"The truth is out there"

Commentary on "Move to outlaw secret DNA testing by fathers"

(A Sunday Telegraph article of 19th May 2002)

Barry Pearson

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Introduction

The Human Genetics Commission (HGC) recently published its report "Inside Information". Although only a relatively small part of the report (essentially Chapter 10 and little more) concerned paternity testing, most of the news articles in the press majored on paternity tests, as indicated by the title of this paper.

It is not clear what lay behind this press focus on paternity tests. The Press Notice didn't specifically mention the topic. The evidence gathered, and later published, by the HGC in order to develop the report doesn't appear to have provided sufficient input to the topic. The HGC hasn't begun its consultation on "the supply of paternity tests direct to the public".

Articles in the press about paternity testing services are typically badly informed. For example, a typical statement will be that men may use such tests to evade their child support responsibilities. But a man who is not the biological father doesn't actually have any child support responsibilities to be evaded! The CSA offers official paternity tests to determine the matter, and won't accept the results of an unofficial test.

In order to balance the typical limitations of press coverage, I have taken a single newspaper article and provided a paragraph-by-paragraph commentary on it. The article is identified by the title of this paper, and it is particularly interesting because part of the article quotes Helena Kennedy QC, Chair of the Human Genetics Commission.

I don't know whether Baroness Kennedy was quoted accurately, nor whether her statements were properly used in context. That is irrelevant for this paper. The purpose of using that article here is to provide a convenient framework for developing the ideas being expressed. These ideas are probably in the minds of many people and need analysis, whether or not Baroness Kennedy articulated them on this occasion.

This paper provides a current-day position on paternity testing services. An accompanying paper provides a vision for the next generation:

"Knowledge is bliss" - Towards a society without paternity surprises.

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Barry Pearson is a business analyst with a special interest in child support reform.

His degree was in Mathematical Physics. His earlier career was especially in the design of large-scale computer systems. As a result he was appointed a Fellow of the British Computer Society. His more recent career was in business consulting, typically applying solution-oriented engineering and modelling principles to the analysis of business problems.

He became interested in the reform of the UK's child support system, after an earlier special interest in social security and welfare reform. Barry contributed at the Green Paper stage of the CSA reform process. He gave evidence to the Social Security Select Committee after the CSA White Paper was published. He is consulted by, and provides information to, academics, the media, politicians and lobby groups on child support matters.

Barry is the Chief Analyst for Child Support Analysis, a small independent think-tank that aims to take a comprehensive look beyond the current stage of the UK's child support reforms towards what should follow them. He also edits their web site:
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To know or not to know – that is the question

Commentary on a newspaper article

This is a commentary on an article in the Sunday Telegraph. The text in *boxed italics* is from the published article, and the rest is my commentary, which follows the text being commented upon. I have included all of the text from the article, but I have little to say here about matters other than paternity testing. This topic must be treated separately in law.

The article is:

"Move to outlaw secret DNA testing by fathers"
By Martin Bentham and Lorraine Fraser
Sunday Telegraph – 19th May 2002

First – a man who wants to use a paternity test may not be a father! He doesn't know if he is the father, or if another man is the father. Only the paternity test will determine that. (Men who know they are the fathers, or who don't want to know, won't want to take a paternity test). Second - "DNA" is misleading here. After all, only junk DNA is used in paternity testing. This is a discussion about *any* form of reliable paternity testing.

Perhaps the title should have read:
"Move to outlaw secret paternity testing by possible fathers"

Fathers who conduct secret paternity tests on their children will face prosecution under new laws to be proposed by a Government watchdog.

Surely the "Inside Information" Report doesn't enable such a statement to be made? It states:

"Private paternity testing, such as that commissioned for civil court cases, may fall under a voluntary UK Code of Practice on Genetic Paternity Testing Services. However, the Code of Practice is not legally enforceable and does not apply to paternity testing services offered by overseas providers. We recommend that the effectiveness and relevance of the Code of Practice on DNA Paternity Testing should be considered as part of our review of direct offering to the public of genetic testing services".

The Code of Practice says *"Motherless Tests … should only be undertaken where the mother consents to the child being tested* ***or*** *where the putative father has care and control and is able to give consent for the child".* (My emphasis). There appears to be no statement that men with parental responsibility need the mother's knowledge or permission.

Paternity testing services in fact were not included in the next round of consultation, and are not in the HGC's work plan for 2002. It would be premature to make such a change to the law before the very broad societal and ethical and practical implications have been analysed.

I am providing input, including this paper, to the future consultation process on "the supply of paternity tests direct to the public", to help make that consultation a success. Only after sufficient consultation can proposals to change the law be made with confidence.

> *The Human Genetics Commission will recommend in a report to ministers that the theft of a person's DNA, including the clandestine removal of a child's hair or saliva, should become a criminal offence.*

How could such a law be framed, *in the specific case of personal knowledge paternity tests?* Consider the following places at which legislation could apply:

The supply of the service itself:

It is well within the power of the UK government to legislate for UK-based services. It does not appear possible for the UK government either to control the supply of services elsewhere, or to control their visibility and accessibility from the UK.

The collection of samples from the adult or child:

It is clearly possible to apply the standard laws of assault, theft, privacy, harassment, data protection, and similar. Indeed, I believe that these are precisely the laws that should be used for personal knowledge paternity tests.

But it would surely be impossible to create a new law that makes it a criminal offence to remove a child's hair from a hairbrush, a sticking plaster that has covered a cut finger, chewed gum, a licked envelope, a handkerchief, or an old toothbrush. People have a right to remove such things from their own homes! They typically throw them away, but that is irrelevant when framing a law specifically about collecting the sample.

It is almost impossible to be close to someone and ***not*** take away his or her DNA! Obtaining the DNA sample is often a trivial activity that is indistinguishable from activities that cannot possibly be made criminal offences, especially for people who are close.

The commissioning of the test using those samples:

How would this be detected? By banning mail to specific overseas addresses? By asking other nations to monitor the use of their paternity testing services by UK citizens and report them to authorities in the UK?

The latter can work for child pornography services, because there is sufficient international consensus. The FBI has reported UK users of USA child pornography services, identified by their credit card details, to UK authorities. But there are no signs of such international consensus on paternity testing services.

Perhaps the paternity testing services could be persuaded to refuse to accept clients from the UK. But unless the national law where they are based prohibits such trade, why should they turn down business? This sort of agreement would need an international agreement that nations would turn down business because other nations wanted them to. There are few precedents for this!

