# Contemporary Quaker Attitudes to Science and Technology

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# Abstract:

I discuss some data on contemporary Quaker attitudes to science, particularly gene technology, gathered from member of Britain Yearly Meeting. Quakers are often perceived as having a relatively positive attitude towards innovation, including technology, and some confirmation of this can be found in Quaker history, until 30 years ago. The observations described in this paper suggest that, in line with the general trend in the west towards a greater scepticism about the benefits of science, the current attitude of British Friends towards the *practice* of science is a more ambivalent or even negative one, although attitudes towards the scientific/experimental *method* have remained positive. Some aspects of this, which may be specific to or more common among Quakers, are discussed.

# Keywords:

Gene technology; Genetic manipulation; Ethics; Public attitudes; Quakers; Science.

### Introduction

Quaker studies has often been taken as entirely synonymous with Quaker history; but in his George Richardson Lecture last year, Professor Grigor McClelland emphasised that Quaker studies legitimately includes 'the living evidence of the present day... the beliefs, values, attitudes and behaviour of individual Friends' (McClelland 1996:10). In this paper I will be discussing some data on contemporary Quaker attitudes to science provided through a project entitled *Playing God? Ethical and Theological Issues in Genetic* 

*Manipulation.* It is important to emphasise at the outset that the primary aim of this project was to provide information to Quakers (Friends) about some of the issues associated with genetic manipulation, and help them explore their own responses. At the same time, the project would provide information about attitudes within the Society of Friends to gene technology: this would be useful internally, and was of particular interest because no such gathering of information specifically from a religious group had previously been done.

Although this is not a historical paper, there is at least one way in which the work I will describe has historical roots. Quakers have long been considered to have a particularly strong association with science. Their exclusion from attending University and therefore from entering many professional areas, meant that they gravitated to commerce and trade at precisely the point when successful involvement in industry required an understanding of, and openness to, technological innovation. Many of the industries that flourished after the industrial revolution involved the use of sophisticated chemical processes; the construction and maintenance of complex machinery required a knowledge of engineering and mathematics.

In addition, the educational models of the Dissenters tended to be selfconsciously distinguished from those of the establishment, which were dominated by the humanities:

> Seventeenth-century Puritans equated metaphysical speculation with Romanism, and adopted the Baconian emphasis on empiricism as peculiarly their own - the natural adjunct to guidance from the Holy Spirit. Experimental science was embraced as an appropriate medium for outward action which served the dual purposes of avoiding the idleness associated with contemplation while revealing more about the eternal purposes of God concealed in nature... (Pratt 1985:45).

And so George Fox encouraged the study of botany, emphasising its practical use in healing, while William Penn recommended that Friends in America

should study the 'commendable and profitable arts' of navigation, arithmetic, geometry, husbandry, gardening, handicrafts and medicine (Tolles 1948:210).

This background, together with the more intangible but equally important reason that Quaker theology, with its emphasis on the authority of personal experience, and the Quaker practice of the corporate testing of ideas and concerns, bears some similarity to the western scientific method, may have fostered a collective attitude that was generally more open to scientific developments. Some evidence in support of this is provided by the landmark acceptance of Darwinism and of historically-based biblical criticism by the Manchester Conference of 1895, for example. More recently Charles Carter, in an extract in *Quaker Faith and Practice* dated 1971, is quoted as saying that, 'Quakerism should not claim to be a religion of certainty, but a religion of uncertainty; it is this which gives us our special affinity to the world of science' (26.39). One of the aims of this study was to test this perception of openness to scientific innovation in a contemporary context.

## Methodology

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The project used a mixture of methods. A significant part of it involved the use of an attitudinal questionnaire, which will be the main focus of this paper.. The purpose of the questionnaire was to help respondents focus their thoughts and refine their questions, so that they would become clearer about their own areas of ignorance, uncertainty or dissent. In answering the questions, responders would be providing me with information about their own attitudes towards gene technology; but the fact that this was a secondary aim affected the choice and particularly the wording of the questions. To provide the sort of catalytic function I required, the questions needed to be either open (allowing the respondent to provide the answers *de novo*), which would have required rigorously unambiguous phrasing of the questions in order to produce interpretable data; or they could have been more loosely phrased, but made use of closed (Yes/No/Don't know) or multiple choice answers, which has the advantages of making the questionnaire easier to fill out and being much more amenable to any kind of quantitative analysis.

