Naturally gay?

By Sean McLennan

It's perfectly clear that homosexuality is downright non-Darwinian. Homosexuals are disinclined to reproduce, they don't pass on their genes and, since the "fittest" is defined by reproductive success and passing on your genes, homosexuality must be the result of poor adaptation and constitutes a weakness in the human species. Ultimately, the goal of evolution and biology is reproduction and the continuation of one's lineage, so in that context, homosexuality is not natural (and consequently wrong).

Of all the non-religiously motivated arguments against homosexuality, this is probably the most compelling within the population at large, holding sway over otherwise rational, even scientifically minded, individuals. Why? Because it resonates with the intuitions that we culturally hold about "survival of the fittest," biology and even society. Much of the GLBT community itself may even believe in these intuitions and just accept that we, for whatever reason, constitute some sort of exception to natural biology.

That is unfortunate because the problem lies not in the nature of homosexuality but in our ignorance of biology and ideas that have been subtly malformed on their path from science to public consumption.

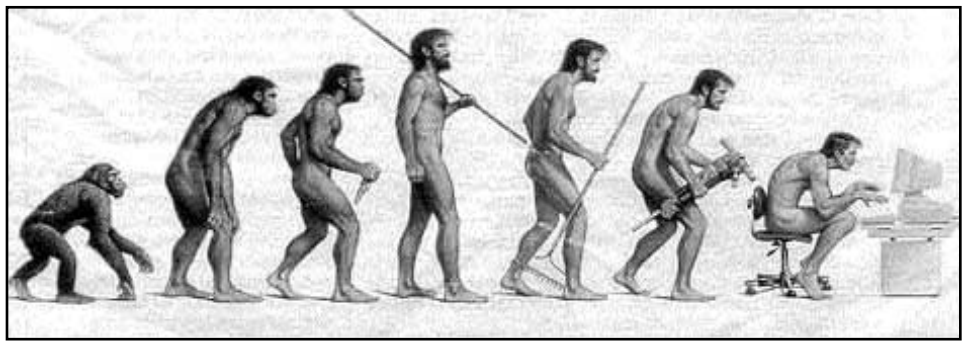
The first of these misconceptions lies in the idea that evolution or biology has a goal in the first place. To suggest a "goal" is to accept a deistic view of the universe—that evolution is a system designed by a higher intelligence. Although this is a perfectly valid spiritual interpretation of evolution, it is not borne out scientifically. Currently, our most accurate scientific picture of evolution—coming out of places like the Santa Fe Institute, which studies the emergence of complexity—suggests that evolution is a simple physical mechanism that differs little from the other physical systems of the universe, such as those that dictate the structure of our solar system or the chemical properties of gold. It would seem strange to say that the "goal of gravity" is to create orbits or to pull in meteorites—orbits and shooting stars are just something that happen as a result of the laws of the universe. It is similarly anomalous to speak of a "goal" in evolution. Evolution is the name that we apply to an observed phenomenon—that life, because of the flexibility of its genetic code, can respond to its environment by adapting. The direction of that adaptation is the logical result of some pretty simple statistics.

Another major misconception inherent in the evolutionary argument against homosexuality is that the individual level is the most appropriate one from which to examine the evolution of humans. In studying any social animal, it is of utmost importance to consider the societal level in addition to the individual level, particularly in the case of humans. I think that Neal Stephenson described it best in "Cryptonomicon," when his main character, Lawrence, encounters the real-life gay historical figure, Alan Turing.

"It got Lawrence to thinking. From an evolution standpoint, what was the point of having people around who were not inclined to have offspring? There must be some good, and fairly subtle, reason for it.

"The only thing he could work out was that it was groups of people—societies—rather than individual creatures, who were now trying to out-reproduce and/or kill each other, and that, in a society, there was plenty of room for someone who didn't have kids as long as he was up to something useful."

Indeed, in social biological systems of all types, there are often individuals who never get the chance to reproduce, or who are even incapable of reproduction, but are nonetheless integral to the functioning of the society. Consider bees, for example—only



one queen in a hive ever mates, and only with a particular "caste" of males. Yet each generation continues to produce the full range of bee-societal-variability because all have a role to play in the colony's survival.

