turns out to have serious implications for our conception of the end itself. This will come as a surprise only if we are inclined to the third presupposition built into Postman’s ‘test’ — that technology is essentially purposeful.

Means and ends

From a philosophical point of view this third assumption is the most interesting of the three I have identified. Postman’s test applies only if technology is exclusively purposive, that is, entirely a matter of means to ends. It is an assumption which it is easy to make, and made easier yet by its having this further advantage: it provides us with a conceptually simple standard of assessment, namely usefulness. The first point to be made against it however arises from just this feature. In the accomplishment of purposes there is the possibility of more than efficiency; there is also the matter of style. Take for example satisfying the desire to eat. If this were just a matter of supplying the needs of nutrition ever more efficiently we could not explain an important aspect of food preparation — taste. One recipe may be as good as another from the point of view of digestibility, safety to health and nutritional value, and yet be preferable because of its taste and appearance. Moreover, improvement in taste and appearance is most often a matter of discovery. I can discover, ab initio so to speak, how delicious the mixture of two flavours is, having had neither a pre-existent desire to find a new combination nor even a belief that such was waiting to be found. In a similar way I can discover the advantages of a different method of cooking. Such is (one) theme of Charles Lamb’s famous story about the discovery of roast pork. The technology of the kitchen can in this way be a matter of pure experimentation.
So too with other tasks. Computer graphics now allows many more people than ever before to experiment with presentation. They already know, let us suppose, what it is they want to say, but they discover, by experimentation, more interesting and arresting ways of saying it. The attraction of this new technology is not simply, or even mainly, an increase in speed and a reduction in cost over pen and paint, but in stylistic and expressive possibilities.

Ignoring the importance of style is not the main fault in the assumption of essential purposiveness, however. A more fundamental error is the implicit supposition that the distinction between 'end' and 'means' is categorial rather than relative. The difference between the categorial and the relative is most easily illustrated by judgements of size. 'Large' and 'small' can be thought of as contraries. A thing cannot be both large and small, it is easily assumed. But this is false. A large mouse can be a small animal; a large raspberry can be a small fruit. 'Large' and 'small' are essentially relative judgements, which is to say, they are judgements relative to the sorts of things they qualify. So too, with ends and means. These are relative judgements. Something can be a means relative to one thing and an end relative to another. My taking a job in a factory may be the means to the end of earning the fees for a course; the fees earned are the means by which I pay for the course, which in turn may be the means to gaining an engineering degree, my gaining a degree the means to the end of securing a career in electronics, and so on. In this example (and the examples can be multiplied indefinitely, of course) each stage is both means and end, depending on the perspective from which it is viewed.

What is the importance of this observation? Its significance is that we cannot rest content with usefulness on its own as a measure of benefit. A means is useful to an end, but if 'means' is a relative term, then so too is 'useful'. Were we restricted to the useful, our estimate of benefit would in an important way be incomplete. In fact, so incomplete would it be that we could attribute no real significance at all to instrumental effectiveness, which, considered by itself, is worthless. This is a point made by J.L. Stocks in a once famous essay entitled 'The Limits to Purpose'.

So far as you are wholly concentrated on bringing about a certain result, clearly the quicker and easier it is brought about the better. Your resolve to secure a sufficiency of food for yourself and your family will induce you to spend weary days in tilling the ground and tending livestock; but if Nature provided food and meat in abundance ready for the table, you would thank Nature for sparing you much labour and consider yourself so much the better off. An executed purpose, in short, is a transaction in which the time and energy spent on the execution are balanced against the resulting assets, and the ideal case is one in which the former approximates to zero and the latter to infinity. Purpose, then, justifies the efforts it exacts only conditionally, by their fruits.

(Stocks, p. 20)

Stocks' point can be applied directly to technology. In so far as the benefit of technology arises from its usefulness, it loses its value when something better takes its place, and if we pursue this line of thought the ideal world would be one in which technology is of no benefit at all, because we do not need to use it. To regard technology as essentially purposeful, then, is to make the mistake of supposing that usefulness is valuable in and for itself. It is not; 'the useful' is of consequence only in so far as it is serves something else. Assessing real benefits, certainly, requires us to pursue a chain of means to ends, but this chain of assessment only produces an answer if, somewhere, it comes to an end. Where is the end to be found? The answer is that we must assess the advantages of technological innovation in terms of the value of the ends to which it is a useful means.

To summarize. It is tempting to think, as Postman's question implies and Berry's test asserts, that the evaluative assessment of technological innovation is a matter of deciding whether the ends we already have are better achieved by the new means with which we are presented. By this account of the matter, technological innovation (however ingenious) will be redundant if it does not solve the problems or further the ends of which we are and perhaps always have been possessed, ends set for us by recurrent, generalizable desires. Against this we can now say, first, that technological
innovation is, in the ways I have suggested, at least in part a process of experiment and discovery; second, that it both enlarges existing ends and alters our conception of them; third, that this makes it a process of development which can throw up wholly new aims and purposes. It follows that the business of assessing the value of any new technology is more complex than the simple means-to-end model suggests. When we add the fourth and further point that means and ends are not categorically distinct but only relatively so, an implication of considerable significance emerges: it is a mistake to think that the assessment of technology can rest content with the idea of usefulness; it necessarily passes on to the idea of the valuable.

Cost–benefit analysis
This summary casts additional light on a familiar idea alluded to earlier – that technological innovation can readily be assessed in terms of costs and benefits. The basic idea of cost–benefit analysis is very straightforward. If benefits outweigh costs, then we are net gainers and ought to adopt the new technology; when they do not, we are losers and ought not to do so. Cost–benefit analysis is attractively simple, but in order to make assessments in this way we need to be clear about the basis of cost and the basis of benefit. In most cases this is harder to do than might at first be imagined. For one thing, the associated costs can be imponderable. A dramatic innovation like the Internet has very many and very widespread consequences. These are extremely difficult to predict and hence to assess. We know that the amount of money spent on computers has been vast, though it is hard to say just how much it is. Indeed Janet Hyland, a network strategy consultant, believes that ‘no one will ever know how expensive it is’ (quoted in Tenner, p. 199). Both local and international networking have had very many effects, but just what these are is difficult to itemize with any degree of precision. Part of the difficulty is determining the timescale over which the assessment is to be made. But even where we are able to draw a line around the chain of effects in both temporal and geographical extension, the problems may be no less intractable. In practice, the sums both of costs and benefits are often incalculable.