Leaving aside the impossibility of constructing a totally unambiguous question, in this instance there was a good argument in favour of phrasing that was open to more than one interpretation, even if that meant occasional misinterpretation. For example, Question 5 asked whether we should be allowed to patent genetically manipulated animals and plants. Some respondents may not have known what genetic manipulation or patenting was (although by the end of the lecture they should have!). For my purposes it was less important to know precisely what they understood by those terms (which are commonly used, without explanation, in the media) as it was to know their general opinion; nevertheless, it was often possible to use insider knowledge to deduce how something had been understood, or misunderstood, by the words, metaphors or arguments used. A second and major factor in choosing the style of question was the desire to avoid bias. Precisely because these are not yet everyday concepts, I doubted that an 'explanation' of what was meant by genetic manipulation could have been both concise and free from the contamination of my own value judgements.

Experience using the questionnaire suggested that responders felt free to indicate where a question was problematic. The question asking whether genetic manipulation is against the will of God, for example, is clearly open to more than one interpretation of the key words, as well as having different answers. Pilots of the questionnaire suggested that those who felt that words like 'will', 'God' and 'against' were indefinable concepts, frequently used the additional space allowed for comments to say so. (The Quaker 'pedantic concern for semantics' has been noted elsewhere: Dandelion 1996:60.) This space was also used appropriately by those who wanted to comment that the whole concept of the will of God was meaningless, or who wanted to suggest an alternative phrasing that made more sense to them.

There were 10 questions in all (see Appendix) chosen to probe attitudes rather than knowledge and to cover a range of ethical issues: the amount of influence genes have on human health and behaviour, whether it is right to do prenatal genetic testing, the genetic manipulation of humans and animals, who should have access to genetic information, the commercial patenting of genes, the meaning of human genetic diversity, and the production and sale of genetically-manipulated food. After the questionnaire was drafted and piloted on a small scale it was revised in the light of comments made. For instance, an earlier version of question 8 was felt to have a 'eugenic' ring to it that might have prompted responses to the hint of genocide rather than to genetic manipulation *per se*.

The questionnaire was always distributed to people attending an event billed as a lecture or workshop on ethical and theological problems of genetic engineering. This meant the sample did not reflect Britain Yearly Meeting as a whole, but selected people with a special interest in gene technology and ethical issues. However, I anticipated that any such selection would not produce a sample biased to one side or the other of the gene technology debate (a judgement which was borne out by empirical observation at events).

Before distributing the questionnaire I made some comments, as far as possible the same each time, which explained its purpose ('to get you thinking, and to give me a better idea of what your ideas are'), emphasised that it was not a test of knowledge, told them how long they had to complete it, ensured anonymity, asked respondents to make comments about their answers, or about the interpretation of questions, or to say if they did not understand the question, and thanked them for filling it in. The questionnaire was always completed and collected up before I started lecturing, to avoid any influence on the answers. Usually, I was then introduced by the Clerk or convener, before we entered a short period of silence (common in Quaker events). In other words, completion of the questionnaire took place outside 'Quaker time', which might have reduced the cues to provide what were felt to be the 'correct' Quaker responses. However, balancing this was the fact that the location was nearly always a Meeting House (other sites were a school, a church and a private home), ie: in 'Quaker space'.

I was left in possession of a total of 550 questionnaires that were complete and that had been filled in by someone who was a member or attender of the Society of Friends. Some events (lectures or workshops) were open or ecumenical, which meant that there was a smaller number of questionnaires completed by members of other or no religious affiliation. This, together with experience working with non-Quaker groups on other occasions, allowed me to make some tentative comparisons between Quakers and other groups.

To supplement the information obtained via the questionnaire I made notes during or immediately after the event, indicating the course of the discussion and any conclusions that were drawn, and often including verbatim quotes. The amount and content of these notes varied considerably with the type of event and number of people taking part. Following a lecture, there might be 45 to 60 minutes of questions and discussion, while in the context of a workshop there might be several discussions lasting anything up to an hour in the course of a day. I also made summaries of the plenary sessions of workshops, at which groups would get together and share their findings. Both these sources of information are more subjective, because I chose what it was important to note, and they could be affected by mishearing or mistaken recall, but they were valuable because they gave much greater depth to my impressions and also indicated how thoughts and attitudes might evolve in the course of reflection.

