

Embodied Religion and Science

with Philip Hefner, "Embodied Science: Recentering Religion-and-Science"; Ann Milliken Pederson, "The Nature of Embodiment: Religion and Science in Dialogue"; James W. Haag, "The Hefnerian Legacy: Rethinking the 'Nature' of Naturalism"

THE NATURE OF EMBODIMENT: RELIGION AND SCIENCE IN DIALOGUE

by Ann Milliken Pederson

Abstract. What is embodiment? And how does this notion apply not only to science qua science but also to the conversation between religion and science? I offer a descriptive analysis of an embodied conversation between religion, science, ethics, and technology. The domain of embodiment is one in which the participants practice humility in the face of others, become aware of their own limitations and finitude, bear witness to the other's finiteness and limitations, take account of the sociocultural atmosphere, and acknowledge the ethical weight of the conversation for all involved. I offer examples of how this tangled knot of emergent practices is put into play, examples that expand upon some notions of what conversations between religion and science should be like.

Keywords: bearing witness; embodiment, finitude; objectivity; practice

Regarding Philip Hefner's essay "Embodied Science: Recentering Religion-and-Science" (2010), I ask: What is embodiment? And how does this notion of embodiment apply not only to science qua science but also to the conversation between religion and science? As applied to science and to religion, Hefner suggests that embodiment is lacking in the religion-and-science dialogue, often leaving the conversation with disappointing results. Hefner, like Donna Haraway upon whom he draws extensively, claims that the current cultural trend is to consider science as "a realm of pure ideas. . . ."

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scientific ideas are held to be impersonal knowledge of a world that is objectlike and value-free” (p. 254). He claims that the religion-and-science discussion has followed suit. I believe that Hefner would define an embodied science (and religion) as one that is messy, value-laden, historically situated, and culturally embedded.

I offer a descriptive analysis of an embodied conversation between religion, science, ethics, and technology. The domain of embodiment is one in which the participants practice humility in the face of others, become aware of their own limitations and finitude, bear witness to others’ finiteness and limitations, take account of the sociocultural atmosphere, and acknowledge the ethical weight of the conversation for all involved.

We have long talked in this American Academy of Religion group¹ *about* religion and science as if the conversation were located in the domain of pure ideas instead of the disciplines as they are practiced by particular individuals. We need to acknowledge that embodiment itself is not an abstract idea but that it emerges through the practices of folks in specific disciplines. How does an embodied conversation work?

I think that Hefner might find Haraway’s definition of feminist inquiry helpful as a model for how an embodied discipline functions: “. . . feminist inquiry is about understanding how things work, who is in the action, what might be possible, and how worldly actors might somehow be accountable to and love each other less violently” (Haraway 2003, 7). She asks: “How can people rooted in different knowledge practices ‘get on together,’ especially when an all-too-easy cultural relativism is not an option, either politically, epistemologically, or morally? How can general knowledge be nurtured in postcolonial worlds committed to taking differences seriously?” (2003, 7) Haraway’s answers to these questions come in her most recent work on the relationships between the companion species of dog and human. We might apply these answers to the concerns about how folks in religion and science relate to one another:

Answers to these questions can only be put together in emergent practices; i.e., in vulnerable, on-the-ground work that cobbles together non-harmonious agencies and ways of living that are accountable both to their disparate inherited histories and to their barely possible but absolutely necessary joint futures. For me, that is what significant otherness means. (2003, 7)

I agree with Hefner’s concern that a realm of pure thinking exists mainly in journal articles and textbooks, or doctrines and creeds—it doesn’t represent how science or religion actually happens. To imagine ideas as pure, as somehow being untainted from the mess of daily living and personal biases, simply reinforces the notion that what really counts as real and true in our world is untainted and unambiguous. In fact, I suggest that there is no such thing as a pure idea and that the realm of “the really real” is always the domain of embodiment. To understand embodiment is to reflect on the narrative and myth, as Hefner explains so clearly.

