

Course 4-1. Introduction to Logic

Location

4. Courses from 1984 to 1987

4.1. Introduction to Logic, 1984-1985, (L1-L95, 169p.)

4.2. Introduction to Hiero-analysis, 1984-1985 (HA1- HA122, 141p.)

4.3. Philosophical Rhetoric, 1985-1986 (WR1-WR305, 328p.)

4.4. Questionnaires from contemporary ontology, 86-87, (HO1-HO368, 416p.)

Note: *This course has been spaced larger than the text of the original course. References in the older version of this text therefore do not correspond to the current 'Word' pagination. For this reason, the original pagination is displayed with the letter 'L'. It stands for 'Logic' and is derived from the old page number.*

Introduction: *This course provides information, but also offers a methodical way of thinking. It starts from an ontology, which refers to everything that reflects reality in any way. Reality is ordered, but it reveals itself only with difficulty. If that order did not exist, we would not be able to order things, and logic and rigorous logical reasoning would simply not be possible. This course examines the various aspects that allow us to discover the order in reality.*

Content : *Click on the text below that you wish to read.*

Preface 1/3)	2
I. Introduction (5/78)	6
IA Ontological Introduction. (5/19)	6
IB Harmological Introduction (20/87).	24
B.(i).1.-- The summative induction (22/33)	27
B.(I).2.-- introduction to comparative ordering (33/66).	40
A.-- The lemma. (33/42)	40
B.-- The analysis (appl. Mod) (42/66)	51
B.(ii). -- The 'new' and the 'scientific' dialectics as harmology (67/87) .	81
1.-- The 'new' (modern) dialectics (67/75)	81
2. -- Contemporary Dialectics (76/87).	91

II. Theory-based models (88/158)	106
1.-- A doctrinal model of comparative ordering (88/93)	106
2.-- Phenomenology as comparative ordering (94/112).	113
3.-- 'Formal logic' as comparative ordering (113/118)	136
4. -- The Idiographic Theory of Thought (119/125)	144
5. -- The idea of the 'understanding' (= 'verstehende' comprehensive method) (126/158)	152

L1

Preface 1/3)

(i) The purpose of this three-year course is 'propedeutic'. 'Propaideia' and/or 'propaideuma' mean, in Ancient Greek (om Platon, Politeia 536d), something like 'introductory (or 'elementary') instruction.

This entails two lines of thought: this course provides, first of all, information, although not in the dilettante (amateur) or specialist sense; it concerns general education; secondly, it provides method; therefore, it does not lose itself in fashion or ideology (one-sided, indeed, fanatical thinking).

(ii) This three-year preparatory course leads, naturally, in the first place to philosophy, but also to rhetoric and to the science of science (definite or positive science). Philosophy is, after all, distinguishable from both, yet not separable.

First of all, the philosopher articulates his ideas in texts; he situates himself within a tradition of texts (intertextual aspect) which he reads himself; now, rhetoric, especially since the Greek Protosophistics (-450/-350), is textual proficiency and theory concerning textual proficiency.

Secondly, the philosopher—with the exception of irrationalist thinkers (and these, moreover, make use of reasoning)—is keen to proceed scientifically (methodical, moment), and he keeps himself, as much as possible (we live in an explosion of specialized science), informed of the results and foundations of the specialized sciences (informative moment). Incidentally, 'propedeutics' is used to denote the elementary study of a science .

(iii) Isocrates of Athens (-436/-338)

He advocated a 'general education,' which formed the foundation of his rhetoric. Philosophy and specialized science were integral parts of that general development, necessary to draft and/or deliver a text in a responsible manner. -- We align ourselves with that tradition.

L2

Note-- (i) *CJ De Vogel, Greek Philosophy , I (Thales to Plato),* Leiden, 1950, 2, states that the technical term 'filo.sofia' (literally: 'wisdom-mindedness'; think of our 'philosophy') covers two meanings:

a. a broad meaning,

i.e. the systematic acquisition of 'wisdom' such that one approaches, as much as possible, the ideal of general development; *Herodotus of Halicarnassus* (-484/-424), the founder of 'history' (geology and ethnology), *Hist.* , 1:30,-- later *Thucydides of Athens* (in Latin *Thucydides*; -460/-399), the highly scholarly founder of history , *Peloponnesian War.* , II: 40,-- later still, Isocrates of Athens (-436/-338), the rhetorician, use the word 'philosophy' in the broad sense of 'general education', - one sees that 'sophia' (Lat.: 'sapientia', wisdom) - practically speaking - means 'general development';

b. a narrower meaning,

nl. the specialized acquisition of what, since Puthagoras of Samos (-580/-500) and the Paleoputhagorese (the oldest pupils of Puthagoras (Latin: Pythagoras) (-500/-300), is called 'philosophy', i.e. a philosophy strongly colored by academic disciplines, -- with which specialization begins; -- yet neither Puthagoras nor the Paleoputhagorese wished to break with the ancient (archaic) 'wisdom', i.e. the totality of skills by which the man of that time could cope with life and its challenges.

De Vogel, oc, 3, briefly mentions the seven sages of Hellas, among whom Thales of Miletus (-624/-545) is generally regarded as the first specialized philosopher (specifically as 'fusikos', physicist, natural scientist and philosopher of nature).

From which one can see that the boundaries between general

education and specialized philosophy (and/or specialized science and, later, also rhetoric) are not clearly delineable.

(ii) Hellas (Greece) was, from that point of view, only one case of a general cultural pattern. See, for example, *W.I. Irwin, *Wisdom Literature**, in: **Enc. Britann**, Chicago, 1967, 23: 601:

L3

The ancient Near East (i.e., the region comprising Ethiopia, Egypt; - Mesopotamia; i.e., approximately Iran and Iraq, Asia Minor (Micrasia, Anatolia), Armenia, -- Syria, - Arabia) knew, from the Sumerians (in Mesopotamia) and the ancient Egyptians, a richly varied wisdom literature, the image of which we can read in the Wisdom Books of the Old and New Testaments, in Israel (especially from -1200).

There is more: the *Strasbourg Colloquium* (May 17/19, 1962) showed us a group of specialists who discussed ancient Egyptian (eight studies), Mesopotamian (one study), and Israelite (three studies) wisdom (see *F. Wendel et al., Les sagesses du Proche-Orient ancien*, Paris, 1963, in which *A. Volten, Der Begriff der maat in den Aegyptischen Weisheitstexten*, oc, 73/101, sees ancient Egyptian hylozoism (the idea that all matter is alive) at work in the first Greek philosophers; Volten interprets 'Measure' primarily as 'soul substance (fluid)').

See also:

-- *W. Bieder, Wisdom Literature*, in: *B. Reicke/ L. Rost, Biblical-Historical Dictionary*, Utr./Antw., 1970, VI: 65/70 (overview);

-- *CA Keller, ibid.*, 70v. ('wise' is strong, capable, experienced, sensible; -- developed, norm-conscious, sensible and conscientious and thus social); *id., ibid.*, 63/65 ('wisdom' is, translated into modern terms, the summarizing term for ancient Eastern humanism ('humanism' in the sense of 'generally developed way of being human') or 'paideia' (educational ideal).

In other words: a very strong agogic element is hidden within ancient Eastern wisdom: emancipation (independent thinking) and salvific behavior (salvation) are at stake. This agogic element is found, later,

among the Puthagoreans and, following in their footsteps, among the Platonists,

rightly writes , *Book of Wisdom* , in: *Enc. Britann .*, Chicago, 1967, 73: 600f.: “Greek philosophy was the heiress and, to a certain extent, the pupil of the age-old contemplation of the East”. (ac, 600).

L4

Philosophical logic (theory of thought, dianoetics).

Since the days of Aristotle of Stageira (-384/-322; nicknamed 'the Stagirite'), the founder of philosophical logic or the theory of thought, logic has always been connected with ontology in one way or another. Therefore, a first chapter on ontology.

Furthermore, logic has always been a theory of order (harmology). Therefore, as a second introduction, a word about the comparative method, the core of all ordering.

After those introductory chapters, we can easily proceed to the actual logic, which essentially discusses three themes:

- ideas (concepts),
- judgments (propositions, statements, assertions) in which concepts function in a judgmental context;
- reasoning (especially the syllogism or deductive reasoning), such as deduction, reduction (in order to and especially inductive reduction), and abduction (or hypothesis).

Usually, applied logic or methodology is added as a separate section. However, we will not treat the applications—or, as they are now often called, 'application models'—separately, but integrated them into the logical text itself.

—Behold the main features of the subject matter of the first year of philosophy. 'Philosophy' has, usually, been 'orderly, i.e. logically

rigorous, thinking'. Not without reason did the Peripatetics (Aristotelians) call their master's logic 'to organon' (Lat.: instrumentum, instrument, — here of the intellect).

Moreover: in the tradition of Aristotle's teacher, Plato of Athens (-427/-347), the founder of the Academy, a doctrine of order is intrinsically interwoven with philosophical thought itself. It is within that Platonic tradition that we shall immerse ourselves: all 'being' (reality) is thought (thought-out, invested thinking); thinking is: allowing that thought-out 'being', in the form of ideas (thought contents), to come into full consciousness within us. It is this type of awareness that is facilitated by ontologically grounded logic.

L5

I. Introduction (5/78)

IA Ontological Introduction. (5/19)

In the first point, we will further outline the ontological method (lemmatic-analytical). Subsequently, in the second point, we will discuss:

- (i) 'being' as in itself being and
- (ii) 'being' as a necessary and/or sufficient reason or ground (as 'horizon').

Definition of ontology.

First, a description. - Ontology, as a term, comes from *Joh. Clauberg* (+1665), who, in his *Metaphysica* (1646), says that 'ontologia' is “a type of science that dwells on being as being, that is, insofar as being exists”.

Clauberg adds: “(it concerns, in this regard, a) a 'natura' (a mode of being), characteristic of:

- (i) all (set; summative induction) and
- (ii) all separate (singular) beings”.

Consequence: such a science is 'catholica universalis' (general regarding the object); in other words, nothing falls outside of it (all-encompassing nature).

2. Ontology as a matter,

di as a human activity, however, is much older: G. Thiné A. Lempereur, *Dictionnaire général des sciences humaines*, Paris, 1975, 673, speaks of a type of ontology as 'metaphysical' ontology, contrasted with the 'formal' of Edmund Husserl (1859/1938), the phenomenologist, and the 'fundamental' of Martin Heidegger (1889/1976), the existential thinker.

Here, first and foremost, we are dealing with the 'metaphysical', which originated in the thought of Parmenides of Elea (-540/...), one of the first ancient Greek thinkers, and was brought to full development both by Aristotle (L.4), its true founder, and in Middle-century ecclesiastical Scholasticism (800/1450). Thus, we are faced with an old and established tradition.

Bibl. sample .

-- O. Willmann (1839/1920), *Abriss der Philosophie (Philosophische Propädeutik)*, Wien, 1959-5, 329/460 (*Historische Einführung in die Metaphysik*; id., *Die wichtigsten philosophischen Fachausdrücke in historical Anordnung*, Kempten / Munich, 1909;

--- D. Mercier, *Metaphysique générale ou Ontologie* , Louvain / Paris, 1923-7.

L6

Lematic-analytic ontology.

Plato of Athens (L.4) is the founder of the lemmatic-analytical method. It proceeds in two steps.

(i) First of all, the 'lemma', *anticipatio* (*praesumptio*) -- the guess (hypothesis, assumption). Regarding 'being', we know, to begin with, vaguely what 'being' is. Reason: we use, daily, the verb and the noun 'essence', as well as the adjective 'essential'. And we use it sensibly.

(ii) Then, the 'analysis', analysis (dissection, unraveling). -- We will now, in the following pages, starting from our initially vague concept of being, clarify, 'explicitize', and further explain 'being'.

(I) -- If anything, then fact and mode of being.

(1) common sense (Eng. common sense (Thomas Reid (1710/1796; *An Inquiry into the Human Mind on the Principles of Common Sense* (1764) and the Scottish School following him has a concept of 'being', 'essence', 'essential', as is evident from the following elementary linguistic analysis.

(i) “Who is Theagenes? And Charikleia?”

Answer: “The heroes from the love and adventure novel *Aithiopica* by *Heliodorus of Ephesus* (between +300 and +400)”.

Note: 'are' is pronounced connected with 'who' or with 'heroes'. One 'is, after all, 'someone' (Identifying language use).

(ii) “Where are Charikleia and Theagenes?”

Answer: “They are in the region of the Nile estuary” (Locally situated language usage).

(iii) “What was Charikleia like?”

Answer: “A young girl, sitting on a rock, -- so beautiful that she had the image (imago) of a goddess”. (Thus Book I, 2:1). (Further qualifying or typical language usage).

We could go on like this.

Just one more question: “Is Charikleia there?”

In this case, the emphasis is not on the place but on the mere fact of whether she is there. -- The three preceding questions dealt with "What" questions; the last question, with "Whether" questions.

(2) M. Heidegger (L.5), known for his foundational research on 'being' and 'knowledge of being' (hence the name 'Fundamentalontology'), says: “To be human ('Dasein') is **(i)** being **(ii)** in a certain way, namely, **(i)** while he himself 'is', **(ii)** man immediately understands 'something like being'. (Sein und Zeit, I, Tübingen, 1949-6 (1927-1), 17).

L7

Translated into the language game of common sense (i of Jan-and-

alleman), this reads: **(i)** because we ourselves 'are' (exist in our own way), **(ii)** we know, somewhat, what 'being' is in general.

So much for the lemma of every ontology, that is, its starting point, however vague.

1. From the duality of the questions and answers (L.6) above, the basic concept of 'being', namely being (independent reality) in itself, is already being revealed.

