E. O. WILSON, STEPHEN POPE, AND PHILIP HEFNER: A CONVERSATION

The following represents excerpts from a transcription of the informal discussion that ensued after Stephen Pope and Philip Hefner delivered the preceding papers at the annual meeting of the American Association for the Advancement of Science in Washington, D.C., 20 February 2000. These excerpts are presented with a minimum of editing, to preserve the extemporaneous, informal, oral character of the conversation. The excerpts end with a fragmentary comment by E. O. Wilson, conveying the spirit of the actual conversation, which was halted when the allotted time had elapsed and the sense of the group was that areas had been opened up for further conversation that could not be continued at this meeting.

E. O. Wilson's response to Stephen Pope and Philip Hefner:

I believe that Stephen Pope is correct in characterizing what I have proposed about moral reasoning, at least metaethics, being programmatic. It is not in any means meant to be prescriptive. However, I also believe that we are in sore need of a phylogenetic theory of the origin of ethical precepts and of religious dogmas, as rich and powerful end products of a combined gene and culture evolution of the consensual, cooperative behavior that is a hallmark of the human species. We don't have such a theory in a solid or testable form at the present time. That is what I would be most interested in seeing in science-religion dialogue. I presented a rather crude model of what the steps might be leading to a sacralized version of ethical precepts of the kind that occur in traditional religion. I've never meant to be prescriptive, even when I say I don't believe in the is/ought barrier, because I think we can explain the origin of these phenomena eventually in a naturalistic way. But that doesn't mean that understanding

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the epigenetic rules thoroughly somehow translates into a naturalistic ethics which we simply define, in the way we take the measure of a protein tertiary structure, then say, that's the totality of it—nail it down and there's not much left to do. What it does instead is to establish in a firmer sense what Philip Hefner has referred to as metaphysical transcendentalism as opposed to methodological transcendentalism. Here is where I suppose my own treatment has been somewhat confrontational. I think it is extremely important to talk about where ethical precepts come from—quite apart from the vouchsafing they receive from traditional religious belief. Either they come from a source external to human existence, our evolution, such as a divine author or from non-deistic laws that exist separate from humanity, which we are the process of uncovering, or they arise from the coevolution of genes and culture. I am inclined to believe the latter, but I managed, with honesty, to say twice in my chapter on religion in Consilience, "I may be wrong." I would be less than a scientist, less than true to my naturalistic worldview, if I discounted the possibility that some discovery might be made such that a new and superior theory explaining the origin of all this behavior would be forthcoming.

I argue, for example, for the conservation of biodiversity. That is my lifelong passion, upon which a great deal of my sensibility of spiritual values is based. No surprise—spiritual feeling is fundamental in human beings. I think that's what you were addressing, Mr. Hefner, by saying that we should seek together the understanding of the phenomenon. This is my spirituality: devotion to the natural environment from which humanity arose, and with all of the overtones of wonder and honest self-evaluation and even exaltation available from which humans can benefit.

When it comes to making the impassioned arguments that I do for this spirituality, I argue for it with normative briefs. But that is not inconsistent with the view that I have of where ethical precepts come from. Indeed, the arrival at ethical precepts, modified or even developed *de novo*, in response to modern circumstance, is something that is beyond the traditional scientific domain, at least in a sense. We may understand the full principles by which we come to arrive at our decisions and our sense of the sacred and our most fundamental ethical precepts. We do so by consensus, and in this sense by trial and error—humanity has by trial and error applied its best moral reasoning to different situations, and while this has sometimes disastrously failed, it often has proved true through the millennia, enough justifiably to become part of the sacred canon. So, what I am doing is not arguing against my own ideas about the naturalistic, evolutionary origin of ethical principles or traditional transcendentalist religious belief by any means, but simply entering the fray saying: "Fellow human beings, may I make the case for sacralizing nature"—that's essentially what I'm all about in my naturalistic arguments. I entirely agree with Hefner's argument that another way in which the spirituality in traditional religion

goes beyond ordinary scientific explanation—without, however, without being uncoupled from it, in the examination and discovery of principles underlying it—is that it is indeed a delivery system comparable to art. That is a very good point to make. What is art, except first of all the perception of a circumstance, of a historic moment, and in any combination of the senses, that stirs us somehow deeply? They say that the presence of poetry is marked by the prickling of the hairs on the back of one's neck. We are led by the impulse, not to explain that response, but to transmit it through the creative arts—visual arts, music, dance, theater, prose, and poetry. And if we succeed, if we have the sense that we have been true to art, whether it is a literal description of some great event or an abstraction that produces the same, visceral reaction. If we sense that we have had that impact on the audience, we have succeeded as artists, and there is nothing to be gained by understanding all of the algorithms and combinations of sensory input and neural integration that went into the process. Yet, our understanding of those phenomena remains one of the great joint challenges of those who wish to pursue the science of human nature to the foundation and those who wish to have a theory of the arts as opposed to being creative artists.

I agree with the idea that a great deal of religion is a delivery system. We haven't got a grip yet on what spirituality is, at least I haven't. But obviously, something enormously important is tied up with identification with one's tribal group, with those who belong with you; it's the identification of something beyond humanity, a greatness to which one can lend loyalty without reservation. That's where biophilia, the innate affiliation to the natural world, enters the picture. Somehow we haven't got a grip on the phenomenon. Its explanation is yet another challenge to the natural sciences, advancing in conjunction with theology.