The use of the information gained from the test:

> How would this be detected? Since a personal knowledge paternity test is unofficial, its certificate will typically not be used directly. Instead, the result will often simply become the knowledge of the commissioner of the test, and enable him or her to make informed decisions and actions. Those decisions and actions will typically be similar to those that he or she *could* have made without that knowledge. It is therefore often impossible to deduce that the person has based the action on a paternity test.

The issue that *must* be faced by legislators is that the topic of paternity tests is not primarily about the handling of material. The material being discussed (typically body cells) is "given away" by everyone all the time! *This topic is primarily about knowledge.* It is a debate about whether people should be allowed to learn facts about themselves and their biological relationships, or whether they must be prevented from doing so.

The ethical questions (see Appendix D to this paper) include: *"is this man allowed to know if he is the biological father of that child; should anyone have the veto on his knowing this; should he have to tell anyone else that he is seeking this knowledge, and if so whom; is a child allowed to know if that man is his or her father; should the mother have a say?"*

The proposal has come out of fears that increasing numbers of fathers are exploiting the growth of internet DNA testing services to undertake paternity checks without the consent of the child or its mother, with potentially traumatic consequences for all involved.

It must be recognised that a personal knowledge paternity test does nothing by itself except provide a man or a child commissioning the test with some (hopefully) accurate information. Any consequences arise from any informed actions that the commissioner then takes. Since the results of such a paternity test have no official status, the actions the commissioner takes are typically those that he or she could have taken even without that information.

The statement about "increasing numbers of fathers" should demonstrate *just how important the truth about genetic relationships matters to many people, men, women, and children*. Women typically (although not always) already have such knowledge. The discussion here is about the ability of men and children to catch up with this level of knowledge.

It is vitally important to consider the views of *all* the stakeholders in such cases. Here are two examples, to illustrate some of the factors involved. (Other cases can be more complicated). Situations like "Case 1" are far more common than situations like "Case 2".

Case 1: the husband suspects that a child of the family is not his, but in this case it **is** his. Here are some views of each of the stakeholders:

> ***The husband / father***. If he commissions a personal knowledge paternity test, his doubts (at least about paternity) are put to rest. If the doubt was gnawing at his marriage, his marriage should be strengthened. If he was testing the water to see whether he would not have to pay child support if he separated from his wife and didn't have residence of the child, he will now know that he *would* be responsible for paying child support. This may be a disincentive to separate.

Tests such as these are often called "peace of mind" tests, and in most cases they do in fact confirm the presumed parentage. In such cases, the relationship is strengthened.

The mother. In this case, she has nothing to fear from a personal knowledge paternity test, and probably benefits from it. But if the father needs to ask her permission for this test, this recognition of suspicion and the need to decide whether or not to give permission would surely put a severe strain on the relationship.

The child. The child probably benefits from the father's extra confidence in the true relationship between father and child, and from any improvement in family stability.

Case 2: the husband suspects that a child of the family is not his, and in this case it is **not** his. Here are some views of each of the stakeholders:

The husband. The first thing to note is that this marriage is probably ***already*** on the rocks. The wife committed adultery, had a resulting child, and hid this from both the child and the husband. The husband has become suspicious (which is why he wants the paternity test). There is a lack of the trust and respect that is needed for a successful marriage. The problem here is not the paternity test! The paternity test result may simply cause a necessary and honest resolution of a broken relationship.

The biological father. Perhaps the biological father doesn't know he has a child. In which case, he may be missing out on an experience he actually wants. Or perhaps he is planning his life, unaware that he may soon be required to pay a total of tens of thousands of pounds of child support over many years. If in fact he does know that he has a child, his own integrity is in question.

The mother. The mother knows what a paternity test will reveal. She knows it may be the final straw for the marriage, and that if she has residence of the child, she will not be able to claim child support from her ex-husband. She cannot be relied upon or expected to act in the best interests of the child or of either of the men involved. She must not be allowed a veto, or be required to be involved in the decision for the husband or the child to learn the truth about themselves.

The child. Children, at least when they get older, sometimes want to know about their biological parents, and increasingly this position is becoming respected. This is clear from changes to the laws on adoption, and from the pursuit through the courts by children of sperm donors to obtain more information about the donor, even as far as his identity. Sweden has changed its laws on sperm donation to cater for this desire for self-knowledge, and a child in the United States has recently been able to meet the sperm donor. It is increasingly becoming recognised that hiding the knowledge of biological parentage from children is not always in their best interests.

The discussion of (and disquiet about) personal knowledge paternity tests tends to concentrate on cases such as "Case 2". But if, as research suggests, perhaps about 1 in 10 children have surprising paternity, then perhaps 9 in 10 don't have surprising paternity, and this suggests that the overwhelming majority of cases are more like "Case 1".

"Peace of mind" in the *majority* of cases is in danger of being sacrificed on the grounds that in a *minority* of cases children need to be protected from the implications of knowledge about adultery and deceit. Yet the latter children are also being "protected" from knowledge that they may later desire themselves.

It is *not* true that the "interests of the child" always favour the lack of clarity that exists if a paternity test is not performed. In some cases, this will become the mother's interests versus the interest of the child and the men concerned. Children have their own interests, rights and needs that will often be in conflict with the mother's own interests.

> *The law would also prevent private detectives, journalists, employers and others from gaining access to genetic information without the individual's consent, or using DNA left behind by an individual to check for diseases, genetic conditions or unknown relatives.*

I have no comment to make about this.

> *Earlier this week, the television producer Steve Bing - who Elizabeth Hurley, the actress, says is the father of her baby son Damian - was named in court papers as the father of a young girl caught up in the world's most expensive child support case.*
>
> *Kirk Kerkorian, 84, the Californian billionaire who owns MGM studios and a number of casinos in Las Vegas, is fighting a claim from his divorced wife, the former tennis player Lisa Bonder, for child maintenance payments of £223,000 a month for four-year-old Kira.*
>
> *He told a Los Angeles court that Mr Bing was the child's true father after private detectives hired by him found a strand of dental floss in Mr Bing's dustbin, DNA samples of which matched those of Kira.*
>
> *While the commission does not base its recommendation on any specific case, it is concerned that scenarios such as this could become commonplace and has concluded that individual rights of privacy must be protected by criminal law.*

These extreme actions would not be necessary in the UK. The UK operates a policy of child support based on biological relationships, and offers official paternity testing to resolve disputes. The UK even refunds payments previously made by non-parents. This case illustrates the superiority of the UK's "strict biological responsibility" approach.