1. Indeed, the Scholastics (L.5) rendered 'his' (esse, ens) with the word 'res' (thing, matter, -- in the sense of 'what exists in itself, objectively, independently of my and your thoughts').

2. And they interpreted 'res' (reality) in two ways:

a. as 'essentia' (from Aristotle 'ousia', essence), i.e. as an answer to the what question, namely as a mode of being;

b. as 'existentia' (existence, factuality), i.e. as an answer to the 'whether' question, namely being as 'being there' (actual being).

In summary

Something (res, in itself, with the following characteristics:

a. to be something different from the rest (complement of 'being');

b. to be, amidst the rest (complement of 'to be').

Behold the conceptual content of 'being' as being in itself.

This is our first analysis of the lemma 'to be'.

2. From the same two kinds of questions and answers, the conceptual scope of 'being' becomes immediately apparent. – Note 'the rest' ('complement' of 'being'; whenever we describe a 'note' (conceptual characteristic): we cannot get around it! Without total being, one moment, element, member of that all-encompassing or total being is, after all, that same moment unthinkable and unspeakable.

As Clauberg said in his definition of ontology (L.5),

(i) all 'beings' (beings) together and

(ii) each being separately (singular) they are, all and every, 'are', so that we label them as 'beings' modes of being and factualities).

The 'proof' by contradiction.

(i) We have just designed an ontological 'model' (idea, concept): starting from a rather vague usage, we have clarified the idea 'being' (essence, essential) into the duality 'essence/existence' as existence in itself.

a. To clarify—it is difficult to speak of formal 'proof' regarding being—that what we have designed as a model is correct,

b. we propose the counter-model, namely 'something' (?) that **(i) exhibits** no mode of being and **(ii)** no factuality: such a thing is both unthinkable and above all unreal (unreal)

We say 'unthinkable' in the sense of 'impossible to conceive as real'. For we have indeed 'thought' of it as a counter-model (but to demonstrate that it is unreal (unreal, non-being, 'nothing')).

Since there is no third possibility between 'being' and 'non-being'—here—the model must, then, be real and the counter-model unreal. So much for the content of the concept.

(ii) As regards the scope of the concept. Here is the table.

Suppose: the counter-model, namely 'something' that falls outside the scope of being. Evidently

(i) is it, then, not something other than the rest of being (for it has no mode of being of its own) and

(ii) it is not there, amidst the rest of being (for it has no factuality of its own).

Conclusion: twice we establish that 'something like that (?) is unreal (unreal). It is also said: “Something like that (?) is situated in 'absolute nothing' (to say that it 'is' 'absolute nothing')”.

With a single word, one says regarding the all-encompassing nature of being (outside of which there is absolutely nothing), that being is 'transcendental' (all-encompassing), for it is 'absolute' (meaning related to absolute nothing and completely independent).

Note: -- One can replace 'ontology' with theory of reality: the reader now understands why.

Note: -- RA Koch, *Die Uraxiome in ihrer Bedeutung für die philosophischen Grunddisziplinen*, in: *Tijdschr. v. Fil.*, 31 (1969), 4: 749/766, expresses this as follows.

L9

(1) "It is a matter of all with all the parts. Jedes Seiende ist **(a)** a part of the whole or **(b)** the whole thing itself."

(1) "There is a universe (transcendental whole) with all its 'parts' (moments, elements). Every 'being' is either a moment of the universe or the universe itself").

"(1) There is a whole with all the parts. The whole thing is a whole, the part of the whole or the whole itself."

"(1) There is a universe that 'validates' (represents value), with all its moments ('parts') Every 'being' is something that 'validates' (represents value), whether that universe itself or a moment of it".

Explanation.

Many misinterpret the idea of 'real' (being). If the idea of 'being' (reality) ought to be understood as 'truly' unbounded (transcendental), in order to be 'truly' ontological – and not the all-too-vague common-sense concept (see our lemma; L.6), – then one must take the following remarks into account.

1. Being, understood philosophically (metaphysically), as a technical term (strict technical term), encompasses everything -- both all that we call 'real' in everyday language, -- and what we call 'imagined' within it.

Reason: what I, you, and everyone imagine is not nothing, but something, namely a merely imagined reality, yet still a (albeit poorly imagined) reality.

Likewise, the philosophical idea of being encompasses all that has already been thought, but also all that has not yet been thought.

2. Being, philosophically understood, encompasses the rhymed (consistent, contradiction-free) as well as the absurd (L.8), -- the latter insofar as it is merely thought and formulated.

Reason : the mere thought, though impossible (absurd, after all), 'is' not nothing, but 'something'. Thus when I 'merely think' a square circle (as impossible, of course). Otherwise, a proof by contradiction would be impossible.

3. Being, philosophically speaking, encompasses both the purely possible and the absolutely impossible. -- The latter, admittedly, as a merely supposed counter-model to the real, respectively, the possible.

Reason: nothing cannot be 'considered' by our thinking (which is, essentially, being-oriented).

L10

In other words, even the unconsidered – the unthinkable – can be 'considered' ('thought') (albeit as 'unconsidered', respectively 'unthinkable').

(II) -- Something, then a, true, valuable.

O. Willmann, *Geschicht des Idealismus* , III (*Der Idealismus der Neuzeit*), Braunschweig, 1907-2, 1036f (as well as his *Die wichtigsten* (L.5v.), 62; 88; 123; furthermore, in his *Historische Einf.* (L.5), 353ff.), mentions a series of basic ideas (fundamental concepts) that invariably recurs in the ontological tradition.

1. Origin of the series.

O. Willmann, *Die Gesch.* , 1036f., states that the series of transcendently used (and therefore called 'transcendental') ideas is the combination of, on the one hand, the Paleoputhagorean (between -550 and -300) basic ideas, the One (indivisible, coherent, combined) and the conceivable (the so-called 'true' in the sense of 'that which corresponds to thought'), and on the other hand, the Platonic (dating from Athens (-427/-347) since Plato) basic ideas, the being and the valuable (the so-called 'good').

2. Essence of the series.

a. As regards 'being' (of Plato), we refer to the above.

b. The three other basic ideas are nothing other than being (being), insofar as it is the necessary and, seen from a transcendental perspective, sufficient condition of three human activities.

a.-- *The transcendental one* (10/13).

a. As M. Heidegger states, man is that kind of being which, while and because it 'is' itself (as factual existence endowed with its own mode of being (L.7v.)), possesses a transcendental concept of being.

We saw, now, that this always implies (encompasses) complementation, classification, or, rather, division, of being into a single considered being (something) and the rest of being.

This proves, in fact, although almost always thoughtlessly, that man entails his classifying gathering. We compare (confront with one another) the one (being) with the rest (of the being).

The comparative method seems to be innate to us. Why? Because being, as the coherence or unity of a multitude (elements), is clearly before our eyes from the very beginning.

11

In other words, being as a multiplicity of factual modes of being, which, by virtue of mutual comparison—this is human activity, of which being is the condition of possibility—prove its coherence (unity), is immediately a light that illuminates. Jean Piaget (1896/...), the genetic psychologist, and his school conducted thorough research into the structuring behavior of children. The results seem to be summarized as follows.

(i) - *Children aged four to five arrange a series*

(They see a connection or unity) sticks S1, S2. ..., Sn, indeed in pairs (two at a time but apparently do not get much further).

himself writes in *Genetic Epistemology (A Study of the Development of Thought and Knowledge* , Meppel, 1976, 36): “The young children aged four to five, whom I examined together with A. Szeminska,

(i) knew their way perfectly well on their own from home to their school and vice versa;

(ii) but they were not yet able to imagine them by means of play material depicting the various main landmarks (buildings, etc.)”.

(ii) - *By the age of five to six, the same children organize,*

Likewise, as in the previous model, the sticks are arranged by size. However,—instead of being able to do this only in pairs (“This stick is larger than that stick”), as before—they arrange the entire series by size, by trial and error.

In other words, the scope of a unit (cohesion) has been increased. And indeed, to the entire series.

Piaget himself writes, oc, 45v.: “The transitivity ‘if a is greater, smaller, equal to b and if, at the same time, b is greater, smaller, equal to c, then also a is greater, smaller, equal to c’ is not yet transparent (mastered) at this stage.”

For example, if the subject (child) sees two sticks together, where S1 is smaller than S2, and subsequently two sticks, where S2 is smaller than S3, then it does not conclude that S1 is smaller than S3 unless it sees everything simultaneously.

(iii) - *Methodical organizing only begins at age six to seven*

faced with the problem of arranging the same series of sticks by size over and over again , the children now choose:

L12

(i) first, among all the sticks (the total collection), the smallest (which they, according to their actual mode of being, distinguished from the rest (complement (L.7; 10)));

(ii) then, within that remainder (complement), they again choose the smallest; etc.-- Says Piaget, *Psychology and Epistemology*, Utr./Antw., 1973, 38v.:

(A) *The given.*

Let us take, as an example, the preservation (identity – through – change) or 'invariance' of a collection of objects. For instance, ten to twenty beads in a glass.

a. (the action).

We then ask the test subject (child) to place an equal number of blue beads in glass Z and red beads of the same shape and dimensions in glass B. (...).

b. (the action).

Now, when two identical sets have thus been formed, the child is asked to pour the contents of glass B into a vessel C, which is different in shape (change) (e.g., C is a glass that is taller (lower) and narrower (wider) than the two preceding ones).

(B) *The requested (sought).*

The child is then asked whether there are still the same number (conservation, identity through variations, invariance) of beads in A and C.

One can repeat this test (testing of identity insight) with ever-changing forms (configurations) of glasses, of course: in that case, it becomes inductive testing.

(C) *The answer.*

(i) The little ones deny preservation. Or rather: they do not consider it necessary. Thus, for some, there are more beads in C than in A “because the level of the beads in C is higher”. For others, again, there are fewer beads in C, “because the glass in which they are now set is narrower”.

(ii) Around the age of six or seven—according to Piaget—children, however, conceive of the set (unity in multiplicity) as invariant, independent of the perceptive (i.e., sensually perceptible) configuration

(geometric form).

(iii) Around the age of eleven to twelve, the child learns to compare through verbal instructions.

L13

a. Up until now, the child has not, except hesitantly, detached itself from the physically real data (actual modes of being (L.7)), realized in – what Piaget calls – observable configurations.

b. Now, however, it begins, through words (linguistic signs: semiological, semiotic stage), to compare and to order:

(a) Given: Edith's hair is blonder than Suzanne's, but darker than Lili's;

(b) Asked: who, among the three girls, has, now, the darkest hair? To this the child responds, now, immediately, without having to physically see the hair.

Decision.

The transcendental – one being – is the light that, already from childhood, enlightens man regarding the comparability and order of things (actual modes of being). – Yet only in ontology does this transcendental – one being – come 'into view', when man becomes aware of it.

b. -- *The transcendental truth.* (13/16)

1. Note: 'truth' – here – is meant as knowability and conceivability. Expressed Platonically: idea.

In other words, as we already said (L.4), all being is thought being, 'noèton', being intelligible, understandable, through the 'nous' (intellectus, understanding). Or again: being and all understanding are, mutually, existing in one another. Attuned to one another. Or again: being is intellectual in nature. Ideal by nature.

2. The definitions of 'truth', as they are in circulation, depend on the above transcendent concept of truth, as on the absolute condition of possibility.

a. Thus Heidegger's definition of 'truth' as unconcealment (a.lêtheia), i.e., as the emergence of factual modes of being (L.7) into the viewer of our intellectual attention. Heidegger's definition is one that determines truth from what phenomenologists, with him, call 'the encounter' (Begegnung, Encounter, rencontre), i.e., the acquaintance with something (in its factual mode of being).

Indeed, what does not reveal itself (think of our lemma) remains hidden and, immediately, unknowable and inconceivable. Yet only what possesses **(i)** fact(ity) and **(ii)** mode of being reveals itself. And as such.

b. The other types of truth all rest on Heidegger's truth of encounter. Indeed, only after (or, at least, during) acquaintance with actual modes of being can man compare.

L14

1. *The first type of comparison is that of the so-called logical truth.*

This one exhibits two facets.

a. The first is that of the correspondence (similarity) between our insight and the thing itself. The judgment (proposition) is, here, pre-eminently, the bearer of the truth so called 'logical': it states, after all, whether or not the predicate (phrase) of the subject (topic) may be stated.

b. The second is that of the mutual connection or coherence between, on the one hand, the assertions concerning the matter in question (factual mode of being), and, on the other hand, the moments (aspects, elements) of the matter itself.

2. *The second type of comparison is that of the so-called ethical (moral, moral) truth.*

This is one type of correspondence, namely between the insights affirmed by ideas or words (actual modes of being) and the actions (praxis) of the one who affirms. If you will: the correspondence of behavior with the word or thought.

3. The third type of comparison is that of the so-called pragmatic (better: Peirastic) truth.

This is, likewise, one type of agreement, namely between, on the one hand, the guiding idea (hypothesis, abduction) of an experiment ('peira', in ancient Greek, means testing) and, on the other hand, the result (outcome) of that same experiment.

One particular form of this is the truth of fate: the fate we undergo is, indeed, one of the tests—yet, unlike the experiment, beyond our will or intervention—of our ideas and views regarding standards of life. Whoever lives life with ideas of 'moderation' should not so readily expect the fate of a drunkard!

In other words, just as in a laboratory, our views on life are causes of destinies (consequences), as truth regarding our actual way of being.

Decision.

