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CHANGING LEVELS OF SCIENTIFIC CONTROL OVER LIFE AND DEATH AND THEIR IMPACT ON MORALITY AND LAW

by

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The spread of the mass availability and use of contraceptives was opposed by many moralists, and notably by Roman Catholics. The latter argued that the use of "artificial" means of contraception were contrary to natural law, a source of rules binding on everyone, whether or not they were members of the Roman Catholic church and supposedly derived from the very logic of the natural order. It is a curious argument for it degrades human beings to the level of lower species of animals who (as if) by design produce extremely large numbers of offspring, the vast majority of whom cannot possibly survive to the animal equivalent of adulthood; parental care is absent or lasts only for a short-time. Human infants by contrast are highly dependent on their parents for a long period of time and a large proportion of a smaller brood survive to adulthood. Contraception is a logical extension of this evolutionary principal and *if* scientific findings *can* have an impact on arguments from natural law then contraception should not merely be permitted but encouraged.

It is the secondary arguments against contraception put forward by Roman Catholic and other moralists, however, that are the most interesting to those studying social and moral change. It was argued that the availability of contraception would lead to increased levels of fornication and adultery and that this would undermine the sanctity of marriage, a lifetime monogamous contract that excluded the possibility of divorce and remarriage. Although moral persons were supposed to observe the restrictions on their sexual behaviour for their own sake, it was held that the fear of pregnancy and, indeed, also the fear of venereal disease provided necessary reinforcements for those more easily tempted. Condoms which provided a dual protection against both these threats were thus doubly abominable. It is worth noticing here that prior to the twentieth century syphilis was as devastating and in many cases as incurable a disease as is AIDs today and could after a long incubation period result in GPI [general paralysis of the insane]. For heterosexuals it was also much easier to catch than AIDs is and it killed such

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by Christie Davies

Throughout the twentieth century there has been a marked change, particularly in the advanced industrial countries, in the degree to which it is possible to control when people will be born and when they will die. Whilst it is true that birth rates in these countries were already falling in the late nineteenth century, it is only in the twentieth century that cheap, reliable and sophisticated means of contraception have become almost universally available, first condoms and caps, later IUDs and the contraceptive pill and now emergency contraception that prevents implantation even though fertilisation has taken place. Likewise, although the death rate fell dramatically in the nineteenth century this was largely due to better nutrition and public health measures leading to a clean water supply and better sanitation. It is only in the twentieth century that there has been an exponential growth in the scientific understanding of the causes of disease that has led to a new generation of sometimes accurate and sometimes aberrant health crusades against the evils of tobacco or chemicals perceived as pollutants. The growth of a greater degree of control over life and death has led people to challenge the validity of earlier moral rules and laws that had been developed in societies where pregnancy and suffering were regarded as immutable facts of life that had to be endured and yet also to unleash moral condemnation of behaviour previously seen as harmless indulgence. In either case it is a complex story perhaps best told chronologically and sequentically though not from the begining but from the middle.

eminent persons as Lord Randolph Churchill and Guy de Maupassant, the heterosexual counterparts of today's Rudolf Nureyev and Roy Cohn. When it became curable using in turn malaria, organic arsenic compounds and anti-biotics many moralists sought to impede the diffusion of knowledge about these cures and they had also earlier opposed the systematic medical examination of individuals such as prostitutes who were likely to transmit the disease.

The early birth-controllers, particulary when faced with legal prohibitions as in the American state of Connecticut, were at pains to argue (a) that they would only provide contraceptive advice and devices to married persons, (b) that they were neither advocating nor providing abortion, and (c) that for many married women bearing another child could mean they would lose their lives or become permanent invalids. These arguments carried the day and birth control clinics were set up in most countries and most U.S. States and even in Connecticut after the U.S.Supreme Court ruling in Griswold v Connecticut in 1965. The Griswold case is a particularly interesting one both because of the way in which a legal case forces contending moralists to put forward their arguments in a detailed and explicit way and because this case is the clear precursor of another U.S.Supreme Court case viz Roe v Wade of 1973, which legalized abortion throughout the United States.

It is now possible and up to a point plausible to read history backwards and to argue that the predictions of the Roman Catholic and other critics of birth control were right and that the pledges of the early birth-controllers concerning the limited nature of their intentions either naive or untruthful. However, it must be stressed that this is a speculative argument made on the basis of a knowledge of subsequent events which were (by definition) not available to the contestants at the time. Also sequence is not consequence and the social changes discussed below may well have been inevitable and driven by more general social forces in an industrial society increasingly based on the rational technical control of production and hedonistic

individualism in consumption. Provided these qualifications are borne in mind, it is, however, worth examining certain recurring patterns that occur in the debates about contraception and abortion.

