Those who attempt to use evolutionary theory to help contribute to solutions to social ills are often accused of making the naturalistic fallacy: the fallacy of assuming that what is, is what ought to be (Flew, 1978). Consider two examples: Women, more than men, evolved as the primary caretakers of children; therefore, they have traits that make them superior caregivers, and ought to be favoured as teachers and nurses and “since the demands of hunting, warfare, and male-male competition caused men to evolve larger size, greater strength, and greater aggressiveness than women, men ought to be preferred as policemen and infantrymen.” Clearly, these statements are fallacious. One cannot reason from what is to what ought to be. Although on average men are larger, more aggressive and competitive than women in all known cultures, we cannot conclude from this fact that men ought to exceed women in these attributes.

From September of 2000 through April of 2001, the public lecture series “Ever Since Sociobiology: Darwinism, Human Nature, and Public Policy and Private Decisions” drew audiences of up to 220 people to Harbour Centre. This lecture series was sponsored by the Institute for the Humanities as well as SSHRC and other organisations within Simon Fraser University. The series was organised by me and Catherine Salmon, a SSHRC post-doctoral fellow in the same department. It brought the following speakers and their topics to downtown Vancouver: Charles Crawford, Professor of Psychology, Simon Fraser University, on Incest Avoidance and Prevention: Legal and Evolutionary Perspectives; Dennis Krebs, Professor of Psychology, Simon Fraser University, on Moral Reasoning and Moral Behaviour: Insights from Evolutionary Psychology; Margo Wilson and Martin Daly, Professors of Psychology, McMaster University, on Family Conflict and Violence: A Look at the Marital Relationship; Kingsley Browne, Professor of Law, Wayne State University, on Women in the Workplace: Evolutionary Perspectives and Public Policy; David Buss, Department of Psychology, University of Texas, on Dangerous Passions: Infidelity, Sex and Why We Hurt the Ones We Love; Catherine Salmon, SSHRC post-doctoral fellow, Department of Psychology, Simon Fraser University, on What Sex Differences in Erotica can Tell Us About Human Sexuality; Randy Thornhill, Professor of Biology, University of New Mexico, on A Natural History of Rape: Biological Bases of Sexual Coercion; Martin Lalumiere, Clark Institute and University of Toronto, on Is Psychopathy a Pathology or a Life History Strategy? Implications for Social Policy. The topics were varied, but all could trace their roots back to the philosophy behind the lecture series itself. How can a society be founded on moral principles, yet be pliable and comfortable enough for people to live in so that it can persist? This question has perplexed thinkers since Plato wrote The Republic. Legalistic (Hammurabi, Napoleon, John Rawls), religious (Moses, Mohammed, Saint Augustine), economic (Adam Smith, Karl Marx, Milton Friedman), and philosophical (Karl Popper) approaches have all been considered at one time or another. Darwin’s closing paragraph from The Descent of Man suggests a role for the theory of evolution by natural selection in the search for an answer.

“Man with all his noble qualities, with sympathy that feels for the most debased, with benevolence which extends not only to other men but to the humblest of living creatures, with his god-like intellect which has penetrated into the movements and constitution of the solar system—with all these exalted powers — still bears in his bodily frame the indelible stamp of his lowly origin” (Charles Darwin, The Descent of Man, 1871/1898, p. 634).

Those who attempt to use evolutionary theory to help contribute to solutions to social ills are often accused of making the naturalistic fallacy: the fallacy of assuming that what is, is what ought to be (Flew, 1978). Consider two examples: Women, more than men, evolved as the primary caretakers of children; therefore, they have traits that make them superior caregivers, and ought to be favoured as teachers and nurses and “since the demands of hunting, warfare, and male-male competition caused men to evolve larger size, greater strength, and greater aggressiveness than women, men ought to be preferred as policemen and infantrymen.” Clearly, these statements are fallacious. One cannot reason from what is to what ought to be. Although on average men are larger, more aggressive and competitive than women in all known cultures, we cannot conclude from this fact that men ought to exceed women in these attributes.

However, the identification of a naturalistic fallacy can lead us astray if we then conclude that the empirical observations leading to it are invalid, that the state of nature suggesting it ought to be changed;
or that it can easily be changed. Identifying the claims that men are taller than women, therefore, they ought to be taller as fallacious does not imply that men are not taller than women, that they ought not to be taller than women, or that the world would be a better place if men were not taller than women. Similarly, identifying fallacies concerned with gender differences in behaviour do not imply it is either advisable or easy to change the state of nature so that gender differences no longer exist. It is as fallacious to go from is to ought not, as it is to go from is to ought.

Although the naturalistic fallacy can be pernicious, another fallacy can be equally noxious. It is the Moralistic Fallacy, the fallacy of assuming that what ought to be is or what ought to be can be (Crawford, 1999). A prominent example is racial differences in intelligence ought not to exist; therefore, they do not exist; hence, anyone finding such differences must be using poor research methods or be politically motivated in their research. There are many other examples in contemporary thought. One that comes to mind is sex ought to be mutually enjoyable and personally enhancing. Aggressive sexuality is not compatible with this ought. Therefore, sexuality cannot be the motivation for rape, and hence rape must be motivated by male aggression. Anyone putting forth arguments or data challenging moralistic fallacies can expect a rough intellectual ride. Some of the greatest tragedies of history have their origins in moralistic attempts to impose an ideology on a whole population. More than forty million people died because of Joseph Stalin's determination to impose communism in Russia. The attempt to impose a strict Muslim code on Afghanistan is the most recent example of the costs of imposing an ideology on a whole nation. The belief that "What ought to be, can be" can have noxious consequences when applied with such zeal. Many Russian communists were good people who worked hard for what they believed. But, those taking an evolutionary perspective on human behaviour were not surprised when their system failed because we worried that communism was not compatible with a human psychology shaped in the crucible of natural selection. Some of our concerns about the adequacy of communism as a social system were based on current thinking in evolutionary psychology that has mental mechanisms producing nepotism, reciprocity, a sense of fairness, and cheating on social relationships as important culture producing mechanisms (Cosmides & Tooby, 1992). If such evolved mental mechanisms do exist, they put constraints on the kind of social systems that we can expect to function well enough to persist for some time. All of the talks in this lecture series dealt with issues that have a great impact on the society in which we live. A better understanding of them can point the way toward making changes and in particular, to areas where changes may be most easily made and in what ways such changes may be implemented.