The above description omits many important facts about this case. For example, I understand that Kirk Kerkorian was the victim of fraud. I won't comment on the real world facts of this case. Instead, I'll comment on the text above, because it provides a convenient case study.

Taken at face value, this text suggests that while Lisa and Kirk were in a relationship, Lisa "played away" with Steve, had a resulting child, and kept the truth hidden from Kirk and the child. (It doesn't say whether she kept the truth hidden from Steve).

Then Lisa applied for child support payments from Kirk. (The amount was vastly greater per month than it typically costs to raise a child during its entire childhood). The person who should have responsibility to pay them appears to be Steve. But "the system", apparently including Lisa and Steve, is trying to claim the money from a man (Kirk) who isn't the father instead of the man (Steve) who is the father.

It appears that the only way in California that Kirk can avoid paying child support for a child who isn't his is to identify the real father. In the UK, Kirk would simply have to show he wasn't the father. It wouldn't be his responsibility to identify the real father. The CSA, or in some cases a court, would arrange an official paternity test. But while this would have protected Steve's right to privacy (unless Lisa then applied for child support from Steve), it would still have the same eventual impact on the mother and child.

Once relationships have broken to this extent, it is hard, and typically impossible, to find a just solution that "protects" the child from the truth about its biological parentage. Even without the paternity tests, the court case itself would fuel the child's suspicions as she grows up. And, in later life, the child (Kira) may not want to be so protected – she may want to know about Steve (and vice versa, perhaps).

A man's or a child's quest for knowledge about his or her biological relationships should be private if the man or the child wants it kept private. It is a breach of their privacy to cause a mother to be informed of their quest to identify their biological relationships.

> *Lady Kennedy, the Labour peer who chairs the commission, confirmed the recommendation last night, saying that children's happiness was being put in jeopardy by unauthorised testing.*
>
> *"DNA testing is very simple, but there can be very serious repercussions. It is not only terribly difficult for the child and the mother, but also for other siblings, who suddenly find that all the things that they understood about their family become different.*

Once again, it is worth repeating that personal knowledge paternity tests do not themselves directly cause serious repercussions. They simply inform the commissioner of the test of a fact that others may already know. It is the informed actions (if any) of the commissioner that changes things for other people. This is in contrast to official paternity tests, such as those used by the CSA, which *are* intended to inform others concerned and to have far reaching consequences! Yet official paternity tests don't appear to cause the same alarm.

What probably causes alarm is that the man or child is able to gain information, typically already known to others such as the mother, that was previous hidden from them. And they are able to gain this information without others knowing they have gained it. If "knowledge is power", what may alarm people is that the man or child now has the means to equalise the power, instead of being kept in the dark.

Obviously, if the result is negative, the commissioner's subsequent actions may be difficult for the mother. *She committed adultery, had a resulting child, and hid this fact from both the child and the husband!* While the purpose of this paper is not to punish her for this, she shouldn't expect to escape the consequences of it at the expense of the other stakeholders.

The children's happiness was put in jeopardy long before the paternity test reveals the truth. We need to move towards a society that doesn't jeopardise the future of men, women, and children in this way. Such a society will not arise if repeated attempts are made to paper over the cracks, instead of accepting that society has a serious problem and something positive needs to be done about it.

> *"We already know that in the United States fathers, on access visits, are taking their children's DNA without consent for testing, and we need to prevent that happening here.*

This is because the United States often doesn't operate the "strict biological liability" that the UK operates for child support cases. In the UK, the man would be able to state on the child support enquiry form that he was not the father, and the CSA would arrange an official paternity test. In the UK, the paternity tests that have the most serious consequences, although not the worst press, are *official* tests. The UK has already solved some of these problems, and can confidently continue with its "strict biological parentage" policy.

In the United States, individual states are only slowly moving towards the UK's position. It is often hard to obtain an official paternity test, hard to make the result have effect, and typically impossible to get a refund of payments made to date. A case was prepared for submission to the Supreme Court (Smith versus Odum) to reform some of these problems, but the Supreme Court has refused to hear it.

Appendix B to this paper summarises the UK's law on who is responsible for child support.

> *"We will be recommending the creation of a special offence which makes it very clear to people that taking the DNA of someone else without authority, without applying to the courts, without consent, would be an offence."*

It is almost impossible to be close to someone and ***not*** take away his or her DNA! A kiss, a touch, their head on your shoulder, and you have some of their DNA.

My commentary here is confined to personal knowledge paternity tests – paternity tests that are commissioned by either the man or the child involved. They do require a sample from the other party, but this is in order to gain knowledge about *oneself* that could not otherwise be freely gained. It would be ethically wrong, and futile in practice, for this to be a criminal offence. Appendix D to this paper clarifies some of the ethical questions.

For a man, this knowledge is not just curiosity. The UK's child support system bases responsibility on biological parentage, so this knowledge can be a vital part of being able to plan one's financial future, (see Appendix B). Would we hide from a man the knowledge of whether he has incurred a debt (of perhaps tens of thousands of pounds) that he will have to repay in future? Yet that is one harsh aspect of paternity.

Every man should have the right to know whether he could possibly be responsible for child support in future, and if so, for how many children.

> *She added: "Personal genetic information is special and people are entitled to feel that it is particular to them and the use of it should require consent, or should be done with the authority of the police, or the courts."*

I believe that the above statement really applies to information about one's genes (non-junk DNA), rather than information about one's biological relationships (junk DNA). It may apply to the latter if there were a database of biological relationships, but (except perhaps for the CSA's computer system) that doesn't exist.

The privacy and ethical issues about knowledge of one's genes – in effect, the recipe used to develop your body – are vastly different from those of knowledge of one's biological relationships, and must be analysed separately. Knowledge of one's genes provides a unique insight into your body. Using genetic tests to determine a biological relationship is simply yet another way of doing so, although a very good method.

An estimated 10,000 paternity tests are now carried out each year. Many of the checks are conducted under the scrutiny of the Child Support Agency or the courts, but there are an increasing number of internet DNA testing services available for private use.