The first point of note is the birth-controller's claim that they were catering for married persons only. This claim was reinforced by the US Supreme Court's ruling in Griswold v Connecticut in 1965 which struck down an 1879 anti-birth-control statute on the grounds that it infringed *marital* privacy. [By contrast the Supreme Court has refused to strike down state laws prohibiting sodomy or other forms of private homosexual behaviour since the privacy on which they impinge is merely that of randomly and casually interacting individuals, rather than the hallowed privacy of that most basic unit of social life, the family]. In practice, of course, it is very difficult to limit the use of contraception in this way and the birthcontrollers have long since ceased to discriminate between their married and unmarried clients. In Britain even under-age girls [i.e. younger than sixteen, the legal age of consent] now have access to confidential birth-control advice and prescriptions. Condoms that were once sold furtively as "packets of three" are now displayed next to the pharmacist's till and unisex hairdressers no longer whisper hoarsely "anything for the weekend, sir?" in the manner of the chirurgeonly-coarse male segregated barbers of a previous generation. There are even female condoms and from the time when the first contraceptive pills were introduced in the early 1960s women in Europe and North America have increasingly made autonomous decisions about contraception and indeed about their sex lives generally. Pre-marital sexual intercourse which would have been unthinkable for middle class and respectable working class women and girls in 1900 (except as a deliberate preliminary to marriage, a marriage whose timing might well be decided by pregnancy) is in Britain, Northern Europe and the United States in the last decade of the twentieth century extremely widespread. The easy availability of contraception has helped to undermine the moral prohibitions that were so strong at the beginning of the

century. Indeed, in an increasingly utilitarian society in which acts are judged by their consequences, only a small minority of people (a particularly small minority of those in the younger age groups) see pre-marital sexual experience as morally culpable.

The second point to note is the speed with which the spread of contraception was followed by a liberalization of the abortion laws in Britain (1967), the United States (1973) and in most of Western Europe. Although the early birth-controllers tried to distance themselves from the advocates and the practitioners of abortion, there is a clear sequential link between making contraception widely available and permitting abortion. The reason people have for practising them are essentially similar - the prevention of an unwanted birth either before or after conception. Although the moral objections to abortion are different and are more widely and more strongly expressed than is the case with birth control, they are more difficult to sustain in a society where control over the number and timing of births is the norm. Also the arguments that have proved to be successful in liberalizing the law in regard to abortion are extensions of those used earlier by the birth-controllers. In England and also in Italy the central causalist (a negative utilitarian moral concept based on the minimizing of harm) argument for liberalization was that restrictive abortion laws put women's lives and health at risk by forcing them to have recourse to unskilled and dangerous back-street abortionists. In effect they argued that women are going to seek abortions anyway and it is better that these abortions should be carried out under regulated circumstances by medically qualified doctors. Also there had always been an exception to the prohibition of abortion in English law, for abortion was permitted if the mother's life was in danger and this had been expanded by case law to include a severe threat to her state of health. In 1967 the criterion for permitting abortion became, in effect, the view of two doctors that continuation of the pregnancy would involve a greater threat to her health than having an abortion. Abortion even under medical supervision had, in the early

nineteenth century, been a risky procedure, but by the mid-twentieth century, it was less risky than childbirth. Thus the key argument used earlier by the birth-controllers that primarily they were seeking to safeguard the mother's life and health, was once again central to the case of those seeking to liberalize the law relating to abortion. The moral priorities of the English speaking societies have become the avoidance of suffering and the enjoyment of health. They were, of course, also seen as worthwhile goals in the past; what has changed is that they have become preponderant and anyone who in an argument seeks to balance other moral values against them (such as the right to life of the foetus in the case of abortion or a right or even duty to choose suffering and ill-health) is regarded as unreasonable.