Although the following narrative examples from South Dakota may seem somewhat parochial, I offer them to illustrate the way religion, science, ethics, and technology are embodied.

Our myths tell us something about who we are and what we value in life. We need only to recall the early twentieth-century movements of eugenics to realize the danger of how seemingly pure ideas can be practically carried out to mythic final resolutions. The sciences of genetics were transmuted by the early twentieth-century cultural practices of racism, classism, and sexism. Sir Francis Dalton's ideas were incorporated in horrific ways by practices of the United States government. Persons who were seen as tainted or impure were quarantined, sterilized, and exiled. About twenty miles from Sioux Falls, South Dakota, in the small town of Canton, is a small plaque acknowledging the existence of The Hiawatha Asylum for Insane Indians. The story about this asylum reveals how one culture sought to put away those whom they deemed impure, who didn't fit the standards of sanity of the dominant culture. I, like many South Dakotans, did not know of this asylum until recently. Today it no longer exists except in the memories of those who come to pay respect to their ancestors. Although we all hope that nothing happens like this again, we should be aware that the poorest counties in the United States are on the reservations of South Dakota. The culture of poverty and its ensuing mythology shape the stories of today's engagement between religion and science.

The Hiawatha Asylum for Insane Indians was intended to be a hospital dedicated solely to the "mental illness problem" among Native Americans. What it became was a kind of warehouse for storing problem Indians. Republican Senator R. F. Pettigrew of Sioux Falls was the sponsor and creator of this institution. When the asylum was visited in its later years, the following was noted in a report played on Minnesota Public Radio: "The Indian affairs commissioner under President Roosevelt called reports of the asylum reminiscent of the terrible indictments Charles Dickens leveled against English poorhouses and schools" (Stawicki 1997). More information about the asylum's operations came from the writings of Dr. Samuel Silk, the Clinical Director of the country's premier psychiatric hospital, St. Elizabeth's in Washington, D.C. He wrote that children were abused and adults were secluded in isolation for years. The asylum did not meet even minimum standards of care. A University of South Dakota history professor said, "The great fault was not in investigating how Native Americans dealt with insanity prior to the arrival of whites. So we took Western European strategies of dealing with insanity. It really was a well-intentioned desire to accomplish cultural imperialism without killing Indian people. And this was a part of it" (Stawicki 1997).

This story reinforces Hefner's understanding about myth, and about "the way things really are." The ambiguity and horror of the Enlightenment myths of white supremacy and human progress nearly wiped out an

entire culture. The Lakota people, whose wisdom was discounted and nearly lost, still struggle with “the way things really are.” When the asylum closed in 1933, the patients were moved to St. Elizabeth’s in Washington, thousands of miles from their families. Today members of Lakota Nation’s Yankton tribe hold religious ceremonies in honor of their friends and family members.

The metaphors and myths of madness still resound in the halls of medical institutions in the early twenty-first century. We put away or drug those we deem impure. Just how powerful the lessons of this story will be for us hinges on whether we consider some ways of human knowing and becoming as true and valuable as other more dominant Western ways of knowing have been valued. Hefner’s question haunts us: How can the wisdom of premoderns be accessed by moderns?

At one level, no medical practice by a doctor should seem more untainted or unambiguous than calling the time of a patient’s death. And organ donation seems like a relatively unambiguous decision for most families to make, or for individuals to make when they check the donor box on their driver’s license. However, a recent article in the *Washington Post* reports that the sciences and technologies that help us to define when life ends and begins are complicated by the need for more human organs. The article cites the *New England Journal of Medicine*’s recent story about a children’s hospital in Denver, Colorado, and claims that this issue of organ donation takes us to the “far edge of this tortured world” (Saletan 2008). At the Denver hospital, hearts of infants were removed seventy-five seconds after they stopped beating and were put into new bodies. The author asks, “Is this wrong? We like to think that moral lines are fixed and clear: My heart is mine, not yours, and you can’t have it till I’m dead. But in medicine, lines move. . . . How can we get more organs? By redefining death” (Saletan 2008). The article explains that the criterion of brain death allows doctors to use organs from persons on ventilators when brain function has ceased. Now we have “donation after cardiac death,” which allows for organ procurement after heart stoppage instead of brain stoppage.

