

Heidegger – scientific reasoning

Trish Glazebrook suggests that we can read all of Martin Heidegger's philosophy as a critique of science. If we understand Heidegger as offering a Hegelian styled rejection of the reductionism of modern science, then the suggestion is fairly defensible. Here I lay out what I deem to be the central tenets of Heidegger's claim that modern science is overly reductionist, and show how this claim is connected to his phenomenology and his critique of technology.

1. Following Hegel, Heidegger suggests that scientific reasoning, and its reliance on no authority other than its own, is a sort of vanity that ignores history.
 - a. The Hypothesis/Experiment structure of scientific reasoning places the IDEA before NATURE, which is *a priori/Platonic Idealism*. In this way, scientific reasoning fails to abandon the authority of Plato/Aristotle, even while it asserts its own authority.
 - i. A priori reasoning (Descartes, Newton, Galileo) characterizes Modern Western Thought.
 - ii. Science claims certainty based on the empirical nature of experimentation, but science projects an understanding on to nature, to objects, prior to experimentation (see #3 below).
 - iii. A priori reasoning is born in Platonic thought, and is distinct from pre-Socratic thought.
 - b. Its ignorance of history, along with its idealism, causes a general concealment of Being, or nature.
 - c. This concealment leaves science vulnerable to being usurped by utilitarian motives (see the concealment of being through technology in #4).
2. Modern scientific reasoning reduces all four Aristotelian causes to one cause: the efficient cause. This reduction leads to the nihilism of the modern age, for it disavows meaning and purpose.
3. Science is the metaphysic of modernity. Its determination of its object brings with it a mathematical grounding of knowledge.
 - a. The success of science to reduce our understanding of phenomenon to mathematical formulas and data demonstrates the effectiveness of science. Quantification becomes the measure of reasoning.
 - b. The failure of science to reduce our understanding of phenomenon to mathematical formulas (for example, the movement of smoke from a fire) creates distortions and gaps in our understanding. See here feminist critiques of science.
 - c. The failure of science to address questions of meaning, and the problem of metaphysical question of Nothing, reveal a broader concealing of the world.
4. Concealment/technology: All revealing involves a concealing, but there is more and less concealing, that is, there is a more authentic way of being in the world (which involves less concealing) and a less authentic way of being in the world (which involves more concealing). The concealing begins with Plato.
 - a. Seeing the world in technological terms: defining humans as tools.

- b. This technological thinking expanded and eventually became the dominant mode of revealing/concealing in the world. Science fell under the spell of technology because only technological thinking is neatly suited to a metaphysics limited to efficient causes.
 - c. As such, science and reason serve technology.
 - d. Under the sway of technology, science establishes regional ontologies via basic concepts, which conceal the truth of the world, or make the world appear as resources for utilitarian goals.
 - e. This explanation benefits from a teasing out of utilitarianism and technological thinking, though Heidegger's own utilitarianism can muddy these waters.
5. Heidegger's alternatives:
- a. Beyond representation there is "thinking" and "reflection." Rejection of: Descartes claims all thinking is of an object (representational).
 - i. Freedom allows objects to be.
 - ii. Rejection of Descartes claim that human freedom and self-certainty is the source of truth.
 - iii. Truth is from Being (nature), not from humans.
 - iv. Truth from nature, is what the Greek's called Alethea. Truth is not subjective (nor objective, to the extent that it is an object of thought), but natural. Rejection of transcendental idealism.
 - v. Heidegger's naturalism is perhaps better understood as a sort of Hegelian dialectic between nature and humans.
 - b. Metaphysics must always ask the whole range of metaphysical questions, which includes questioning the questioner. This avoids the vanity the worries Hegel.
 - c. Heidegger offers a not altogether cogent embrace of poetry, art, and a nostalgia for pre-industrial labor in an effort to seek alternatives to technological thinking. His alternatives seem to arise out of:
 - i. His acceptance of Marx's critique of industrialism.
 - ii. His desire to avoid class conflict.
 - iii. His affection for medieval thinking.