The Rev. Jennifer Amy-Dressler Zion United Church of Christ Poland, IN

Beyond Intelligent Design Ps. 104; Romans 8:18-23 – 10/30/05 ("Fifth Sunday with Professor Steve")

To go from the sublime to the ridiculous: There is a fun little scene in Disney's **The Lion King** in which two oddly matched best buddies – a meerkat called Timon and a warthog named Pumbaa – are lying under the night skies with the soon-to-be-lion-king Simba, gazing up at the stars. Like the writer of Psalm 8, it sets Pumbaa, the warthog, to wondering. He asks Timon, "Ever wonder what those sparkly dots are up there?"

Timon answers matter-of-factly, "Pumbaa. I don't wonder. I know. ...

They're fireflies. Fireflies that uh... got stuck up in that big... bluish-black... thing. "

"Oh. Gee," Pumbaa says. "I always thought that they were balls of gas burning billions of miles away."

And Timon responds to his friend, who has a well-known problem with flatulency, "Pumba, with you everything's gas."

This exchange captures the crashing of worldviews in Europe during the 16th and 17th centuries. The rise in a new way of thinking was drawing Europe out of the medieval age, coinciding with and influencing the economic, technological, and social upheavals of the times, not to mention the Protestant Reformation and wars of religion. Europe was entering the Enlightenment, the Age of Reason. Modern science was being born. Perhaps, had there not been

1

so much else going on to challenge Church authority, the early split between faith and science would not have been so extreme. But then again, all these areas of human existence are interrelated. Progress in technology meant increase in wealth; it also meant increase in exploration, to secure political power over the resources that provided wealth and power. Economics, social rearrangement, the rise of the middle class, conquering and vanquishing, restlessness for individual freedoms – it's a complex and total reforming of how western Europe operated, lived, thought, believed, everything. And one piece of it all was the rise of a new way of knowing: the rise of science.

Here's a helpful quotation I came across in my preparations this past week: "A common misinterpretation of science is that science defines 'truth.' Science does not define truth; rather, it defines a way of knowing" ("The Scientific Method," by Anthony Carpi, Ph.D., at www.Visionlearning.com./library/module_viewer.php?mid=45). Science does not define truth; it defines a way of knowing. It is a way of knowing that opened the universe to humanity in ways we could never before apprehend it. Science employs a simple but critical procedure that allows us to gather knowledge about the physical creation with minimal bias. This is the scientific method, learned by every schoolchild in preparing a science fair project:

- <u>Observation</u>: observe and describe with as much quantifiable detail as relevant and available a phenomenon or group of phenomena
- <u>Hypothesization</u>: think imaginatively but reasonably to formulate a
 possible and likely explanation of the phenomenon.
- <u>Prediction</u>: use the hypothesis to predict the existence of the same kind of phenomenon, or the same quantitative results of new observations.
- <u>Experimentation</u>: design and perform experiments to test the predictions, and thus the validity of the hypothesis.
- If the results fail to consistently uphold the hypothesis, check not only the
 details of the experimental method, but consider revising the hypothesis,
 or discard it completely. If the results confirm the predictions, and are

repeatable by other experimenters elsewhere under similar conditions, the hypothesis becomes a theory.

It's also helpful to remember that in science, a theory is not "just a theory," as we use the term in ordinary conversation. A theory serves as a framework for understanding something about the world, whether it is in medicine or physics or chemistry or electricity or whatever the scientific field might be. It may help to remember that there is no absolutely proving any theory. Theories hold as long as they serve. They are never proved, but they may be disproved when an alternative theory does a more consistent job of explaining the observations, the data. Thus, thanks to Galileo's careful observations and experimentation, the understanding that the earth was the center of the universe – Ptolemy's theory – was displaced by the model offered by Copernicus, that the sun was at the center and the planets revolved around the sun. Likewise, Newton's laws of matter and energy, which hold true at the macro level, were swallowed up in the theory of relativity, which does a better job of explaining the universe at micro levels. And new understandings in biology and chemistry help us understand better how the human body works, and how we might win the battle against the ravages of disease.