This is an important fact which should at the least temper our enthusiasm for the cost–benefit approach. Much more important from a philosophical point of view is a conceptual rather than a factual question: what is to count as a benefit? The strategy of cost–benefit analysis presupposes both estimability and commensurability in input and outcome. That is to say, it supposes both that we can estimate the costs and benefits and that there is some common medium in terms of which they can be compared. A relatively simple illustration of cost–benefit analysis would be advertising. Is the monetary cost of additional advertising outweighed by the additional monetary value of sales? In this particular case the requirements of estimability and commensurability seem easy to satisfy, though even here less obviously quantifiable effects on ‘image’ may come into play. Still, a company can know how much it has spent on advertising and how much has come in sales, and both quantities can be cast in monetary terms. The simplicity of this case is comparatively rare, however. Consider, by way of contrast, the comparison we might try to make between two holidays. We can tell easily enough how much each costs; but how should we estimate the benefits and can they be compared by means of the commensurable medium of money? This is much less obvious. How is the benefit of sea and sun to be compared with the interest in visiting historic places? Even if I know that I enjoyed one holiday much more than I did the other, I may still be quite unable to put a monetary value of the higher level of enjoyment and thus unable to compare its additional benefit with its relative cost.

The example of sales and advertising, in effect, invokes the idea of usefulness: has the new advertising medium been more instrumentally useful in producing the same end, namely increased sales? The second example, on the other hand, introduces a different sort of scale: was the second holiday of greater value than the former? What this shows is that cost–benefit analysis, however alluring its simplicity, cannot adequately deal with the difference between the useful and the valuable, a difference that we have seen other reason to highlight. It is this distinction, not that between cost and benefit, which we most need to understand.
The useful and the valuable

The distinction between the useful and the valuable is of great philosophical importance and requires further explanation. One way of explaining it is this. The activities of any individual can be divided into two broad categories — work and leisure. There are other distinctions with which this can be (but ought not to be) confused. The distinction between work and leisure is not that between the dreary and the pleasurable, for instance. Some people find their work a source of great personal satisfaction and others find that leisure activities can pall. Nor is it a distinction between employment and non-employment. The possessor of vast inherited wealth, who is not employed, is working, in the relevant sense, when they stand in line to collect their welfare benefit or fill in the forms bureaucracy requires. The distinction between work and leisure, then, is really between those activities which are necessary to live, and those which make living worthwhile.

We can express this distinction as one between useful activities (work) and valuable activities (leisure). Of course, in the life of one individual any given activity may be simultaneously useful and valuable (this is perhaps the mark of a ‘profession’ or ‘vocation’ as opposed to a mere ‘job’), but there must always be some such distinction in every assessment of worth just because we can always ask of any activity (or object) that is useful — what is it useful for? And because we can always ask this question, we need some further evaluative conception which will answer it and which is not itself open to the very same question, otherwise we are launched on a regress, a way of trying to estimate benefit that is necessarily incomplete. This further conception, which brings the business of estimation to completion, is what we may call ‘the valuable’. In short, while every human life will contain actions and objects whose purpose is to sustain life (the useful), it must also contain others whose purpose is to make life worth sustaining (the valuable).

The usefulness of the useful is, in a way, easy to assess, because it lies exclusively in causal efficiency: does a means that purports to be better actually bring about the desired end in the quickest and most cost-effective way? If it does, then it is useful. But what of the value of the valuable? What determines this? There is an answer implicit in the expression ‘the desired end’ which we have been using: namely, that value lies in the satisfaction of desires. This explanation of value in terms of the satisfaction of desire has a long, if not entirely venerable, philosophical history. Its most famous exponent is David Hume, and to examine it we need to return to his memorable dictum quoted earlier: ‘Reason is and only ought to be the slave of the passions’.

The implications of this dictum can be easily brought out by an example drawn from recent technology. Computers have made possible the itemizing of telephone bills. Before this was a possibility, let us agree, no one felt its absence. Now that itemizing is possible, people can and do desire it, and hence tend to prefer telephone systems that permit it over those that do not. To conclude that itemized bills represent an increase in value, however, that in some way or other they enrich our lives (albeit modestly), we must ask where precisely the additional value lies. Is it in satisfying a desire? The claim that it is carries a curious implication — namely, that human beings are the playthings and not the masters of technological innovation. That is to say, they are subject to the dictate of desires which are neither of their own choosing or under their direction. So, in the example of itemized bills the picture is one in which we are simply presented with this new invention and either do or do not find awakened in us a desire for it. If we do, then it is valuable; if we do not, it is not. What the picture rules out is any mediation by the reflective intelligence, any raising of the question: ‘Is this new invention worth desiring?’

This is not a very welcome implication, yet it is a necessary corollary of the dictum that reason is and only ought to be the slave of the passions. To reject it therefore, suggests that we should reject (or at least seriously question) Hume’s dictum and deny that the basis of the valuable (as opposed to the useful) is adequately explained by the satisfaction of desire.

So strong is the grip of Humeanism in contemporary thinking about these issues, however, that it often seems very difficult to say
where else it might lie. In The Road Ahead Bill Gates remarks that there is never a reliable map for unexplored territory. But is the information highway really unexplored territory? It is fairly easy to state the advantages that it has over telephone, fax, letters or libraries. Most of these have to do with access, speed, storage and so on. But if this is all that there were to be said, the Internet would not constitute a new source of value, merely a useful new way of doing things whose value is already established. What new possibilities does the Internet introduce and how, if they truly are new benefits, is their value to be assessed? The crucial problem here, as I have remarked in the introduction, is not to anticipate these new possibilities, which is what Gates is trying to do, but to put in place some conceptual framework in terms of which their innovatory character can be evaluated. And the important point is that we want a way of thinking about the source of value underlying this assessment which does not make passive victims of technology’s users and consumers.

So, something more needs to be said about the satisfaction of desire. There is an old contrast of considerable significance which is relevant at this point. Hume’s contention is that things are valuable because we desire them. An alternative contention is that it is rational to desire things if and only if they are valuable. To believe the first is to subscribe to a subjective explanation of value – the valuable is constituted by our desires; to believe the second is to subscribe to an objective explanation of value – the rationally desirable must be based on the truly valuable.

My own inclination is to the objective interpretation. This is because it seems obvious that people can genuinely desire harmful and worthless things, and the fact that they do have such desires does not in itself seem to bestow any value. In other words, desiring the harmful or the trivial does not make it any less harmful or trivial. For example, addicts unquestionably want drugs; this does not make them good for them. The collector of bus tickets wants bus tickets; this in itself lends them no intrinsic interest. What this implies is that, contra Hume, the psychological state of desiring can track the desirable (in the objective sense) or it can fail to do so.