In Britain the key debates were conducted in the legislature and as in the case of many other moral controversies, the key criterion applied was as noted above, the short-term avoidance and minimisation of harm and suffering, a kind of negative utilitarianism I have termed 'causalism'. In the United States by contrast the crucial decision about abortion was made by the Supreme Court *and* on the same basis as in earlier decisions regarding birth-control: the right to privacy, which in Roe v Wade 1973 was used to protect the relationship between doctor and patient from government intrusion. Given that there is no explicit clearly formulated right to privacy in the text of the American constitution, it is possible to argue that the establishment of this right in the case of birth-control in 1965 was a necessary precursor of its later application in 1973 to the much more controversial issue of abortion. Thus, birth control and abortion may be treated for our present purposes as part of a single medical and scientific and moral and legal change in which the link between sexual intercourse and the birth of a child has been made optional and controllable.

If it is further argued that one of the key purposes of the moral regulation of sexuality is to ensure that children should enjoy a secure and happy family life during their early and dependent years, then the universal availability of birth control and abortion in the industrial countries has rendered much traditional sexual morality redundant. However, it should be noted that the collapse of the older morality has led to new versions of old problems. In theory the use of birth-control and abortion should have led to a decline in the incidence of illegitimacy [which had already fallen in Britain during the nineteenth century to very low levels by the interwar period] but it has in fact increased markedly since the mid 1950s in all the English speaking countries. The newer technical controls do not seem to work as effectively in preventing bastards as the older social controls. Even where children are born with two parents to look after them, the parental relationship is likely to be less stable and more likely to end in divorce than was true earlier in the century. Family life in the 1990s is less stable than it was in the 1950s or in the 1900s and it may well be that this is the result of a shift from a world of taken for granted moral duties to one in which autonomous individuals can construct an unstable bricolage of life-styles. The parents pursue ever sweeter grapes and the children's teeth are set on edge. For many children this brave new birth-controlled world must appear badly out of control and the marked rise in juvenile crime in Britain since the mid 1950s may well be the result of a breakdown of family life and of the family's effectiveness as an agent of social control and a source of moral training.

The twentieth century has been a century of improved death control as well as birth control and this has been accompanied by an ever more emphatic ideology of health such that individuals have not merely the right but the duty to live in good health for as long as possible. The key sin against healthism is to choose a way of life that makes it more likely that you will not survive for the full allotted span to which you are entitled by the upwardly creeping mortality tables appropriate to your

sex. You must not depart from the modern ideal that a person should live in perfect youthful health for the exact normal life expectancy of his or her society and then expire quickly, painlessly and cheaply. The worst offenders against this creed and the ones who have in consequence attracted the most obloquy are the smokers of tobacco.

It is difficult to see why the smoking of tobacco should be regarded as a moral issue. Speaking for myself, I do not smoke because I see it as an unacceptable health risk: I do not want to increase my chances of getting lung cancer, asthma, chronic bronchitis, emphysema, a heart attack, or peripheral neuritis resulting in possible amputation of my feet. However, should it be proven that smoking lessens one's chance of being afflicted by Alzheimer's disease, Parkinson's disease or ulcerative colitis, I might change my mind as I grow older. Also I consistantly advise my associates including the students who attend my lectures on the sociology of smoking: 'If you don't smoke, don't start. If you do smoke, give it up'. In addition I do not allow other people to smoke in my house or my office because for me tobacco smoke smells awful and is an unpleasant irritant to the eyes, nose and throat. However, my personal behaviour has nothing to do with morality. I am making a prudential judgement, a self-interested judgement and an aesthetic judgement: morality doesn't come into it. It may well be that for (some) other people the use of nicotine as a drug that permits rapid control of mood (and which can be directed to produce relaxation or to enhance concentration on a particular task) provides a degree of satisfaction that is sufficiently strong to justify their taking the risks to health that smoking entails.

Like all my fellow non-smokers, I am to some extent a free-rider in a society (Britain) that heavily taxes tobacco and thus smokers and which gives more welfare benefits to non-smokers than to smokers; non-smokers live longer and thus in aggregate receive more pension benefits and are more likely to need the expensive