### Analysis

The questionnaire provided both quantitative data in response to coded questions, and qualitative data from open questions and from the additional comments. Because of the nature of the questionnaire, discussed earlier, it was not appropriate to subject the quantitative data to detailed statistical analysis. The qualitative responses were placed in appropriate categories (for example, 'did not think the will of God is a useful concept'). Notes taken during discussions, and the flip-chart summaries of plenary sessions, were analysed similarly.

# Discussion of the Results

Many of the attitudes towards genetic manipulation shown by Friends were no different from those expressed (in books, newspapers, other media) by non-Quakers. Although the overt topic was genetic manipulation, the discussions ecumenical, which meant that there was a smaller number of questionnaires completed by members of other or no religious affiliation. This, together with experience working with non-Quaker groups on other occasions, allowed me to make some tentative comparisons between Quakers and other groups.

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# Discussion of the Results

Many of the attitudes towards genetic manipulation shown by Friends were no different from those expressed (in books, newspapers, other media) by non-Quakers. Although the overt topic was genetic manipulation, the discussions spontaneously ranged further and were equally applicable to science and technology in general; while people may ostensibly have been talking about the potential use of gene therapy to modify patterns of human behaviour, the discussion ultimately reflected more fundamental issues, such as how the relationship between a technology and the society that has produced it is perceived (is it a mutual enterprise or is it something imposed from above?), attitudes towards whoever devised the technology, whether there should be limits to its use, and if so where these limits should be and who should regulate them (who has authority? are these authorities trustworthy?), whether and how legislation might be influenced by 'ordinary people', and so on.

A dominant theme is fear. People will commonly describe genetic manipulation as 'frightening', 'terrifying', 'awful', 'worrying'. A positive response ('exciting', 'amazing') is a rarity. This holds for science in general but is particularly strongly expressed towards genetic manipulation probably because, unlike computers or anaesthesia, it is not yet a technology which is familiar from everyday life.

A second theme is the strong polarisation of opinion: if people are willing to claim to know anything at all about genetic manipulation, they tend to be either very for or very against it. Readiness to express an appreciation of the complexity and ambiguity of some of the issues was relatively rare. I would emphasise, however, that this is a generalisation over a very large number of encounters. There were several occasions in discussion or in questionnaire responses when the answers showed considerable sophistication, and this may correlate with the amount of personal exposure that person had had. For example, a group of Friends outstanding in terms of the thoughtfulness and depth of their responses were the participants at a residential gathering of the Quaker Lesbian and Gay Fellowship (QLGF). There are many factors involved here, including demography, but it may be significant that this group of people has been personally confronted with some of the issues surrounding genetic screeening: the reported discovery in 1993 of a genetic locus that influences the development of homosexual orientation in men (Hamer *et al*,

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1993) led to an immense amount of public discussion of the significance of the discovery, its interpretation, and the ethical and social consequences of such information being made available (Hamer and Copeland, 1994). It was clear that many members of QLGF had made it their business to inform themselves, and it showed not simply in their attitudes - which were not uniform - but in the degree to which they could provide reasons for the attitudes they had.

Responses become more thoughtful and complex when particular situations are addressed rather than abstractions. This was particularly apparent in the workshops, where groups of people spent an entire day considering a concrete example with (fictional) named people in it, but it was also noticeable in the questionnaires. Questions 3 and 6 independently asked whether the genetic manipulation of humans, in one case, or animals, in the other, was: against nature, against human or animal rights, or against the will of God. Question 8 later asked whether, *supposing* it was possible to manipulate people genetically to remove 'aggression' (which of course it is not), it would be right to do so. A sizeable minority of people answered 'yes' to all parts of questions 3 and 6, that is they said that genetic manipulation was against nature, human or animal rights, and the will of God, *and* they also answered 'yes' or 'don't know' to question 8: in other words there was a discrepancy between their belief expressed in the abstract and their response to a concrete, although imaginary, situation.

Fear of the technology, polarisation of attitude and increased subtlety of response when practical situations are considered, are not specific to Quakers. In contrast, some attitudes were sufficiently universal within the Quaker group to suggest they might be distinctive. However, the acknowledged dual nature of the questionnaire and the small size of the comparator group (non-Quaker responses) mean that the following must be considered as observations, which only further work can show to be specific or not to the Society of Friends.