From the truth of encounter up to and including the truth of fate, -- all these types of truth have as a condition of possibility the fact that man, as Heidegger says, possesses 'Seinsverständnis' (the idea of being), which, as we saw above, acts as a light that illuminates (in other words, is a necessary and sufficiently transcendental condition of all understanding and comprehension, of all knowledge and thought).

L15

That this is the case has been evident for centuries from the so-called laws of thought. -- Usually, in textbooks, they are presented in the form of three short sentences.

a. The Identity Law. -- "his(e) is his(e)".

In doing so, the thinking person expresses that he/she:

1. once confronted (encounter; L.13) with some factual mode of being (L.7), think of Heidegger's unconcealment --, and moreover honest (this ethical truth is always, naturally necessary, present in the act of affirmation itself),

2. can do nothing else, in conscience, than to admit that what he knows (perceives, interprets) regarding the circumstances ('circumstances' is a summarizing word for 'actual mode of being'), must indeed be acknowledged, affirmed, confirmed, and confirmed as that very circumstances and nothing else (exclusion of the complement of being; L.7).

b . *The law of contradiction or absurdity. “Being and non-being cannot possibly be affirmed simultaneously”.*

Thus, the thinking person, confronted both with the state of affairs of something and with his conscience, expresses that 'something' (being), factuality, and manner of being—always L.7—are either present (being) or absent (non-being). In other words: being and its negate (denial) do not go together (they are contradictory, contradiction). They 'do not rhyme together'!

c. *The law of the exclusion of a third possibility.*

This 'law of the excluded third' (which can be disregarded in semiotic, but not in ontological logic) states: “either something is being or it is absolutely nothing. There is no third 'mode of being' (l.8: proof by contradiction): There is absolute disjunction between the model 'being' and the counter-model 'non-being'.

These sentences convey statements, not 'axioms' in the semiotic-logic sense (i.e., arbitrarily presupposed statements).

L16

Whoever violates that fundamental truth—expressed threefold—“that being is being and nothing else”, undergoes, sooner or later, clearly his fate (L.14). It is also said: “the laws of thought are inviolable”—not in the sense that they can never be violated (transgressed): we say that both the absurd and the absurd can be thought (L. 9); we add, now, that they can also be put into practice in life, praxis, “with all the consequences thereof” (truth of fate).

c.-- *the transcendental good.* (17)

1. Note once again: being is merely a necessary and sufficient (transcendental) condition of value and appreciation. Nothing more. -- So it was also with the properties 'one' and 'true'. The transcendentals—being, one, true, good—constitute the all-encompassing horizon of our life. 'Horizon' here means: condition of possibility.

2. It is claimed by some that the term 'value', used instead of 'goodness', originates from modern taxing economic language. In any case, one can also use that same term 'value' generally, i.e., neither economic nor taxing. The fact is that current axiologists (specialists in the theory of value) use the word in this way.

Let us depart, as above, from common sense (L.6).

Do A. Decoene/ A. Staelens, *Paedagogische zielkunde*, Ghent/ Leuven/ Leiden, 1920, 7, not say the following? “The faculty of estimation is a sensory (sensory) cognitive faculty, common to animal and man, in order to,

(i) in material things - compare with (L.12 (bottom)) what Piaget says about 'perceptive configurations',

(ii) to perceive the useful or the harmful.” – Indeed, even the average Joe can observe this: his little dog refuses some food and snaps eagerly at others – without thinking! Children, too – *mutatis mutandis*, for they are already human, even in the thoughtless stage – quickly act in the same way!

Both types of thoughtless choosing (preference and aversion) apparently intend more than the sensory: in the perceptive configuration (the sensually perceptible reality), they are oriented towards 'value' (albeit, (still strongly) biological).

L17

In a strictly philosophical sense, following Vladimir Solovyev (1853/1900), the first Russian thinker of international stature among the Christian Russian realists, the sense of value on a higher level can be characterized as follows.

1. “When we distinguish ourselves from what is not ourselves, then we define what is not, threefold:

- (i) for once it is something that is, by nature, among us;
- (ii) then again it is something that resembles us, as being of the same essential nature (homogeneous);
- (iii) finally, it is something that, compared to us, stands higher. (...)”.

2. Logically, it follows that the conscientious (ethical, moral) relationship, as it ought to be, will likewise be threefold.

Regarding (i). -- It is clear that we ought not to regard what is situated below us (such as an instinctive inclination, insofar as it arises purely from our material nature; think of profiteering or eccentric sex) as if it were of a higher nature (e.g., when we see something 'divine' in purely instinctive profiteering or equally instinctive sex).

Regarding (ii).-- Likewise, when we are confronted with something that we regard as a being like ourselves (e.g. a fellow human being), we treat it as if it were something beneath us (-- think of the mistreatment of fellow human beings without reason or of racial contempt). -- Nor should we approach our fellow human being as if he or she were a higher being (think of the cult of pop stars or the idolization of dictators).

Regarding (iii). -- Finally, what we know to be superior to ourselves and our peers, we need not tear down without reason (think of criticism of authority or atheism).

Decision.

From this brief phenomenology (description of essence), it is evident that Solovyef situates, or orders, according to the actual mode of being (L.7). However, not instinctively (as in the faculty of estimation), but morally.

L18

To this, Solovyef links the three basic ethical attitudes that characterize our conscience.

(1) First of all, the feeling of shame

(Especially modesty, i.e., the sense of shame regarding sexual information. Thus he writes: "The sense of modesty (...) is, already, (...) a characteristic that radically distinguishes man as a man from all that is beneath him (think of the animals). No living being (outside of man) possesses even the slightest degree of this sense of modesty. On the other hand, since time immemorial, the sense of modesty has manifested itself, indeed, that it is capable of growth and development in man." (*La justification du Bien* , Paris, 1939, 31).

But there is more.

a. Note what is implied in that fact: this lends that fact an even more profound meaning.

1. The sense of morality is not merely a characteristic that, for a description of behavior (from the outside), separates man and distinguishes him from the rest (complement) of the animal world.

2. The same sense of morality, viewed phenomenologically (from within), proves that man, in fact, detaches himself from and distinguishes himself from purely material nature as such (in its entirety) – both the material nature that surrounds him (Ad 1) – and that which is his own as a biological being.

b. Solovyef explains (oc, 31s.).

The fact is that man feels shame regarding his own purely bodily inclinations and functions.

1. This fact reveals one essential trait: in it, man shows that he is not merely a material being (in the sense of 'totally coinciding with'), but also something else and higher.

2. Reason.

In the psychological act inherent in the sense of modesty, the one who feels shame distances himself from that of which he feels shame. (...). If I feel shame in my purely biological nature, I prove, by that very fact, that there is no essential identity between me (as I) and that biological nature. (...). A being that feels shame in its animality proves to be more than mere animality.

(2) Then, as a second basic attitude, tenderness and altruism .

The true essence of empathy, of compassion, is most certainly not the simple identification of ourselves with our fellow man, but rather the insight into and recognition of the dignity inherent in our fellow man; in particular, his right to:

(i) actual existence, (L.7) and

(ii) a mode of being (L.7), which encompasses happiness. -- It is established that, with Solovyef, founding ethics (moral philosophy) is connecting with what ontology teaches us.

(3) Finally, as the third basic attitude, reverence.

If we—according to Solovyef—are aware that there is 'something omnipresent' above us, then the sense of truth demands that we behave towards it as towards something omnipresent above us. This is where Solovyef situates religiosity.

Decision.

Both what common sense perceives regarding estimation, and what a phenomenological analysis, in the style of Solovyov, teaches us regarding the ordering of ethical attitudes to life—shame, tenderness, reverence—are only possible if, intrinsically in all being, something like value (goodness) is at work as a condition of possibility.

General decision

As, L. 5, promised, we have,

(i) after the definition of the word 'ontology' (metaphysics);

(ii)a . clarifies the lemma 'being(the) as factual mode of being' in a first analysis.

(ii)b. In a second analysis, we have likewise clarified the lemma 'being as horizon of life' (condition of possibility, yet on an all-encompassing or transcendental plane), in a threefold manner—as coherence (the One), as truth, as value), so that we have uncovered the

foundation of both a theory of order and a theory of knowledge and thought (logic) and an ethics (moral theory).

O. Willmann, *Einf.*, 453, states, with Aristotle, that 'being' is a 'pilon' (an empty word). In other words, to say that everything is a 'factual mode of being' is to say 'nothing new'. But, as an entry, it is guiding for all further research.

What we will determine.

L20

IB Harmonological Introduction (20/87).

Linguistic remark.

Linguists pointed out that the words 'alarm', artist, harmony, aristocrat, Arithmetic, poor, Aryan' have the same semasiological (theological) root, namely °ar, which expresses the idea of 'combination'.

1. Similarly, the Latin word 'ars'—which we translate as skill or art—originally means 'joining' (into a joined or work of art). Or further: the Latin 'arma' (armor) is derived from 'armus' (shoulder,—arm; the weapon, after all, is joined with the arm and the shoulder). In the same sense, one understands 'articulation' (joint).

2. The ability to combine numbers, whether or not by means of digits and/or geometric figures, was called 'arithmètikè (techne)' by the ancient Greeks;

3. Very generally, the same (correct) combination was called 'harmony' -

4. Socially: in Sanskrit, the most harmoniously developed are called 'arya', 'noble' (hence 'Aryan'; 'Aryan'). The Greek 'aristos', the best (noble, ennobled), is found in the compound 'aristocrat'.

Philosophy and harmology (the study of infusion).

One of the most famous Paleoputhagoreans (L.2), Archutas of Taranton (-400/-365), expresses the relationship 'thinking (wisdom) /

ordering (combining)' as follows:

“If anyone were capable of resolving all genders into one and the same principle ('archa', principium, principa) ('analousai') and, starting from that one principle, assembling them again ('sun.theinai kai sun.arth.mèsasthai'), then—it seems to me—such a man is the wisest, equal to him who shares all truth—equal, also, to him who adopts a standpoint from which he can know God and all things, as God has assembled them according to (the model of) the pair of opposites ('en tai sustoichiai') and the ordering ('kai taxei')”.

This text is one of the oldest doctrinal texts. -- So many centuries later, St. Thomas Aquinas (1225/1274), the leading figure of Scholasticism, would write: “Sapientis est ordinare” (It is the work of the philosopher ('wise man') to order).

L21

Bibliographic sample:

-- Descamps, *La science de l'ordre (Essai d'harmologie)*, in: *Revue Néo-Scholastique*, 1898, 30ss. ;

-- Josiah Royce (1855/1916), *Principles of Logic*, New York, 1961 (1912-1), in which, oc, 9, it is expressly stated that the traditional, so-called General or Formal Logic is only a part—and at that a very subordinate part—of a doctrine whose name is 'the science of order'.

-- Franz Schmidt, *Ordnungslehre*, Munich/Basel, 1956,-- in which, oc, 11, it is stated: “The entire metaphysics (ontology) of the West - from Plato of Athens (-427/-347) to Friedrich Nietzsche (1844/1900) - allows itself to be seen as a science of order, such that each of its systems appears as one way of thinking about order”.

Note: Our reference to some more recent works should not conceal the fact that *Aristotle*, Plato's pupil, already inserted a kind of lexicon of fundamental doctrinal ideas from Stageira in his *Metaphysics (Book Delta)*, a sort of lexicon of fundamental doctrinal ideas (such as element (it was not G. Cantor (1845/1918), the founder of set theory, who was

the first to introduce 'element!'); one and many; same and not-the-same (the other); difference; equality and inequality; opposite; earlier and later; quantity and quality; relational completeness; boundary; configuration; part and whole, etc.).

According to Schmidt, oc, 12, *St. Augustine of Tagaste* (c. 354/c. 430), the leading figure of Patristics (Church Father thought), was the first to write a deliberate and distinct doctrine of order (at least in the West): *the ordine* (On Order).

The great saint was then, in +386/387, a catechumen and on his way to his Christian baptism. In his world-famous work, * *De civitate Dei** (On the City of God), he gives a definition of order:

Order is that configuration (merging of places) which indicates the place due to the – by comparison – identical and non-identical (*parium dispariumque*) data.

One can still sense the Paleoputhagorean, rather geometrizing fundamental idea, namely in 'loca tribuens' (assigning a place, typical of our concept of 'configuration'). In this, St. Augustine was inspired by Cicero (-100/-43).

L22

The lemma.

The exposition on ordering will:

(i) to call into question the fundamental operation of all orders, namely what is classically called Aristotelian (summative, 'formal') induction or generalization.

(ii) On that set-theory basis we will be able to discuss:

a. further applicable models (in which the distributive and/or collective ordering types are already, implicitly, examined);

b. the two fundamental harmological structures (units), as already stated (the distributive and the collective);

c. the comparative method;

d. the lemmatic-analytical method.

B.(i).1. -- The summative induction (22/33)

1. As a 'model' (this image) we can take the inventory, -- and indeed, in its broadest sense. 'Inventory' is

- (i)** the whole (the total, the summing (sum), collection)
- (ii)** of the objects present anywhere (defines the common property
 - a.** the mode of being (L.7) and
 - b.** the factual nature (L.7) of the elements (here; objects), which:
 - a.** 'somewhere' (location = mode of being)
 - b.** 'present' (existence as detectable = factuality).

So much for the regulatory model.

2. As (appl.) models, *Van Dale, Groot Woordenboek der Nederlandse Taal*, Utr./Antw., 1982-10, 1066v, boedelbeschrijving, lists -- the list (di som) of the 'stukken' (elements) of a 'dossier' (corpus of texts), which are submitted to the judge, etc.