This story makes it sound as though we are in some dystopic future where organ transplantation occurs at the expense of others. Individuals are simply used as means to someone else’s end. In *Never Let Me Go*, a contemporary novel by Kazuo Ishiguro (2006), we are led into the not-so-far-away future in England where humans are cloned for the sole purpose of becoming organ donors. Because the clones are not viewed as humans with a soul, those who receive their organs can do so with little guilt or remorse. We readers would like to think that we are not like “those people” in the book, that we are far away from the world created by Ishiguro. And yet we know that boundaries of life and death are constantly being redefined in light of our need to improve the human condition. When we fail to recognize our limits, our finiteness, we become nothing more than soulless clones.

How do we define life and death? Hefner notes: “The research results of embodied science do not present us with univocal (‘of one voice’) testimony, with one clear meaning for us to act on. The word ambiguous indicates that we are faced with more than one possibility for action. Consequently, we must decide, and the decisions frequently are difficult and full of risk” (Hefner 2010, 254).

I may be overstating the case, but I think that our need to remain in the realm of pure ideas, or pure doctrine revealed from above, exposes our attempt to deny that we are embodied creatures. If we are truly, as Hefner notes, in and with a culture, we are also truly in our bodies. We don’t have our ideas and bring our bodies along with them. Any possibility for transformation of the human condition must keep in sight the limits of the human condition. Mortality is a terminal illness we all face. As Hefner notes, science (and I would add religion) is ambiguous precisely because it is such a thoroughly embodied human art and practice. The arenas of medicine and biotechnology are replete with difficulties, risks, responsibilities, and issues of control.

In *The Lazarus Case: Life-and-Death Issues in Neonatal Intensive Care*, John Lantos writes a drama of how the NICU raises poignant ethical dilemmas. A professor of pediatrics at the University of Chicago, Lantos walks the fine line of professor, ethicist, and NICU physician. He writes about specific cases and views them as “constituting a sort of cultural locator, an indication of where and how our culture tries to understand and to frame the tough issues raised by the double-edged sword of neonatal intensive care, and by analogy, other innovative medical interventions” (Lantos 2001, xiii). He explains that cases are really stories riding on “the current of different narrative streams” (p. 5). In the NICU, boundaries between life and death shift, creating on-the-moment, on-the-run conversations and decisions regarding ethical dilemmas. Those involved in the decisions cannot retreat to the abstract ethical principles of patient autonomy, justice, beneficence, and nonmaleficence. Decisions are necessarily ambiguous—scientifically, technologically, spiritually, and ethically. Choices have to be made. Now. The moment presses urgency.

Lantos notes that the history of creating technologies for saving premature babies has a track record of creating economic profit for hospitals. So, he explains, our notions of right and wrong change as our economies change (p. 13). Also, “NICUs set themselves apart from the society and developed their own particular moves” (p. 19). Physicians in the NICU setting, who Lantos claims often live in their own world, may not acknowledge their practice of medical science as morally freighted or as embodied.

The NICU is a great example and metaphor of what Haraway and Hefner call technoscience and technonature. Lantos notes the eerie setting of the NICU:

The babies seem almost, but not quite, human, but not quite fetal. In their chimerical, half-human, half-machine state they seem not only helpless and pitiful, but also exotic, threatening, futuristic, feral, untamed, barbarous . . . they shouldn't be there so vulnerable and so dependent on the machinery and technology of medicine . . . they are real little people, and this spaceship, this high-tech roller coaster, this cyber womb, is their introduction to life on earth. (pp. 28–29)

So, in a world of high-tech ups and downs, we make decisions about how to improve the human condition. But we rarely acknowledge that these technologies and sciences reflect the wild swings of our culture's ups and downs. Such is the market nature of embodiment.

