

# Philosophy of Technology: Ancient Greece

(from a lecture for the Komaba undergraduates, June, 2003, by Andrew Feenberg)

Our subject today is philosophy of technology. I'm going to approach this subject from two standpoints, first of all historically and then I'll look at the contemporary options in the field, the various different theories that are currently under discussion....

Let me turn now to the historical perspective on its origins. For this we must go back to ancient Greece. As you will see, the question of technology is raised at the very origins of Western philosophy, not as I have just described it of course, but at a deeper level. Philosophy begins by interpreting the world in terms of the fundamental fact that humanity is a laboring sort of animal constantly at work transforming nature. This fundamental fact shapes the basic distinctions that prevail throughout the tradition of Western philosophy. The first of these is the distinction between what the Greeks called *physis* and *poiêsis*. *Physis* is usually translated as nature. The Greeks understood nature to be that which creates itself, that which emerges from out of itself. But there are other things in the world, things which depend on something else to come into being. *Poiêsis* is the practical activity of making in which human beings engage when they produce something. We call these created beings artifacts and include among them the products of art, craft, and social convention.

The word *techne* in ancient Greece signifies the knowledge or the discipline associated with a form of *poiêsis*. For example, medicine is a *techne* that aims at healing the sick; carpentry is a *techne* that aims at building from wood. In the Greek view of things each *techne* includes a purpose and a meaning for the artifacts the production of which it guides. Note that for the Greeks, *technai* show the "right way" to do things in a very strong, even an objective sense. Although artifacts depend on human activity, the knowledge contained in the *technai* is no matter of opinion or subjective intention. Even the purposes of things made share in this objectivity insofar as they are defined by the *technai*. The word *techne* is at the origin of the modern words for technique and technology in every Western language, although these have a somewhat different meaning as we will see.

The second fundamental distinction is that between existence and essence. Existence answers the question whether something is or is not. Essence answers the question what the thing is. That it is and what it is appear to be two independent dimensions of being. In the tradition of Western philosophy, existence becomes a rather hazy concept. It is not really clear how to define it. We know the difference between what exists and what does not, for example, as immediate presence or absence, but there is not much more to say. Most of the attention is given to essence and its successor concepts as developed by the sciences because this is the content of knowledge.

These distinctions are self-evident. They form the basis of all philosophical thought in the West. I'm sure there are equivalent distinctions in traditional Asian thought as well. But the relation between these two distinctions is not obvious, is in fact puzzling. The source of the puzzle is the

Greek understanding of *technê*, the ancestor of modern technology. Of course the Greeks did not have technology in our modern sense, but they did have all sorts of techniques and crafts that were the equivalent for their time of what technology is for us today. And strange though it seems, they conceived nature on the model of the artifacts produced by their own technical activity.

To show this, I will analyze the relation between the two basic distinctions that I've introduced, *physis* and *poiêsis*, and existence and essence. In *poiêsis*, the distinction between existence and essence is real and obvious. The thing exists first as an idea and only later comes into existence through human making. But note that for the

Greeks the idea of the artifact is not arbitrary or subjective but rather belongs to a technê. Each technê contains

the essence of the thing to be made prior to the act of making. The idea, the essence of the thing is thus a reality independent of the thing itself and of the maker of the thing. What is more, as we have seen, the purpose of the thing made is included in its idea. In sum, although humans make artifacts, they do so according to a plan and for a purpose that is an objective aspect of the world.

On the other hand, the distinction between existence and essence is not obvious for natural things. The thing and its essence emerge together and exist together. The essence does not seem to have a separate existence. The flower emerges along with what makes it a flower: that it is and what it is “happen,” in a sense, simultaneously. We can later construct a concept of the essence of the flower, but this is our doing, not something essential to nature as it is to artifacts. Indeed, the very idea of an essence of the things of nature is our construction. It lies at the basis of science, episteme in Greek, the knowledge of things. Unlike the knowledge that is active in technê, which is essential to the objects the essences of which it defines, episteme, knowledge of nature, appears to be a purely human doing to which nature itself would be indifferent. Or is it? Here is where the story gets interesting.

This difference between the relation of essence to physis and poesis is important for an understanding of Greek philosophy and in fact the whole philosophical tradition precisely because philosophers have tried so hard to surpass it. You may recall Plato’s theory of ideas, the foundation of the tradition. For Plato the concept of the thing exists in an ideal realm prior to the thing itself and allows us to know the thing. Note how similar this theory is to our analysis of technê in which the idea is independent of the thing. But Plato does not reserve this theory for artifacts; rather, it is applied to all being. He relies on the structure of technê to explain not only artifacts, but nature as well.

Plato understands nature as divided into existence and essence just as artifacts are and this becomes the basis for Greek ontology. This has many important consequences. In this conception there is no radical discontinuity between technical making and natural self-production because they both share the same structure. Technê, you’ll recall, includes a purpose and a meaning for artifacts. The Greeks import these aspects of technê into the realm of nature and view all of nature in teleological terms. The essence of natural things includes a purpose just as does the essence of artifacts. The world is thus a place full of meaning and intention. This conception of the world calls for a corresponding understanding of man. We humans are not the masters of nature but work with its potentials to bring a meaningful world to fruition. Our knowledge of that world and our action in it is not arbitrary but is in some sense the completion of what lies hidden in nature.

What conclusion do we draw from these historical considerations on ancient Greek philosophy? I will be provocative and say that the philosophy of technology begins with the Greeks and is in fact the foundation of all Western philosophy. After all, the Greeks interpret being as such through the concept of technical making. This is ironic. Technology has a low status in the high culture of modern societies but it was actually there at the origin of that culture and, if we believe the Greeks, contains the key to the understanding of being as a whole.

Now we're going to skip to modern times...

*What Is Philosophy of Technology?*

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