Bibl. sample

-- A. Lalande, *Vocabulaire technique et critique de la philosophie* , Paris, 1968-10, 506/509 ;

-- P. Foulquié/ R. Saint - Jean, *Dictionnaire de la langue philosophique* , Paris, 1969-2, 357s.;

-- John Stuart Mill, *A System of Logic* (1843), 3:2;

-- Pater IM Bochenski, *Philosophical methods in modern science* , Utr./Antw., 1961, 146;

-- R. Verhulst et al., *Mathematical Learning Package* , 1(*Textbook*), Antw./ A'm, 1980-3, 210;

-- Ch. Lahr, *SJ Cours de philosophie* , I (*Psychologie - Logique*), 1933-27, 595.

L23

(A). 1. Two applicable models.

(I) Let's take a day-to-day teaching experience.

As the structural method of merging (L.20) of our description, we take reduction (L.4 (method)).

(A) Observation.

a. The given (L. 12). --

The classer has just corrected a set of homework assignments.

b. The requested (sought) L.12).-- He wants to know if he has corrected them all.

(B) Answer.

(B)I . Regressive (= abductive) reduction.

Since he remembers not having skipped anything, he assumes (= hypothesis) that he has indeed corrected all of them.

(B)II . Progressive reduction (= deductive reduction).

Starting from the impression (= lemma) that he has corrected them all, he deduces that if he **(i) examines them** all **(ii)** one by one (test, verification, peirastic truth (l.14) for their improvement (actual mode of being (L.7)), this common characteristic), he will then have verified certainty.

(B)III . Peirastic reduction (= full reduction).

He examines, one by one, (ii) all the copies.

(B)IV. Evaluative reduction.

Now he possesses absolute certainty ('absolute', because verified). His value judgment (L.16ff.) reads: "I have accomplished my task of improvement well!"

Reason: he summarizes a multitude of verified facts (homework corrections) into a single unit (summarization).

Especially in evaluative reduction, he acquires new information: he has corrected them all; his task is completely finished; there lies before him the set (= 'gestalt') of corrected works.

(II) Let us note, before continuing the analysis of our lemma (summative induction), that Ad (B) III (peirastisch ed.) is decisive (relevant, conclusive) as the first step regarding summing: one cannot make the sum unless one has first examined (verified) one by one.

Note: that verification is an action (operation). J. St. Mill strongly emphasizes the operational aspect (= nature of operation) in his appl. mod..

L24

First, however, two definitions.

(1). -- What the ancient Greeks called 'kuklos' (cycle, loop) can be described as a line such that all its points, once they have been traversed one by one, cause the starting point to coincide with the end point. In other words, such a summation that the beginning and the end form a single point.

(2).-- 'Operational' is, provisionally, what we call a prescription for a behavior as an antecedent (AnteCeDens (the Latin word for 'sign': ACD) of its own consequent (ConSeQuens (idem for 'follow-up': CSQ)).

In short: **(i)** 'do something' (ACD), **(ii)** 'and you will have the result (CSQ)!

John Stuart Mill (1806/1873), *A System of Logic* (1843), a famous work of logic, gives an operational summary.

(A) Observation.

a. Given: a landscape.

b. Required: provide operational proof that the mentioned landscape is an island.

(B) Answer (L.12).

(B)I.-- Regressive (abd.) ed.

“All landscapes, explorable, by water, in the form of a loop path, are islands. -- If the landscape in question is an island, then everyone can go around it, by water, in the form of a cycle.” (Hypothesis).

(B)II.-- Progressive (deduct.) red.

“If I take a small boat, with which I make a tour such that I execute a loop route around said landscape by water (in fact: operationally), then I provide proof in fact that said landscape is actually (factual mode of being (L.7)) an island”.

Whoever speaks like this designs an experiment (a proof-and-fail). His design is a deduction, supported by a general (universally valid) hypothesis ('all landscapes...'). "If all (loop-shaped navigable landscapes), then this (loop-shaped navigable landscape) here and now". (From the universal set to the singular member of this set).

(B)III.-- *Peirastic (full) ed.*

I am, in fact, carrying out the tour. -- By this execution, I demonstrate—not merely by reasoning (which designs its model), but by reasoned execution of the designed experiment—that the reasoning actually 'matches' with reality (his actual mode of being (L.7)) (which corresponds point by point).

(B)IV.-- *Evaluation*

(Evident).

L25

Note: One sees that, in both application models, the 'answer' (the actual reductive reasoning) is structured:

(A) *Perception* (cf. Heidegger's idea of truth: acquaintance (encounter); L.13);

(B) *Pragmatic* (better: peirastic) ***truth***

regarding what in the first acquaintance (meeting) as a lemma (which is rather vague and imprecise). In other words, a reductive structure (ordering) is hidden in the brief sketch of the various conceptions of truth.

(A).2. *Regulatory model*

We are going to formulate the general idea of 'summative induction' in two different ways.

1 -- *Starting point.*

'Intuitively' (mathematicians and logisticians like to say 'naively'), common sense quickly sees what, firstly, summative induction is and,

secondly, what type of factuality (L.7) it represents: if one adds up all the parts of a whole (all the elements of a set), then one has that whole (that set). - Or again: if all the parts (elements) exist, separately, then they also exist collectively.

2.a. First formulation .

Father Bochenski, oc, 146, formulates as follows.

(i) “If $g_1, g_2, \dots, g_n$ are elements of the class (*note*: 'Class' is an idea related to set, totality, sum, meaning) of the given g and they are all its elements (i.e.: no other element (complementation; L.7) occurs outside these elements) and (after separate verification) the attribute (common property) k applies to $g_1, g_2, \dots, g_n$, then k applies to all (summarized) elements of that class'.

Mathematicizing; “if g_1k, g_2k, g_nk , then $k(g_1, g_2, \dots, g_n)$ ”. Which, clearly established for the first time in our analysis, points to a distributive structure.

The "if" clause does not differ, in a certain sense, from the "then" clause! And yet: the "gestalt" (form) is different; the totality as a totality comes into its own better (mode of being).

Consequence: summative induction is rightly also called 'formal' (formal) induction 'formal' in the sense of 'Gestalt-creating'.

L26

Note: -- Regarding the comparative nature of the summing.

Let us consider an application of the distributive summation formula (L.25);

for example: $5 \cdot 10 + 5 \cdot 3 + 5 \cdot 2 + 5 \cdot 1 = 5 (10 + 3 + 2 + 1)$;

arithmetic: $ax + ay + az + ar = a (x + y + z + r)$.

Only by comparing the first numbers or letters, named one by one, and testing them for their similarities (identity) and differences (non-identity), does one perceive the distributive (immediately, the summative) structure.

2.b. Second formulation.

We can also formulate the regulative model in the form of a deductive reasoning (= syllogism).

M (maior) = antecedent 1 (regulatory model).

“if k (characteristic, common property) is verified for **(i)** all data g **(ii)** separately, then k is immediately verified for the sum (totality, set, whole) of all g.

m (minor) = prefix 2 (applicative model).

Well, k is verified for all data g and for each individually.

C(onclusio) = Nazin.

So, k is immediately verified for the sum of the data g”.

Again: from a reductive perspective (with emphasis on the peirastic (tested truth (L.14)), the minor (second antecedent) is decisive: the hypothesis of the first antecedent (Maior) is checked for its effective (verified) truth by means of deductive experimentation. The Conclusio is merely the evaluation.

Compare with the reductive structure L.23/24.

(B). Cultural-historical assessment (verification).

Formulating a theory, even starting from its applications (appl. mod.), can possibly be an easy task. -- Nevertheless, testing (always the Peirastic truth (L.14)) is always desirable. One compares one's own ideas with those of earlier generations.

L27

1.-- Summering, viewed from a primitively archaic perspective.

An appl. model. -- Verhulst et al., *Mathematical Learning Package* , cites the findings of the German physician and naturalist MHK Lichtenstein (1780/1857).

1. He stayed for a considerable time in Southern Africa, to be with the Xosa (Negro-African people there (= Transvaal)).

(i) “Although they have numerals, they rarely use them.

a. Few among them get further than ten when counting.

b. Most people cannot even name this number.

(ii) Compared to these Xosa, certain Californian tribes were even less advanced: around 1850, a number greater than six was called 'very many'.

2. Notwithstanding this state of affairs—which is 'backward' for our Enlightened Western methods of thinking and calculating—Lichtenstein establishes the following facts.

(1) The Xosa possess a summering type of their own kind.

If herds of four to five hundred cattle are driven home, the owner notices, immediately,

a. whether any animals are missing (factuality: 1.7)

b.1. how much and

b2. which are precisely missing (mode of being (L.7)).

We, the Western Enlightened, will not be quick to imitate this! This concerns suddenly perceived summatives (both one by one and all together)! This type of summative induction seems rather mantic (paranormal clairvoyant art).

(2). In West Africa, among the Negro-Africans, again, summative induction proceeds in the following way.

The tribal chief delivers a set of sticks to the village chiefs such that, if, from that day on, exactly one stick is removed each day separately, then, finally, the day of the meeting arrives when all the sticks have been removed together.

a. A purely applicable model of summering; one every day, all together!

b. And, furthermore by means of projection: one maps the sum (projects it) onto a set of sticks such that, **(i)** to each stick, **(ii)** exactly one countdown day corresponds (mathematicians, in the style of Bourbaki, speak of 'bi.jection' (addition)).

2.-- Summering, viewed as antique, or 'classical' respectively.

What archaic people did in their 'primitive' (paranormal or non-

paranormal) way, thinkers reinterpreted in 'rational' terms, especially since the ancient Greeks.

L28

2.A.-- The ancient, medieval, and modern views on the matter.

First of all, the ancient Greek, the starting point for the rest.

a. -- Aristotle of Stageira (-384/-322),

In his First Analytical 2:23, he discussed summative induction.

Pater Lahr, Logique , 591, quotes:

1. Man, the horse, and the mule live
2. Well, they are the only type of 'beings - without - bile'
3. So, all living 'beings - without - bile' live long.

Here, in this appl. model, the summation hides behind 'enige' ('unieke') and 'alle', as well as behind the enumeration (enumerative summation) of the species.

b. -- Scholasticism (800/1450),

Ecclesiastical Medieval philosophy spoke, in its Church Latin, of 'inductio per enumerationem simplicem' (induction or generalization by means of simple enumeration. Cf. L.22 (inventory)).

c. -- Rene Descartes (Lat.: Cartesius; 1596/1650),

The founder of modern philosophy assumes, in the traditional sense, that induction can take place 'par dénombrements entiers' (complete enumerations, - inventories).

d. -- Antoine II Arnauld (1612/1694)/ Pierre Nicole (1625/1695),

Logique de Port-Royal (1662), 3: 19; 4: 6, speak of 'induction entiere' (complete generalization. 'Total' induction is also used). -- The logicians of Port-Royal describe total induction as follows: “

(1) the information (insights, intelligence) provided by the major and the minor together,

(2) returns in summary in the Conclusio”. (Cf. L. 26).

In other words: (1) what both preceding clauses teach, (2) that results, summarized in the concluding clause of the syllogism.

2.B. Current views (28/30)

a. -- *Pater Ch. Lahr, SJ, Logique* , 595 (591), calls summative induction simply 'Aristotelian induction' or also: 'formal induction' (L.25 (bottom)).

His description:

“ **(1)** What is said of each member individually, **(2)** is said of the set (which he, in Middle-century language, calls 'purely logical whole')”.

b. -- Georg Cantor (1845/1918), the founder of 'formalized' set theory, which he published from 1874 to 1897.

L29

Contemporaries were, however, so closed to his new approach to mathematics that Cantor, deeply disappointed, eventually died in a psychiatric clinic in Halle. Which proves that mathematics, from a cultural-historical perspective, is more than pure reasoning!

1. In 1895 , *Cantor formulated* the idea of 'set' (ensemble, set, menge), descriptively rather than strictly mathematically defining, as follows: “By 'set' we understand every summarization (L.25) into a whole (L 22: inventory as one type) of certain, distinct objects, whether of our intuition or of our thought (which are called the 'elements' of the set)”. (*Beiträge zur Begründung der transfiniten Mengenlehre*).

2. In other words: summative induction (each data point in itself, if verified from the perspective of characteristic k, -- all data points together exhibit k) returns here:

- (i)** certain, well-defined objects, called 'elements';
- (ii)** 'summarized into a whole' (Jede Zusammenfassung zu einem Ganzen').

Conclusion: There is formal similarity (model identity) between the 'sum' of summative induction and the 'summarization into a whole' of the (Cantorian-conceived) set.

Note-- *E. Bouqué, De algebra der collectieen* , Ghent, 1967, from

whom we derive the above description by Cantor, says, oc, 13, that it can be determined (verified) of any 'thing' in two ways whether or not it belongs to the set in question:

- a. by listing all the elements (L28);
- b. by indicating a characteristic property (mathematicians call this the 'principle of abstraction') (L25: k).

As can be seen, in the course of the history of the idea of 'summative induction', we have seen the two verification criteria applied.

In fact, there are two to three 'k' features, the basis of the complete enumeration.

1. *The fact that more than a given g is present in the field of attention of consciousness ;*

Bouqué speaks of “a man, a book and a building” (oc,12);

L30

a. In themselves, they show no connection whatsoever (neither the connection of similarity nor the connection of coherence) – unless – though the author does not mention this – the person is in the building with a book.

b. Yet they are, expressed in ancient Greek, 'one' (i.e. interconnected (L.10ff.)), namely as objects of my attention. With E. Husserl (1659/1938), the phenomenologist, and his teacher Franz Brentano (1838/1917), the leader of the Austrian School of Philosophy, we can call this type of 'unification' (collection, summation) 'intentional': our conscious attention, after all, is 'intentio' (as the Scholastics said), i.e. directed towards (something L.7; 9/10).

