

## Your genes don't make you do it !

Those researchers who know most about genes and SSA say “Your genes did not make you do it”. Let's review the evidence bearing in mind that many of the following arguments apply to all human behaviours.

### Genetics:

- Science has not yet discovered any genetically dictated behavior in humans. So far, genetically dictated behaviors of the “one-gene-one-trait” variety have been found only in very simple organisms. (Ch 1)
- From an understanding of gene structure and function there are no plausible means by which genes could inescapably force SSA or other behaviors on a person (Ch 1)
- No genetically determined human behavior has yet been found. The most closely genetically-related behavior yet discovered (mono-amine oxidase deficiency leading to aggression) has shown itself remarkably responsive to counselling. (Ch 1)
- If (exclusive) SSA were genetically inherited, it would have bred itself out of the population in only several generations, and wouldn't be around today. (ie. gays with no children would not be able to reproduce their genes.) (Ch 1)
- Generally, geneticists settle for some genetic influence of rather undefined degree, most agreeing that many genes (from at least five or six to many hundreds) contribute to any particular human behavior. (Ch 1) This means:
  - If SSA were caused by many genes it could not suddenly appear and disappear in families the way it does. It would stay around for many (eg. at least 30) generations because it would take that long for that many genes to be bred out. Therefore SSA cannot be caused by many genes. (Ch 1)
- The occurrence of SSA (2.6%) in the population is too frequent to be caused by a chance mutation in a single gene. Therefore SSA cannot be caused by a single gene. (Ch 1)
- Researchers trying to find “homosexual” sequences of genes on the recently mapped human genome have not found any such sequences although they have found them for schizophrenia, alcoholism etc. (Ch 9)
- The occurrence of SSA is about five times too high to be caused by a faulty (non-genetic) pre-natal developmental process, so it is not innate in that sense either. (Ch 1)
- First same-sex attraction occurs over a very long time span, unlike pre-programmed genetic events eg puberty, menopause. This argues that first same-sex attraction is not a genetically programmed event. (Ch 1)
- The human race shares most of its genes - something between 99.7 percent and 99.9 percent. That means all ethnic groups will have most of them. This has the following three implications.

- If homosexuality is genetically dictated, homosexual practices will be identical or extremely similar in all cultures. But there is an enormous range and diversity of homosexual practice and customs among different cultures (and within cultures) (Ch 6)
- There would be a similar incidence of homosexuality in all cultures. But homosexuality has been unknown in some cultures and mandatory in others. (Ch 6)
- Changes in homosexual practice and behavior in different cultures would take place very slowly, over many centuries. But this is not what history shows. The decline of whole models of homosexuality (the Greek, over a couple of centuries, and the Melanesian, within a century); the relatively sudden [in genetic terms] emergence of the present Western model over a couple of centuries; and abrupt changes of practice within an ethnic group, even over a single generation, are not consistent with anything genetic. Even less so the swiftly changing sexual practices within the current Western model. (Ch 6)
- The drop in SSA attraction and practice over the lifespan is too great to attribute to genetic change – or for that matter, deaths from AIDS. It could indicate some change in sexual orientation. (Ch 2)
- Recent increases in the percentage of those experimenting with same-sex behaviour suggest social influence rather than genetic change. (Ch 2)
- Dean Hamer, one of the strongest advocates of a genetically-based homosexuality, has remarked that he doesn't think a gene exists for sexual orientation. (Ch 9)
- **Twin studies:** These very complex comparisons of identical twins and non-identical twins definitively rule out genetic determinism. If homosexuality were genetic, identical co-twins of homosexual men and women would also be homosexual 100% of the time, but they aren't. The genetic influence is indirect, certainly lower than 30% for men and 50% for women and may be as low as 10%. This is illustrated further by the fact that identical twins with identical genes are at most 11 and 14% concordant for SSA (ie. if one twin is SSA the co-twin will be gay only 11% of the time (males), 14% (females.) (Other studies have even lower concordances). And remember this: everyone has at least a 10% genetic influence in his or her behaviour - simply because without genes there can be no bodily activity of any kind, or human behaviour. (Ch 10) What does genetic influence mean? Those who say homosexuality is genetically influenced are correct, but only to about this degree:

*If a girl becomes pregnant at age fifteen, we could argue that she is genetically predisposed. We could say that in her culture, her genes gave her the kind of face and figure that send male hormones into orbit and bring her under a level of pressure that she is unable to resist, and she is fertile. But that's about the strength of the genetic influence. There are a huge number of environmental factors that could also have brought the pregnancy about, from cancellation of the basketball game she was going to watch with a girlfriend, permission to use her boyfriend's father's car, her boyfriend's company, the movie they had just viewed together, and failure to use a contraceptive, to big environmental factors like personal values systems, peer group pressure, and an emotionally distant father.*

If there is some genetic weak influence towards SSA (quite possible) would you like to be controlled by those genes, or to control them?