There are more than 60 organisations offering (in English) home testing kits for "motherless" paternity tests on the Internet, often internationally. Some are in the UK, but the vast majority of them are elsewhere, mostly in the United States, but also in Australia, Austria, Belgium, Canada, Germany, Korea, Malta, The Netherlands, and Sweden. There are presumably many more in other languages. The number perhaps doubles every 7 years.

This shows the scale of the task that would be faced if it were decided to prevent use of these services. But, more important, *it shows the scale of the desire to know the truth about one's biological relationships*. This desire is not a new phenomenon – it has been behind many social and sexual practices for millennia. What has now happened is that this pent-up drive, apparently part of human nature, can now be satisfied.

Attempts to suppress this desire to know the truth will surely fall foul of the "law of unintended consequences" – it will simply result in other ingenious but less desirable behaviour. Which would be better – driving the problem "underground", and forcing men and children to seek the truth via paternity testing services of unknown quality elsewhere, or having suitable paternity testing services of controlled quality available in the UK?

Knowledge about one's biological relationships is not just about curiosity. Apart from the potential child support liability mentioned earlier, the diagnosis and therapy of genetic disorders is placing an increasing emphasis on such relationships. There are already hundreds of identified genetic disorders, and in some cases a desired aim is to track from someone diagnosed with the disorder to potential carriers of the defective gene, for screening, counselling, or therapy.

In a recent case the mother of a child she had put up for adoption was unable to pass the news to the child that the child may have inherited a genetic disorder. This was an example of the problem for children that can arise when genetic relationships cannot be tracked. Clarity of biological relationships is increasingly important.

> *A Government code of conduct published last year stipulates that for children, the consent of both mother and father should be obtained.*
>
> *The code is, however, voluntary and there are fears that some internet companies, particularly those based overseas, might be allowing tests to be carried out without the proper parental consent.*

The "Code of Practice and Guidance on Genetic Paternity Testing Services" (Department of Health, March 2001) was largely focused on paternity tests for "official" purposes. It is therefore unable to handle properly the different requirements of tests for very different purposes, including "peace of mind" tests.

The "Case 1" and "Case 2" described earlier illustrate that "proper parental consent" need not include the mother when the test is for personal knowledge such as "peace of mind". Her position may be in conflict with the best interests of all other parties, including the child. Different guidance is needed for "official" and for personal knowledge paternity tests.

> *Under the Human Genetics Commission's recommendations, which are expected to be accepted by ministers, a father seeking a paternity test would have to obtain the consent of the mother, or gain a court order.*

Does the Inside Information Report say this? There appears to be no recommendation that in all circumstances the mother needs to know about such a test. And the Code of Practice appears to permit a man with parental responsibility to commission a motherless test without the mother's knowledge or permission.

See "Case 1" earlier – "peace of mind" paternity tests will in the majority of cases be beneficial to the mother, the man, and the child *if* they provide information to the commissioner of the test by private means, rather than by a means that can only cause damage to family relationships.

"Official" paternity tests will also sometimes overrule the wishes of the mother.

It is time to rethink ***why*** the mother's consent should be seen to be important. When it is a matter of the biological relationship between a man and a child, the mother has the least to learn but is potentially the most self-interested in the result. Her interests may conflict with those of the child as well as the men concerned. In fact, the child's interests and the man's interests may be closer together than the mother's interests – a deceitful mother is probably deceiving the children as well as both men.

If "surprising paternity" is such a social and ethical problem, the answer is to reduce the problem, not paper over it.

Lady Kennedy said that making the theft of DNA illegal would also protect adults who might be the subject of clandestine testing by others seeking to identify the presence of a genetic condition, disease or previously unknown family connection.

"We all leave a trail of DNA behind. People could want to obtain someone's DNA to prove things, or disprove things, to show that some high-profile person had fathered a child, or had not fathered a child, or that somebody carried a gene for a particular disease," Lady Kennedy said.

This acknowledges the way that all of us cast our DNA into the surrounding environment. 20 years ago DNA paternity tests didn't exist. 10 years ago they needed a medical procedure such as drawing blood. With the increasing use of polymerase chain reaction (PCR), many paternity testing services simply need a buccal swab or hair follicles, and since DNA is a stable molecule, the hair can be years old. In future, the technology will enable the use of other, easily shed, cells to become commonplace. One paternity testing service talks of "cigarette butt, chewed gum, razor shavings (electric razor), a licked envelope". Others would accept a dried handkerchief or a toothbrush. Some would accept blood in various forms.

Laws (if any) on the collection of such samples must be framed with that reality in mind. They must also not bring the whole topic of regulation of genetic tests into disrepute. The consultation and debate must not have to be repeated after each technology advance.

Otherwise I have no comment to make about this.

The commission, which will publish its report this week, wants to increase the public's trust of genetics and genetic testing with new protections for individuals, while at the same time enabling advances in medicine and science to progress.

The new law on DNA privacy would mean that organisations planning to set up genetic databases for research purposes would be able to include samples only from people who had given their consent. Researchers would not be able to use the information for any purpose other than that originally described.

The commission is also expected to argue that the police should not be allowed access to these databases, as it could discourage people from taking part.

I have no comment to make about this.

Summary

1. Ethical debates must start with the realisation that the topic of paternity tests is primarily about *knowledge*, not about *DNA*. DNA is simply the "tactical means" being used to gain knowledge.

2. Paternity tests for personal knowledge do not themselves hurt anyone. They simply inform a person of a fact about themselves that other people may already know. His or her subsequent informed behaviour may affect others, but ethically that is not a reason to deny that person that information.

3. It is necessary to distinguish between tests that simply inform the commissioner of the test about something and have no other practical value, and tests that inform a second or third party. The ethical implications of personal knowledge tests are very different from others.

4. Men, women, and children should have privacy in their quest for personal knowledge of biological relationships, as long as they obey the standard laws of assault, theft, privacy, harassment, data protection, and similar.

5. It is necessary to distinguish between tests that provide knowledge of one's genes, hence bodily attributes, and tests that simply use junk DNA to identify biological relationships without attempting to predict bodily attributes. The ethical and privacy issues are totally different.

6. The UK's "strict biological relationship" policy for child support avoids some of the bad behaviour that occurs elsewhere in the world, and should be supported for that reason.

7. The explosive growth in paternity testing services demonstrates just how important very many men feel their biological relationship with their children is. This dimension to "fathering" has always been strong and won't go away.