Behold the first type of k, characteristic (characteristic property), basis of collecting.

2.a. *The fact that more than one piece of data is mutually connected, in itself, by similarity ;*

for example, all the ants of an ant colony.

2.b. The fact that more than one set of data are mutually, in themselves, connected by coherence (connectivity) ;

For example, a person reads a book in a building (purely local coherence); likewise an anthill: the nest is the dwelling, structured by the ants, which lead a strong collective life (local and biological coherence). In both cases—objective similarity and objective coherence (connexity)—there is, besides intentional connection (as objects of attention or 'intentio'), also a connection in itself, within the data itself.

Consequence: the characteristic *k* is, besides being intentional, 'objective'.

(C). Logical classification of summative induction.

Usually, people speak of induction, at least without adding the type name. We are not going to do that.

G. Thinès/ A. Lempereur, Dict gén. D. sciences. hum ., Paris, 1975, 495, clearly distinguishes summative induction from amplificative ('amplifiante') induction. Proponents say that it is also called 'Baconian induction' (after Francis Bacon (or Verulam) (1561/1626), the man of causal induction). As a definition, we give: a scientific method which:

(1) relying on a finite set of verified factual modes of being (L.7) = which is synonymous induction

L31

(2) generalizes (extrapolates) to the corresponding infinite set of possible verifiable factual modes of being (L.7);

a. It is this 'extrapolation' that constitutes the difference from summative induction: the name 'extrapolating induction' therefore seems to us the most appropriate name.

After all, 'extrapolating' means crossing the boundary of the verified, for whatever (valid or invalid) reason.

"Amplifying induction (thus Thinès, oc 495) transcends the known and the lived in order to predict, immediately (meaning: without first

verifying), a future state of affairs”.

b. This implies that extrapolating induction is, at the same time, abducing, hypothesis-formulating induction:

(i) from the established factual modes of being (summative),

(ii) one extrapolates, or 'concludes', into endlessly repeatable, future ascertainable factual modes of being of the same essential nature (or 'factual mode of being').

Maw the summatively established factual mode of being functions as a lemma (L.6), which, thanks to further 'analysis' (establishable factual modes of being), will become clearer as true.

c. Expressed differently: summative induction counts as a sample ('sampling, jaugeage, Stichprobe') taken from a collection of essentially similar phenomena.

If it is understood in this way, it changes into a highly probable verifiable hypothesis (abduction), i.e., it becomes, literally, amplification, extrapolating.

Decision.

Contrary to what we have done above, namely to hold summative induction in high regard, it was traditionally viewed with more contempt. Nevertheless, the undeniable connection with the highly regarded amplificative induction—it is its verified heartwork—should long ago have prompted a different evaluation, not to mention the idea of 'collection' which is contained within it, clearly and inductively.

L32

Schematic summary.

Again, cast in the form of reductive reasoning (L.12; 26.).

(A) Observation.

a. Given.

On the one hand, a dose of guano (a phosphate residue of the skeletons and excrement of both fish and seabirds, living on cliffs and preferably uninhabited islands, especially in Peru; from guano, phosphorus (P, a reactive element (a solid non-metal)) from group V of

the periodic table is extracted).

On the other hand, the suitable equipment to produce phosphorus from guano.

b. Requested.

The structure of the logically consistent proof that all guano releases P,

(B) Answer = reduction.

be summarized , with Jan Lukasiewicz (1878/1956), from the Polish School of Lwow (= Lemberg) - a school for thought analysis founded by Twardowski (1866/...) - as follows:

M = VZ 1: If all quantities of guano release P, then these quantities h1, h2, ..., hn also do so here and now.

m = VZ 2: Well then, these quantities h1, h2, ..., hn here and now actually, empirically, verified, yield P.

c = NZ: Therefore, all quantities of guano release P.
(Cf. *IM Bochenski, Philosophical Methods* , 94ff.; 126).

Note-- Like L.26, but now more clearly, the thought-analytical schema appears to be:

M=VZ 1: If general rule (universal set, regulative model), then (all) applications (subsets or members, examples, applicative models).

m= VZ 2: Well then, applications (h1, h2, ..., hn).

C = NS. So, general rule.

In this syllogism one sees that:

(i) the summative induction is hidden in the minor (= VZ 2);

(ii) the amplifying (lemmatic, extrapolating) induction is hidden in the conclusion (NZ): one acts as if the unverified quantities will also actually be verified,

In other words, in school language: **(i)** from the applications **(ii)** one concludes the rule!

B.(I).2. -- introduction to comparative ordering (33/66).

a. Summative induction (L.22/32) is, as it were, the foundation: whoever proceeds methodically first and foremost takes stock. Only then can he proceed.

b. Let us summarize, once again:

(i) summative induction is: “if all separately, then all together”;

(ii) amplifitative (lemmatic) induction is: “if at least one (some), then all”. With regard to the distributive structure inherent in summative induction, reference was made to the comparative efficacy (L.26 (top)) that underlies it. Now we analyze that comparison itself.

A.-- The entry. (33/42)

(L.6; 32). First: *L. Davillé, La comparaison*, XXVII (1913), 23, says:

“(a) Instead of dealing with individual cases (understand elements, moments, -- subsets), when it comes to dealing with phenomena or objects,

(b) the comparative method attempts to bring sets ('ensembles') into focus, **(i)** either similar **(ii)** or complementary.

The summative and amplifitative (lemmatic) inductions have taught us what Davillé means by 'ensembles' (L.29): they are, after all, central to collecting; -- and indeed in an operational manner (L.23).

However, the idea of 'collection'—if it is to become more operational with regard to comparison—must urgently be defined more precisely. We will do this in two ways: firstly, by means of the brief analyses of the applicable models of comparison shortly; then, by explicitly focusing on the comparison structures themselves.

The lemma.

Apart from the fact that methodical comparison refers to sets (the comparatives 'intentio' (L.30 (direction of attention))), there is the pair of 'internal and external comparison', to which Davillé already points out, mentioned in passing.

1. The distinction 'factual mode of being/complement of being' (1.7) is its basis: the internal comparison, through decomposition (analysis) into elements (components), remains within the factual mode of being; the external one stands still, likewise decomposing, but viewed from the perspective of the factual mode of being in question, at the complement of being (with what, within it, shows a connection (or the opposite) with the mode of being under consideration).

L34

2. One application not yet developed.

a. One might know something, in Germany, at the end of the last century, 'Das Grossische' was called 'Prinzip' (the Grossian principle). In his *Die Anfänge der Kunst*, Freib.i.Br., 1894.

Moreover, in his * *Die Formen der Familie und die Formen der Wirt(h)schaft**, *Fr.i.Br.*, 1896, E. Grosse (1862/1927) defends—in a non-Marxist manner, incidentally—the following heuristic principle (note 'Heuristic means: 'lemmatic', setting the way in research):

“Economic activity (1) is the life centre of every cultural whole; (2) is its own antecedent (ACD L.24) ('influences') -- in the most profound and irresistible way of the other (complement: 1.7) cultural factors”.

E. Grosse—apparently influenced by earlier statements ('intertextually,' one might say, with Julia Kristeva)—explains his thesis with the following, somewhat provocative application: “Wenn man weiss was ein Volk isst, so weiss man auch was es ist” (If one knows what a people eats, one also knows what a people is).

b. W. Koppers, SVD, *Die materially-wirtschaftliche Seite der Kulturentwicklung*, in: *Settimana Internazionale di Etnologia Religiosa* (IVa Sessione: Milano (17/ 25.09.1925)), Paris, 1926, 109, gives, in the spirit, incidentally, of Father W. Schmidt, SVD (1868/1954), who Grosse agreed, next applicative model.

“ **(a)** = In general, we see how, in modern Europe, the legal position of women is undergoing a serious change. For instance, today (1925), women generally possess the right to vote, the right to university studies, the right to free choice of profession (...), which, a few decades ago, were non-existent for her.

Who would, now, misunderstand or, even, deny that modern—specifically: capitalist economic development—is to be held responsible for that state of affairs in the first place? The internal comparison: Koppers remains within the current cultural context (main set); within it, he distinguishes at least two subsets:

L35

- a.** the legal position of women;
- b.** the economy.

Maw Koppers compares, internally, the culture sets (woman, economy), namely within culture. – It is now also said, since the more recent system or system theory, that woman and economy are two subsystems within one supersystem.

The text continues after that.

“ **(b)** Now, however, what is legitimate for the present time can only be just for the archaic time in the development of mankind. For many evidence points to the fact that, at one time, in essentially the same manner, the mother law arose from specific economic conditions.”

1. The author refers here to maternal rights or matriarchy (a legal system in which, particularly in certain early civilizations, authority rests primarily with the woman, especially with the mother of the family).

2. However, note this: the author now compares, externally, the modern fact with an archaic situation; he sees a similar possibility, namely the economy, according to Grosse's cultural model, as the reason (ACD (antecedent, omen)) for the legal position of women (CSQ (consequent, continuation)).

However, now, he compares the modern main set, with respect to those two subsets, externally with the archaic main set, with respect to those two subsets. (L.24: ACD/CSQ).

The lemma.

We must now expose some structures that govern the above internal and external comparison of sets. We outline them as differentials.

a. The identity link.

Identity and non-identity are, here the criterion:

totally identical	partially identical	totally non-identical
(entirely	(partially the same)	(completely
same)	the (analogous, similar)	different)

Thus it can be seen that, regarding the relationship 'woman/economy', modern and archaic culture are partially identical (analogous).

L36

Cultural-historical verification.

(i) Antiquity:

The Paleoputhagoreans (-550/-300) worked with a type of 'sustoichia' (systemic pair of opposites), namely 'tautotès' (identitas, identity) / 'heterotès' (alteritas 'distinction' (non-identity, difference)). (Cfr O. Willmann, *Gesch. d. Id.*, I,273).

Plato of Athens (-427/-347), the founder of Academic philosophy, and Aristotle of Stageira (-384/-322), the founder of Peripatetic philosophy, also worked with the same pair of opposites.

(ii) Scholasticism (800/1450),

Ecclesiastical-Middle-aged philosophy, strongly influenced by both

the Puthagorean and the Platonic-Academic and the Aristotelian-Peripatetic philosophies, continued to think in the same style.

(iii) Modern - Enlightened philosophy

R. Descartes (1596/1650), the founder of modern thought, held that “(most) knowledge is attained by means of the comparison of at least two 'things' (choses): (Regulae ad directionem ingenii, xiv);

Moreover: “one must analyze in terms of identity and difference (en termes d'identité et de différence), of measure and order(ing)”. (Thus *M. Foucault* (1926/1984), *Les mots et les choses* (*Une archéologie des sciences humaines*), Paris, 1966, 66, where this structuralist summarizes Descartes' method).

But David Hume (1711/1776), the empirically Enlightened mind, in his associationist interpretation of comparison, also stands for the following:

- (i) similarity and contiguity (adjacent, adjoining, contact) and
- (ii) cause-and-effect relationship enable us to 'collect' (associate) elements.

Working in the tradition of Hume, yet typically French (and therefore intellectual), Auguste Comte (1798/1857), the founder of positive philosophy (i.e. philosophy founded on scientific principles), also believes that facts, as elements, are associated according to (i) similarity and (ii) succession.

Bertrand Russell (1872/1970), the human rights advocate, also thinks in that same tradition.

Decision.

This brief overview of the history of ideas shows that, with the pairing 'identity/non-identity (difference)', we are aligning ourselves with a strong tradition.

L37

b. The connections that are more than merely identity-based.

The essential core of all other connections is identical (it has, whether or not, an identical character). -- We place a few before the viewer.

b.1. As noted in L. 29v, all sets are possible only on the basis of intentional connection: the man, the book, and the building of the applicative model, there, are identical, namely from the perspective of 'being in the view of attention' (actual mode of being), but not completely. They are, from that perspective, namely the intentional, partially identical.

b.2. Likewise the objective relationships, the basis of collecting: if all the ants (L.30) of the anthill are, well, as individuals (singular specimens), different (non-identical), yet, as 'specimens' of the same species (specific), they are identical. Let us say that, viewed specifically, they are partially identical. So, too, (L.30) the ants as a home in and around the nest: although disparate, living and moving as mutually independent and free, yet they belong in one and the same 'colony'; from the point of view of local and biological coherence, they are partially identical.

Thus, likewise, (L.33ff.) the complementary connection (internal and external): I consider, first, the (legal) position of women (internal); then, I confront it with the cultural context (Grossian, for instance, i.e., with the economic context), i.e., with the 'rest' (complement) (external).

Now, if there is a connection (namely of the type *acd/csq* (L.24)) between the (internally viewed) object (the female position) and the (externally viewed) complement, then these two are, from the point of view of connexity (coherence-relatedness), partially identical.

It can be seen that here, there is already an application of the second type of connection, namely the *connexe*.

a. Moreover, in the complementary context, one recognizes the age-old pair 'part/whole', however in such a way that the whole, starting from a part, is divided into two (division into two).

b. In every connection, one recognizes the same age-old 'part/whole' model; thus, the ants are the 'parts' (moments, being living, movable elements) of the whole, the colony.

c. One also recognizes, in the intentional context, the same 'part/whole' pair: the whole is the view itself—within which the 'parts' (take the human being, the book, the building) 'situate' themselves, just as one can say that the ants situate themselves within the whole of the colony and that the part under consideration (e.g. the position of the woman), in the complementation (dichotomy), 'situates' itself, along with the complement, within the whole.

c . *Distributive and collective structure.*

a. L.26 (distributive summation formula, supported by 'identical' comparison, incidentally) already taught us that identical data reveal, as it were, one and the same characteristic L.2 spread over a multitude of data (L.10v.; frl. L.10: at the bottom). All identical structuring (comparison) results in such a distribution of the same factual mode of being (L.7).

b. What stands out, within the systechie (L.36) 'part/whole:' is that:

(i) the identical structure is present there, in any case (all moments, elements, 'parts', after all, exhibit the same characteristic k, namely belong to (for the part) (or comprise (for the whole)) the same totality (whole).