## Social, sociological

- Much sexology literature shows huge amounts of change from a homosexual orientation toward a heterosexual orientation and vice versa. This could not happen at all if homosexuality were genetically dictated – it would be fixed and unalterable. Contrary to popular impressions SSA is much less stable than OSA and changes more frequently. (Ch 12)
- About 90 percent of Western “intersex” children (those born with ambiguous genitalia) choose to remain in their gender of upbringing when puberty reveals their true genetic gender and surgical interventions are offered. Often, this choice is made in the face of very contrary physical and hormonal characteristics. It argues that environmental influences predominate in the formation of gender orientation and behavior. This percentage has remained approximately constant over the last 40 years. (Ch 5)
- The stages of psycho-social development toward adult heterosexuality are clearly defined and understood by developmental psychologists, and so obviously learned that heterosexuality is clearly not genetically mandated. Surveys of adult homosexuals show conspicuous deficits in several of these developmental stages - strongly suggesting homosexuality is cultural and environmental rather than genetic. (Ch 3)
- There is a much higher incidence of homosexuality among those who have been raised in large cities, rather than in rural areas, arguing that the environment is much more powerful than genes in the development of homosexuality. (Ch 2)
- A scientific/sociological tool, Path Analysis, has been argued to show that there is no social or familial basis to homosexuality, but rather a biological one. However, the researchers *did* discover social and family paths leading to homosexuality, but chose, for some reason, to say they were not significant, even though, in terms of the methodology, they were. (Ch 11)

## Hormones and brain structure

- There have been many studies, none of which has shown any convincing relationship between homosexuality and exposure to pre-natal hormones in dictating adult behaviour. Studies examining effects of very high doses of female hormones to pregnant mothers show no effect on males and a dubious effect on women. Therapy changing levels of adult male and female sex hormones has been shown to affect sex drive but never orientation. (Ch 7)
- The idea that homosexuality results from immune attack on male brain characteristics by the mother during pregnancy is poorly supported. If so male testes and genitalia would be attacked, because they also contain predominant clusters of male proteins. But they are not. (Ch 7)
- Lesbian finger length ratio studies are said to show an effect of prenatal hormones. However any effect on sexual orientation is weak. (Ch 7)
- Scientists have barely been able to distinguish between male and female adult brain microstructure let alone male homosexual and female brains. Attempts to prove such a similarity have been unconvincing, because they may arise from brain changes caused by behaviour rather than being innate. Male and female brains appear identical at birth, and from about age two or three the only main consistently replicable difference, is their size: male brains are larger. Most of the development of the human brain takes place after birth in response to stimuli, learning, and experience. The brain changes so much in response to learning and repeated human behaviours that this could probably account for any differences between homosexual and heterosexual brains which might be ultimately discovered. (Ch 8)
- Our instincts, such as self-preservation, hunger, and reproduction, are among the most deeply embedded and strongest impulses we have, but these are able to be controlled. Eg. fear in

soldiers. If we want to argue homosexuality is also a deeply ingrained instinct, we must also argue it should be malleable and responsive to training. (Ch 4)

## Genetic content of homosexuality is minimal

Geneticists, anthropologists, developmental psychologists, sociologists, endocrinologists, neuroanatomists, medical researchers into gender, and twin study researchers are in broad agreement about the role of genetics in homosexuality. Genes don't make you do it. There is no genetic determinism, and genetic influence at most is minor.

Is this consensus likely to change? Might some major biological link be discovered which could change everything? After all, science is about discovery

For most of these scientific disciplines, the findings have been clearly established from facts that will not change (eg. the diversity of homosexual practices between and within cultures; the clearly established stages of human development; the over-riding role of upbringing in the ultimate gender choice of people with ambiguous genitalia). But what of future studies of brain micro-structure, or detailed analysis of genes and function? Will they reveal links between brain structure and human behaviours, or behaviours and genetic sequences?

