Summary of the Course C.6-1.: Elements of Logic and Methodology

General

This course offers an introductory and propaedeutic study into the fundamental structures of human thought, logic, and scientific methodology.

Starting from the Ancient Greek heritage and the concept of ontology - bringing into discourse the 'being' or reality as 'non-nothing' - the course examines how human beings gain a grip on reality through concepts, judgments, and ordered structures.

By means of the four epistemological methods of justification of Charles Sanders Peirce, the three observational perspectives (phenomenal, rational, and transempirical), and the theory of tropes (metaphor, metonymy, and synecdoche), it is demonstrated how language and frameworks of thought unlock reality.

Next, the course analyzes the doctrine of concepts (content versus extent, categorial versus transcendental concepts), the categories and systechies (opposing pairs), as well as the contrast between the Modern and Postmodern cultural scheme.

Finally, the course culminates in an analysis of alethic modalities, the problem of relative versus absolute nothingness, and the three ontological fundamental laws (the law of identity, the law of non-contradiction, and the law of excluded middle), whereby recognizing reality is understood as a conscientious and inviolable duty.

1: Foundations of Logic and Methodology: Ontology and Justification

This course has a propaedeutic and general-educational character, aimed at offering the 'elements' (*stoicheia*) - the explanatory basic insights that make actual human thought and scientific theories understandable. The subject aims to transcend specialized narrow-mindedness and superficiality by training students in a reasoned approach to reality, structured around the ancient mathematical interplay between the given (actual thought) and the requested (what renders this thought valid and insightful). Its cultural-historical cradle lies primarily in Ancient Greek philosophy and the Biblical tradition.

The philosophical foundation of this doctrine of thought is ontology or the study of being: bringing into discourse 'being' ('to ontos'), or everything that exists in any way or is 'non-nothing'. Where Parmenides and the Eleatic school founded ontology with the proposition that "what is, is, and what is not, is not", Aristotle redefined ontology as 'first philosophy' (metaphysics). This is

the inquiry into being as being, searching for the first principles ('archai') and presuppositions of reality. Reality is approached here through identitive thought, in which everything that exists is examined for its total or partial identity, testability, and ascertainability.

To determine how opinions about reality are validly grounded, the course utilizes the typology of the American pragmaticist Charles Sanders Peirce. Peirce distinguishes four methods:

- *The method of tenacity*: stubborn and narcissistic adherence to one's own view by deflecting conflicting stimuli (ostrich policy).
- *The method of authority:* the authoritarian and orthodox adoption of what a social group, pillar, or tradition prescribes.
- *The method of apriority:* the dialogue-oriented cultivation of preconceived, ideal preferences that are mistakenly equated with 'reason'.
- *The scientific/ontological method:* the only correct method, which grounds opinions on objective reality ('the real') and its permanence independent of subjective views ('external permanency').

2:Epistemological Perspectives, Theory of Tropes, and Conceptual Structures

When analyzing reality, epistemology distinguishes three epistemological perspectives: - The phenomenal perspective: based on direct sensory observation (*empeiria*) - The rational perspective: based on intellectual reasoning (*logismos*), which transcends phenomena to grasp invisible connections and regularities. - The transempirical or transrational perspective: recognizing dimensions of reality that exceed mere senses or human intellect.

To express thoughts about reality, human beings use tropes (figures of speech or style that function as models of insight)

- *The metaphor:* based on an analogy or similarity of characteristics between separate elements.
- *The metonymy:* based on a real connection or systemic relation (such as cause and effect).
- *The synecdoche*: based on co-signification, where a part is taken for the whole (or vice versa).

Contrary to what linguistic positivists such as Frege and Russell assert - that the concept of 'being' is overly ambiguous and therefore useless - the course demonstrates that 'being' is neither univocal nor equivocal, but

equivocal/analogous and identitive: it simultaneously expresses unity (identity) and multiplicity (difference).

Within general conceptual doctrine, a distinction is made between conceptual content ('comprehensio': what one thinks) and conceptual extent ('extensio': the set of things to which the concept applies). In addition to categorial concepts (which can be singular, particular, or universal), ontology knows transcendental concepts. These are all-encompassing concepts applicable to everything that is 'non-nothing', such as being ('ens'), something ('aliquid'), thing ('res'), essential form ('forma'), the one ('unum'), the true ('verum'), and the good ('bonum'). Furthermore, being possesses a fundamental duality: existence (the actual 'that' something is) and essence (the essential form or the 'what' something is).

3: Categories, Systechies, and Cultural-Historical Schemata

In order to think and judge concretely, the mind requires categories (philosophical basic concepts) or commonplaces (*topoi koinoi*). Aristotle distinguished substance (the independent being) and accidental categories such as relation, quantity, quality, place, time, activity, passivity, situation, and posture. Many of these categories appear in the form of systechies (dualities or opposing pairs), operating both synchronously (simultaneously) and diachronically (over a passage of time or process).

These categorial structures guide our understanding of cultural history. The course contrasts two major interpretive schemata:

1. The Modern scheme: originates from the Enlightenment and positivism. It primarily values the exact specialized sciences, 'earthed' reason, and the ongoing demystification of the world.

2. The Postmodern scheme: criticizes the one-sidedness and environmental impact of Enlightened rationalism. It revalues pre-rational, archaic, and magico-mystical ideas as an equivalent form of human understanding and favors an inclusive cultural view.

4:Modalities, Being vs. Nothingness, and the Ontological Laws of Being

In the analysis of reality, alethic or physical modalities play a crucial role. They indicate the manner in which something is real: possible (with probable as a variant), impossible (absurd or contradictory), necessary, and contingent.

Following modalities, the course examines the concept of Nothingness. Absolute nothingness is really non-existent and merely a nominal figure of speech, for outside all-encompassing being there is nothing. However, relative nothingness does exist, occurring as negative nothingness ('nihil negativum': the absence of a specific object) or as privative nothingness ('nihil privativum': the lack of a quality that ought to be present, such as blindness). In human experience and psychology (analyzed, among other things, through Freud's reality principle and Paul Diel's psychology of vanity and neurosis), a denial of reality can lead to delusional thinking ('paraphrosyne') and alienation.

Indeed, reality possesses an inviolable and sacred character. It imposes a fundamental requirement of conscientious honesty on human beings: recognizing facts and structure as they are. This conscientious obligation of human thought rests on three universal ontological laws of being:

- *The Law of Identity:* "Whatever is (so), is (so)". Every being coincides completely with itself and is distinguishable from the rest.
- *The Law of Non-Contradiction:* "Something cannot simultaneously and from the same point of view be and not-be". This forms the basis for consistency and proof by contradiction.
- *The Law of Excluded Middle* ('tertium non datur'): "Either something is (so), or it is not (so)". There is no third middle way between being and absolute non-being.