(ii) The collective structure, however, reveals itself in the fact that they only constitute the whole (totality) together, whether they are mutually identical or different (non-identical).

That type of summering (L.22ff.), namely that all data exhibit the same characteristic k (distributive), yet in such a way that they can only exhibit that k jointly (collectively) if they wish to constitute a totality, is to be called 'collective structure'.

Decision:

in any case distributive, in some cases collective, -- the structure, as far as comparing is concerned, is always there.

L39

Cultural-historical verification.

a. That both the distributive and the collective structures have indeed played a role within the ancient Greek (and, therefore, within the Western) world of thought will, furthermore, gradually become increasingly apparent; especially when system theory is discussed.

b. In the meantime, merely the semasiological (theological) sketch of the Greek word 'su.stêma' (literally: assembly; system, scheme). Curiously enough, the ancient Greeks perhaps did not make such a sharp distinction between 'collection' (i.e., a purely distributive structure) and 'system' (system: both a distributive and a collective structure). Let us take a look.

1.-- *Physical.*

Something like a bag of gemstones—the togetherness (i.e., both being gathered and being enclosed) of more than one given within the space (but, then, contiguous space) of something—is called 'sustêma' by the ancient Hellenes.

2. -- *Organic.*

The body of a plant, animal, or human—as a totality, as a mass, and also of its parts—was called the 'sustêma'.

Thus Aristotle speaks of Stageira (-384/-322) of 'to holon sustêma tou somatos' (the entire system of the body).

3.-- *Cultural.*

3a. Sociologically: every group or grouping of people (multitude; -- association, guild, college, league) was called a 'sustêma'.

3b. Legally: a constitution – the summary and ordering of institutions – was called a 'sustêma';

3c. Doctrinal: a philosophical or other system of thought – the

interconnection of doctrines – was called 'sustèma';

3d . Poetic, respectively musical

(think of the 'choreia', i.e. the unity of dance, music, and song (text), among the ancient Greeks): a rhyming stanza, a musical chord – as an ordered whole – was called a 'sustèma'!

c. Compare, with this, what *D. Nauta*, **Logica en model**, **Bussum**, 1570, 173ff., says of 'system' in current system-theory thinking. One distinguishes, likewise, three levels of 'system':

L40

1.-- 'Concrete' (understand: physical, respectively biological or culturological) systems:

Such a (physical) crystal; a (biological) organism, a (culturological) factory;-- with 'concrete' systems it concerns 'concrete' relations, such as the binding energy of an atom (oc,175).

2.-- 'Conceptual' systems:

such a collection of points, a number system, a schema, an atomic model; -- 'conceptual' systems occur - according to the author - “in a theory, on paper, as abstractions, constructions of the human mind”; in these systems the relations are 'conceptual' (oc,175); -- compare - ancient Greek - with 'doctrinal' systems.

3.-- 'Formal' or 'language systems':

Thus the logistics (calculus) of judgments (propositions), a programming language for computers; -- any language in which:

(i) of the physical (understand: 'concrete' in the language of D. Nauta) realities

(ii) a . conceptual reconstruction **b.** described symbolically (i.e., in a coherent system of signs), is a 'formal' or 'linguistic' system; in such systems, the relations are 'formal' or, as the author describes, 'syntactic' relations ('syntax' is the description of the mutual relations of signs within a sign language, -- differing in this respect from 'semantics' (the study of meaning) and 'pragmatics' (the study of use value)).

Note: -- Although the ancient Greeks did not have an explicit 'formalization' like we do now, their logic and, for example, axiomatic-deductive geometry (Euclid of Alexandria (-323/-383)) were somewhat ahead of current 'formalizations'.

In any case: they knew very well the first two layers of current systems theory, the 'concrete' (physical, biological, cultural) and the 'conceptual' (comprehensible). They remain—here, once again—the pedestal.

So much for the second sketchy, yet sufficiently relevant history (see L.35v.), which engages us in a solid and still 'living' intellectual tradition.

L41

Note: -- It may have been noted that D. Nauta describes systems in terms of 'relationships'.

Indeed, in oc.175, he states that “he does not further define the term 'relation' (connection), but proceeds from the 'intuitive' concept thereof (*note:* 'intuitive' in the sense of 'lemmatic'). This term 'relation'—called 'primitive' (because undefined)—is used by the author to describe 'structure': “the structure (of a system)—according to Nauta—is the totality (L.22ff.: summative ind.), the entire network, of relations between the elements (of that system)”. (Ibidem). One sees the order in the usage of the language: **(i)** relation, **(ii)** structure.

And now: 'system'. “A system is a collection with a structure”. (Ibid.).

Decision: **(1)** employment; **(2)** structure; (3) system.

-- One can also do it ontologically (L.7):

(i) actual mode of being;

(ii) more than one factual mode of being, which – as factual modes of being – exhibit a partial identity, are 'involved' (relationship) with one another;

(iii) if that relationship (partial identity) forms a network, then one speaks of structure.

General decision. -

From L. 33ff., we discuss comparative ordering.

a. Indeed as a lemma, i.e. as a working hypothesis, which is gradually clarified by means of analysis (L.6). Or, if you prefer: as a regressive (abductive) reduction (= lemma), which is clarified by means of progressive (deductive) and peirastic (testing) reduction (= analysis). (L.12, 23ff.).

b. In summary:

- 1.** Comparing is collecting (L.33).
- 2.** Comparing is dissecting internally and externally (L.33/35).
- 3.** Comparing is collecting, internally and externally analyzing, based on (comparison structures (especially the identical structure) (L.35/41).

B. The lemma.

Now that we possess the base lemma, we can likewise design the analysis (determine it lemmatically).

With Father Pinard de la Boullaye, SJ, L'étude comparée des religions (Essai critique), II (Ses méthodes), Paris, 1929-3, 48, we can, already, say:

(1). -- Diachronic .

The comparison of the sequence of states (of something, namely life, for example) leads to the idea of 'organic evolution'.

L42

2.a. Synchronous

Experimental-scientific. The comparison of the influences undergone (ACD = influence (L. 24; 34v.)) and changes (CSQ = change (L. 24; 34v.)) proves its utility value when it concerns experiment (L.32; appl. mod.: 11/13).

This is the case for phenomena that can be randomly repeated by the researcher.

(2).b. Synchronous.

non-experimental scientific. “The comparison of the various cultural forms that have emerged in the course of history replaces the experiment when it concerns phenomena that cannot be arbitrarily replicated. Such as, for example, vanished institutions.”

This outlines, lemmatically, the far-reaching domain of application of the comparative method: it is, indeed, as will become apparent, far-reaching.

Bibliographic sample

-- In addition to the works or articles mentioned, reference is made to:

-- *L. Davillé, La comparaison et la méthode comparative (en private, dans les études historiques), in: Revue de synthèse historique , XXVII (1913): 4/33: 217/257; XXVIII (1914): 201/229 ;*

-- *H.Pinard de la Boullay, L'étude comparée des religions (Essai critique), II (Ses méthodes), Paris, 1929-3, 40/87 (Methode comparative), -- which remains one of the most thorough studies on the subject;*

-- *M. Foucault, Les mots et les choses (Une archéologie des sciences humaines), Paris, 1966, 66ss, (Descartes' theory of organization),*

B.-- The analysis (appl. Mod) (42/66)

We will now consider a limited number of applications of the comparative method.

1.-- The measuring equation (42/51)

L. Davillé, ac XXVII (1913), 20, says: “The comparison can be either direct or indirect.

a. - One can, namely, directly compare at least two pieces of data with each other, without a third piece of data.

b. - If, however, one must introduce at least a third given to compare them, then one is dealing with an indirect comparison. This is calculated whenever a common measure is used.

H. van Praag, **Meten en vergelijken **, Hilversum, 1968, writes on the subject: “As the French mathematician Henri Poincaré (1854/1912) has demonstrated, it is:

- (a) the choice of the measure is a subjective matter,
- (b) the use of the once chosen measure is given an objective (L.29v.)”.

Appl. mod.

(a) It depends on my free choice whether I measure the distance traveled in meters, yards (three feet = 0.9144 m, since 01.07.1959) or toises (une toise, fathom (six feet = 1.95 m)).

(b) But what our 'I' decides has to do with the objective length (distance traveled): the result will, in other terms (meters, yards, fathoms), represent exactly the same factual mode of being (L.7). Or: any other person will be able to verify my result (l.23v.). The measurement result will, in itself, be identical.

Euclid of Alexandria (-323/ -283), in his *Stoicism (Elements)*, already cites a first axiom: “The data that are identical to the same third are mutually identical”.

Expressed in letters: If A is equal to B and B is equal to C, then A is equal to C. (*L. Brunschvicg, Les étapes de la philosophie mathématique* , Paris, 1912-1; 1947-3, 88, where the correct interpretation (spatial or purely logical) is discussed). - In any case, indirect comparisons are performed here.

R. Descartes (43/47) (1596/1650) in his *Regulae*, XIV, states the comparative character of Euclid's axiom: “By means of comparison we find “the figure (external form of a body; Gestalt), the extension, the motion and the like”, in other words the simple natures (actual modes of being) - in all the data in which they can be present.

On the other hand: given a derivation of the type “Every A is B; every B is C; therefore every A is C”; it is clear that our mind “compares the sought term and the given term (L.12), namely A and C, with one another, but from the viewpoint that both are B”.

Consequently,

- (i) if one disregards the intuition of a separate reality,
- (ii) then—one might say—“one obtains, by the mutual comparison of at least two realities” (Regulae, XIV). (*M. Foucault, Les mots et les choses*, 66).

Descartes further explains the latter by distinguishing two types of comparison (he even claims that only two exist), namely, the comparison by means of measure and that by means of 'order'.

Explanation. -- The measuring equation according to R. Descartes.

a. Descartes—according to Foucault, oc,67ss.—claims that one can measure both continuous and discontinuous data. In both cases:

(1) one first considers the totality (L.22ff.: summative operation);

(2) the totality is divided (division) into parts, called 'units'.

a. If continuous data is involved, those 'units' are agreed upon (conventionally: think of the meter, the yard, or the fathom to measure a line). The unit, here, can be called a 'measurement model'.

b. If we are dealing with discontinuous data (think of a series of blocks that one wishes to measure), then those units (measurement models) are the units of arithmetic.

b. - Descartes concludes, then, in two ways.

a. “Comparing two quantities (continuous data) or two discontinuous data requires, in any case, that one applies a common unit (measurement model) in the analysis of both the first and the second kind.” (Oc, 67).

b. “Thus, the measuring equation amounts, in any case, to the arithmetic relations of equality and inequality. The measure (measurement model, unit) allows us to analyze the similar (le semblable, the analogous (L.35)) according to the calculable form of the

identity and of the difference (L.35ff.)". (Ibid.).

In other words: the measuring equation first divides (division) and then applies a common unit (measure, measurement model) (ibid.). It is an analysis by means of units to determine equality and inequality (ibid.).

L45

Decision.

One hears it: Descartes is and remains traditional. But he innovates: not identity-and-difference (non-identity), but its computable form. That is, for him, analysis (comparative ordering). The mathematical (arithmetic) form of analysis comes to the fore.

Explanation.

1. The '*mathesis universalis*' (general '*mathematics*') acc. Descartes.

a. M. Foucault, oc, 70ss., emphasizes:

(1) not the mechanistic model of thought (i.e. interpreting reality as 'machine', as, for example, in the 17th century, in medicine, respectively physiology);

(2) nor does the mathematization model (i.e., the interpretation of reality as an embodied mathematical formula, as in astronomy and in part of physics) constitute Descartes's total intention

b. The fundamental (total) intention of Descartes is called '*mathesis universalis*' (literally: all-encompassing, computationally operating theory of order). Not interpreting as a machine;—nor mathematically interpreting,—but ordering by means of a means of self-ordering,—that constitutes Descartes' full design.

'Analysis' means both machine thinking and mathematics as well as general order theory, but, then, especially the latter.

c. In this—in a mathematizing theory of order that encompasses the whole of reality—Descartes is not new: the Paleoputhagoreans—(-550/-

300), with their arithmology (a theory that works with number, geometric form, and 'harmony' (incorporation)), upheld an analogous (L.35) doctrine.

And every Platonism (Platon of Atene: -427/-347; the older Platon became more and more Puthagoreaning) continues that tradition, at least partially.

2. We will explain this in more detail. (45/46)

a. Ordering, according to Descartes, differs from measuring and comparing. "I perceive the order that exists between, for example, A and B, without considering anything other than these two terms." In measurement, a third something intervened.

b. The order of things is not known by examining them in themselves, separately; but:

(i) one first recognizes the simplest given,

(ii) after which one recognizes the nearest reality (given).

This creates a series (serial side).

L46

c. Secondly, the order of things is discerned by starting, in the above series, with the simplest given and, continuing that series, ending with the most complex given (complexifying side).

In summary:

(i) Series formation - of which the series of numbers playing a major role in the arithmetic centered on the above is only one type -;

(ii) Complexification (the progression of analysis from the simplest to the most complex given).

An appl. model.

Assuming – in contemporary algebraic terms – the asteroidal formula follows:

$$a/b + c = d.$$

Cartesian 'ordering' would amount to this:

(i) first, the simplest data: a, b, c, d; -- - (division sign), + (summation sign), = (equality sign).

