

for human evolution. To be sure, if we open up an unbridgeable gap between ourselves and other creatures, our view of human evolution will be pallid, abstract, and superannuated. But a too-tight assimilation of human to primate evolution presents problems and perils of its own having to do with striking evidence that Arnhart himself points to in this paper, namely, that human beings are quite capable of going against bodily integrity and good evolutionary sense (in creating and sustaining over centuries the practice of female clitoridectomy, for example), and that we may persist in such folly even when the weight of evolutionary evidence suggests that it is precisely folly.

Here Arnhart asks: "Does cultural diversity deprive us of any universal standards for condemning such practices?"—he has clitoridectomy in mind. I would argue no, it does not and need not. Recognizing cultural diversity is not the same thing as embracing a thoroughgoing moral and epistemological relativism. Whether the status of one's moral position is or ought to be what Arnhart calls ethical naturalism is, of course, another question.

This brings me to my final point. In the waning paragraphs of his piece Arnhart links my work to that of other women who, he claims, "celebrate...feminine ways of thinking." Quite frankly, I have never viewed my own work as a celebration of a feminine way of knowing or doing anything. Rather, I see at least part of my work as contributing to a shared recognition that there are distinctive ways of knowing and being that flow from those social and historical locations in which human beings find themselves. The social location of maternity is a complex world—I have characterized it as "biosocial"—for a maternal identity cannot be severed from female embodiment and the complex imbrication of a human body with the social and ethical features of maternal identity. I see my work as pushing towards an insistence that human beings, with all humility, should accept our bodies in good grace. In this, I fear, I am swimming against the tide. But if I am going to thus persevere, I prefer not to do it under the banner of the "feminine," but in the recognition that we human beings, in some deep and un-get-overable way, are never not our bodies.

Neither a Genre of Feminism nor of Ethical Naturalism: Primatology as a Source of Naturalistic Truth and Fallacy

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Important insight into a problem can result from cross-disciplinary thinking. And yet, when I read an argument such as Arnhart's, I am often struck by the difficulty of bridging the gaps between disciplines, especially in relation to words that may be commonly used

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but differentially understood. The word *nature* is used without definition in many different forms and contexts in Arnhart's paper; and yet, throughout my reading of it, I felt that the author and I had not arrived at a firm and common understanding of the word.

For example, to a primatologist (or an evolutionary biologist or behavioral ecologist) the word *nature* conjures up a system of immediate biological processes (e.g., photosynthesis, metabolism), ontogenetic change (e.g., growth), and evolutionary processes (e.g., natural, sexual, and kin selection). But to a nonbiologist, the word *nature* may be conceptualized simply as those aspects of the living and material world that are distinct from, or unaffected by, human activity. Similarly, I would gloss references to human nature as designating innate propensities resulting from millennia of selective processes. The author's view that a theory of human nature is a description of human "needs, wants, and purposes" is much more teleological, and assumes more awareness, than a biologist's framework of selected behavioral

propensities. And feminist writers (many of whom are nonbiologists) may understand "a theory of human nature" to refer simply to essential human characteristics, however determined. In their writings, "a theory of human nature" cannot be assumed to be a reference to biology ("nature") as the ultimate authority for deciding what is right and good.

I will frame my comments in the form of four issues that arise in my mind as reflecting questionable assumptions in Arnhart's essay:

- Can we know human nature?
- Is nature good?
- Are critics of science nihilists? and
- Must feminists be sociobiologists?

Can we agree on what constitutes human nature? Arnhart minimizes the difficulties of determining what truly constitutes human nature (or primate nature or the human nature of women), and overestimates the ability of science to provide us with a clear, uncontested vision of nature. Primatology may indeed be founded on the premise that there is a universal primate nature, but there is also a vast literature debating whether we can say anything conclusive about human/primate nature or about what humans are "naturally inclined" to do. Many experts still think not.

Even if all feminists were to turn to ethical naturalism, we would still have to agree on what is natural in human behavior—no small undertaking for those familiar with the arguments. In Arnhart's quotation from Blackwell ("it is to Nature as umpire—to Nature *interpreted by scientific methods*, that we most confidently appeal"—emphasis added), the key phrase is "interpreted by scientific methods." Models of early human social life, such as the Woman the Gatherer scenario, have been so controversial precisely because human nature is so differentially interpreted through scientific methods, and yet the implications are so far-reaching (see discussion in Fedigan, 1986; Fedigan and Fedigan, 1989). Further, Arnhart assumes that we can simply turn to animal behavior studies for the answers, even though there are other scientific sources of evidence for human nature (such as cross-cultural data, archaeological/paleontological evidence, and psychiatric interpretations of behavior and motivations) that may offer conflicting interpretations.

Arnhart is aware of the naturalistic fallacy (i.e., conflating what *is* with what *ought* to be), but makes a special plea that anything natural will be desirable and therefore good. I cannot accept his argument that whatever we are naturally inclined to do must therefore be good. It strikes me as foolhardy to abandon the distinction between biological processes and human ethical systems that has been so carefully delineated. In the first place, the experts have not been able to agree on what it is that we are naturally inclined to do. And second, "nature," as I

understand it, cannot be inherently good or bad. Only humans can interpret the various aspects of nature as good or bad from their own moral standpoint. Nature just *is*.

