## How Things Really Are Actually and Potentially

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## 1 Introduction

There is a great war raging. It is a cultural war between Western Civilization and her enemies. By "Western Civilization" I mean what eventually emerged from the confluence of ideas in ancient Israel and classical Greece. First, these ideas became intertwined in the production of the Septuagint; then they were united in the minds of Christians, who conquered the declining Roman empire from within, defended Europe against the onslaught of Muslim invaders, and finally established a new civilization that produced modern science<sup>1</sup> and laws respecting the rights of man. Western civilization has many enemies, but perhaps her most serious enemies are atheism on the one side and Islam on the other. The atheists, like the Muslims, deny the Hebrew basis for universal human rights; they deny that every human being is an image of God. The atheists, like the Muslims, also deny the Aristotelian metaphysical basis for understanding reality. The present talk is motivated by my interest in one, narrow aspect of the great war: the attack on Western Civilization, ironically, by the those who, espousing scientism and scientific realism, imagine themselves to be advocates of modern science. So I point to a philosophical front in the war: the conflict over how things really are.

The story of the conflict begins in ancient Israel. The relevant idea from *Genesis* is that things have not always existed. God, Who is not a thing, initially created things from nothing. Although a new thing might come into existence from pre-existing things, which are transformed somehow into the new thing, there was in the past a beginning when the first things were created ex nihilo, not by transformation. The fundamental distinction made by the ancient Israelites is between God and what God creates.

Another thread of the story begins about 2,500 years ago with Thales of Miletus, the intellectual patriarch of classical Greek philosophy. Much as the tradition of Abraham

<sup>&</sup>lt;sup>1</sup>The terms "science" and "scientific" are by etymology misleading. In Latin, the verb "scire" means "to know," but what we call a "scientific theory," is in many cases something that can never be known as a truth. There are, of course, truths in modern science; primarily, these are *observational* truths: Every repeatable observation is a truth of modern science. Further, a scientific theory that refers only to perceptible things might in principle be a truth, if it be a descriptive theory, such as the arrangement of the bones in the human body. However, a scientific theory that refers to something imperceptible, like the electron for example, might some day be superseded by a new theory making no reference to the imperceptible thing. Its existence in reality is not certain, and so the theory referring to it cannot be known as a truth.

culminated in the writing of Moses, the tradition of Thales culminated in the writing of Aristotle. The relevant idea from Aristotle was intended to explain the production of a new thing by transformation from another thing: For a thing to change is for what existed only potentially in a thing to become actual. The fundamental distinction is between actuality and potentiality. This distinction is the root of what has come to be called "Aristotelian metaphysics," and any theory about what lies at the root of being or becoming is now called "a metaphysical theory."<sup>2</sup>

When, after having been lost for a time, Aristotle was reintroduced into the West by Saint Thomas Aquinas, he perfected the metaphysical theory so that it could explain not only change by transformation but also creation ex nihilo. Aquinas showed how, even if there had been no beginning in time, there would still be creation ex nihilo at every moment in time! Ironically, although Aristotle's metaphysical theory naturally led to the emergence of modern science in the West, Aristotle's opponents in the present conflict mount their attack ostensibly under the banner of science.

The self-proclaimed "science advocate," opposing the Aristotelian position, typically proposes two main errors:

- 1. *scientism*, according to which everything that exists is describable by modern science, and
- 2. *scientific realism*, according to which an imperceptible thing proposed as part of a scientific theory is certain to exist.

We shall see in what follows how Aristotelian metaphysics provides powerful arguments against these errors. First, however, we must make the key distinction.

<sup>&</sup>lt;sup>2</sup>The word, "metaphysics," originates from the accidental fact that in the traditional list of Aristotle's writings, his writing on the distinction between act and potency came after (meta) his writing on nature (physics).

- 2 Act and Potency
- 2.1 The General Theory
- 2.1.1 Example: Silly Putty
- 2.2 Causal Powers and Laws of Nature
- 3 Efficient and Final Causality
- 4 Formal and Material Causality
- 5 Essence and Existence

## References

Feser, E. *Scholastic Metaphysics: A Contemporary Introduction*. editiones scholasticae (www.editiones-scholasticae.de). Heusenstamm. 2014.