(ii) then, the less simple: a/b.

(iii) Finally, the most compound: $a/b + c = d$.

An appl. model.

Assuming (L.37) the ant colony.

Cartesian ordering (as series formation and complexification combined) would amount to this:

a.1. I take exactly a tiny ant (simplest given) on my fingertip.

a.2. I see the little ant (analysis) in itself: internal comparison.

b. I look, now, at all the other little ants (division = complementation).

b.1. I see that the others are formally similar (model-identical), so I group (L.22ff. (summering); 35ff. (identitive aspect)) the entire series of ants into one biological type.

b.2. I see the little ant, on my finger, struggling,

to (i) be with the other (locally (L.37))

and (ii) to sympathize with the other (L.37 (biological connection)).

c. I am now looking at the nest and the surrounding forest:

c.1 The nest situates the 'society' (system; L.35).

c.2. The nest itself is situated within the forest as a whole (supersystem; L.35).

Result:

(1) The series (a to c.2.);

(2) Complexification.

L47

3. The relationship between measuring and ordinary ordering equations.

a. This is formulated by Descartes himself as follows: "One can reduce the measurement of continuous and discontinuous data to the establishment of an order: the numerical values of arithmetic are always susceptible to series-like ordering. (...)."

It is precisely in this that both the (Cartesian) method and its 'progress' exist: reducing every measurement (...) to a series formation, which,

- (i) starting from the simple,
- (ii) exposes the differences (non-identities) as so many degrees of complexity". (M. Foucault, oc, 68).

b. In other words, the 'universal theory of order' (mathesis universalis) subjects every analogy ('resemblance' (L.35 (bottom))), the heart of ancient Greek and Scholastic philosophy, to testing by means of comparison – thus: comparative method, in any case, whereby this testing (verification/falsification) proceeds in two ways:

1.-- comparison by means of the measurement model (the common unit).

2.-- comparison by means of 'ordering' (i.e. identity and series of differences (non-identities)) (M. Foucault, oc, 69).

Note: -- Needless to say, Descartes, in his critique of the vagueness (not of the principle itself) of ancient Greek and Scholastic comparatism (= method of comparison), as well as of complexifying ordering, places very strong emphasis on complete enumeration (L.28) or summation. This can take three forms:

- a.** -- the exhaustive count (inventory (L.22));
- b.** -- the classification into 'categories' (types)
- c.** -- the analysis of a necessary and, somewhat, sufficient sample (from the series). What matters in each of the three types of summative induction is that one tests the totality as exhaustively (completely) as possible.

Reason: only then—according to Descartes—is there absolute certainty regarding identity and (the series of) non-identities (differences) (L.35). Cf. Foucault, oc, 69).

Note:- Cultural-historical comparison.

As already stated (L.45), Descartes, consciously or unconsciously (there is, after all, a clear Renaissance Puthagoreism and Platonism) (cf. O. Willmann, *Gesch. d. Id.*, III (*Der Idealismus der Neuzeit*), Braunschweig, 1907-2, 24/69 (*Der Pythagoreismus d. Ren .; Einfl.d.Pyth. auf Mathematik u. Astronomy*) ;

1. Puthagorean series formation and/or complexification.

a. *Euclid, Elements* , 7/9 (*Arithmetic*), begins with two definitions:

(i) “Monas (= monad, unity understood as element (micro-unity)) is she, after which each of beings ('onton') is called one”;

(ii) Arithmos (= conjunction, 'number (form)') is the set ('plêthos'), insofar as it is composed of micro-units ('monads')” (*Fr. Krafft, Geschichte der Naturwissenschaft* , I (*Die Begründung einer Wissenschaft von der Natur durch die Griechen*), Freiburg, 1971, 319).

With these two descriptions, Euclid, in his time, aligned himself with an ancient Paleo-puthagorean tradition regarding the conception of number: “The one (unity), (understood as element, stoicheion), exists for all numbers ('arithmoi'); it is not a number itself ('arithmos', set of units). It is, however, present in all 'numbers' ('arithmoi', sets of units), as their necessary condition.” (*O. Willmann, Gesch. d. id .*, I, 2721, where the author speaks of the Paleo-puthagorean idea of number (di from -550).

When, around 300 BC, Euclid wrote his *Stoicism (Elements)*, he was still living within that older tradition. In other words, it is only from the two (the smallest possible set of units) that the older Greeks speak of 'number' (understand: set of units). Number theory is set theory! (L28 ff.)

Ancient Greek set theory is unity theory (L.10/13).

In addition (namely with that type of gathering), the double meaning of 'them', 'one', which is also found in our word 'unity', came to mind.

1. For once, 'them' (€V) is the 'one' as an element, a constituent of all sets of units ('numbers').

2. Then again, that same 'one', understood as connection (L.30; 37v.), is 'henosis', that which makes every 'number' (set of units) into a 'number' (set of units), - 'number' (set of units), which is itself something once, that a unity (= connection) of a multitude". (O. Willmann, oc, 272).

L49

Willmann, the great philosopher of education, could not have put it more clearly: the ancient Greek doctrine of unity (understood micro-monadically and macro-monadically) is set theory *avant la lettre*, and this in the realm of the specifically ancient Greek theory of integration or harmony (which we will elaborate on further).

2. Platonic 'stoicheiosis' (series formation and/or complexification).

We cite the translation of a passage from *Plato, Theaetetus* and id., *Philebus* – the latter in a favorable sense, taken from *EW Beth, *De wijsbegeerte der wiskunde** (*From Parmenides to Bolzano*), Antwerp/Nijmegen, 1944, 36ff. However, first of all, two doctrinal remarks regarding word meaning.

1. Thoth (= Thoth, Theuth) is the ancient Egyptian power (life force) and personal deity, who controls intellectual endeavors, writing, language, etc. (who provides the necessary 'fluid' (subtle or ethereal) foundation).

2. 'Stoicheion' (pl.: 'stoicheia') is, in ancient Greek, "that which, as a member thereof, joins into a series, -- especially when that series constitutes either, for example, a rank or, for example, another line (*A. Bailly, -- E. Egger, Dict. Grec/Français* , Paris, 1903-4, 1795).

a. Especially, 'stoicheion' means any part of a text written on a single line, namely a character.

b. In one of the many figurative meanings, 'stoicheion' means 'element' (micro-unit). Platon addresses these two meanings.

Listen.

"When someone—whether a god or a divine man (*note* : 'divine' here means 'paranormally' gifted)—(according to an Egyptian myth ('story'),

his name was Theuth) remarked that sound was infinitely varied (= multiplicity), he was the first (= prototype) to realize:

(1) that, in that infinity (multiplicity), the vowels were not 'one', but 'many' and

(2) again, that there were other sounds (compl., L.7) which - although not vowels, nevertheless - possessed a certain sound value, and that there was also a certain number (multiplicity) of these and

(3) He distinguished a third kind of letters, which we now call consonants.

L50

Then he divided (l.47 (almost at the bottom: division into 'categories'))

1. the consonants, until he distinguished each one individually (L.46 (at the top: simplest given)) (L.47: differ);

2. in the same way, the vowels and

3. the semi-vowels, -- until, also thereof, he knew the number.

And it was called (each of them and all together (L.25 (elements/ Gestalt(form); 29 (Cantor's concept of collection); 33 (summative)) 'stoicheia', letters.

But Theuth realized that no one among us

(a) one of them separately

(b) without all the others (L.7 (compl.) could learn.

Theuth considered that this (not one separate one without all the others) was a connection that made them all into one (L.10ff.).

Consequence;

Theuth assigned them a single science, which he called 'grammar'.

Decision.

a. Not the slightest doubt—at least upon a careful reading of the text—that Platon, otherwise in the purely Puthagorean tradition, also

prepares to some extent the Cartesian precise method of comparison.

b. But there is more. EW Beth, oc, 103, literally says the following.

In this connection, the Letter of 30 November 1629 to Father Mersenne (father Marin (1688/1648), mathematician and thinker, friend of Descartes) deserves further discussion.

With reference to a kind of Esperanto (an international language designed around 1887 by the Polish Dr. Lejzer Ludwik Zamenhof), Descartes sets out how, in his view, the word stems of such a language and the corresponding letters (characters) should be composed (L.46 (complexification)).

The numerals and numbers serve as an example to him in this regard.

One should establish, among human thoughts, a hierarchy (L.46: series and complexif.), such as exists naturally among numbers. Only then could one construct a language (...). Only the 'true' (in the Cartesian sense, mind you) philosophy would, however, make the execution of this plan possible.

L51

Reason: she alone enables us to the human thoughts:

- (1) to distinguish (L.47: differences)
- (2) to list (L.28; 47 (exh. tell.)) and
- (3) to arrange (L.47).

If, one were to possess an inventory (L. 22) of the individual representations (*note* -- As Beth, oc, 116, says: G.W. Leibniz (1646/1716) later conceived of such an 'inventory' as 'alphabetum cogitationum humanarum' (alphabet of human thoughts)), from which all thoughts are composed, then a universal language would be possible, which would support judgment to such an extent that error would be almost impossible.

Beth rightly summarizes (ibid.): “de mathesis universalis (...) generalization of 'analysis' and algebra (...)”

General decision

1. M. Foucault attempted to demonstrate that Descartes (and, with him, the Cartesian age) wanted more and something different than mechanics (L. 45) and the mathematization of the entire reality (L. 45).

2. EW Beth, however, relying equally on Descartes' texts, nuances Foucault's judgment very sensitively: mathematics is and remains the epitome (main model) of Descartes' design. It, and they all, are leading.

J.-P. Sartre (1905/1980), the great French existentialist, asserts in his * *Situations* * (1947/1976), I (**La liberté cartésienne* *), that Descartes, in his youth, experienced the rational compulsion that mathematical truths impose upon the thinking mind, to such an extent that this 'existential' (understand: personally lived) experience imposed a new rationalist manner on his entire way of thinking, including philosophy.

This does not, however, prevent Descartes from having taken a major step forward regarding the comparative method, which we, in turn, are also taking—even though we do not yield to the 'rational' compulsion of mathematics, as Sartre claims to discover it in all that is Cartesian.

Mathesis universalis, not rationalistic (modern), but ancient-Pythagorean, didactic (aimed at independent thought and the edification of salvation), is and remains a great achievement in terms of exactness.

L52

2.-- The differential equation (52/66)

(1) 'Differential' (cf. the Latin 'differentia' (Gr.: 'diaforma'), difference, distinction) means 'that which corresponds to difference(s), or concerns differences!

Thus, 'differential' psychology concerns itself with the differences (distinguished, indeed, contradictions) regarding behavior, or inner life, of the types of people (animals, if animal psychology).

It is clear that we remain within the perspective of the identity mentality here (L.35ff.).

(2) With *HJ Hampel, Variabilität und Disziplinierung des Denkens*, Munich/Basel, 1967, 82/104 (Variologische Denksysteme), we could speak of 'variological' comparison, i.e. comparison directed at variation (variants), -- were it not that this thinker places his own ideology in that term 'variological' (to which we will return later).

Introduction.

a . On page 35, above, we saw the list 'identical / partially identical (= analogous) / totally non-identical (different, distinct): The emphasis at that time was on identity.

1. However, comparing always involves (learning to) see both identity and non-identity. Therefore, now, a word about the typology of non-identity.

2. Descartes (L.47) taught us to avoid specific vague types of comparison. Therefore, he placed emphasis on differences (L.47) like no one before him, albeit while maintaining the identitarian way of thinking. This Cartesian sense of (very) fine differentiation (the unraveling (L.6: analysis)) finds its application here.

b. *Cardinal D. Mercier* (1851/1926), the leading figure of contemporary Neo-Scholasticism (L.28), in his * *Logique**, *Louvaine/Paris*, 1922-7, 107/109, emphasizes that non-identity ('opposition') can be understood in four different senses.

a.-- The contradictory (absurdity) **opposition** (difference).

Thus the ideas 'white' or 'not-white'; 'just' or 'not-just': it is one of the two (dilemma). In Latin, the 'or' between two irreconcilable ideas is represented by 'aut' (not by 'vel'). Cf. L.15).

Note . - Mercier should have added 'to be white or not to be white', after all, assuming a wall:

a. if it is white (whitewashed) (the emphasis is on the actual mode of being (L.7v.) and not on 'white' as not red or anything like that), then that wall IS white;

b. With Heraclitus of Ephesus (-535/-465), already labeled 'the obscure one' in ancient Greek antiquity for the sake of his pronouncements challenging common sense, we can indeed say: "That wall is white and not-white"; but, then, we do not mean the actual mode of being as the actual mode of being (as above), but rather something like "That wall is indeed white (at first glance), but (in fact) it is not so pure white"; or even: "(Now) that wall is indeed white, but (it is already discolouring, through weathering etc. and, therefore, it is) also not-white:'

b -- the privative opposition (difference).

In that case, the 'negate' (the negative sentence form) expresses the void or the deprivation of something that ought to be there.

Like this: "That lady does not see" (is deprived of the exercise of the sense of sight, which she ought to have), -- deprived, e.g. by (congenital or acquired) blindness).

Mercier expresses it humorously: "the stone, for example, does not see. Yet it is not deprived of it; (in other words, for it, it is no void)."

c. The contrary opposition (ordinary opposition).

Here Cartesian series formation (l.45/47) is applied. Given: some kind (type), e.g. a color, quality of conscience, state of health, etc.

'White' and 'non-white' (which includes red, black, etc.) are both colors, yet each other's negative; 'conscientious' and 'unscrupulous' are both qualities of conscience, yet each other's negative; 'healthy' and 'unhealthy' are both types of health, yet each other's negative.