Of course they will. Papers will continue to be published. But we can safely conclude that even authors wanting to find such links will almost always include the standard scientific caveats that the influence is minor, and that the environment is important. What we can reasonably say about future research is that it will enter new fields and come up with new links, but none of them will be definitive.

This is proved once and for all by studies of identical twins. They have identical genes, and other influences, but if one is homosexual the identical brother or sister usually isn't. There is only an 11% chance he/she is homosexual. ***This includes all the influences we know nothing about and are yet to discover.*** All added together only have a rather weak effect.

The first edition of this book in 1999 floated a trial balloon: the genetic content of SSA will ultimately turn out to be 10%. That is quite imprecise, and could be in the range 0-20% - allowing for a 10% margin of error. But even if the final result is 20%, this is still a weak influence. Even at the time of writing, late 2007, this 10% conclusion still holds, and the evidence is stronger than in 1999. And don't forget, any genetic influence is indirect – as in the case of the pregnant 15 year old.

Homosexuality, as a congenital condition, has probably been gay activism's most effective propaganda tool. Although it is no longer politically correct or fashionable to say in many circles that homosexuals can change, it is scientifically accurate to say so. And we are not talking merely about changes in behaviour, but changes in attraction as well.

To say a behavior is "genetic" is a logical fallacy - a simple lack of observation. Nothing is forced on us by our biology. Even breathing isn't. The fact is, nothing makes us do anything - neither our genes nor our environment.

## What is the cause of SSA?

There is no one cause. No single genetic, hormonal, social, or environmental factor is predominant. There are similar themes: childhood gender non-conformity, sexual abuse, peer dynamics, family dynamics, sexual history, but the mix varies with individuals, making the individual's response to life's events the single overriding factor. Random reactions of children to their circumstances are important. The overriding outcome of these contributors is often a sense of feeling "different" and withdrawal from gender norms, along with admiration and envy and a drive to reconnect that focuses on certain individuals and becomes confused after puberty with genital sex. This sexual response to emotional signals can become a repeating pattern, leading to type-casting ("I am a homosexual"), and not infrequently, to addiction.

It can be changed. It takes work, self-knowledge and help from others in many cases, but some people who have not got into homosexual behaviour very deeply may manage this by themselves. That is, life itself can bring along the circumstances or people who can help change the dynamics that contribute to the homosexual condition.

Is it worth it? Is it worthwhile to gain the freedom where nothing rules over you? Is it worthwhile to find others who have shared the same struggle? Is it satisfying to join a group who are the real heroes? Is it worthwhile to come out of what did not involve conscious choice, by an adult conscious choice? Is it worthwhile to do what others say is impossible? If a change like this is possible, what else may be possible?

DNA is a ladder of nitrogenous bases and sugars that is a recipe for proteins. But it is also a ladder of destiny, a Jacob's ladder, and it is our choice whether angels or demons walk up and down it. Do our genes make us do it? We choose.

*I saw, struggling in a stagnant pool, a bee which had somehow fallen in. It flapped its wings futilely and tried to dog-paddle, but made no progress. It seemed to be drowning. All around the bee were little creatures called water-fleas who hopped round, trouble-free on the surface of the water. They didn't seem interested in the bee at all.*

*I took the bee out of the pool using a dead leaf from a tree, and set it down nearby on the slate surround. The bee staggered off the leaf, drunkenly wandering in its new freedom, headed straight back to the pool and fell in again.*

*I lifted it out once more, and the bee staggered round rather aimlessly and seemed quite lost. I transferred it further away onto some grass. It tried to use its wings, but it look to me as though they might be torn, and it might never fly again. It staggered from blade to blade, under some and over some in the three dimensional maze of the herbage. It even hopped from one blade to another, perhaps pathetically imagining it was flying.*

*Then – suddenly – after I had practically given up, it flew! It wove a surprisingly straight course through the airy dimensions and was out of sight in seconds. I never saw it again.*

*This I know: that bee reached heights the water-fleas couldn't even dream of and so can you.*

If you seriously want to seek change, it is worth exploring the internet. In today's climate groups condemned by the politically correct are often a good place to start, and those groups can recommend further links. Good hunting!