8. Increasingly, it is often being seen to be in the interests of children to know about their biological parents. This has even been identified in the case of a seven-year-old child. The trend is towards laws and judgements that recognise this important need of many children.

9. It appears to be very difficult to attempt to frame credible laws which would make it an offence to obtain DNA samples from someone close, or to use a paternity service across the world. It would be better to concentrate on having good quality private personal knowledge paternity services in the UK.

10. Since paternity surprises are seen to be a problem, the answer is to solve the problem. We should move *"towards a society without paternity surprises"*.

Knowledge of biological relationships matters to many men, women and children!

Appendix A: Paternity tests for personal knowledge

Classes of paternity tests

Consideration of the practice and guidance for paternity testing services in the UK has tended to be based on the use of such tests for "official" purposes. But that is just one purpose; two types of paternity testing services are contrasted here, and reflect purposes with different quality criteria. Some suppliers on the Internet offer both types at different prices.

Because these purposes differ in so many ways, the rules for each must be considered separately. Only by considering them separately will their special natures be treated properly.

Paternity testing services for "official" purposes

Here, the results of the test are to satisfy some "official" purpose, such as child support or immigration or a paternity determination by a court.

Given that the results of the test will formally change the status of the people involved, it is vitally important that the service performs to a known, high, quality, and that the "chain of custody" is maintained to prevent fraud. It almost certainly needs to be accredited by authorities in the country concerned (such as the UK), and will typically be based in that country. Since the result is likely to be formally disseminated, the impact on all concerned must be taken into account.

Much of the UK's existing "Code of Practice and Guidance on Genetic Paternity Testing Services" (Department of Health, April 2001) is focused on the above requirements. The rules for these tests do not need further discussion here.

Paternity testing services for personal knowledge

These are sometimes called "peace of mind" tests. They are simply meant to inform the person who commissioned the test. Further actions may result from this but they will then be informed actions (which may well include taking extra "official" tests), instead of actions based on ignorance and doubt. Most tests will simply confirm the presumed biological relationship, and doubts will disappear!

Therefore, the quality of the service needs to be sufficient to satisfy *the commissioner* that the "yes" or "no" answer is accurate. There is no issue about fraud so there is no need for a chain of custody, and the commissioner of the test has probably already considered the impact of both "yes" and "no" answers. The service may be based anywhere in the world.

Obviously, it is desirable that the commissioner can choose a high quality service rather than rely on services of unknown quality.

Proposed rules for "peace of mind" paternity tests

The only paternity tests discussed below are those where the person commissioning the test is one of the two people (man and child) involved. So this proposal is restricted to paternity testing services intended to answer the questions *"is that person my biological child?"* or *"is that person my biological father?"* (There is probably a case for being able to answer the question *"is that person my biological mother?"* but that is not pursued here).

The proposed rules for "peace of mind" tests, based on the ethics discussed in Appendix D, are:

1. *For the purposes of this paper only, the person commissioning the test is one of those being tested*. This is simply to focus the scope of this paper. It is not intended to restrict what other people may propose elsewhere.

2. *There is no need to obtain the permission of the mother*. Why should a mother's permission be needed for a man to determine whether he is biologically related to a particular child? Why should a mother's permission be needed for a child to determine whether he or she is biologically related to a particular man? Obviously, the possibility that the result may reveal that the mother was "playing away" must not give her a veto on the test!

3. *There is no need to obtain the permission of the other party, as long as general laws have been obeyed*. This is about personal knowledge, gained legally. It is little different from other knowledge of a similar nature, already available, such as observation of facial or bodily similarity, or perhaps asking the person what their blood donor booklet says about their blood type, etc.

4. *There must be no contravention of laws established for the general good outside the arena of paternity determination, for example laws of assault, theft, privacy, harassment, data protection, and similar*. The position of this paper is that the general law of the land must be followed, but there should not be special law that either makes exceptions to this, or that adds restrictions to this. This rule is really about how samples are obtained. People leave a trail of their DNA wherever they go. Whatever the rules are about exploiting this for other purposes, it should be OK to exploit them for personal knowledge – for "peace of mind" paternity tests.

5. *Since the test is for personal knowledge, any services may be used*. This is little more than a statement of the *de facto* situation. But it would desirable to encourage "peace of mind" services to be established with known high quality, instead of simply forcing people to commission tests of doubtful quality by denying them quality tests.

6. *The results returned must not identify the subjects*. Unless there is a proper chain of custody, the testing service doesn't confidently know the identities of the subjects. The results of the test must not record subject details, for example names, supplied by the commissioner. This ensures that the commissioner can't make improper use of the test certificate, because it will simply say "Subject 1 is / is not the parent of Subject 2", which only provides knowledge to those involved in the commissioning of the test. *Only the commissioner(s) should know what the certificate means.*

The limits on "the right to know"

How much should any particular person know? This paper makes two specific proposals:

1. No one should be forced to know anything about biological relationships, except where these are dictated by someone else's valid need to know, as identified below. Instead, the knowledge should be made available to them if they choose to learn it.

2. The maximum that any person has a right to know is: "is person X my mother/father?" or "is person Y my son/daughter?" (There is no right to have answers to questions such as "who is the father of my wife's child?" or "who are my grandparents?") The test solely identifies a biological relationship, not the data needed to identify genetic characteristics and disorders. Therefore, the moral and ethical problems, and issues of privacy and commercial exploitation, are simpler and more controllable than all other uses of genetic tests. It is possible to legislate for this case in isolation.

Even this knowledge may have to be further limited. Some questions may appear valid, but in practice would be intrusive: "is Tony Blair my father?" However, these details are merely distractions - the cases that are most obviously valid lie within known family members, and difficulty with peripheral cases must not distract from the central cases.

(An application for child support could also name Tony Blair, and would presumably be dealt with discretely and without intrusion. Malicious and frivolous claims *can* be handled).

Appendix B: Child support responsibility in the UK

Summary of who is responsible for child support

1. Child support responsibility lies with the biological parents, except for itemised cases including gamete donation, surrogacy, adoption, and those declared to be parents by a court.

2. Although parentage can be "presumed" in certain cases (such as marriage), that is simply to avoid delay in the flow of money. It does not replace the above rule about biological parents.

3. If a man later uses the courts to demonstrate that he does not satisfy the conditions in "1" above, for example he is not the biological father, the CSA will refund payments made to date (at taxpayers' expense).

