

BRAVE NEW GENETICS ?

~~The eugenicist dream-~~

What might be called the eugenicist dream lies behind a good deal of the present hype (and fears) about the new genetics. The dream is that we can breed for, or genetically engineer, desirable qualities, and character traits and dispositions -intelligence, courage, docility, sociability, or even homosexuality or heterosexuality - in human beings, in more or less the same way that we breed for physical qualities and traits - weight, speed, stamina, colour, resistance to disease etc.- in plants and animals. This is a very ancient idea (at least as old as Plato who thought that we could breed for political leadership!) and it keeps on reappearing in different guises. But it is nevertheless an incoherent idea because the central *human* character traits and dispositions are quite unlike *physical* or bodily traits and they cannot be 'engineered'.

First, *human* traits and dispositions are non-specific in the sense that

whereas, say, the size or weight of a bull, or the milk productivity of a cow, are specifically determinable characteristics or qualities that can be bred for or engineered, the qualities of human intelligence, or kindness, or courage or peaceableness are indeterminate. One has only to think of the multitude of different ways of being intelligent: the creative intelligence of a da Vinci, the scientific intelligence of an Einstein, the philosophical intelligence of an Aristotle, the political intelligence of a Nelson Mandela and so on. What kind of intelligence could one set out to breed for or engineer?

Second, what I have called the central human traits are contextual in that they can be defined only in particular contexts. Being aggressive, for example, may be undesirable in certain contexts (for example, in fostering social relationships) but wholly desirable in another context (for example, in resisting an enemy). In themselves aggressive feelings and dispositions are neither desirable nor undesirable: it is what we do with them, how we employ them in particular situations or contexts, that makes them morally desirable or undesirable. The same is true of sexual dispositions and inclinations: it is how we use them to construct a style of life (the life of a Casanova, or the life of a faithful lover like Virgil's Dido) that makes them

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distinctively human and ethically valuable.

To put this point in a different way: the central human characteristics involve an act of choice, explicit or tacit, or 'construction' on our part. Kindness, for instance, means being aware of the needs of other people, and being willing to help them satisfy those needs, even if they conflict with your own immediate needs. Being courageous means being able to face up to obstacles and to overcome them, even when this goes against your instinctive desire to flee from them. You cannot be *caused* or determined to be kind or courageous, any more than you can be caused to love another by, for example, taking a love-potion. If you are caused to 'love' another

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love for Bottom under the
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by a drug your love ceases to be an autonomous or moral act, (The same is true of all the other central human qualities : they have, in some sense, to be chosen or appropriated, explicitly or tacitly, by people for themselves.

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The ambivalence of gender

Very much the same comments could be made about gender as, first, a biologically and genetically determined or 'given' set of dispositions, and, second, as a chosen way of human life. In one sense, of course, you are biologically born a female or a male, but 'female' and 'male' designate a very wide range, or spectrum, of dispositions and behaviours and you also 'choose' to be a female or a male of a certain style. Some females have a 'male' style (like Boadicea), and some males have a 'feminine' style (like St Francis of Assisi), and there are many styles or modes in between.

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Unfortunately, the debate about gender is systematically confused because people oscillate between the two senses, now seeing gender as something that is biologically 'given' and determined in the same way as the colour of our eyes, and then seeing gender as a human construct that we 'choose' and creatively elaborate.

The 'gay' gene

In parenthesis, it is worthwhile (~~though possibly dangerous!~~) saying something about the fatuous notion of the 'gay gene', that is the idea that homosexuality is as genetically determined as the colour of one's eyes, and that it might be possible, by appropriate genetic engineering, to change a person's gender orientation. If what is meant by this is that a person's biological *disposition* to engage in sexual relations with others of the same sex has a genetic basis, this may or may not be true. But if it means that a person's choice of a complex style of life - forming a permanent union with another of the same sex, in effect choosing not to have children of one's own, cultivating certain attitudes and conventions of love and friendship - is genetically determined or caused, then this is subject to the objections just