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medical treatment required by those who survive into extreme old age. In what way, then, am I being moral by not smoking since it means that I pay less today into the common fund and in the future am likely to draw more heavily upon it? However, the members of vocal anti-smoking pressure groups do perceive smokers' behaviour as wrong and with the same vehemence that would have characterised the rhetoric of moralists at the turn of the century seeking to uphold the values of purity, chastity and continence. Indeed even the language is often the same, for smokers have come to represent pollution and weakness of will in the face of temptation. At the turn of the century it was not respectable for women to smoke but this was not primarily for health reasons; rather it was considered fast, bold and a display of disregard for convention that might also extend to sexuality. As women have gained more autonomy in their sexual as well as their economic lives, so too the numbers and proportion of British women who smoke has risen. By contrast as the scientific findings that smokers run a greater risk of ill-health and premature death have multiplied and become more certain, the proportion of men in Britain who smoke has fallen from two-thirds of the male population to one-third and the patterns of smoking behaviour of the two sexes are now roughly similar. For once, however, this emancipation of women to the point where their behaviour is almost indistinguishable from that of men has been greeted with shrieks not of exhultation but of dismay from those who see themselves as morally "progressive," for female smokers have ignored and defied the increasingly strong health warnings about the evils of tobacco based on new medical, scientific and epidemiological findings. The same moralists who have welcomed the growing use of birth-control and abortion by women, particularly where these are used to save a woman's life or health, are horrified at female smoking because it is seen as as a threat to the life and health of the smokesses. In the case of both sex and smoking, it can be argued that abstinence from the activity concerned preserves health but those who today urge abstinence from tobacco rarely agree with the old-fashioned moralists who preach sexual abstinence. Clearly a new health-puritanism has developed that is very different

from the sexual asceticism of the past. It even extends to cases of doctors refusing medical treatment to those suffering from smoking related disorders, much as in the past many doctors would have refused to provide contraceptive advice or abortions to those who needed them or, in some cases, even treatment for venereal disease.

Nonetheless the anti-smoking lobby have until recently lacked a crucial element for their moral crusade, namely a third-party victim and it is at this point that a new and reverse link between morality and science emerges. What has happened is that the anti-smoking activists have manufactured and marketed a health threat to non-smoking third parties caused by passive smoking [i.e. those who accidentally inhale the smoke from someone else's pipe, cigar or cigarettes] for which there is no convincing evidence. There is for instance, no statistically significant evidence to show that non-smokers exposed to the smoke of a spouse or of colleagues at work are more likely to get lung cancer than non-smokers who are not exposed to this kind of passive smoking. Most studies show no statistically significant link and the two studies that purport to do so have been strongly criticised by statisticians because of their methodological weaknesses. Yet in 1992 the US Environmental Protection Agency issued a report saying that environmental tobacco smoke presented a "serious and substantial public health impact". In order to justify this, it employed a "creative" use of confidence intervals. The generally accepted confidence interval is 95% (i.e. there is a 95% probability that a statistical association did not simply occur by chance) but the E.P.A. used a 90% interval (a much weaker test) and also in effect disregarded those studies that showed a <u>decreased</u> risk of lung cancer among those exposed to environmental tobacco smoke. To treat data in this way is bizarre to put it mildly. John Luik has traced this way of dealing with data back to "the Lalonde doctrine propounded by a former Canadian Minister of Health, Marc Lalonde. Lalonde argued that health messages must be vigorously promoted even if the scientific evidence was incomplete, ambiguous and

divided. Health messages must be "loud, clear and unequivocal even if the evidence did not support such clarity and definition."

Such a view makes it impossible for individual citizens, officials or politicians to make rational decisions. It is a piece of socialistic chicanery on a par with the planning targets for the Soviet economy before the democratic revolution or John Major's dirigiste schemes for controlling Britain's state run programmes for health, education and criminal justice, schemes perceived by his civil service advisors as tales told to an idiot, void of sound and fury and signifying something or other, but no one knows what, least of all the Prime Minister. It is difficult enough at the best of times to make reasonable decisions in the face of uncertainty, but if officials imbued with Lalondisme are massaging the data before it gets to the citizens then all respect for the autonomy and rationality of the individual as a free moral agent is destroyed. Also it is unwise to exaggerate the probability that drug takers will suffer deleterious effects from their drug of choice whether it be alcohol, tobacco, marijuanha, opium or cocaine. All these substances are harmful and addictive but if the harmfulness and addictiveness of taking any of them is exaggerated, it will undermine the credibility even of accurate and truthful health warnings. At an even more fundamental level Lalondisme destroys respect for science, objectivity and truth at a time when they are being seriously undermined by fashionable post-modernist views of the social construction of science. Science can never be a fully objective, disinterested and reliable source of truth because it is always enmeshed in a web of human desires, interests and pressures, but is is the best guide we have to the nature of the material world (though not necessarily to spiritual, aesthetic and moral values). As far as possible it must be insulated from the corrupt pressures of politics, even if these purport to serve an essentially benign end such as the promotion of good health. If the findings of science are to serve and inform morality then as far as possible their determination must be free from moral

pressure and particularly from the insidious pressures emanating from those who claim to be the disinterested protectors of health and welfare.