Suppose this alternative to Hume is true. What then is the mark of the objectively desirable, the truly worthwhile? One possible an-swer can be generated by returning to a way of thinking that has been unfashionable for most of this century – the appeal to progress. Few deny (who could?) that technological advances in recent times have been more striking and have had more widespread effects than those of possibly any preceding century. Mere technological advance is not a sufficient guarantee of betterment in a larger sense, however. Is the Armalite rifle, for instance, a progression on the bow and arrow? The reason we might hesitate over saying that it is, though it accomplishes the same purpose – the killing of enemies – with far greater efficiency, lies in the thought that we would be even better off without the need for either. Killing is bad and better ways of killing, though they are instrumentally better, do not make killing itself any better. It is not necessary to enter into a proper discussion of the many issues this remark raises to make the point I want to make. We can approach the assessment of weaponry in a narrower or a larger framework. Within the narrower one of efficacy there has been progress. Within the larger one of international relations and human welfare this is much less clear. Yet the wider framework is obviously relevant to an adequate assessment of this important branch of modern technology. The construction of this wider framework is a major philosophical task: to delineate the features of an evaluatively more praiseworthy world order. (The reader will find the subject addressed at length in my book The Shape of the Past, which is listed in the bibliography.) Obviously more needs to be said about this, but for the moment it is sufficient to state the thought I have in mind at its most abstract. Better weaponry is better instrumentally. But it is ‘better’ tout court only in so far as it forms part of a better world. So too with the Internet. The improvements it promises are improvements in so far as they make for a better world.

Thus stated such a contention sounds vacuous, platitudinous even, unless we answer some all-important questions: better in what respect? And who is to say? Nonetheless, despite its abstraction, such a conclusion has interesting and important implications. Faust, it will be recalled, at least in some versions of the myth, obtained unlimited wealth and power in exchange for his soul. We may interpret this as meaning that he was required to abandon any
claim to a wider judgement on the ultimate value of things. Faust was confined to the accomplishment of strictly mundane desires: you want power and success, and for a price you can have it. But do not ask about the true value of those desires. Assessing the Faustian bargain properly, therefore, requires us to occupy a point of view other than that of our current, felt desires. This point of view is that of a wide cultural and moral frame. In this respect the myth of Faust is to be contrasted with the Promethean myth. Again, this comes in different versions, but in Prometheus Bound he is represented as the inspirer of both technology and the quest for knowledge, the Titan who restored fire to human beings, in defiance of Zeus. The mastery of nature which Prometheus represents, unlike that of Faust, does not confine itself to the accomplishment of human desire, but continually strives for a larger understanding such as the gods might jealously guard as peculiarly their own. Achieving this point of view is a very large task and its sheer size makes it daunting, which is why Prometheus, in later nineteenth-century versions, is an icon of Romantic heroism. But the difficulty of the task should not make us think of it as impossible; indeed it is not so difficult to make some headway with it.

Moral freedom and political neutrality

Chief among the difficulties that explicating and defending an objective conception of what is and is not valuable faces is the resistance that arises from the rejection of moral absolutism and fear of political totalitarianism, a resistance characteristic of the West in the twentieth century. In most previous ages there were, and in other contemporary places there are, believers in absolute right and wrong. Such people are prepared, on the one hand to kill and oppress in defence of these absolutes, and on the other to die for them as martyrs and heroes. It is arguable, though far from demonstrable, that this sort of absolutism was the source of the ferocious religious wars in Europe, wars which the founding intention of the United States was designed to overcome (historically an even more questionable contention in my view). Whatever the truth of this, there can be little doubt that modern political thinking has been profoundly influenced by the idea of toleration. As a consequence, the dominant political philosophy of the contemporary period – liberal democratic theory – has striven to base itself on fundamental values that enjoy a certain sort of neutrality.

The claims for this neutrality rest on two important contentions. First, there is the belief that killing and persecuting for the sake of some supposedly ‘higher’ moral or religious end is indefensible. Let us agree that it is. It is crucial to observe however that, if so, our agreement rests upon an assumption which necessarily presupposes, and hence does not deny, an objective conception of value. It supposes, in fact, that killing or persecuting in the name of culture-bound religious or moral codes violates yet more important values – the lives, freedom and welfare of other human beings. This may be true; for my own part I have no inclination to dispute it. True or not, however, it invokes a set of values no less objective than those it seeks to displace: to kill others because of their religion is wrong – not wrong ‘relatively speaking’, but wrong simpliciter.

Simpliciter is not the same as ‘absolutely’, however. Absolute values I take to be values without qualification or exception, values which are not commensurable and can never be compromised. Now it is perfectly consistent to hold that there are no such exceptionless values, that is to say, no values that can never be traded off against others according to contingent circumstances, while at the same time interpreting trade-offs of this kind as trade-offs between the objectively valid. Indeed, it is difficult to interpret that in any other way, because the need for a trade-off implies a value independent of choice and desire. This is true even of benefits of a strictly personal kind. I may settle for a trade-off between, for instance, the excitement of hang-gliding and the risks to physical injury it poses without this calling into question the objective good of the excitement and the objective good of avoiding injury. It is only this, in fact, that makes sense of the idea of ‘getting the balance right’. It follows that though they are commonly compounded, objectivity and absolutism are not the same.

The second basis of the modern conception of neutrality lies, as I have already noted, in a strong belief in the value of toleration. Once again, however, stressing the importance of toleration does not militate against an objective conception of value. On the
The Faustian bargain

58 The Faustian bargain

contrary, it presupposes it. Subjectivism about values and toleration of social differences are often thought to go hand in hand, but properly speaking, I am only called upon to tolerate things which I believe to be truly wrong or bad. I have no need of tolerance with respect to mere differences - of taste, for example. I am not called upon to 'tolerate' your choice from the restaurant menu simply because it differs from mine. It is only if and when I believe that someone else's freely chosen decision is not merely different but wrong that I am called upon to respect their freedom by tolerating their erroneous beliefs and misguided actions. Toleration, then, is a concomitant not of relativism or subjectivism, but of a commitment to the objective value of freedom.

If this is right, there are values (freedom being one) which transcend felt desire. Toleration implies the suppression of a desire to stop or hinder others in the name of a higher value which is not itself, therefore, a felt desire. Such a conclusion supports both the rejection of the Humean dictum and the contention that we must locate the benefits of innovatory instrumental means in the permanent pantheon of transcendental values. 'Transcendental' here does not mean 'other-worldly' (though a case can be made for thinking that the ultimate source of value must lie beyond the realms of ordinary human experience) but Promethean in the sense explained previously. For present purposes it need only be taken to mean values that are necessarily abiding for all forms of human communication and interrelation, and hence rise above and regulate the desires we find ourselves having.

From the point of view of avoiding strife this is a welcome conclusion. Despite common opinion to the contrary, to conceive of values as ultimately rooted in felt desire is not to make room for respectful negotiation and compromise, but to imply that at bottom there can only be conflict - my desires against yours. By contrast, if there are objective values we can hope, mutually, to discover what they are and thus resolve our disagreements. This is a possibility which many find unpersuasive because it leaves unanswered this most important question: how are we to tell, and who is to say, what these values are?