Many of those who felt strongly against genetic engineering not only made a deliberate connection between their opposition and the green or environmentalist movement, using statements like, 'Our interference in this field may have devastating effects on the globe as has our messing about with the environment'; but in addition would also specifically link this with Advices and Queries 41 ('Do you keep yourself informed about the effects your style of living is having on the global economy and environment?') and 42 ('We do not own the world, and its riches are not ours to dispose of at will...Work to ensure that our increasing power over nature is used responsibly...'). This attitude therefore follows a fairly conventional heuristic: it is grounded in a reason and the reason derives from an officially sanctioned statement of Quaker belief.

An interesting and less conventional variation on this 'environmentalist' response was the tendency to identify some (and only some) aspects of the natural world as nature, to personify it, and then to use it at least as a verbal substitute for God, in statements such as: 'If [genetic manipulation] is done, nature will very often hit back'; 'We are overstepping the bounds of Creation'. Although the numbers involved were small, where it was possible to compare with members of other religious groups I found this type of phraseology to be Ecumenical groups, and the questionnaires commoner among Quakers. completed by people who defined themselves as coming from other Christian traditions, made considerably more use of conventional religious language and sometimes of biblical sources of authority, which virtually no Quaker in this study did. It is highly likely that this behaviour stems from the acknowledged breadth of belief in the Society's contemporary membership and the ways in which it has accommodated to that (Dandelion 1996, Heron 1995). Whatever this broadness of belief means to individual members and to the Society as a whole, one result appears to have been a certain level of disempowerment; Friends may have become so unwilling to cause division that they no longer have access to religious language which can be very helpful in exploring beliefs and values.

Many Friends in their mid-forties and older saw the issue of genetic technology, and its use and regulation, as analogous to the issue of nuclear weapons. Some had been or still were members of CND (the equivalent for the younger generation of Friends being Greenpeace); they expressed the

desire for some kind of Quaker activity in the gene technology debate, in analogy to the way Friends had often played very significant parts in local CND campaigns. However, it was also acknowledged that the issues here are less clearcut, and less obviously supported by the precedent of the peace testimony. It was not generally felt, for example, that a demonstration or even a vigil outside a university research department or a pharmaceutical company was an appropriate way of expressing Quakerly concern about the use of genetically manipulated organisms. This actually results in a profound sense of helplessness: Friends know the issues are complex, they do not feel technically competent to deal with them, and are not sure how to frame an appropriate or effective response.

A further notable trend is the openness to the idea of diversity. In the work I have described this was embodied in genetic variation, the kind of basic biological diversity that leads to differences in physical appearance and abilities, and sometimes to disease and disability. Ouestion 7 of the questionnaire asked people to select appropriate words to describe a person with a genetic variation. A high degree of acceptance of genetic variation as being a natural thing was shown, coupled with a firm resistance to the idea (which has become increasingly entrenched in popular understanding as the 'conclusion' of the Human Genome Project) that only some forms of the human genome are normal. Some of this may be due to a sympathy with marginalised or ostracised people that comes from Quakers' present and historical sense of being outside the establishment. However, in discussion and in some reponses, it was also explicitly linked with the popular Quaker phrase, 'that of God in everyone', which in this context was interpreted as meaning that all humans, whatever their physical or genetic form, are children of God.

My final observation is one which it would be particularly interesting to compare with other religious groups. Question 10 asked: If you or a member of your family had to decide whether or not to be tested for a particular genetic trait, such as a disease, to whom would you go for advice or help in making the decision? This was the one completely open question; people could nominate as many or as few others as they wanted. The answers showed that

this was seen almost exclusively as a medical problem. Almost everybody said they would talk to a doctor or genetic counsellor, or a disease helpline. A much smaller number (about 14%) would consult relatives or friends. Reference to *any* form of religious or spiritual guidance or counselling was made by only 6%. The proportion of people who specifically mentioned anything connected with the Society of Friends, such as their Meeting, an elder, overseer, or Meeting for Clearness, was 2%.

This is surprising for a number of reasons. We were usually sitting in a Meeting House or church; the event would have been organised and publicised by the local Meeting; I was described as a Quaker Fellow; my introductory blurb mentioned my membership of the Society; and the very end of the questionnaire asked where people had heard of the event, to which they usually dutifully replied 'From X Meeting'. Despite all these cues (which I had originally thought might be a source of bias towards religious answers), it seems that Friends today do not turn to the Society or their Meeting for moral guidance in areas that do not come with a prominent label saying 'spiritual matter'.