It is also difficult to say how accurate the information used in the debates about birth control and abortion discussed earlier was. Those who opposed reform were in either case often callously indifferent to the impaired health and loss of life that resulted from the legal enforcement of their sectarian moral principles. Those who wanted reform often exaggerated the beneficial short term consequences of liberal reform and paid no attention at all to possible long-term problems. In the case of abortion, they grossly underestimated the number of abortions that would be carried out under the new liberal regimes and accepted without question unrealistically high figures for the number of women killed or severely damaged in health by back-street abortionists. After the reform of the abortion laws, the reformers were greatly encouraged by the rapid decrease in loss of life and health as the back-street abortionists were put out of business, but they neglected to mention that there had already been a steady decline in deaths due to botched back-street abortions for many years before the law was reformed. In fairness, though, it must be added that the reformers did not falsify or misrepresent the data; they merely accepted without asking too many questions best guess estimates that favoured their cause. Their opponents either adhered to a position of absolute moral principle that ignored these utilitarian considerations altogether or else lacked the statistical and methodological sophistication needed if they were to challenge their opponents' rhetoric. Faced with a reformer emotively brandishing a bloody coat-hanger, the members of the anti-abortion lobby were quite unable to assess the numbers of coat-hangers put to such a use in a year or the number of resulting fatalities or even to see the relevance of such a calculation to the moral issues involved.

One further moral question on which the statistics produced by the progressives have been accepted, despite their inherent implausibility, is that of

male homosexual behaviour a form of activity traditionally regarded as a wilfully chosen unnatural vice. During the last fifty years, homosexuality (when chosen as a preferred form of behaviour over heterosexual alternatives) has come to be seen as an innate condition affecting about 5% of the male population, the so called "one in twenty". Kinsey is often cited as the source of this figure but his methods of sampling were crude and the most recent surveys have suggested a much lower figure, of between 1% and 2% of the male population. It might be thought that such a figure would be welcomed by the homosexual activists since it reduces the possibility that homosexuals will be perceived as a threat by the heterosexual majority. However, they have in fact campaigned against the acceptance of the latest survey figures because they fear it will make them appear a numerically smaller group with, in consequence, less political or economic power, whose members' wishes can in consequence be disregarded by politicians and marketing agencies alike. Added to this is the curious argument that homosexuality is a freely chosen gay life-style available to all, but which cannot be abandoned even with the assistance of skilled sex-therapists and psychologists. What is most striking about these recent debates is that the homosexual activists have effectively repudiated the ideal of scientific objectivity; for the activists the true measure of homosexual numbers is that which supports their current interpretation of what will help their cause.

A similar problem has arisen in regard to the incidence and mode of transmission of AIDs. In Britain and the United States the vast majority of cases of people with the disease are either male homosexuals, intravenous drug addicts or persons needing frequent blood transfusions. The number of people who have become HIV or acquired full-blown AIDs through heterosexual sexual activities in Britain itself is trivial, even in the case of persons such as prostitutes having a very promiscuous sex-life. In Paddington, a district of London with many whores, out of a sample of 150 prostitutes, only 2 were HIV positive; one was an intravenous drug

user, the other had a boy-friend who was an intravenous drug user. There is no heterosexual AIDS epidemic in Britain and the figures for the incidence of the disease have consistently fallen far short of the projections made in the early 1980s when it was believed that it would be rapidly spread throughout the population by ordinary (heterosexual) sexual intercourse. Also we can now see that the very high expenditure by the British government at the time on health propaganda and sex education was largely wasted because it was aimed at the heterosexual majority rather than being targeted on the vulnerable minorities, i.e. male homosexuals and injecting drug addicts. All the intense social workers who have been lamenting the indifference of teenagers to their advice that condoms should always be used for safe-sex, even with a regular partner, have been wasting their time. The sad cases they cite of individuals who wrongly trusted in the fidelity of their partner and were, in consequence, infected by him or her are very exceptional, which is precisely why the social workers' advice and their condoms have been rejected. Given that condoms are also a prophylactic against other much more easily transmitted venereal diseases and a form of birth-control, the discrediting of anti-AIDs propaganda in favour of their use may well have had very damaging consequences.