That immediately begs the question, "So what is the role of homosexuality in human society?" to which one might respond in two ways. The first is to say that, currently, we don't know enough to answer that question. Not only is the scientific study of homosexuality new, but it continues to be hampered by innumerable social factors. Moreover, the range and complexity of human behavior, unlike that of bees, makes it infinitely harder to tie down, in a succinct manner, the influence of homosexuality on society.

The second response to the question is to point out another standard misconception - that every characteristic of a biological entity need have a purpose or an evolutionary explanation. Evolution selects against characteristics that are significantly damaging to the survival of a species and for characteristics that significantly improve the chances of survival. Anything that neither improves nor hampers survival is pretty much free to wander around the evolutionary spectrum with little or no immediate impact. Assuming, for the sake of argument, that ten percent of the population is homosexual, this is not likely to threaten the survivability of human civilization. So it just may be that homosexuality is part of the natural variation inherent in any characteristic that does not directly influence evolution.

The last misconception concerning homosexuality and biology that permeates the public's thinking has to do with the whole "nature vs. nurture" debate about the origins of same-sex attraction. It seems many would be more inclined to accept homosexuality if it turned out to be determined by genetics and not by "choice" or rearing. The fallacy here is in accepting that there is any clean-cut difference between genetics and learning in the first place. In reality, they are extremes on a spectrum of tools used by development that can produce the same results. A good analogy is the difference between hardware and software: both can perform exactly the same functions and do it in the same way. If you wanted to run Windows 98 faster, you could produce a Windows 98 computer chip. The drawback being that you wouldn't be able to upgrade to Windows 2000 without buying a new chip, thus sacrificing some of the flexibility in your computer. Software (learning) provides flexibility, and hardware (genetics) provides speed; it is the same in biology. It takes a few years for humans to learn how to walk, but horses can run within moments of being born. This reflects the importance of mobility for horses escaping predators—that selection pressure pushed "walking" from a learned ability to an innate ability.

Even this example is over-simplified. Ultimately, every learned ability must also have a genetic component—humans couldn't learn to walk if they didn't have legs specified in their genetic code. Similarly, you can't install Windows on a Mac because the hardware is fundamentally incompatible. The degree to which any ability or characteristic is due to "nature" or "nurture" depends on how many of its components are genetic and how many are learned—this is something that can vary from individual to individual yet still produce the same end result. Anyone who has bought a computer with a DVD player in it should be able to grasp this easily. A DVD movie played on a player attached directly to your TV is processed entirely by hardware—you can't upgrade the player by just downloading a new program from the Internet; you have to buy a new one. A computer with a DVD drive may or may not have a "hardware decoder." If there is one, the information on the DVD is processed much faster and is consequently less susceptible to skipping, but the software will need to have been designed specifically to work with your machine. If there is no hardware decoder, you have much more flexibility in which software can be used to play the DVD (but you may have speed problems). The end result is the same—playing the movie—but there are a variety of combinations of hardware and software that can bring about this result.

Homosexuality is probably very similar. I know people who firmly believe that they changed from heterosexual to homosexual after specific events in their life (learned / software); I, on the other hand, had no such experience and am convinced that I was born homosexual because indications of my homosexuality appeared very early (genetic / hardware). Others I know have reported a full range of experiences and feelings in between (some combination of both).

So what's the point? My hope is that this discussion will have two effects: Firstly, to challenge some of the misinformation that exists, perhaps even within the gay community, in the effort to build up more accurate intuitions about how the world works; and secondly, to give GLBT individuals a better basis from which to answer the invalid arguments that homosexuality is against nature. I, personally, have not found perhaps the simplest, most patently obvious answer to be strongly persuasive among the ignorant. That is, the fact that homosexuality has existed in every human society, in every time since recorded history began—a fact attested to by numerous cross-cultural demographic studies and homosexuality's mention in historical documents since the ancient Egyptians—is a pretty good indication that it is a "natural" phenomenon.

Sean McLennan has a degree in Linguistics from the University of Calgary and he's currently working towards a PhD in Linguistics and Cognitive Science at Indiana University. In between research, classes, and teaching, he does Web-design, writes for a Japanese English-learning magazine, and is active in a local GLBT education group.