There is a long-standing tradition in moral and political philosophy - one which the 'neutralist' political philosophy dominant in the second half of this century has tended to embrace - that offers an answer to this question. It goes by the general name of 'contractualism'. The idea behind it is that the ultimate values which must govern social and moral relations are those which would be agreed upon by rational agents stripped, as it were, of their personal preferences and particular interests. This is the conception at work in the writings of the century's most influential political philosopher - John Rawls. In a sequence of books and essays Rawls has elaborated at great length the thesis that the values which should structure the fundamental constitution of social and political life are those which can be found to comprise what he calls an 'overlapping consensus' between groups of individuals who in many other respects are divided by deep differences.

The amount that has been written about Rawls' conception of social morality is vast, and there is neither point in nor scope for considering it in detail here. It is sufficient for present purposes to draw attention to one element in the Rawlsian strategy. This is the uncovering of the overlapping consensus by an exchange between competing points of view. One difficulty with the realization of this strategy is that it remains unclear in Rawls whether the exchange is one between hypothetical deliberators or real ones. If it is the first, there is a question about how such hypothetical deliberation can uncover actual consensus. If it is the second, if it is actual consensus that matters, there is the obvious objection that real political deliberation does not take place in the pages of a philosophy book, but must actually take place in the public forum. The most that philosophy can show is what people ought to agree to; it cannot show that they have so agreed.

Political theory of a normative kind, then, must at some point give way to political practice; this fact turns our attention to the realities of the democratic process. Does the democratic process realize, at least in part, the sort of deliberation out of which real consensus can arise? The best we can say, to date, is that it does so in a very imperfect form. We know that in even the best-ordered societies the democratic process is not in fact one in which every opinion has free and equal opportunity of expression. Moreover, in practice democracy is a system where wealth and power can be used to affect, and on occasions effect, electoral outcomes.
The Faustian bargain

It is on the strength of this background belief about consensus and democracy that one of the most important and ambitious claims about the Internet has been made. It has been argued, for instance, that the public and interactive nature of the Internet presents us with the means by which, for the first time, true democracy (and hence real consensus) is possible. Is this correct, and if it is, is it to be welcomed? These are two of the questions to be addressed in the next chapter. To appreciate their significance for the theme of this chapter, however, a summary of the argument up to this point will be useful.

We began with the question: how are we to assess the value of technological innovation in advance of knowing exactly where it might lead? The initial suggestion considered was that we should ask what problem or problems such innovation can be expected to solve. Upon examination, however, it emerged that this very natural question is importantly limited. It supposes that the problems we seek to solve are independent of the means available for solving them. This, we have seen, is false. Postman’s ‘test question’ further supposes that ‘the problematic’ is constituted subjectively, by what is felt to be a problem. This too is false. But more importantly yet, it implies that the significance of technology is a matter of instrumentality – usefulness. Further reflection and analysis shows, to the contrary, that ‘usefulness’ is an essentially incomplete conception of worth, and that it requires a further reference to values which are the final ends which mere usefulness serves and in terms of which it has to be shown to constitute a real benefit. Such values, though often construed as arising directly from human desires, are better interpreted objectively – which is to say, interpreted as standing above and shaping the more immediate ends of felt desire. The discovery and realization of these values creates an essential, and a larger, context – the context of a better world to which truly useful technology is a better means.

What are these values? One answer to this question which has been canvassed extensively in contemporary moral and political philosophy (as well as in social thinking more broadly) is that they are the values which will command agreement or consensus after a process of widespread social deliberation and debate. Such deliberation brings into dialogue the many different voices that go to make up the pluralist societies of the modern world, a dialogue which serves both to uncover common ground and to forge a common agenda. How is this deliberation to be contrived? Another answer to this further question is equally familiar: it is to be effected through the democratic process. This is one explanation of the rise and (apparently) universal aspiration to democratic social and political forms. However, up to the present, democratic institutions have functioned only imperfectly and have been subject to the distorting influences of unequal distributions of wealth and power. Could it be the case that the technological innovation of the Internet might significantly alter this? If so, we have (by a somewhat circuitous route) arrived at an answer to the topic of this chapter which can be made to apply to the technology of the Internet. Technology is truly valuable if it raises the prospect of a better world. A more democratic world would be a better one. Now, for the first time, we have the means – the Internet – to effect this improvement.

The cogency of these last two claims – that a more democratic world is a better world and that the Internet can bring this about – provides the starting point of the next chapter.
8 Virtual reality
The future of cyberspace

With the concept of 'virtual reality' we arrive at the world of science fiction and of fantasy. Or so many suppose, and it may indeed seem that if in the discussion of virtual reality every limit on the imagination is removed, then all the factual and conceptual constraints which control our speculations are lifted also. Such a lack of constraint may suit the novelist or storyteller, but it is a freedom we do not want in the sort of inquiry we are engaged in here, because it makes any speculation as good as every other and hence marks the end of serious critical investigation. Actually, although in discussing virtual reality we are indeed entering the realms of the highly speculative, the position should not be construed as one quite without constraint. What is true is that we need to be careful about the constraints we observe. As I remarked at the start of the book, and have had occasion to repeat in the ensuing argument, the sheer speed at which the technology of the Internet is developing is probably unprecedented in human history, and for this reason there is a constant danger of declaring something to be impossible a priori, only to find that in a very short time it is a reality. The same thing can be said of VR technology, which has largely been developed independently of the Internet.

The ‘bodynet’ and the ‘smartroom’

Nevertheless, though the future undoubtedly holds many hitherto undreamt of technical marvels, what is imaginable is not necessarily...
The distinction is illustrated with great regularity in traditional fairy stories. We can imagine, easily enough, that the prince is turned into a frog, but there are well-known philosophical obstacles in the way of making such an imaginary event properly intelligible. The same sort of thing is observable in science fiction. There are many tales of time travellers, and very entertaining and diverting they can be. But philosophers know well that whether time travel is conceptually possible is a vexed and difficult question. A large part of its difficulty lies in the fact that the idea of time travel seems to admit the flatly contradictory – the traveller existing before he was born, for instance, or encountering on his travels a younger person who both is and is not himself. Contradictory states of affairs are as good a mark of the impossible as one can hope to find, but even so we can imagine the contradictory without any great difficulty, as when we picture (either mentally or with pen and ink) the older and the younger time traveller meeting each other.