For more information, see the following booklet. The extract below deals just with use of courts for cases such as "presumed parentage" or delayed disputes. Most child support DNA tests are used when the application is first made, and are performed without court involvement.

Child support: Disputed parentage and DNA testing
ISBN: 1-85197-949-2. CSL110 - January 2002

Application to the courts under Family Law

At any time the alleged non-resident parent or the parent or person with care can apply direct to a court for the courts to determine parentage.

These decisions are binding on the CSA.

When an application is made, the courts will usually request DNA tests.

What happens once the dispute is resolved?

If the alleged non-resident parent is proved to be a parent of the child any unpaid arrears of maintenance will be due. The CSA will take enforcement action if it is not paid.

If an alleged non-resident parent is proved not to be a parent of a child either by a DNA test result, or a declaration made by a court, the CSA will revise its decision. Any maintenance previously paid can be paid back.

Parliamentary intentions

This is not a side effect of careless wording of the legislation. It is a specific intention of ministers, debated in Parliament and discussed in Committee. I personally believe that it is the right position to take, and I am pleased that the UK is ahead of most of the world in this matter.

For example:

Standing Committee F - February 3rd 2000

> *Mr. Pickles (Brentwood & Ongar):*
>
> *Hon. Members will recall that, on Second Reading on 11 January ... my hon. Friend the Member for Buckingham (Mr. Bercow) raised this issue in relation to one of his constituents with the Secretary of State. He said:*
>
> *"Can the right hon. Gentleman guarantee that from now on, in every case where an individual is willing to have a DNA test to prove parentage--or more particularly to prove non--parentage--he will be able to do so?"*
>
> *The Secretary of State replied:*
>
> *"I do not see why anyone who is willing to undergo a DNA test should have any difficulty in doing so, as that would put beyond doubt whether or not he was the father of a particular child."*
>
> *Angela Eagle (minister of the Department of Social Security):*
>
> *In the vast majority of cases--there are always exceptions, as the hon. Member for Brentwood and Ongar amusingly illustrated--any man who is presumed to be the father of a child has the right to apply to the courts for that presumption to be rebutted if he can prove his case.*

Select Committee on Delegated Powers and Deregulation
Thirteenth Report - 19th April 2000

> *Clause 19 - Reduced Benefit Direction*
>
> *104. Clause 19 replaces section 46 of the Child Support Act 1991. In the new child support scheme, a parent with care who claims benefit may be treated under section 6 as having made an application for child support. However, she has the right to opt-out. Section 46, as replaced by clause 19, provides for a benefit penalty, to be known as a "reduced benefit direction", to apply to a parent with care who, without good cause, opts out of child support, refuses to provide information or refuses a DNA test. This section contains five delegated powers, all of which require the affirmative procedure.*

Eighth Standing Committee on Delegated Legislation - Tuesday 9 July 2002
Malcolm Wicks (minister of the Department of Work and Pensions):

> *Any person with a child support maintenance liability can dispute a maintenance assessment on the grounds that they are not the child's parent. Most people who do dispute that they are a child's parent do so before their liability is assessed. In such circumstances, the agency can offer to arrange for DNA tests to be taken in order to resolve the dispute....*
>
> *The power to assume parentage allows the agency to assess the non-resident parent's liability. However, some parents do not dispute parentage until after their maintenance liability has been assessed. In those circumstances, if the dispute cannot be easily resolved by the agency, the person might wish to appeal against the maintenance assessment. The effect of the order is to route any such appeal to a court instead of to a tribunal.*

House of Lords - Tuesday 9th July 2002
Baroness Hollis of Heigham (minister of the Department of Work and Pensions):

> *But appeals on the ground of disputed parentage are routed to a court instead of an appeal tribunal by the Child Support Appeals (Jurisdiction of Courts) Order 1993.*
>
> *Of course, declarations of parentage have a wider legal application beyond child support. They are binding, for example, in immigration and inheritance disputes in the same way as they are binding on child support issues. Therefore, we believe that it is sensible to import the existing powers to go to the courts into the new child support regulations. As a result, this will be binding on the agency.*
>
> *A non-resident parent can declare and reply directly to the court at any time. Such a declaration is then binding on the CSA. If the person in question is found not to be the parent of the child, any child support maintenance that he may already have paid will be refunded in full by the agency.*

Conclusion

There is a risk of a lack of coherence between the policy adopted by the UK's child support system and policies arising from different concerns.

Many relationships unfortunately end in separation, and there are perhaps 300,000 applications to the CSA each year (hopefully reducing). A substantial proportion of all children will experience such separation. In each of these cases, the alleged father can apply for a paternity test, with its implications on later relationships between adults and children. Given the financial consequences, alleged fathers are increasingly doing so. If a later test proves negative, taxpayers refund the payments, so in fact early tests are to be preferred.

A man who is not sure of his biological relationship with a child faces an uncertain financial future, with perhaps tens of thousands of pounds resting on whether or not he is the biological father. It is wrong to hide the existence of such a financial liability from a person.

Appendix C: Other methods of identifying non-paternity

Paternity tests are not the only "biological" method for a man to discover that he is the not the father of a child. Consider this:

From the Observer 2000-09-03: "One study followed couples waiting for NHS fertility treatment, where the men were 'azoospermic', meaning they produced no sperm and were totally infertile. The researchers found that 25 per cent of the women became pregnant before fertility treatment started".

Suppose this infertility is discovered *after* the child is born. It gives the man precisely the same knowledge that a paternity test would instead of a fertility test: the knowledge that he is not the father. And it can do so in a way that doesn't inform anyone else that he knows, and without requiring samples from anyone. In fact, Kirk Kerkorian (see earlier material in the Sunday Telegraph article) has apparently declared to the court that he is sterile. I don't know whether he knew this fact at the time he first agreed to pay child support for Kira. But such knowledge has precisely the same power to disrupt family relationships.

Already, a man who has had a vasectomy can be pretty sure that he is not the father of a child of his partner. He can have this knowledge, even though she may not be aware that he knows that he cannot be the father. In several years time there will be a new generation of high quality male contraceptives. Some of these will be chemical or hormonal methods, similar in principle to injections available to women at the moment. Some of these may need a patch, and this will give a clue that he is infertile. But other methods will display no such signs.