It might be argued that this ignores the possibility of Friends using other Friends informally, or using worship or prayer, to carry out a process of discernment. But the 6% mentioned earlier includes everyone who said anything like 'Friends from Meeting', 'God', 'my higher self', 'my conscience', 'my inner being', 'prayer', 'a priest', 'a minister', and even that person who (presumably because of aberrant punctuation) would go to 'God my family doctor'. This behaviour is perhaps understandable in view of the absence of readily identifiable authority figures, such as a priest or rabbi, within the Society, but it is still a striking contradiction of the claim that Friends are guided by corporate discernment. Advice and Query number 27 asks 'When decisions have to be made, are you ready to join with others in seeking clearness, asking for God's guidance and offering counsel to one another?' From this evidence, the answer to that question is no, at least when it comes to decisions which can be classified as non-spiritual. How do these observations of Friends 'in the field' compare with some of the official or quasi-official pronouncements of the Society of Friends on the subject of science and technology in general, and genetic manipulation in particular? Since around 1990 there have been a number of articles in publications such as *The Friend* and *Quaker Monthly* which have looked at these areas. Articles like this do not in any sense bear the *imprimatur* of the Society of Friends: they reflect individual members' own opinions, and these are as diverse as those encountered in person, although probably with a more self-conscious attempt to be even-handed since they are written for public consumption. It is also likely that these articles do not reflect the feelings of the majority of Quakers, because they are written by the very small number of people who feel sufficiently confident in this area to write for publication.

If we turn to *Quaker Faith and Practice* (1995), which is the nearest the Society has to an official description of current Quaker belief, there are several statements indexed under 'science and scientists' that illustrate what might be called the traditionally positive Quaker attitude towards science. Charles Carter's linking of Quaker experientialism with scientific method was mentioned earlier. Arthur Eddington, writing in 1929, connects the rejection of creed with the sceptical attitude of science (27.24) and is also quoted as saying, 'In its early days our Society owed much to a people who called themselves Seekers...It is a name which must appeal strongly to the scientific temperament' (26.16). It is noteworthy that all these extracts are concerned with the scientific method, science as an intellectual activity. A positive statement about the application of science and the manipulation of natural resources for human good is harder to find. There are no indexed entries under technology, although there are hints here and there in other contexts -for example, extract 23.55, which describes industry as working in partnership with God, 'combining natural and human resources and extracting order from chaos'. Here contemporary Quakers differ from their forerunners, including George Fox, who in 1656 had no inhibitions about admonishing Friends to learn '...how to use the creatures in their places, to the glory of him that created them', quoted in Christian Faith and Practice (1959); 149 (note the verb use); or another extract in the same book, 552, on the

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benefits of technology, which said it 'has not destroyed creative selfexpression and self-realisation for the large number of people. Quite the contrary, it has made them possible by enabling us to do away with the drudgery of manual labour and the low standard of living of preindustrialism'; or extract number 644, from the Friends World Conference in 1952: 'We call upon peoples everywhere... to conserve and develop the resources of the good earth to the glory of God and *the comfort of man's distress*' (my italics).

There is one entry in *Quaker Faith and Practice* (1995) actually indexed under 'genetic engineering', a submission by Amber Carroll and Grace Jantzen dated 1994 (29.05).

We recognise the enormous powers of newly developing genetic engineering techniques to change living matter with speed and scope hitherto unthinkable. Recent applications of bio-engineering to plant and animal species have benefited mainly people in materially wealthy countries at the expense of the materially poor, and of global biodiversity. Continuation of these technologies and their extension to human beings highlights the need for Friends to affirm that the intrinsic value of all life forms is not restricted to their utilitarian functions, and that the richness of human diversity should never be reduced to the level of a commodity or made subject to market forces. The potential of genetic technologies for good and ill requires humility, wisdom, and lovingkindness, and also the capacity to know when to stop. We Friends need to bring our own diverse gifts to help ensure that research into and application of genetic technologies do not proceed without consideration for justice, democracy, and respect for the dignity and well-being of all.