From this it follows that not all that is imaginable is conceivable. We can imagine things which logically could not happen, and if they are indeed logically impossible, necessarily they are empirically impossible also. To make any headway with the idea of virtual reality and hence with the future of cyberspace, then, we need to restrict ourselves to the realms of the conceptually possible and ignore the impossible imaginings of science-fiction writers. At the same time, if we are to think about the future of cyberspace to any real purpose, then, to reiterate what was said in the previous chapter, we should allow full rein to speculation about the technically possible. At present, life on the Internet does not amount to much more than interactive television. People have speculated, however, that whenever the devices of VR technology that might be developed in the future can be plugged into the Internet, the result will be something much more like a ‘total’ experience. One of the steps along the way to this is the ‘bodynet’, described by one of the most enthusiastic futurists in the world of information technology as follows:

The bodynet is the brainchild of Olin Shivers at the MIT Laboratory for Computer Science ... The Shivers bodynet builds on a pair of ‘magic glasses’ that you wear. They have clear lenses that let you see where you are going but also present miniature inset displays that show color images to each eye. The images are generated by a computer the size of a cigarette pack on your belt or in your purse. The glasses also have photodiode sensors that monitor the whites of your eyes in order to detect where you’re looking. Miniature microphones and earphones attached to the glasses let you speak to and hear from your equipment ... The gadgets communicate with one another in a language called ‘bodytalk’, which is transmitted via low-power radio waves that are confined to an invisible envelope around your body – the body network, or bodynet.

(Dertouzos, p. 64–5)

The bodynet, or the ‘smartroom’ (another very hi-tech device described by Dertouzos), is not necessarily linked to the pursuit of virtual reality, but clearly has or is expected to have implications in this connection. For convenience devices such as these and speculations about their possible uses can be combined into what is sometimes known as a ‘VR Body Zone’. The aspiration behind the VR Body Zone is that it would make Internet encounters far less like watching television and more like experiencing the real thing. And it is to the world of the Internet with such a device, rather than that now currently prevailing, that the term ‘virtual reality’ is normally applied.

Let us grant the Internet enthusiasts and futurists all the advances and advantages that these technological speculations permit and let us for the moment deploy the phrase ‘virtual reality’ to indicate the kind of experience that electronic communication up to and including such devices would make possible. We can then ask the following questions. Is virtual reality in any sense a new mode of being, and in so far as it is, is it better or worse than the everyday world with which we are all familiar?
The 'virtual' and the 'real thing'

Consider other examples of the use of 'virtual'. In the expression 'virtual certainty' the word 'virtual' implies 'as good as'. When something is a virtual certainty, then, even though it is not certain, it can be taken to be so, at any rate for the purposes in hand. In so far as it has any currency, the expression 'virtual reality' seems to function in a similar way. It signals something not the same as, but as good as, the real thing, at least for certain purposes. Of course, in making sense of this a lot turns on what we mean by the 'real thing', but I do not think we need to spell this out in the abstract. In any individual case it will be clear enough. To have met a virtually real Marilyn Monroe is as good as having met her in the flesh; to have climbed the Eiger in virtual reality is as good as having climbed the Eiger; to have 'virtually' encountered a man-eating tiger in the depths of the South East Asian jungle is as good as having encountered a real one. To each of these examples we must add, of course, the qualification 'for certain purposes'. What might those purposes be? The last example gives us a clue. For the purposes of knowing 'what it is like' to face a man-eating tiger, a virtual one is as good as a real one and it has the further advantage of none of the normal risks attaching. One can extend the example certainly and imagine being 'virtually eaten' by the virtual tiger, and hence getting to know what it is like to be eaten by a tiger. Still, no death results and this has to be an advantage virtual reality enjoys over the real thing.

The extension of the man-eating tiger example might be thought to bring us not so much to the realms of the fantastic as the ludicrous. And so perhaps it does. But it allows us to raise two important doubts about virtual reality. First, do we really find out 'what it is like' to face a man-eating tiger if we know that there is no danger of actually being eaten? Second, do we need all the apparatus of the bodynet and the smartroom to accomplish this? It will be most convenient to begin with the second of these questions.

Are people in the networked VR Body Zone so very different from the person stimulated by and caught up in far simpler forms of make-believe? At a minimum, it is not obvious that they are, because the ordinary power of make-believe is very considerable. This is a fact about the arts in general that has been taken up by Kendall Walton, author of a major study in aesthetics entitled Mimesis as Make-believe. An important part of his thesis is that the world of make-believe as embodied in films, plays, novels and other forms of artistic imagination allows us to 'enjoy' the experiences depicted without the normal costs of doing so.

Make-believe ... is a truly remarkable invention. We can ... make sure the good guys win, or see what it is like for the bad guys to win ... There is a price to pay in real life when the bad guys win, even if we learn from experience. Make-believe provides the experience – something like it anyway – for free. The divergence between fictionality and truth spares us pain and suffering we would have to experience in the real world. We realize some of the benefits of hard experience without having to undergo it.

(Walton, p. 68)

Whether this is a good explanation of the value of works of art is open to question, but that is not the issue here. Rather, we want to know whether the vaunted advantages of an Internet capable of full-blooded virtual reality effects constitutes something radically new. And the answer seems to be that it is not: certainly it may be true that virtual reality 'provides the experience – something like it anyway – for free', but this is no more than Walton claims for the 'remarkable invention' of make-believe as exhibited in less technically advanced media such as plays, novels and films.

To see that there really is no very great difference here despite the futuristic nature of cyberspace, something more needs to be said about the relation between, on the one hand, having the experience 'what it is like to ...' and, on the other, any given medium that induces this. Suppose that I am reading a narrative of encountering a tiger in a jungle. It might be fiction, or it might be the reporting of fact, but in the hands of a good author either might induce in me a sense of 'knowing what it is like'. Of course there is certainly a difference between knowing what it is like in virtue of reading an account and knowing what it is like because I have
myself been in this circumstance. An important part of the difference lies in this simple fact: in the first case, though I 'know what it is like', it is not true of me that I have encountered a tiger; in the second case, it is true that I have encountered the real thing, and it is precisely because this is true that I know what it is like. However, this difference applies just as well to my encounter with a virtual tiger as to my merely reading about it. In this case too, however life-like the virtual experience of a tiger, it is not actually an experience of a tiger and no increase in technical sophistication will make it so.

There are prospective differences between storytelling and VR experiences, certainly, just as there are differences between a film and a novel. But since in both cases the impression, however vivid, necessarily falls short of the reality, any such differences, whether between storytelling and virtual reality or between film and literature, must lie in the nature of the alternative media. 'Knowing what it is like' is the same in both cases; all that differs is the means by which this has been induced.

It seems plausible to characterize this difference in the following way. The story-book case relies upon my imagination, aided no doubt by the imaginative and descriptive power of the author. The virtual reality case, by contrast, leaves much less to my imagination, perhaps hardly anything at all, because the gap between experience and reality which imagination normally bridges is filled by the technical devices of the electronic medium.

It is tempting to try to strengthen this point by saying: reading about tigers is not at all like encountering tigers, whereas virtual experience of a tiger is very like actual experience of a tiger. Let us agree that this is true. Nevertheless, if the point or value of the virtual experience is coming to know 'what it is like', this is also the case in the imaginative experience prompted by my reading. What is called virtual reality may have the advantage of inducing this sense of 'what it is like' more easily, and perhaps more vividly, especially among the less imaginative, but it still remains the case that if the merit of virtual reality is said to lie in its being 'as good as' the real thing for the purpose of coming to know 'what it is like', this is true of other much less technically complex media also.