One such method recently passed its clinical trials in India, and has started to be deployed in hospitals there. The doctor responsible for the use of no-scalpel vasectomies in Canada intends to introduce this method there. The method called RISUG: "Reversible Inhibition of Sperm Under Guidance". It appears to be an ideal contraceptive: unobtrusive, long lasting, reversible, safe, and reliable. By perhaps 2010 men will not only be able to control their own fertility much more conveniently than at present, but will also be able to do so unobtrusively. Such men will know about their non-paternity without needing a paternity test. Obviously, use of such male contraceptives will inform the man concerned long before the child is born. But unless the woman has an abortion, there will still be a child, and probably a disruption to the family. Siblings will be affected.

Another biological means of discovering non-paternity is the diagnosis of genetic disorders:

From The Dallas Morning News, 1999-10-31: ""You are not a cystic fibrosis carrier, the doctor says". Sounds like good news, but it has ripped his patient's life apart. Both parents must have a defective CF gene for their offspring to develop the deadly disease - so how could Morgan Wise's youngest child be sick? "I'm sorry to say there's a good chance he's not your boy," he recalled the physician telling him. In disbelief, he had DNA work done on all his kids. The staggering conclusion: His three sons were not his three sons, at least not biologically speaking."

What the above show is that paternity surprises don't just arise from paternity tests.

Appendix D: Ethics of personal knowledge paternity tests

This is clearly an ethical minefield. There are up to 4 individual stakeholders: mother, presumed father, biological father, and child. These are potentially in conflict.

The ***primary*** ethical arena is "*personal knowledge*". This is about people and their desires and drives, in the context of society. This transcends tactical mechanisms and technologies.

The ethical arena of "*paternity tests*" is ***secondary*** and ***subservient***, because it is simply one current-day mechanism in support of "*personal knowledge*".

These different topics are dealt with separately below.

Although I propose in another paper that we should move *"towards a society without paternity surprises"*, something doesn't become ethical simply because it is a step on the way towards a better society. Questions must still be answered on their own merits. I have attempted to avoid being influenced by the proposals in that other paper.

The ethics of personal knowledge of biological relationships

This primary topic is about rights of personal knowledge, and limits of personal knowledge, irrespective of how this is gained. The objective here is to step away from issues about whether it is OK to collect a few hairs from a hairbrush as DNA samples, and instead to ask fundamental questions such as:

> *"Has this person the right in principle to know X?"*
> and
> *"Has that person the right in principle to prevent this person from knowing X?"*

People will have different views about this. But the trend in civilised nations is that *"knowledge of oneself" takes precedence over "censorship of knowledge of oneself"*.

Has a person the right in principle to know if he or she is the biological parent of a particular child?

Yes. There are at least 3 reasons for this:

1. This has been a fundamental desire of people for millennia. It is presumably a result of the evolution of Homo sapiens via natural selection. It has driven many facets of societies and sexual practices over that time. It is an aspect of human nature itself.

2. In an era of knowledge of inheritance of evolved characteristics and of genetic disorders, knowledge of biological relationships provides a key to important linkages between oneself and others.

3. In the UK, biological relationships define child support responsibilities. A child support responsibility for a child may involve (say) £50,000 over the years. A person must be able to find out whether he or she potentially has such a liability in future.

Has a person the right in principle to know if he or she is the biological child of a particular adult?

Yes. There are at least 3 reasons for this:

1. This has been a fundamental desire of people for millennia. It is presumably a result of the evolution of Homo sapiens via natural selection. It has driven many facets of societies and sexual practices over that time. It is an aspect of human nature itself.

2. In an era of knowledge of inheritance of evolved characteristics and of genetic disorders, knowledge of biological relationships provides a key to important linkages between oneself and others.

3. In the UK, biological relationships define child support responsibilities. In some circumstances a child can make a claim for child support from the biological parents. A child must be able to find out whether he or she potentially has this option in future.

Has a person the right in principle to know who his or her biological parents are?

A qualified **yes**. The qualification is that it would be legally and ethically dangerous to make a retrospective change to laws, such as those for adoption and gamete donation, which identified someone who was entitled to assume because of the law at the time that this would not happen. This principle of law should probably override the interests of the child.

There has been news of *"...a recent high court case in which a judge overrode a mother's objections and ordered DNA tests on a seven-year-old boy who wrongly thought his mother's infertile husband was his father. The most important right, said the judge, was the boy's right to know his "true roots and identity"".*

So in principle a child should be able to find out from his or her mother whether or not the apparent father is the biological father. Furthermore, if he isn't, the child should be able to discover the identity of the biological father. He is in the position of a sperm donor who has not been guaranteed anonymity in law! *When will a child take his or her mother to court to make her divulge with whom she committed adultery?* (Is "Mikulic v. Croatia", European Court of Human Rights, 17th January 2002, a precedent for using Article 8 of HRA 1998?)

(Inside Information, 10.35: *"… The child is denied any access to knowledge of the identity of their genetic parents. However, it is expected that this situation may be challenged under the Human Rights Act 1998, given the growing trend in international law to recognise the right of the child to knowledge of their biological origins."*)

(Inside Information, 10.36: *"It is also possible that not telling the child at an early age will mean that they may obtain this information from other people or following genetic testing. It has been suggested that if a child discovers information about their origin in later years they may be resentful and less trusting of their (social) parents."*)

If a person knows about his or her biological relationship to a particular child or a particular adult, has any other person the right in principle to know that person has that knowledge?

No. There are few cases indeed where one person has a right to know that another person knows something. There are few cases where this can even satisfactorily be determined. This is not one of them.

(A related question, for which I have no confident answer, is: *"does a child have the right to know whether the mother knows who the child's biological father is?"*)

Has the person the right to seek to gain the knowledge identified above, without informing the other parties of the search?

A qualified **yes**. The qualification is that general laws on assault, theft, privacy, harassment, data protection, or similar laws must be adhered to.

But, other than that qualification, a person has a right (for example) to seek the information of who the mother was with at a particular date in history. For example, he or she could validly ask others who may know the answer, or make deductions from car mileage or receipts available in the house, etc.

A man has a right to take a fertility test that might confirm that he cannot possibly be the father of the child, for example that he is azoospermic. In future, when there is a new generation of high quality male contraceptives, some of which will be completely unobtrusive, there will be further valid ways of making the deduction. There are many valid ways of clarifying paternity, of which paternity tests are just one example. Use of DNA for the purpose is simply one "tactical mechanism".

