

Regional

Pearson studies philosophies, ethics of science

Scientific discussions have become the source of controversy in the public arena, particularly when dealing with topics such as evolution or climate change. As a result, more and more scholars have added their voices to the arguments on these subjects.

One such scholar is Dr. Chris Pearson. Pearson was born in Madison, Wisconsin. He received his bachelor's degree in Philosophy and Zoology from the University of Wisconsin-Madison, his master's in Philosophy from Northern Illinois University and his doctorate also in Philosophy from the University of Washington at Seattle. Today, he is an assistant professor of Philosophy at Southern Illinois University Edwardsville.

The word philosopher comes from the Greek word for "lover of truth." For Pearson, that encompasses any person who is intellectually curious. "It is becoming more and more common that philosophers start to turn to the sciences to address traditional questions in philosophy and the role, then, for the philosophers is to look at the data that scientists usually gather and talk about how to interpret the data and what are the implications for that data. Those are things that philosophers can do," he said.

That does not mean that philosophers of science don't have to specialize. "Specialization is key to making a contribution," Pearson said. "The fact of the matter is that people know so much about so many different things that if you are going to do something new, you are going to say something that is interesting to people, you have to know a lot of stuff, he said. "If you are going to say something interesting about interpretations of quantum mechanics, then you have to know what goes on in quantum mechanics. You cannot advance in the field unless you have the expertise, and that expertise is going to demand so much attention

Aldemaro Romero College Talk

that people end up being very restricted," Pearson said.

One of the areas in which he has worked is developmental biology or embryology, as it was known years ago. Developmental biology has become a hot topic because of the issue of stem cell research. "Yes, 25 years ago there was very little presence of philosophical attention to developmental biology but it has increased more and more," Pearson said. One of Pearson's papers draws from the history of embryology to focus on the wrong conception of how development works.

For Pearson, many public misconceptions are rooted in fear. "Ten, fifteen years ago, there was a decision in Pennsylvania that restricted intelligent design theory from being taught in public schools and as part of that decision, the judge took expert testimony from one of the philosophers of science who testified in that case, Robert Pennock," he said. "Pennock has a great book called 'The Tower of Babel.' One of the things he emphasizes is that since the scientific revolution, as far as science is concerned, one of the principal guiding rules is that you cannot invoke supernatural explanations (ghosts, gods, demons) when you start to try to explain things," Pearson said.

And that brings up another question. Are there things designed in nature and if so, who is the designer, Pearson asked. For example, is the fatty, white polar bear designed to live in Antarctica? "Clearly the polar bear is too well adapted to its environment with the fat and the fur," he said. "So when we think about design, design seems to

be the appropriate alternative. Then, we start to move in this direction of an intelligent being, but the crucial revolutionary thing in biology is that with Darwin, there was an opportunity to think about design a little bit differently," Pearson said. "Nature designs, but Nature designs differently than an intelligent, engineering-type designer. So what Darwin provided was a design explanation without a designer and what you need to then understand is how evolutionary theory works with respect to selection on a randomly emerging variation," Pearson said.

Some of Pearson's latest work has to do with environmental philosophy. "A lot of work environmental philosophers are presently engaging in concerns issues that surround climate change. These issues can run a whole gamut of things," he said. Pearson believes that traditional questions in environmental philosophy have to do with the value of nature, whether nature has a value independent of humans. "In the case of climate change, you have things like questions regarding obligations to future generations," he said. For Pearson, these are interesting and difficult questions to answer because they imply an obligation to beings who do not yet exist. "So, what a lot of environmental philosophers are doing is that they take this kind of core questions about values and future generations and then look at contemporary issues like climate change and see what they can contribute to try to understand ethical obligations," Pearson said.

Aldemaro Romero is the Dean of the College of Arts and Sciences at Southern Illinois University Edwardsville. His show, "Segue," can be heard every Sunday morning at 9 a.m. on WSIE, 88.7 FM. He can be reached at College_Arts_Sciences@siue.edu.



Photo by Stephanie Miller

Dr. Chris Pearson at the Field Museum of Natural History in Chicago.