Those who produced the projections concerning an AIDs epidemic spread by ordinary sexual intercourse acted in good faith, but they made their mistakes in the era saturated with political correctness that followed the initial reaction of fear, muddle and bafflement at the arrival of a new and unknown disease. The two politically correct but unstated and possibly unrecognized assumptions shaped thinking about the spread of AIDs were (a) a tendency to overestimate the threat of the new whether a virus, a chemical or a form of radiation (indeed in this sense AIDs was associated with "unnatural" threats to life and health such as asbestos in school laboratories, radiation from (Western) nuclear power plants, passive smoking or food additives, (b) a prejudice against admitting the truth of any data that might seem to reinforce the public's negative views of an excluded minority

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such as the homosexuals or come to that injecting drug addicts or Haitians (indeed decisions not to accept members of these groups as blood donors in Canada have been attacked as discriminatory). In order to avoid the stigmatization of homosexuals as carriers of a self-inflicted disease or of one inflicted on them by the angry God who blitzed Sodom and Gormorrah for the same vice and also to ensure political support for treatment and research it was necessary to insist that the disease be seen as affecting homosexuals and heterosexuals alike. Scientists who stepped out of line were liable to be sacked or to find it impossible to get their work published. However, in point of fact, very few clergy even among the fundamentalists have regarded the spread of AIDs as a punishment for unnatural vice; the dominant mood has been one of sympathy with, and charitableness towards, the members of a group afflicted so suddenly, severely and insidiously by a new and unpredicted disease.

A strange attempt to be moralistic about AIDs without succumbing to "heterosexism" was made at Queens University, Belfast in 1987 by the former Bishop of Birmingham, Hugh Montefiore, who had earlier claimed that because Jesus was unmarried at thirty (something almost unknown among traditional Jews), he was "not the marrying kind", i.e. homosexually inclined. Montefiore argued that the AIDs epidemic was the result of promiscuity, both homosexual and heterosexual and that promiscuous sexual behaviour of any kind was to be condemned. His argument was a curious muddling together of traditional morality and political correctness and of moral arguments and prudential ones. It gets unpleasantly close to the view that if promiscuous people get AIDs, it serves them right, much as some doctors seem to believe that if smokers suffer heart attacks, it is a moral judgement on them and they don't deserve medical attention. [In fairness, I think that the ex-Bishop would have been horrified to see his argument to be extended in this way, but nonetheless his remarks did invite such an extension.] Also promiscuous male homosexuals are far more likely to catch AIDs than

promiscuous heterosexuals or promiscuous lesbians though only if they indulge in the unspeakable and abominable vice of buggery per anum rather than mere gross indecency between males. The reason for this is that sodomy really is unnatural in the sense that it causes cuts, lesions and other damage to tissue since human organs and orifices are not shaped or sized for this purpose; it is though these lesions that the transmission of the disease from one person to another occurs. At the same time homosexuals who practice safe sex by using specially designed condoms or by restricting their repertoire of sexual practices, can be wildly promiscuous with impunity. Once again there is no clear link between morality and self-interested prudence. One small point that might be addded, though, is that the incidence of veneral diseases other than AIDs among male homosexuals in Britain (which used to be very high) has dropped remarkably since they became aware of the dangers of contracting AIDs. It is a clear indication that most of them have radically shifted their sexual practices in the direction of safe sex in order to avoid AIDs. It is a sign that male homosexuals are a group of individuals who in the main are exercising a high degree of rational fore-sight, i.e. they are not self-hating and self-destructive. Perhaps this does indicate a kind of moral virtue?

The link between changes in science and tecnhology on the one hand and changes in morality and the law on the other, is a complex and difficult one. New medical discoveries and techniques by breaking the link between intercourse and pregnancy have made sex safer and undermined traditional sexual morality but have also led to the stigmatization of tobacco smoking. At the same time the moral atmosphere within which research is conducted has influenced the way in which estimates are made and results presented. In particular the risks to third parties caused by passive smoking have been greatly exaggerated and so has the risk of transmission of AIDs between heterosexuals in the industrial countries. A bias against smokers and a fear of appearing prejudiced against homosexuals or worse still, against sodomites, seem to be the likely causes. The only moral I would draw is

that we must always struggle to keep fact and value separate however difficult this may be. The dangers of passive smoking or of acquiring AIDs are questions of fact - there is a real world of real risks out there. We have two duties here, first a duty to try and prevent our values, fears and political affiliations from influencing our estimates of these risks and second, a duty to avoid unduly condemning those who have succumbed to them; these duties best called by their traditional names: honesty and charity.