In fact, the above reveals an interesting danger. While it may well be the case that about 9 in 10 children have the expected paternity, only paternity tests are likely to confirm these cases. Other methods tend to be focused on revealing the 1 in 10 cases of surprising paternity!

Has a person the right to prevent someone gaining the knowledge identified above?

A qualified **no**. It should only be possible in narrowly defined cases where this is in the interests *of the person seeking to gain the knowledge*. This would need some sort of pre-assigned authority, such as an ethics committee or a court. It is very unlikely that they apply in the case of competent adults seeking knowledge of their genetic relationships.

Has a person the responsibility in principle to know if he or she is the biological parent of a particular child?

No. There is no responsibility to know something. But it may happen as a by-product of another person's rights.

Has a person the responsibility in principle to know if he or she is the biological child of a particular adult?

No. There is no responsibility to know something. But it may happen as a by-product of another person's rights.

The ethics of paternity tests to establish personal knowledge

A personal knowledge paternity test by itself does not have any direct affect whatsoever on anyone other than the person commissioning the test. Its sole affect is to provide the commissioner of the test with a piece of accurate information. The test certificate itself should not contain anyone's names, so it will have little meaning except to the commissioner.

Any impact on other people is the result of whatever the commissioner of the test freely and (hopefully) legally chooses to do as a result of gaining this newly obtained accurate information. Any consequences derive from the actions of a person with accurate knowledge.

These consequences need to be compared with the potential legal actions of that same person but with incomplete or inaccurate knowledge. *Ethical considerations should always favour informed actions instead of uninformed actions*.

Is it ever right to use paternity tests to identify biological relationships?

Yes. This follows from the answers to the questions above about personal knowledge, combined with other issues about "official" knowledge, for example for child support or immigration purposes.

(Public attitudes to human genetic information, page 30: *"Similarly nine in ten are aware that human genetic information can be used to establish paternity and other family relationships, and over three-quarters say the information should be used for this purpose. Eleven per cent disagree with its use in this way."*)

Should there be restrictions on how a person finds out if he or she is the biological parent or the biological child of a particular person?

Yes. There are general laws on assault, theft, privacy, harassment, data protection, or similar laws. Unless authorised by a body defined in law, for example by a court, these general laws must be adhered to.

But there is no ethical reason for extra laws beyond this. Those laws will protect someone from immediate harm. The intention of the quest by a man of a child here is not to harm a person, but instead to learn about oneself. This learning should be permitted as long as the learning itself doesn't harm that person. It is always possible that a person will act differently as a result of learning the truth. But that is not a good reason for preventing that person from learning the truth; see earlier.

Need anyone else be aware if a person seeks to find out if he or she is the biological parent or the biological child of a particular person?

No. Just as there are few cases indeed where one person has a right to know that another person knows something, so there are few cases where one person has a right to know that another person *seeks* to know something.

A man's or a child's quest for knowledge about his or her biological relationships should be private if the man or the child wants it kept private. It is a breach of their privacy to cause a mother to be informed of their quest to identify their biological relationships.

Shouldn't the mother have to give permission?

No. See above – there is no ethical reason even for her to be aware that the man *knows* the truth, or that he is *seeking* the truth. So her permission is irrelevant.

When it is a matter of the biological relationship between a man and a child, the mother has the least to learn but is potentially the most self-interested in the result. She cannot be relied upon or expected to act in the best interests of the child or of either of the men involved. She must not be allowed a veto, or be required to be involved in the quest of the child or husband to learn the truth about themselves.

Shouldn't the other party have to give permission?

No. The purpose of the test is to gain personal knowledge, and this is covered earlier.

Should the other party (the man or the child as appropriate) have to give permission to have an expert examine photographs of the man and the child to detect a resemblance? No. DNA-based paternity testing is an extension of comparisons that have been used for centuries.

How old should a child be in order to request a paternity test (about some man)?

They probably need to be "Gillick competent". This needs expert advice.

But see the news item quoted earlier about a 7-year-old boy being tested. It is probably best to assume that it is in the interests of children to have the right in principle to know their biological parents from the earliest possible date unless there are reasons to deny this.

Should the process of using a paternity test also be used potentially to reveal genetic characteristics of either person?

No. The use of junk DNA in order clarify biological relationships is vastly different from the use of genes or non-junk DNA to identify or predict bodily attributes. Every single ethical question needs completely different analysis and typically has a completely different answer for these very different cases.

(The supply of genetic tests direct to the public - A consultation document, July 2002, section 9: *"There is also a Code of Practice on Genetic Paternity Testing Services, published in 2001, which sets out good practice for testing mothers, their children and putative fathers in order to establish parentage. Such tests generally involve a DNA test that is offered direct to the public, but we do not intend to deal with them at this stage of the review. This is a distinct area of testing which raises different issues, not least that it often involves the testing of third parties who are children. We feel that it is more appropriate to focus in this consultation on tests aimed at health and lifestyle issues. We will consider the subject of paternity testing at a later stage"*).

Do any other sorts of paternity tests need to be considered?

Yes. But the conclusion from doing so is that paternity tests using DNA are simply one of many ways of clarifying parentage. There is no justification in imposing stronger regulations than on other methods of finding out, and where there are choices, DNA tests should be used in preference.

From the Inside Information Report's "List of conclusions and recommendations":

"We recommend that there be clear official guidelines for the use of DNA testing for child support and immigration control purposes.... In our view, such guidelines should state that DNA testing should only be used in situations where no other evidence is available."

Why? DNA testing is totally compatible with the policy of biological parentage liability. It is the most reliable method ever known. It is remarkably unobtrusive, totally safe, of known accuracy, credible and understood, cost-effective, repeatable, and even getting better year-by-year. The ethical principle here is that *truth should take precedence over ambiguity*.

Although this paper is largely about confidence in biological relationships as a result of genetic tests, such tests are just the latest in a series of ways of identifying paternity. What about "he has his fathers eyes"? (Or hair, or chin, or skin, etc). Do these statements contravene ethical principles? Do blood tests, rather than DNA tests, contravene such principles? Where could a line be drawn?

DNA tests are not different in principle from discussions about paternity that have taken place over centuries and even millennia. What singles out genetic tests for disquiet is their *accuracy* and *reliability*. Does improving the accuracy and reliability of information increase ethical problems? No! Accuracy and reliability reduce ethical problems, they don't increase them. The ethical follow-up to "he has your eyes" is "show me how you know".