In this era of environmentalism in Western societies, there may be a temptation to assume that our behavior should conform as closely as possible to what we know of natural systems. But ample counterexamples exist. Primatologists have found, for instance, that there is a tendency in nature for males to kill those infants of their female mates that are clearly not their own genetic progeny. And Freudian psychologists have argued that humans have a natural propensity to mate with close relatives. Almost all human societies have decided that these behaviors are not good and not desirable, and have put social sanctions in place to counteract them.

It is in part the human cognitive ability to be aware of our actions and to make moral decisions about them that cuts the tie between innate propensities and actual behavior. Unlike the author, I do not find it absurd to think that we could desire the "unnatural," or fail to desire and judge as good the "natural." As an evolutionary biologist, I do, however, find it absurd (i.e., an oxymoron) to argue that nature is intrinsically good, or bad.

Without engaging in a debate about a correct interpretation of Haraway's view of science, which would be beyond the scope of this commentary, I would like to note that it is possible to criticize some scientific practices without seeking to bring down the enterprise itself. Nihilism is an extreme interpretation of the stance of most feminist critics of science. Nihilism refers specifically to a doctrine that denies any real ground of truth, but also refers colloquially and by connotation to terrorists, or those who would destroy the entire system. It is unfortunately common to dismiss criticism (e.g., feminist arguments on scientific bias) by caricaturing such criticism, pushing it to an extreme or logical absurdity. I doubt, for example, that it is fair to say, as Arnhart does, that feminist critics of science hold the view that "the personal bias of a scientist cannot be altered by evidence and argument," or that many of them believe such bias "deprives science of any claim to truth."

Feminism is a term that I hesitate to use as a general label, because it represents such a large and diverse field with so many different epistemologies. I could perhaps accept an argument that ethical naturalism would be strong ground for some feminists to stand upon. However, I cannot accept the author's argument that ethical naturalism is the *only* solid ground for feminism. Again he seems to be overstating his case. Since Sarah Hrdy is the only notable feminist to be simultaneously a sociobiologist, there seem to be many feminists who have located other grounds than an appeal to nature for their critique of patriarchal customs.

Most feminists are social rather than biological scientists, and they often argue that patriarchal customs are

the result not of innate propensities, but rather the products of the human mind, of social tradition, and of socialization practices. Appeals to nature as an authority are usually seen as reactionary or conservative appeals, because innate patterns change so slowly. Cultural constructions are seen as much more malleable, and offer more potential for change. That, and the heavily male-biased scientific interpretations of "nature" that have been offered over the past two centuries, explain why most feminists would not accept ethical naturalism as their authoritative source.

Feminism, the Naturalistic Fallacy, and Evolutionary Biology

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Arnhart argues that a scientific understanding of women's nature, achieved through primatology and related disciplines, can serve as a basis for judging social arrangements. Those arrangements that promote the expression of women's "natural potentials" should be encouraged. Based on this argument, the key issues are (1) how to determine the "natural" potential of women, and (2) how to use this information to judge social arrangements. I will begin by focusing on the second and more fundamental issue; I will return later to the first.

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References

- Fedigan, L.M. (1986). "The Changing Role of Women in Models of Human Evolution." *Annual Review of Anthropology* 15:25-66. [Reprinted in G. Kirkup and L.S. Keller, (eds.), *Inventing Women: Science, Technology, and Gender*. Cambridge, MA: Basil Blackwell, 1992.]
- Fedigan, L.M. and L. Fedigan (1989). "Gender and the Study of Primates." *Gender and Anthropology: Critical Reviews for Research and Teaching*. Washington, DC: American Anthropological Association.

Arnhart's argument that the "natural potential" of women should be used to guide social policy embodies the naturalistic fallacy, which equates what exists (in this case, biologically-rooted potential existence) with what ought to be. He argues that we should promote social arrangements that "actualize natural human potentials in ways that promote human happiness." He assumes that both the need for and the ability to pursue happiness are products of natural selection, since happiness serves as a proximate mechanism leading individuals to act in ways that, in past (and sometimes present) environments, increased their reproductive success (Alexander, 1987). He thus squarely situates his argument within the framework of modern theories of social evolution.

Arnhart, however, mostly ignores the most basic lesson of those theories: behaviors that promote reproductive success inevitably entail fundamental conflicts of interest between individuals. It is not possible for everyone to maximize their reproductive success (and, by implication, their happiness); inevitably, some individuals increase their reproductive success (and happiness) at the expense of others.

Although Arnhart briefly acknowledges that conflicts of interest between individuals do occur, he clearly does not recognize the significance of this fact. He claims, for example, that "human beings strive to fulfill their natural needs and powers" and that "frustration of that striving is contrary to nature." Modern evolutionary theory and observations of other animals, however, tell us that frus-