raised. From this point of view, you are not 'born' a homosexual (or a heterosexual or a celibate); rather you *choose* (tacitly or explicitly) to be a homosexual (or a heterosexual or a celibate) and to adopt a particular style of sexual life. What one is born with, and what may be genetically determined, are certain biological dispositions which have to be appropriated by us and given a meaning in a certain style of life. Some may incorporate those dispositions in a homosexual style of life; others may incorporate them in a heterosexual life; others may, for religious or other reasons, 'sublimate' them in a celibate life.(It needs to be remembered that many women and men willingly choose to be celibates.) The biological sexual dispositions are in themselves indeterminate or plastic and they are given human meaning and significance only by our choices.

Is homosexuality involuntary?

It is worthwhile remembering in this connection that in classical Greek and Roman society aristocratic men often chose homosexual love for pleasure and personal fulfilment. Since homosexual love was 'non-productive' or childless, it was thought to be a 'purer', or more 'liberal' or non-utilitarian form of love; one loved the other for himself or herself and not as a means to having children, and so fulfilling one's civic duty.). On the other hand, they *chose* heterosexual love for begetting children, and forming families, and fulfilling their civic duty by contributing future citizens to the community.

Many homosexuals, when they 'come out', speak as though their homosexuality is a kind of unalterable or unmodifiable fact, and they often claim that they 'discovered' that they were homosexual very much as one might discover that one is left-handed. In other words, they suggest that they did not have a choice about their sexual orientation since it was already determined or fixed in some way. As an English-American thinker has put it: 'Homosexuality is an essentially involuntary condition that can neither be

denied nor permanently repressed'.(1) (1. Andrew Sullivan, *Virtually Normal: An Argument*, New York, Knopf, 1995, p.170. Sullivan's book is nonetheless a very intelligent study of the issue.)


But, if this is so, it is difficult to see how engaging in a homosexual (or heterosexual) life can be a fully *human* life that we have fully committed ourselves to and that we value. An act, as Aristotle said, is a distinctively *human* act only when it is willed or voluntary. No doubt, the idea of 'choosing' to be a homosexual or heterosexual may seem strange since there is usually no overt deliberation in adopting one or the other life-style. But there is usually a tacit choice. ^{A person may} I did not explicitly choose to lead a heterosexual life when ^{he} ~~X~~ ¹⁵ was 16 or 17, but ^{he may} I knew enough about the homosexual way of life to judge that it was not for ^{him} me. I suspect that ^{Men & women} people with a homosexual orientation 'decide' in the same oblique and tacit fashion. After all, we make momentous decisions about our life-goals, and what kind of person we want to be, in much the same way.

In his work, *History of Sexuality*, Michel Foucault shows very clearly how different the idea of homosexuality in ancient Greek thought and practice was from our contemporary ideas. For the Greeks, he says, sexuality was an 'appetite' – a drive that had to be controlled, and directed and modulated, if it were to play a part in the moral life of a person. Whether the object of a person's sexual appetite was male or female was not of any moral relevance, and neither was the fact that a person had a proclivity for one sex or another. Foucault also remarks that biological sex in homosexual relationships is 'boring' and that it was the homosexual life and personal culture, with all that it involved in new forms of friendship, that was important:: 'Is it possible to create a homosexual way of life? The notion of a mode of life seems important to me...It seems to me that a way of life can yield a certain culture and an ethics . To be "gay", in my view, is not to identify with the psychological traits and the visible marks of the

homosexual, but to try to develop a way of life'. (2) (2. M. Foucault, *History of Sexuality*, New York, Pantheon, 1989, pp.206-7.)