Embodied practices acknowledge the context of limitations and finitude. Lantos notes that centuries ago doctors gave suffering and death a context and a meaning: "They created a moral framework for dealing with the limitations of being human, of getting sick, suffering, weakening and dying" (p. 68). Recognizing and practicing medicine by doctors in this land of finitude shapes the kind of care and nature of compassion their patients will receive. To be embodied is to acknowledge the cost of being human. We might wish: "If only science and technology were created with pure ideas and ethics were simply practices offering clear answers through the use of abstract principles" (p. 68). But they are, finally, finite practices done by finite humans. And herein lie the costs and benefits, the risks and responsibilities, the possibilities for improving the human condition.

The realm of the pure and abstract can lead us to contain and quarantine the imperfect, the abnormal—those who don't fit into our categories. Consider the application for a driver's license. Are you male or female? No in-betweens. And yet, for one in every one thousand births the answer would be "yup." The science and classification of gender and sex fit the categories of our culture but not the reality of those who embody it. Even the science of sex and gender selection is at odds with itself. Although slices of brains are studied for male and female differences, babies are born in hospitals where doctors and nurses decide on the sex of the ambiguous, intersex child, who never knows what happened until years later. Why are we so uncomfortable with three or even five sexes instead of two? Why isn't "yup" an option on the driver's license? Our pure ideas of sex and gender resist ambiguity. The young bodies of intersex children, once relegated to freak shows or the circus, challenge our pure notions of male and female, of masculine and feminine.

The notions of the pure and unambiguous lead us away from the understanding of what it means to be embodied. In her work *When Species Meet* Haraway states: "Because we have never been the philosopher's human, we are bodies in braided, ontic and antic relating" (2008, 165). Bodies are constructed; they emerge through our relationships and practices with each other. Embodiment is a knot or web of becoming. Haraway's recent work with dogs as our companion species is an acknowledgment of

the complexity of what it means to speak of embodiment: “My point is simple: Once again we are in a knot of species co-shaping one another in layers of reciprocating complexity all the way down. Response and respect are possible only in those knots, with actual animals and people looking at each other, sticking with all their muddled histories” (Haraway 2008, 42). To speak of embodiment is to respond to the knots of practices that connect the academic worlds of religion and science to the cultures they inhabit. Haraway’s methodology is helpful: “I think we learn to be worldly from grappling with, rather than generalizing from, the ordinary. I am a creature of the mud, not the sky” (2008, 3). We are more like the mutts of the dog park than the pedigrees of the show ring.

In a recent article from the *Journal of Medical Ethics* I read about Oscar Pistorius, who was “born without fibulas and had both legs amputated below the knee when he was 11 months old” (Camporesi 2008, 639). He runs and competes now with prosthetic devices. In 2008, the International Association of Athletics Federation (IAAF) discussed whether or not he could compete in the Olympics. Enter the questions from the transhumanist: “Is it ethically right to enhance our species with the aid of technology or genetic interventions?” (p. 639) This is hardly a disembodied issue. Pistorius’ dilemma raises all kinds of questions. Elio Locatetti, who is with the IAAF, even questioned whether or not the purity of the sport would disappear. The article ends with this very interesting comment that gets to the heart of Hefner’s critique about purity in science: “His case is a snapshot into the future of sport. It is plausible to think that in 50 years, or maybe less, the ‘natural,’ able-bodied athletes will just appear anachronistic. As our concept of what is ‘natural’ depends on what we are used to, and evolves with our society and culture, so does our concept of ‘purity’ of sport, and our concept of how an Olympic athlete should look” (p. 639). What appears as natural will soon seem anachronistic. How we define *normal* has to do with what we are used to and with the evolution of ideas in our culture. This experience of “what we are used to” is rooted in the experiences of and stories about our technocultured bodies.