Medicine, communications technology, even safe design and construction of buildings – these are just a few examples of the tremendous gifts that come to us through science. Advances that improve quality of life came only through the scientific revolution. One might argue if God couldn't have done it differently, but the point is that this is what God has provided, allowed, done. Think of what you have received in medical care in your life. Without the work of modern science, how many of us are sure we would still be here today, or that we even would have been born? The earliest modern scientists were steeped in Christian faith, and most were themselves devout Christians. John Calvin loved to dabble in science, to read and learn. To him, science inspired wonder and awe, especially wonder in God's natural order and laws, as it had for the writer of Psalm 104.

There is also the wonder inspired by that which we do not understand. Wendell Berry, a contemporary rural writer, describes in one of his poems an almost mystical experience on a Sabbath walk: "Design [by which he means personal intention or pre-judgment] / Now falls from thought. I go amazed / Into the maze of a design / That mind can follow but not know, / Apparent, plain, and yet unknown... ("Thrush song, stream song, holy love" from 1982, as printed in **A**Timbered Choir, by Wendell Berry; Washington DC: Counterpoint, 1998). The study of science increases knowledge, provides tools for improved life and improved understanding of creation, and inspires awe and wonder. Perhaps a less flamboyant Galileo and a less fear-ridden Church would not have confused the gifts of scientific knowledge with other ways of knowing and the gifts they bring us, too.

Because certainly science does not provide everything necessary for "the good life," much less deal with questions that are beyond that of the quantifiable, measureable universe. Some scientists and philosophers of science fall prey to pride, believing science can and does (or soon will) know everything that is real, everything that matters, everything that is true. But there is a whole realm of non-quantifiable experience which gains little if anything from scientific method or theories or ways of thinking. Science can give us the secrets of the atom, but it cannot guide us what to do with nuclear potential. Science in and of itself cannot address questions of value, moral questions, ethical issues. It provides information but it truly cannot tell us how to use the information. Science can clone cells, and may learn to clone successfully large numbers of animals or even humans, but it cannot tell us if we SHOULD do this. Scientific procedures are applied in sociology and psychology and anthropology, but these are called "soft sciences," because they touch into realms that science alone is insufficient to address. Science can add nothing to nor take anything from Paul's understanding that all creation is in bondage to sin, that sin is not just a human psychological phenomenon but a reality of existence. Science is just not this

kind of knowledge. I think God knows that some things are simply too important to be left to mere "proof."

Scientific knowing and other ways of knowing – intuition, imagination, and faith – have been too easily cast into opposing camps. What a shame; what a loss. Because science and faith are intended by God to be complementary ways of knowing, not opposing ways. (By the way, I can't "prove" that statement, not even by quoting scripture passages to you!) That's why Timon, Pumbaa, and Simba can all be "right" in what they "know" from the heavens. Timon, despite his obvious closed-minded pride, has an imaginative knowledge that, if he controls his pride, can animate creativity. Pumbaa has scientific knowledge that accurately describes physical reality according to the best theories. And Simba – who recalls and believes that the stars are the former kings who have gone before and watch over him – Simba has religious knowledge, faith-knowing, that speaks to spiritual reality. As Christian writer Madeline L'Engle has emphatically insisted, "The Bible isn't factual; it's TRUE." She stands in a long line of theologians from the days of Augustine and before, recalling that the first interpreters of scripture read it allegorically, and that Jewish interpretation has for centuries found new truths in scripture instead of one right or literal interpretation. Yet L'Engle also explores the points of convergence between science and faith. For example, the twentieth century French priest and scientist Teilhard de Chardin wrote passionately that gravity – the attraction between physical bodies was a physical manifestation of divine love, which is in essence the coming together of all things in God, the holy longing to overcome the separation of sin. Today, quantum physics includes what is called "chaos theory" – the insight that the laws of universe cannot function without an utterly inexplicable, unpredictable variable. Many theologians see this as the way in which prayer and the free will of God may play into events such as evolution or remission of cancer. Is this "intelligent design"? Oh no; oh no. This is something far more mysterious, far less nameable. God is beyond even "intelligent design." May we never fear to know whatever God allows us to know, in any realm of knowledge. May we

never fail to watch out for the danger of fear and the danger of pride. May we always celebrate the One who is in and beyond science, in and beyond scripture, in and beyond us and all creation, setting us free in Christ! Amen.