Much the same point has been made from a scientific point of view about the genetic basis of sexual orientation. As Richard Horton has put it: 'Perhaps we are asking the wrong question when we set out to find whether there is a gene for sexual orientation. We know that genes are responsible for the development of our lungs, larynx, mouth, and the speech areas of our brain. And we understand that this complexity cannot be collapsed into the notion of a gene for "talking". Similarly, what possible basis can there be for concluding that there is a single gene for sexuality, even though we accept that there are genes that direct the development of our penises, vaginas, and brains? This analogy is not to deny the importance of genes, but merely to recast their role in a different conceptual setting, one devoid of dualist prejudice'(3) (3.R.Horton, 'Is homosexuality inherited?', *The New York Review of Books*, xlii, 12, July 13, 1995. Horton ¹⁵ reviews ¹⁶⁴ Simon Le Vay, *The Sexual Brain*, Cambridge, Mass., MIT Press, 1994, and Dean Hamer and Peter Copeland, *The Science of Desire: The search for the gay gene and the biology of behaviour*, New York, Simon and Schuster, 1994.)

Evolution and genetics

It is worthwhile remarking that there has been a radical change in thinking about genetics and evolution. Darwinian evolution by natural selection  operating on chance DNA variations -gene-centred evolution- is now seen as being one of a number of evolutionary modes. A recent study by Eva Jablonka and Marion Lamb, *Evolution in Four Dimensions*, focusses on how traits and behaviors are inherited. (4) (4. *Evolution in Four Dimensions: Genetic, Epigenetic, Behavioral, Symbolic Variation in the History of Life*, Cambridge, MA., MIT Press, 2005.) The authors argue that there are three other modes of heredity: epigenetic, or the non DNA transmission of traits; behavioral, where information is transmitted through

social learning, for example, learning from others what is good to eat; symbolic, where the transfer and acquirement of information takes place through symbolic thought and communication: 'Linguistic ability, artistic ability and religiosity are all facets of symbolic thought and communication'. According to Jablonka and Lamb, this latter form of evolution represents a 'qualitative change' in that 'homo sapiens is totally unlike any other species'. 'Cultural evolution', they say, 'cannot be explained in purely Darwinian terms. If we are to begin to understand how and why cultures change, we need a far richer concept of the environment than is used in Darwinian theory, and a different concept of variation. We have to recognise that the environment has a role in the generation and development of cultural traits and entities, as well as in their selection, and that new cultural variants are usually both constructed and targeted' (5)(5.ibid. p.193.)

These ideas chime in nicely with the argument ^{developed} ~~I have been developing~~ in this ^{Chapter} ~~essay~~ and emphasise that, while distinctively human traits and behaviors are based upon biological and genetic factors, they nevertheless transcend those factors. We are here confronted with a paradox: how can the evolutionary process bring about a 'qualitative' change by producing homo sapiens? This is linked to another paradox: how does it come about that the evolutionary process results in producing a living creature, homo sapiens, who is able to understand that process and can, to a certain extent, control ^{and} ~~manipulate~~ it?

Is there a human nature?

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~~I have suggested that we distinguish~~ very clearly between the biological and genetic sub-stratum of human nature and the styles of human life we construct out of those biological and genetic materials. The former sets constraints upon the latter but there is nevertheless a great deal of creative invention that is possible within those constraints. An analogy with

^{As was said before}

language may be helpful here: a language is a system of signs (physical sounds and marks endowed with meaning) which allow the emergence or generation of completely new meanings. But at the same time we cannot do as we like in a language because it has phonemic, and lexical, and grammatical structures which set severe constraints on our linguistic behaviour.

In the same way, human nature is not a fixed and inflexible 'essence' but an open-ended structure that allows a great deal of creativity and invention. ~~As I have remarked,~~ ^{But} the creation of human meanings takes place within biological and physical constraints: indeed it can take place *only* within those constraints. All attempts to erect theories of morality or theories of human nature on the basis of pure reason alone must fail because human beings are biological and genetic beings. But equally, all attempts to erect theories of morality or theories of human nature on the basis of biology and genetics must also fail, because human beings are meaning-making creatures who use their biological and genetic dispositions for their own purposes.

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I suggest then that many of the speculations about the 'brave new world' implications of the new genetics are in the realm of fantasy and that, while we should be attentive to the particular ethical issues raised by genetics (the issue of the privacy of genetic information, for example), we are, fortunately, not really likely to be faced by a 'brave new world' brought about by genetic engineering.

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