On science and theology

Introduction

A few first steps:

- 1. Be clear, consistent, and fair about the nature and aims of "science"
- 2. Be clear, consistent, and unsentimental about the nature and tasks of "theology"

How should Christians understand "science"?

1. "Science" and "scientific" are words with several common meanings. Consider these uses:

"What is your favorite subject?" "Science. The tests are easy, and the homework never takes much time."

Science is...

"Did you see the article on bagels in the New York Times last year?" "Yes, I did. I was amused that the author took a scientific approach to his cooking: three months of experimenting; 300 bagels tried; he weighed out *precisely* 3 grams of lye."

Science is...

"[F]or many of us, myself included, the central question in philosophy at the beginning of the twenty-first century is how to give an account of ourselves as apparently conscious, mindful, free, rational, speaking, social, and political agents in a world that science tells us consists of entirely mindless, meaningless, physical particles. Who are we, and how do we fit into the rest of the world? How does the human reality relate to the rest of reality? (John R. Searle, *Mind*, 11)

Science is...

- 2. Why Christians should understand "science" as "natural philosophy"
 - It reflects ancient way to understand the world

Philosophy since the Presocratics has dealt with "the problem of understanding the world in which we live; and thus ourselves" (Popper, 184).

• The "science" of the early modern "scientists" was "natural philosophy"

E.g., Newton's Principia was "Mathematical Principles of Natural Philosophy"

• Science as natural philosophy is highly influential and poses the hardest theological questions to contemporary Christians

What kind of natural philosophy is science?

To say something is a "natural philosophy" is to say it claims to be *our best possible explanation of everything*.

What kind of natural philosophy is science?

1. It assumes everything is made of basic ingredients.

Richard Feynman (20th century physicist)

If, in some cataclysm, all of scientific knowledge were to be destroyed, and only one sentence passed on to the next generation of creatures, what statement would contain the most information in the fewest words? I believe it is the *atomic hypothesis* (or the atomic *fact*, or whatever you wish to call it) that *all things are made of atoms—little particles that move around in perpetual motion, attracting each other when they are a little distance apart, but repelling upon being squeezed into one another.* In that one sentence, you will see, there is an enormous amount of information about the world, if just a little imagination and thinking are applied....

2. It assumes everything works according to rules

"Laws of nature," "physical laws"

This has been called "the Ionian Enchantment." It is the "belief in the unity of the sciences—a conviction, far deeper than a mere working proposition, that the world is orderly and can be explained by a small number of laws" (E. O. Wilson).

3. It is critical, not dogmatic

It is "critical" because allows all claims to be subject to testing.

It is not "dogmatic" because nothing has to be accepted just because someone said or because "we've always done it that way."

Whether this is always observed is another question!

Why the "critical" attitude? Because science ultimately answers to the world.

Science is a way of understanding and getting around in the world, and it can only be right if it is actually consistent with the world.

4. Modern science is "empirical": Its conjectures are subject to empirical testing

What is a valid criticism for a scientific theory? One that the world itself yields. The world cannot *verify* a theory, but it can *refute* it. And so, as Richard Feynman said, "The principle of science, the definition, almost, is the following: *The test of all knowledge is experiment*. Experiment is the *sole judge* of scientific 'truth'" (2).

5. Modern science is "mathematical": Everything is understood in mathematical terms

The first major scientific figures, including Copernicus, Kepler, and Galileo, were firmly convinced that the world was mathematical. The success of modern physics only reinforces this conviction.

As a result, the world is understood primarily as inert and valueless. Qualities like color and values like good are secondary. They are subjective—personal—not objective.

What is the aim of science as natural philosophy?

1. Modern science, like ancient Greek philosophy, inquires about "the nature of things as a whole" (Kirk and Raven, 74, about Thales as the first Greek physicist).

Cf. Kirk and Raven about the ancient Ionian philosopher Anaximander: "... the first of whom we have concrete evidence that he made a comprehensive and detail attempt to explain all aspects of the world of man's experience" (100).

- 2. Modern science aims to explain all things in terms of fundamental stuff and fundamental laws.
- 3. Modern science aims to let the world decide how it is doing.
- 4. Modern science and modern philosophy are converging on their aims

We have observed already that science bears the marks of "philosophy." Contemporary philosophers are recognizing their task in light of science.

Once again, John Searle:

How, if at all, can we reconcile a certain conception of the world as described by physics, chemistry, and the other basic sciences with what we know, or think we know, about ourselves as human beings? How is it possible in a universe consisting entirely of physical particles in fields of force that there can be such things as consciousness, intentionality, free will, language, society, ethics, aesthetics, and political obligations? Though many, perhaps most, contemporary philosophers do not address it directly, I believe that this is the single overriding question in contemporary philosophy (*Making the Social World*, 3).

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