Despite the difficulty of discerning any very great distinction between media such as novels and films with which we are thoroughly familiar and Virtual Body Zones yet to be invented, the idea is likely to persist, I think, that a virtual reality experience of X is in some important and interesting way closer to the actual experience of X than is merely reading or seeing a film about X. But on what might this greater closeness be based? One common answer is that virtual reality experiences are (or would be at any rate) 'just like' the real thing. Is this true? Here there is reason to return to the first of the two questions posed earlier. Do we really find out 'what it is like' to face a man-eating tiger if we know that there is no danger of actually being eaten? Suppose we answer 'No' to this question with respect to novels and plays. Then we must also answer 'No' in the case of virtual reality. This is because however vivid the experience inside our wraparound goggles and data gloves, we know we are not in danger of being eaten just as much as we know it when we sit and read the book. Many people, I imagine, would feel inclined to answer 'Yes' with respect to virtual reality machines, to say that in the case of virtual reality we really do get to know what it is like to face a man-eating tiger even though we know there is no chance of our being eaten. The temptation to say this is because we can predict that under such circumstances people are likely to experience the same emotions and exhibit the same reactions that they would in the presence of an actual tiger - terror, anxiety and so on. But on exactly the same grounds we would have to answer 'Yes' in the case of other media also because it is a fact (much discussed by philosophers of art) that novels, films and plays can stir strong emotional reactions on the part of audiences - horror at horror films, sadness at tragedies and so on - even in the familiar surroundings of their own homes. It follows, it seems to me, that either way we have no reason to attribute any difference in kind to virtual reality experiences over other make-believe experiences. At most, we have reason to attribute a difference of degree of vividness or intensity.

The reason for this is that on the analysis so far, even the most technically sophisticated virtual reality set-ups must be interpreted as experiences without 'the reality'. What is missing, it appears, is any ingredient that would incline us to say that virtual reality is
more than a simulacrum – that it is a different kind of reality, different but just as good as (or better than) any other for certain purposes.

‘Virtual’ as a kind of reality

The previous chapter was concerned with Internet communities. These, as we noted, are frequently referred to as ‘virtual communities’ and it was this expression which led us on to the discussion of virtual reality, the ‘reality’ of which we have now found reason to doubt. It seems, though, that the use of ‘virtual’ in ‘virtual community’ signals something a little different from its use in the more general expression ‘virtual reality’. A virtual community is not a community that is an experientially indistinguishable copy of the real thing, but rather a community of a different kind. In this sense ‘virtual’ signals not a simulacrum of reality, but a different kind of reality, and this is just the idea we want to explore.

It was Howard Rheingold, author of The Virtual Community: Homesteading on the Electronic Frontier, who first brought this use of the term to prominence and who provides a definition that has gained a certain currency:

virtual communities are social aggregations that emerge from the Net when enough people carry on ... public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace.

(Rheingold, p. 5)

The first thing to be observed about this definition is that it contains no reference to (or even hint of) substitute experience. Nothing said here suggests that the emergence of a virtual community depends on or would even be specially advanced by the development of hi-tech Virtual Body Zones. The contrast, it appears, is not between that of a ‘real’ community of flesh-and-blood people and an experiential simulacrum which conveys what the real thing is like. The difference lies elsewhere. Where could this be? The answer will be found, I think, by remembering the origins of the virtual community. MUDS and MOOS, out of which those
groups called virtual communities have emerged, were first devised as many-player games. So the question is: when does interacting on the Internet in a structured way cease to be merely a game? When does it take on the seriousness (rather than the feel) of community life? The answer in outline is: when a virtual community is formed, and this is precisely the point which Rheingold’s definition aims to capture or isolate (whether or not it succeeds).

In this sense of ‘virtual’, the virtual is not a semblance of something else, but an alternative to it – an alternative type of entity with properties both similar and dissimilar to that with which it is contrasted. If this is correct, the question is whether this alternative form of community is a kind of entity in its own right, and of a sort that allows us to attribute to it a distinctive form of reality.

Why should anyone deny this, or deny that virtual communities, though different are real enough in their own way? The crucial difference between ‘encountering a tiger’ or ‘climbing the Eiger’ by means of a VR Body Zone and doing these things in real life can, as we saw, be expressed in terms of make-believe. It is possible (in theory) by means of VR to have the experience of encountering a tiger (or something like it) but this is really no different to having ‘made-believe’ with the help of a novel or a film that I have met a tiger. In the absence of the real thing it remains true of me that I have never as a matter of fact encountered a tiger. Imagine, now, someone whose sole experience of interacting with others lay, or at least had come to lie, in relationships formed within a GeoCity or virtual community. Would it be true of such a person that they had never ‘really’ interacted with anyone, that they merely knew ‘what it was like’ to do so? The answer is much less obvious than in the VR case and this is why there is some reason to attribute to virtual communities a reality of their own.

Why is the answer only much less clear? Why is it not plain that they have indeed formed real relationships, though of a different sort? The residual doubt arises from this important fact: it seems possible that indefinitely many of the relationships they enter into by this means are fictional. At this point we return, in fact, to the discussion suspended at the end of the previous chapter.

A virtual community could in theory comprise the one real person we are hypothesizing (for convenience, our real person can be
a woman called Technos) and indefinitely many invented personalities. If Technos does not know this, and believes that she has friends and acquaintances with whom she exchanges gossip, from whom she learns and to whom she turns for advice, is she not deluded? There are no friends out there, only invented personalities, so how can she have real relationships with them? Alter the case so that Technos has herself invented the larger part of the character by which she represents herself on the Internet. The whole thing now seems a delusion, no better than a game and possibly worse in so far as it has generated a degree of deception.

But is the resultant community life truly a delusion? The case in which all the characters in a virtual community are significantly different to the real-life 'players' who 'operate' them, is certainly the most interesting case to explore. If under these circumstances we could find a way of attributing a certain sort of reality to the community they comprise, we should indeed have found a virtual reality of an interestingly different kind. The principal difficulty in the way of spelling this possibility out convincingly lies, of course, in the thought that such a community would in fact have returned to that from which it had its origin -- namely a mere game. What we need to ask, therefore, is whether the wholly fictional community just imagined could have the sort of seriousness that Rheingold builds into his definition, or whether it would be nothing more than a game of very great sophistication.

'Virtual' achievements

To simplify the task of exploring this question I shall introduce some stipulative terminology. Let us use the term 'community' to refer to the normal case -- the villages, associations, cities and countries with which we are familiar, whether or not these meet the stricter criteria of a 'community' that we set out in the previous chapter. And, ignoring the fact that many of the Internet groups currently referred to as virtual communities are 'inhabited' by real people, let us reserve the term 'virtual community' for an Internet group in which all the on-screen personalities are the alter egos of those who, so to speak, sit at their terminals. Is a virtual community in this limited sense anything more than a game?