Religion as a delivery system operates very much like art. A funeral high mass, a consecration, the inauguration of a high official, or the burial of a hero never fails to send chills down my back. Something important is happening to me and others forgathered. There is a community of humanity among those of different metaphysical beliefs on such occasions. It comes in an instant as a spark of inspiration, as a flash of lightning, and then it passes. One would like to know what it is exactly, and in some depth, as well as understand how it can be sustained in human activity in order to bring out the best in all of us.

Question from the audience:

"Can religion function with everyone knowing it is a system of symbolism, and nothing else beyond that, nothing transcendental in a metaphysical sense?"

Philip Hefner: The theologian Paul Tillich said that if you use the words, "merely a symbol," it indicates that you do not understand what a symbol

is. I have that reaction to this question. Can people live knowing that religion is a symbol and nothing more? That's a bit contradictory, since the use of the word *symbol* means that it is something more. The point is that one has to act on the symbol, whether ethical or other action. As soon as you act on it, you are saying to yourself that it is symbolic and it is true. That's the neuralgic point.

Stephen Pope: There is a debunking use of symbolism that you find in Feuerbach, Marx, and Freud that tries to reduce the symbol to a just a human function of some kind—whether it is to repress class consciousness or repress unresolved conflicts. Identifying the symbol, then, becomes a way of unmasking the way people are oppressed by an ideology or by a delusion that has to be overcome for some kind of health or justice. I think that when religiously vibrant people who are educated reflect on the role of symbols in their faith, it is understood that the human imagination produces symbols, but symbols that in some deep way are expressive of a reality that cannot be completely expressed in human language or images. So, the symbols become, in Catholic language, sacramental, because they enable people to grow in their love of what are for them the most profound realities with which human life presents us. I think the question is whether it is only a human reality, or is it also a reality of what is divine? I think the difference between someone who reads symbols functionally, and only functionally, and someone who reads symbols in a theological, faith-inspired way is that for the latter the symbols are functions both of human realities and also of realities that enable them to live in relation to what is sacred.

Question from the audience:

"Respecting nature and protecting biodiversity are well within the purview of a survivalist human ethic, so how can they be related to spirituality or religion?"

E. O. Wilson: Well, it won't do to go back to druidism, to nature worship in any primitive sense. Yet one can make a powerful argument, an ethical argument, within the larger framework of human survival, which of course is what we do anyway, inwardly and instinctively. The global conservation community does that now, and it has a powerful set of arguments that are persuading more and more people to make a commitment to global conservation. But I digress. That is not what we are really talking about here. . . . We are asking the question: "How does one construct a culture, a symbol system of honestly derived ceremony, a literature, and a body of art, which when united have the power of a spiritual delivery system?" That is what we are talking about.

Traditional religions have had 2,500 years to develop a canon of sacred poetry and to hone the effectiveness of it. Modern science has had very little time to do the same in its attention to the natural world. It appears to me that the differential underscores the great importance of literature that

addresses the cosmos in the version presented by science. The cosmos—all of tangible material existence—is vastly more complex and affecting, when even partly known, than anything dreamed about by the late Iron Age scribes and anchorites who composed sacred scripture. Once we recognize the full potential of naturalistic explanation, we should be less inhibited—without sacrificing honesty and faithfulness to the criteria of science—to expand the reach of the creative arts. The connection is one reason that nature writing, for example, is looked on as perhaps the most original of purely American literary traditions. Perhaps this process will take centuries before it acquires the same weight and power as the traditional arts.

It is also true that such naturalistic expression in order to be successful has to be tied up with our own humanity. A lifetime of experience has taught me that you cannot transmit nature in the raw, objectively, as it actually is and gain the same response. It has to be transmitted metaphorically and symbolically into the human experience and expressed in human terms. Then it becomes art, and part of the spiritual delivery system.

Philip Hefner: I think that religion, most of the time, and your own spirituality, focuses on a sense or vision of what this natural world can become. . . . You are talking about rearranging, within the framework of the idea of biophilia, our sense of what this natural world, the other species and human beings, can be. Of course, we don't know whether that is possible, and sometimes the discussion becomes bitter, not a pleasant conversation but a bitter argument, an argument about what this world and this life can become. One reason we need symbols, myths, art—direct delivery systems to the sensibilities—is because we are talking about the future.

Stephen Pope: Paul Ricoeur, one of the most famous philosophers of the twentieth century, said about symbols that symbols live and die—they are not made, not constructed, not manufactured. It makes sense for us in a scientific and technological age to want to make symbols that people can identify with, but I think you are shifting an activity proper in one domain into another, trying to answer a need of the human spirit by an activity that it is ill-equipped to solve. If it is true that symbols cannot be constructed, it leaves a big question: Where will the symbols appropriate to the problematic Wilson lays out come from, if they cannot come from the scientific community itself?

E. O. Wilson: My argument is that, if the empiricist view is correct, then these moralities are not uncovered, they are made; in other words, they evolve.