This is carefully written, and at first reading seems even-handed. Some of the characteristic attitudes of Friends towards science, discussed earlier, are clear: the specific mention of intrinsic value of all life forms; there is the acceptance

of the richness of human diversity. On closer scrutiny is becomes clear that in reality it is a very negative statement. Four of its five sentences contain explicit warnings against misuses of gene technology, and the choice of the word 'unthinkable' in the first sentence - since unthinkable can mean not just something undreamt of, but something too evil to be thought about - makes even that a condemnation.

#### Concluding Remarks

The observations provided by this study suggest that an official image of Friends as science-friendly exists, and that it is still possible for members of the Society to make positive statements about science that reflect such an image, but that this applies only to the scientific method; the application of science (technology) provokes generally much more negative reactions. This is a significant change in behaviour which has occurred over the last 30 to 40 vears. There are likely to be several reasons for this. People today are more aware than before of the downside of technology - environmental damage, social disruptions, health problems, and so on. Through television and other news media, they are also much better informed at least about the existence of such problems, and of the occurrence of technological catastrophes such as Chernobyl, Minamata, and thalidomide. There has been a change in attitude towards business, strongly influencing how people perceive the morality of commercial investment in technologies like genetic engineering. Public trust in authorities - the insurance company, the police, the government - has also declined

All of these factors, and others, may have played a role in changing social attitudes to science in general, and these attitudes may be demonstrated more acutely within the membership of the Society of Friends because of its strong historical connections with anti-nuclear and environmentalist movements, and a notable attitude of solidarity with marginalised people which is now extended to those excluded from industrial-technological power and those who are 'genetically marginalised'. I suggest also that this change of attitude is particularly apparent in the area of genetic engineering because it is novel, and

is exotic enough to be scapegoated and rejected without much personal inconvenience.

Overall, the Quakers considered in this study had beliefs about genetic engineering that were heavily polarised, and they tended to see the issues as black and white. Since Quakers within the liberal tradition of Britain Yearly Meeting have been identified as culturally and theologically very tolerant towards controversy of various kinds, I suggest this relative intolerance exists largely because of unfamiliarity. The technology has not yet penetrated far enough into daily life for the complexity of our encounter with it to be apparent: grey, rather than black and white. This study also indicates that the gap between the unfamiliar technology and the everyday world can be bridged by posing key questions or by use of simple case studies or role plays. As initially abstract issues are made concrete their true complexity and ambiguity emerges. Concomitantly, imaginative encounters like these also foster the development of increasing skill at identifying areas of ethical conflict and finding creative ways of dealing with them.

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Appendix

## **Playing God?**

# Ethical and theological problems of genetic manipulation Questionnaire

The aim of this questionnaire is to get some idea about your feelings and opinions on various topics. There are no right or wrong answers! Don't spend too much time thinking about the questions - your immediate reactions are more helpful. If you are not sure that you understand a term or question correctly, interpret it as best you can, and make a note under 'Comments'. Use this section for any other thoughts you might have too.

1. How much influence would you say genes have on

our health? Completely control	A lot	About half	A little	None
our behaviour? Completely control	A lot	About half	A little	None

Comments:

2. Is it right to test an unborn child for genetic defects?

Yes No Sometimes Don't know

Comments:

3. Is altering human genes

against nature?	Yes	No	Sometimes	Don't know
against the will of God?	Yes	No	Sometimes	Don't know
against human rights?	Yes	No	Sometimes	Don't know

Comments:

4. Who should be able to find out about your genetic makeup?

You Your partner Your children Other members of your family Your employer Work colleagues Your health and life insurance company Your doctor Your school or college Your neighbours The police Government authorities Other

5. Should we be able to patent genetically manipulated animals and plants?

	Yes	No	Don't know
ente.			

Comments:

6. Is putting a gene from one animal into another

against nature?	Yes	No	Sometimes	Don't know
against the will of God?	Yes	No	Sometimes	Don't know
against animal rights? Comments:	Yes	No	Sometimes	Don't know

7. Which word(s) best describes a person with a genetic variation?

normal abnormal unusual healthy common ill disabled gifted other (please specify)

Comments:

8. If it was possible to manipulate people genetically so that violent behaviour was eradicated from human society, would it be right to do so?

Yes No Don't know

Comments:

9. Would you eat genetically manipulated food?

Yes No Don't know

Comments:

10. If you or a member of your family had to decide whether or not to be tested for a particular genetic trait, such as a disease, who would you go to for advice or help in making the decision?

Are you a member or attender of the Society of Friends? Yes No

How did you hear about this workshop/lecture?

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