Computer games have something in common with VR. In a computer game I 'kill', let us say, a number of evil invaders. Of course, in an obvious sense, it is true that even so I have never actually killed anyone. That is to say, just as in the earlier example where my 'VR encountering' a tiger falls short of actually encountering a tiger, however life-like the experience, in the game there is a similar falling short with respect to 'killing' invaders. Nevertheless, there is a difference and one which, we might say, makes all the difference, for killing enough invaders in the game counts not as an imaginary win, but a real one. In other words 'killing game invaders', though different from 'killing real invaders', is still an achievement. It is not the same achievement, but an achievement nonetheless -- an achievement within the game. Similarly, a relationship established by Technos, though not a relationship with the person at the other terminal, is a relationship 'within the virtual community'. Two questions arise. First, does this remain true if Technos is herself an invented persona? Second, if it does, is this enough to make the relationship thereby achieved something other than a move in a game?

We can expand the example in ways which allow us to explore these questions further. Imagine that Technos gets elected mayor of the virtual community (let us call it Cyberville) and initiates a building programme. A 'law' is established by which every time someone comes on-line, their persona has to contribute to the emerging communal construction by the addition of a suitable building icon. Failure to do so results in exclusion. Over time, this cooperative activity results in Cyberville's having the most sophisticated architectural construction of any virtual community to be found on the Internet. Then Technos starts to make 'political' misjudgements and the policies she pursues lead to dissension. So great is this dissension that more and more personae leave Cyberville until, finally, it is abandoned and the virtual community known as Cyberville ceases to exist. It becomes, in other words, a 'ghost town on the electronic frontier' just like so many on the original Frontier. Could we not say that the architectural construction which lasted for a time was a significant achievement and that Technos's mismanagement of the virtual community was, correspondingly, a significant failure? If we can say this then, as it
162 Virtual reality

seems to me, we have given sense to the idea that Cyberville is (or was) a community in a different order of reality and thus something more substantial than a mere game.

To decide whether this is the right conclusion to draw, we have to describe the history of Cyberville with some care. Despite the way I have just posed the question, the crucial point is not so much whether an achievement or a failure ‘within the virtual community’ is a move in a game, but whether either the achievement or the failure can properly be attributed to the personae who inhabit this community. Did the inhabitants build an impressive structure? Did Technos fail the community as mayor? It seems there is reason to doubt this, because it seems odd to say that the public policy which proved disastrous was decided by Technos. Isn’t it more plausible to hold that the policy was decided by the author of Technos – the person who sat at the terminal? Suppose that Technos has an arrogant and autocratic temperament, while the author of Technos is not like this at all, and that it is because of this arrogance and autocracy that the policy failed. Even so, we have not eliminated the ultimate responsibility of the author, because it is the author who has decided that Technos shall have this character, and who, step by step, has authored the reactions and responses which best express this temperament. In short, it appears that at some point or other we must make reference to real persons and cannot explain the whole history of Cyberville entirely in terms of the invented personae who constitute the virtual community.

This does not show, however, that it is all a game. For a time the author of Technos has successfully presided over a functioning community which has to its credit an electronic construction of impressive proportions. The truth of this is not altered by the fact that the people of Cyberville are fictions or that the basis of the construction is digital information held on servers rather than bricks and mortar existing in physical space. Asked the question: ‘What have you ever achieved?’ the author of Technos can truthfully point to a community and an architectural construction which really existed – really existed in cyberspace. This reveals a difference with the earlier virtual reality examples. There the person who, thanks to the VR Body Zone, had the experience of encountering a tiger can say ‘I know what it is like to encounter a tiger’ but cannot say ‘I have encountered a tiger’. By contrast, the author of Technos can say both ‘I know what it is like to preside over a community’ and ‘I have presided over a community’. Moreover, she can say the former precisely because she can truly say the latter.

I have chosen this particular example with care because it is not clear that the same point could be made about all relationships established within a virtual community. Imagine another invented persona: Webman. Let us suppose that, on some level of description or other, Webman and Technos fall in love, marry and set up a new home in Cyberville. On the strength of this it seems plausible to think that the author of Technos could claim that she knew what it was like to be in love, but not that she had been in love. From this is follows that only some Internet relationships and activities can count as real achievements as opposed to simulated achievements like those we experience in the VR Body Zone, and in turn this implies that the distinctive reality which is to be found in virtual communities may be importantly limited.

Still, the general point is this. Virtual reality – interpreted not as simulation but as the sort of world realized in the virtual community just described – can properly be conceived of as a distinctive mode of existence, a mode that is not just a game, but a world of its own in which a significant if limited range of things can be accomplished and lost. If we now add to this minimal claim the reminder that the Internet is at a very early stage of development, there is reason to think the future of cyberspace will bring metaphysical novelties – that virtual reality interpreted via the virtual community is to some extent a new world and one that we are on the edge of.

To make this notion of a metaphysical novelty clearer it may be useful to consider what has been called the ‘cyberstore’ – an Internet site where a wide variety of goods can be inspected and ordered. According to Neil Barrett, the cyberstore

...
Virtual reality search. Shelves full of goods can be displayed and the shopper can select and sample goods—perhaps simply by ‘clicking’ on the image.

(Barrett, p. 112)

Internet shopping is now fairly commonplace and growing rapidly. The Internet bookstore Amazon.com has reported annual increases in sales of over 480 per cent. Much of it, however, is simply a matter of doing by other means what we have done for centuries. We order a book, say, but the book is dispatched from an ordinary warehouse by ordinary means. More interesting are the cyberstores which sell only electronic goods—texts, films, music—that are downloaded direct to the purchaser’s PC and paid for by a credit-card system that is wholly electronic, with earnings attributed to the earner through BCTS (the computerised Bank Credit Transfer System). Such a cyberstore operates wholly within the world of the Internet and the point at which it ‘touches’ the ordinary world is only at the point of consumption and consumer satisfaction. What it sells, however, is substantial enough. Though neither the goods, nor their transfer, nor the financial transaction has any ordinary physical embodiment, these are real goods and sales and transfers—virtually real perhaps but real nonetheless. The point is, they are of a kind that could not have existed before the advent of the Internet and the World Wide Web.

The poverty of cyberspace

Virtual reality interpreted in this way, then, is a kind of reality and not merely a copy or simulation of something else. There remains this all-important issue. Even if there is indeed a new world coming into view, not just in a metaphorical but in a metaphysical sense, have we any special reason to welcome it? The answer to this question turns, as it seems to me, on what we can say about the value of this new medium relative to other media that it might replace. Once more, in order to simplify the discussion, I shall make a stipulation and from here on use the expression ‘virtual reality’ to mean the medium which the examples of Technos, Cyberville and the virtual megastore have isolated, ignoring any special connection it normally has with VR Body Zones and the like.

