Summary of course C.7-1: Elements of Ontology (1993–1994).

General

This course offers an introduction to ontology—the philosophical study of reality as reality. Building on the classical traditions of thought of Parmenides, Plato and Aristotle, it analyses the fundamental distinction between actual existence (existentia) and mode of being (essentia), and shows that everything that is "not nothing" belongs to the all-encompassing domain of being.

Through the three fundamental laws of being (identity, contradiction and excluded middle) and the transcendentals (being, unity, truth and goodness), the course explains how human thought understands the structure of reality.

The course also examines various methods of reasoning—from hypothetica

l deduction/reduction and inductive generalization to the ABC theory of interpretation, axiomatic systems and computer algorithms—and concludes by considering the limits of our intellect when confronted with the opaque necessity (anankē) and the excessive complexity of reality.

1: The Philosophical Starting Point: Existence, Essence and Language Use

Ontology is the branch of philosophy that investigates reality in its most fundamental form: being insofar as it is being. The Greek thinker Parmenides of Elea founded this discipline. He established that what truly is, exists "in itself" (*kath' heauto*), independently of human opinions (*doxa*). A central starting point in ontology is the distinction between actual existence (*existentia*) and mode of being (*essentia*). Actual existence indicates that something exists, while its mode of being or essential form determines what it is. These two aspects can be distinguished in thought, but in reality they are inseparably connected.

In terms of content, the concept of "reality" therefore encompasses both the existence and the essential form of something given. In terms of scope, the concept has no limits: it literally includes everything (*panta*) that is "not nothing". This includes not only tangible physical objects, but also thoughts, dreams, abstract formulae and hypothetical assumptions, since these too possess their own form of existence and their own mode of being. Ontology thus clarifies everyday and specialized scientific language: "becoming" or evolving, for example, is not a denial of "being", but rather a specific form of "being-in-the-process-of-becoming".

2: The Theory of Negation and the Three Axioms of Being

To define reality precisely, ontology also examines the concept of "nothing". An essential distinction is made between absolute nothingness (*nihil negativum*) and relative or privative nothingness (*nihil privativum*). Absolute nothingness is the complete absence of all being. Relative nothingness, by contrast, refers to a gap or lack of a particular form or expected value within reality - such as an empty room or a lack of conscience.

Thinking about reality rests on three unquestionable laws of being, or axioms:

- *The law of identity:* Whatever is, is; and whatever is so, is so. Every being is entirely identical with itself.
- *The law of contradiction:* Something cannot simultaneously be and not be, or be so and not be so, in the same respect.
- *The law of excluded middle* (the fundamental dilemma): Either something is so, or it is not so; there is no third possibility between the two.

These three rules are not merely human constructions of the mind, but follow directly from our primordial experience of reality. They form the absolute precondition for all valid logical reasoning and ethical action.

3: The Transcendentals: Being, One, True and Good

Classical and scholastic philosophy distinguishes four all-encompassing concepts that apply to every conceivable being: the so-called transcendentals. These were brought together by Euclid of Megara and Plato:

- *Being (ens):* Reality considered in its factual existence.

- *The One (unum):* Every being exhibits a form of unity. Through element analysis (*stoicheiosis*), one discovers that this unity is expressed either as a collection (*totum logicum*, based on similarities between individual instances) or as a system (*totum physicum*, based on the interrelationships between parts within a whole).

- *The True (verum):* Every being is in principle intelligible and accessible to the human mind. Truth here means ontological disclosure (*alētheia* or *apokalypsis*): bringing what exists out of concealment.

- *The Good (bonum):* Every being is open to value judgements. According to the classical maxim, goodness requires complete integrity (*bonum ex integra causa*), whereas evil arises when an element or essential characteristic is missing somewhere. Socrates had already shown that mere professional

knowledge or expertise without moral conscience is not “good”, but leads to an illusory reality.

4: Methods of Reasoning: Hypothetical, Inductive and Holistic

Ontology uses various methods to understand reality.

- The *hypothetical method* encompasses two directions of reasoning: forward deduction (*synthesis*), in which necessary conclusions are derived from general assumptions, and backward reduction (*analysis*), in which one starts from an established effect and searches for the explanatory hypothesis or assumption.

- The *inductive method* starts from specific samples in order to explore reality as a whole. It distinguishes between generalization (drawing conclusions from a few instances about an entire collection) and totalization (drawing conclusions from a few components about an entire system).

An overarching framework is provided by *holistic ontology*. Since our intellect can never survey all of reality at once, our understanding continually moves within a field of tension between what is immediately given (the phenomenon) and what is sought indirectly (the transphenomenal). Through careful observation (*theoria*) and considered sampling, we attempt to reveal the unknown transphenomenal step by step.

5: ABC Interpretation, Axiomatics, Formalism and Chaology

Applied ontology uses tools to structure human knowledge. The ABC theory of interpretation shows that an objective stimulus or given fact (A) is never perceived in a completely neutral way, but is always filtered through the observer’s interpretative “lens” or assumptions (B), leading to the final judgement or behavior (C).

The axiomatic-deductive method, as used by Euclid and Peano, begins with a finite set of unproven starting points (axioms), from which all further propositions are logically derived. In modern information technology and computer engineering, this formalism is translated into algorithms: step-by-step, strictly organized instructions for solving problems.

Finally, the course points to the limits of our rationalism. Whereas classical determinism assumed a fully calculable universe, the Platonic concept of *anankē* (reasonless, opaque necessity or fate) indicates that the cosmos contains elements that cannot be captured by rigid formulae.

Modern scientific insights from chaology and complexity theory, such as the “butterfly effect”, confirm that small variations in initial conditions can lead to unpredictable developments. Ontology therefore teaches human beings humility: through working hypotheses (*lemmata*), we must learn to deal with a reality that far exceeds the limits of our intellect.