Back to the intersex children born in hospitals. If what we are used to is a strict dualistic sex and gender classification of male or female, what on earth do we do with these little bodies? For many, their sex and gender are surgically chosen within a few weeks of birth. The child undergoes multiple surgeries, many of which can cause disfigurement and pain. What if “what we are used to” could change so that we might be open up to more than two sexes? What if the sciences of sex and gender realize that “what we are used to” does not fit all bodies and is not natural for every body? There are anthropological studies of cultures that use categories to interpret gender in multiple ways.

Back to purity. In South Dakota, we are being visited from near and far (even a reporter from France) as once again we vote on legislation that would

ban all abortions except in the case of the mother's health or reported cases of rape and incest. In this same state is Hematech, a company creating transgenic species. The cattle live next door, in Iowa. Haraway notes that "transgenic border-crossing signifies serious challenges to the 'sanctity' of life for many members of Western cultures, which historically have been obsessed with racial purity categories authorized by nature, and the well-defined self. The distinction between nature and culture in Western societies has been a sacred one" (Haraway 1997, 60). When these distinctions between species collapse, so do the universal definitions of what is natural, of what it means to be human. Haraway notes, as does Hefner, that what is at the heart of biotechnologies is "power, profit and bodily rearrangements" (1997, 61). Ironically, we pay no mind in South Dakota to Hematech's shadow, which is near the parking lot of Planned Parenthood. Across the street from each other the powers and politics of reproduction let loose in a state unwilling to see their connections. Like Hefner, Haraway claims: "It will not help—emotionally, intellectually, morally, or politically—to appeal to the natural and the pure" (1997, 62). In the medical and biotechnological worlds of South Dakota, strands of these various stories come together in complicated ways. The babies in the NICU are linked to the calves of their transgenic mothers through the power and politics of reproduction. Science and religion engage amid these discourses, often plagued with either/or options.

No science studies embodiment more directly than that of human anatomy. Christine Montrose, in *Body of Work: Meditations of Mortality from the Human Anatomy Lab*, remarks: "The human body harbors mysteries that are not solved by text books or studying, and, as I have been confronted with them, I have found myself amazed, humbled, and unnerved" (Montrose 2007, 4). She takes the reader on a journey with her as a first-year medical student into the human anatomy lab. She confronts her fears and the world of medicine's relationship to the body—at once very intimate and very detached. In some medical schools, the cadavers are giving a kind of ceremonial blessing by the medical students before they begin dissection. Such a ceremony acknowledges the gift of the body.

The anatomy lab, along with other arenas of medical practice, brings the physician or medical student into the tension of the drama of the human body. Medical school curricula are changing, but many physicians are still taught to stay at a safe distance from their subject of work, the human person. Detachment is necessary at some psychological and emotional level for the physician or medical student. But when the detachment is reinforced with notions of pure objectivity, it creates a kind of science removed from the finitude of the human body. Detachment must be embodied as compassion in order to link the doctor to the humanity of the body being dissected.

Montrose notes the differences between how corpses are dissected today from the way they were a couple of centuries ago: “But we deal with far fewer of the realities of the corpse. Our cadaver shows no signs of decay. It harbors no timeline of rot, no trace of earth clinging to the skin, harking back to an abandoned grave” (2007, 60). Death is sanitized, medically and culturally. In a culture driven to keep life pure, clean, and healthy, we are afraid to face our limits, including death. With great irony, Montrose notes: “To that end, we are left in a profession with the pretense of untouchable greatness and infallibility, but one whose members kill themselves more than any other” (2007, 205). Let us hope, along with Hefner, that we, too, are not left in a conversation with the pretense of untouchable greatness and infallibility, but that instead we can create a body of work that “understands how things work, asks who is in the action, dreams about what might be possible, and hopes that as worldly actors we might somehow be accountable to and love each other less violently” (Haraway 2003, 7).

NOTE

1. A version of this essay was delivered at the annual meeting of the American Academy of Religion, Chicago, Illinois, 2 November 2008.

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