Why would we favour community life in virtual reality rather than community life on the streets, so to speak? One possible explanation lies with the account Walton gives of make-believe. His claim, it will be recalled, is that ‘there is a price to pay in real life when the bad guys win, even if we learn from experience. Make-believe provides the experience … for free’. It is not hard to see how this line of thought applies to Cyberville. ‘For free’ is not quite right, however. While there is clearly a price to pay when real communities break up in dissenion and strife, there is also a price to pay for the break-up of a virtual community. But it is not the same and certainly not as high. No actual bones are broken, no blood spilt, no buildings or businesses destroyed. What is destroyed is the virtual community itself and the virtually real accomplishments which have resulted from its existence. If we take Rheingold’s definition seriously, the building of communities in virtual reality includes ‘sufficient human feeling’ and this feeling will be dissipated and frustrated. It is not itself ‘virtual’ feeling, but the emotion invested by the authors of Technos, Webman and all the other personae. This is a real cost. Still, it is a cost that falls short of the losses sustained by those whose ordinary homes and communities are the casualties of civil strife.

One thought which this prompts is that, given a choice, human beings would risk less by engaging in virtual relationships than in ordinary ones. Might this be the attraction of the world of virtual reality? The answer depends on a trade-off between the diminished risk and the more limited character of such engagements. In advance of knowing the future character of cyberspace, this is a calculation that is hard to make. Nevertheless, there seems reason to suppose that the limitations of cyberspace will always be greater than those which operate on corresponding relations in ordinary life and consequently that the reduced risks will not outweigh the loss of possible benefits. Anyone who has followed the exploration of this chapter, in fact, could hardly conclude anything but that virtual communities are relatively poor substitutes for real ones. Their poverty does not lie in their being mere simulacra, as is the case for VR Body Zone experiences, which as we
Virtual reality saw lack the crucial element of reality. But on present reckoning, and as far into the future as one can reasonably see, they are impoverished nonetheless. The possibilities of virtual reality may well bring added benefits, but without the context of ordinary life, to live one’s life primarily on the Internet would be a poor way to be.

In this chapter we have been exploring the outer reaches of the Internet. Previous chapters were concerned with its more mundane implications. It is time now to try to summarize our findings in a conclusion.

Conclusion

In the early 1890s a US newspaper syndicate surveyed seventy-four eminent American men and women about life in 1993, and it published the results for the Chicago World’s Columbian Exposition of 1893. Dave Walter has compiled their responses in a fascinating book, and they show the perils of technological extrapolation. What is remarkable is not any omission of nuclear weapons or microelectronics; many public figures of the late nineteenth century foresaw both new weapons of mass destruction and new forms of electrically powered global communication. The striking oversight is the rise of mass motoring. Nobody understood the chain of technological, commercial, social and political events that would surround the internal combustion engine which Karl Benz had patented in 1886.

(Tenner, p. x)

Given the huge effect that the private motor car has had on almost every aspect of human life, this was an oversight of monumental proportions. Yet there does not seem any reason why the people canvassed should have foreseen it. With the Internet the position is a little different. We are already some way down the road of its development, and we know something of the scale and speed at which it is developing. Nevertheless, whether the road in question will actually be the information superhighway that futurists and enthusiasts predict is still uncertain. What we do know is that all such prediction is fraught with difficulty. Does it not follow that any investigation of the implications of the Internet is bound to fail?
This is a question I raised at the outset of this book and claimed that only the course of argument itself could answer it. Has it been answered and, if so, how? It is not difficult to state some of the conclusions succinctly: the truth about the Internet lies somewhere between the fears of the Neo-Luddites and the hopes of the Technophiles; technological innovation cannot and should not be regarded merely as an improved means to a pre-selected end because while some technology merely modifies, other technology transforms, and with respect to a number of areas of existence we may expect the Internet to be transforming. It will not, however, transform political life along more truly democratic lines, or, rather, in so far as it does it will strengthen the downside of democracy which has a tendency to favour consumer politics over rational decision-making. In all probability it will strengthen rather than weaken the atomizing character of individualism because it encourages moral fragmentation, and neither externalist attempts to police it nor the internal formation of virtual communities is likely to counter such a tendency effectively. At the same time, it does not have a very great deal to offer by way of a compensating virtual reality, if we remember the similar advantages that we can derive from much older forms of make-believe.

Thus succinctly stated, the conclusions sound much more negative than positive. To a degree this is true, but they are negative largely in relation to the somewhat wide-eyed hopes of the Technophiles. It is certainly the case, in my view, that the Internet has brought and will continue to bring new benefits, interests and possibilities on a scale so large that in a relatively short time to be linked to it will be as beneficial, and as troublesome, but nonetheless as necessary as having a telephone or a motor car. And like these things it will alter our mode of existence — but the degree to which the motor car and the telephone have done this, though very great, can be exaggerated too. 'In this world', Benjamin Franklin famously said, 'nothing is certain but death and taxes.' But surely other things can be said to be certain also: those aspects of existence which can be described as features of human nature and the human condition. People will continue to have and to value emotional and creative lives broadly similar to those they have always had. If the changes wrought by the motor car and the telephone are striking, it is no less striking that, for all the vast differences between their worlds and ours, people continue to read, study and value Plato, the Psalmists, Augustine, Shakespeare, Omar Khayyam, Newton, Donne, Tolstoy and countless others. Conversely, they will continue to share many of the difficulties that beset every age. Modern technology may have made huge advances in helping us cope with illness and poverty (though these can be exaggerated) but it is as foolish to believe that technology will abolish disease or destitution as it is to believe that cryonics could be an effective way of overcoming death. There is no sign that the sources, as opposed to the means, of war, or the difficulty of securing peace, are much altered by technological advance, and the ever-present possibility of suicide, of which existentialist philosophers made so much, is not the sort of thing that could be removed by digital information technology, however cheap and powerful.

If this is true, we may expect the Internet to be tempered by human nature and the human condition as much as, indeed more than, we may expect it to transform them, and this tells us something about Faustian bargains. As we saw, the transforming and unpredictable character of technological innovation makes any manageable form of cost-benefit analysis impossible. Does this mean that we have no way by which to judge it? No, because all such technology comes into existence and develops in a context, and that context at its broadest is the one to which reference has just been made — human nature and the human condition. It is a context, however, which bears on our assessment of technology not by providing a medium in which costs and benefits may be compared, but by providing us with the standard against which the ultimate value of technology must be measured. As Heidegger saw, from a rather different philosophical perspective than that from which I have been working, ultimately 'The Question Concerning Technology' is directly related to what it means to be.
Bibliography