Note-- Systechi, opposite pair , (Cf. L36)

O. Willmann, *Gesch.d. Id.*, I, 273, speaks of an important body of teaching of the paleoputhagorese (-550/-300), namely a list of systechiae (pairs of opposites);

(1)	form/formlessness;	firmness/unsteadiness;
------------	--------------------	------------------------

orderliness/disorganization; straight/crooked; right/left;

(2) male/female (non-male);

(3) light/ darkness (absence of light);

(4) good/evil (not-good). -- with 'identity/non-identity (difference)' they form a curious set of differential equations.

Admittedly, viewed from the perspective of our classification (typology) with which we are currently engaged, they are disparate; -- for example, 'not-good' is actually privative; reason: from a normative perspective, acting 'good' is, for instance, a requirement, -- 'doing evil' is a lack, a void, indeed, a sinful void.

L54

Note: Why did we mention 'series formation' above (L53, Ad c)?

Cardinal Mercier says, for: "The ordinary opposites (*les 'contraires'*) constitute the two extremes of a series of elements, brought together under the same kind (type; -- understand: set (L.29).

Suppose, for example, that the shades of light are mentally arranged in a row ('disposés en série') (L.46), -- then the two extreme terms 'elements' of that row ('series') are two opposites.

There is (ordinary, contrary) contradiction where data,

(i) although reducible to the same 'class' ('classe') (L.26),

(ii) yet cannot simultaneously exist (L.7: actual mode of being; 15; 52v.) in the same essence". (oc,108).

We immediately see that Cardinal Mercier, based on purely scholastic ordering, nevertheless thinks in a similar direction to Descartes (L.47 (classification into types)).

d. The purely relative contrast.

This – according to Mercier, oc, 108 – is rather a symmetry (the mutual relationship) than an absolute exclusion: it exists where two terms (elements),

(1) although distinct (different),

(2) yet only make sense on the basis of one another.

For example, the idea of 'father' and 'son': without a son there is no father, and vice versa (= symmetrical). Likewise—according to Mercier—the ideas of 'double' and 'half', or 'knowledge' and 'known object'.

One would perhaps do better to speak of a 'correlative' contrast (mutual relationship).

Decision.

This introduction to differential comparison proves how ambiguous (one word for more than one meaning) negation ('not', 'un-'; -less, etc.) can be. We have analyzed with Cartesian finesse! Let us now return to Heraclitus of Ephesus (L.53): the wordplay with opposites means little without such an analysis à la Descartes.

L55

Particle 1. -- The idea 'logical differential'. (55/60)

(1) Starting point. - Let us take as a basis the placement of elements in 'boxes' (places), -- specifically: boxes on one horizontal line. This is a type of 'combinatorics' (i.e., construction, analysis, etc. of 'configurations' (a set of places, provided with a certain order)).

(2) The second starting point is the Paleoputhagorean systechy (opposite pair; L.53ff.) we place ('combine') such a systechy in at least two boxes; like this:



Such a 'binomium' (algebraic term) or – in Greek – duas, dyad (= duality, binary mode of being) covers one of the opposites briefly analyzed above, yet unified ('harmony' of opposites) within the framework of a configuration.

(3) The differential.

Based on the two preceding bases, we can now describe the differential as it belongs in a theory of order (not as in mathematics).

(a) The same term (element) - e.g. 'good' - is confirmed (+) when placed on the left and negated (-) when placed on the right. Thus, polarization (bipolar opposition) is literally 'analyzed' (clarified by decomposition) combinatorially (di by placement).

(b) Combinatorially, we now introduce a third, namely middle position (creating, therefore, an interval between the two extremes):

'Good'	good and not good	not good (evil)
+	+ / -	-

Thus we now have a 'trias' (ancient Greek for triad, threefoldness, a type of trinary mode of being). Behold what the most elementary (simplest) differential is (L.45v.).

Applicable models of the idea 'differential'.

We take examples in which the idea of 'scale' (small-scale, large-scale (L.42/44: measuring equation)) comes to the fore.

Economic model

Under the same idea, a distinction is made between small (small-scale) enterprises and medium-sized and large or even giant enterprises.

L56

Since Lord JM Keynes (1883/1946), in addition to microeconomics (national economy at a small or medium level), one also speaks of macroeconomics (national economy at, for example, a national or even an international level (scale)).

Aesthetic model

a. C. Lefèvre, SJ, *La composition littéraire*, Bruxelles, 1936-3, 13s., writes: "The terms (ideas) 'pleasant' **(i)** graceful (gracieux), **(ii)** beautiful (beau), **(iii)** sublime (sublime) -: these ideas express what one might call 'a progressive series' (une progression) (Ricardou, *De l'idéal*, 112s.)"

The question arises: what is the distinction between these three aesthetic categories (L.47 (types))?

b. - *Applicable model* of the charming (the graceful).-- Every artist, but most certainly Guido Gezelle (1930/1899), in his poem 'Voetjes' for example, suggests the small-scale beauty (= charming). Listen.

“This little foot -- and that little foot -- went, together, to guard the calves. -- The calves ran in the corn. -- This little foot -- and that little foot, they ran very fast ahead. -- This little foot - -and that little foot I shall wash, together, in the little water . -- The little water shall rinse them. -- This little foot -- and that little foot shall cool in the water. -- They shall shine as red as roses. -- They shall be as white as milk. -- Like berries under the leaves. (1858(?))”. (*Fr. Baur-, inl., Guido Gezelle's dichtwerken (Tijdkrans, Rijmsnoer, Laatste Verzen)*, Amsterdam, 1943-1, 722).

c. *Appl. model* of the sublime (large-scale beauty). Gezelle sees an old tree—an oak—lying felled. Listen:

The giant .

Stripped bare, in the sunburnt sun, -- all your limbs, naked and bare, -- ruler in the Netherlands, -- king of the great forests, -- oak tree, so strong in former times, -- who then has fought you down? -- Winds fell, strong and many, -- storming and thrusting at you; - seized you by neck and throat, -- wanted to cast you into the sand: -- standing, so the all too wicked -- wind-force left you, fearless one!

Thundering dragon mouths (dragon mouths) heavenly powers, unknown,-- sparks of fire and forks shot,-- brave, near the top of you:-- nothing has moved or thundered you down under the lightning fire.-- who, then, has contended with you,-- green giant, with all your might?- - Naked and bare your beautiful limbs,-- brought to the smooth floor, in the sand?-- Who could force all your strength, bring you hairless and into shame?-- Standing and remaining, before human hands,-- nothing, that which lives eternally.-- King of the Netherlands,-- strong is he (= God), who never trembles:-- mankind has brought you down, master (to become strong),-- green giant. - (01.10.1896)” (ibid 391).

Furthermore, Baur mentions an analogous poem (L.35 (at the bottom)), of which, here now, the title (*Van den ouden boom*) and opening:

'With an arm stripped bare, -- half-truncated (truncated until a fist remains), -- who stands there, and raises a non-existent fist -- to the heavens? Is it a giant -- in image? No, it is -- not a human construct. It is rather a deformity, -- a stone mountain monster (mountain mass), -- that, standing fierce and proud, -- bears the sharp blows -- of the sparking heavenly fire (lightning). (...)”.

Note-- As anyone familiar with art and aesthetics knows,

(i) Gezelle indeed sees the naked reality;

(ii) yet, existing together with that naked reality, an idea (such small-scale gracefulness, as in **Voetjes **; or large-scale sublimity, as in the two previous poems). The choice of words, the sentence structure, the entire atmosphere is determined not so much by the naked reality, but rather by the idea. Whoever, however, does not grasp (behold, perceive) that aesthetic idea, immediately also does not grasp what the poet wants to say.

d. Also humor

(Small-scale ridiculousness) and irony, respectively sarcasm (large-scale ridiculousness), make use of the above aesthetic categories (basic ideas).

Listen.

J. Racine (1639/1699), the French classical tragedian, also wrote a comedy, *Les Plaideurs* (1688), in which the antithesis (contrast; L.52ff.) plays out in the following sentence: (The summoned man says, humorously, to the commissioner: 'Monsieur, present here, - has made me, with a great blow, a small present ('gift'):

Misfortune (misfortune) can likewise be small-scale or, on the

contrary, large-scale. This latter type of misfortune is often called tragedy.

58

1. Something of this shines through in Gezelle's poem ' *Van den ouden boom* ' , where he speaks of “a deformity, -- a stone mountain monster (monster is mass, but, just like deformity, ominous in size, sinister).

2. Something along the same lines resonates in *Gezelle* 's * *Avondrood** (fourth stanza): “In the glorious sunlit field, -- that grows dark upwards, -- and, slowly, darker -- and deeper, stand at the table (as a spectacle), -- written, black on gold, -- a band of giants great: -- the endless people of trees, -- in the endless twilight”.

Once again: the choice of words (on a large scale, both 'endless' (twice) and 'band of giants' or '(tree) people' (whereby the overwhelming multitude, expressed in 'band' and 'people', comes across as more ominous than, for example, just a single tree)), the atmosphere (in 'evening red', for instance) is determined – not by naked reality, but – by the idea (large scale coexisting with an ominous atmosphere).

3. Likewise within the same aesthetic category (basic idea), comes from the same *Gezelle* , e.g. *De Gypten* (Baur, I, 614).

The Gypsies, incidentally, are Gypsies.

“It is dark in the green woods and the beech ravine is dense. (...). -- They are there, the Egyptians a wandering throng. -- with sparkling eyes and flowing hair. -- (...).

By the blazing campfire, in the fading greenery, -- there the men lie, wild and bold.

There sit the women: they roast the meal -- and fill the old goblet with wine.

Songs and legends echo all around—with sonorous tones, like the hum of bells.

And magic spells, for need and danger, -- Grandlord (= grandfather,

ancestor) teaches his children to repeat, together.

Pessimistic maidens cultivate the dance—and flicker, wandering from shadow and gleam.

There the kithara rustles, the mulebag roars, while the dance moves wilder and wilder.

Now they went on strike, weary of the evening traffic.

The beech trees sigh; the desire to sleep sets in. -- And they, so far removed from home and country, - behold, while dreaming, their blessed shore. (...).

(November 1877)?

L59

Gezelle, beach. (...) composed this poem after Emmanuel Geibel (1815/1864), who once lived in Athens for two years as an educator in the house of the Russian envoy, and later occupied himself extensively with Southern literature.

In what, then, does the unique consist (within the uncanny as a category)? In the fact that, in the Gypsies, the unsavory is situated—not in nature (the trees, for example)—but in people. Even more (and this is something to which we hope to return later): the Gypsies represent, in our Enlightened center (the Enlightenment is situated from around the end of the 17th century), a remnant (superstition) of an ancient religion celebrated at night, close to the earth (as Earth Mother).

Well, this religion comes across, at least to Enlightened minds, as 'dreadful', 'uncannily threatening', and 'ominous'. – Gezelle has allowed something of that atmosphere (idea) to shine through to us in his poem.

Sociological model.

1. D. Szanton, **Cultural Confrontation in the Philippines**, in: **Cultural Frontiers of the Peace Corps**, Cambridge (Mass.) / London, 1966, 35/61(f. 53), shows how the adaptation of the men of the USA Peace Corps in the Philippines displayed a whole range or spectrum (i.e., an enriched differential), with the following 'categories' (l.47):

(i) rejection, aversion, (ii) aloofness, (iii) acceptance, preference. --

This regarding the indigenous population and its cultural type. The above threefold nature could be characterized as follows:

(i) acceptance/ preference dislike	(ii) aloofness	(iii) rejection/ dislike
+	+/-	-

One sees how, in human relationships (attitudes), the threefold nature that characterizes the minimal differential (L.55) is once again present.

2. Analogous to this is the polarity profile (cf. *Ch. E. Osgood, The Measurement of Meaning*, 1957).

In an opinion poll, for example regarding what 'people' think about someone (take a teacher)—image or visual impression research—one can, for instance, use the differential triad 'competent' / 'undecided' / 'incompetent' as a questioning method.

L60

There is more: if one records the number of people passing judgment in each box, one has an even mathematical method (L.45: mathematization model). After all, one can then compare the numbers.

Part 2. -- The impact of (gradual) quantitative change on quality

First of all: there are still people who view 'quantity' (sometimes expressed mathematically) as incompatible with a sense of the qualitative in reality. And yet they proceed to criticize mathematics and quantification! Quantity, on the contrary, is that quantity and quality coexist, to a certain extent.

a.-- Ainesidemos of Knossos (+/- -50) is a skeptic (a philosopher who places inquiry, insofar as it leads to uncertainty and doubt, at the center). He is immediately a follower of Heraclitus of Ephesus (L.53),

which implies that he has a penchant for paradoxical statements, in which real or apparent contradiction is formulated.

Bible sample pr . -- V. Brochard, *Les sceptiques grecs* , Paris, 1887-1; 1969, 253/298; RG Bury, *Sextus Empiricus* , 4 vol., Cambridge (Mass.), 1961, I (*Outlines of Pyrrhonism*), xxxvii/xl.

a.1. Central to this Cretan are the so-called tropes (tropoi, modes of forming opinions), which serve to prove that both our sensory experience and our thinking are, fundamentally, relative (relativism: nothing is 'absolute (certain)').

a.2. Now, among these tropes are those that are based on the object itself of our sensory or intellectual knowledge (objective tropes). Here, then, are situated the relationships between quantity and quality. There is a connection (L. 35; 37) – apparently, repeatedly, a connection ACD (cause)/CSQ (effect) (L.24) – between quantitative changes in the object and qualitative perception (stepwise).

As evidence, cites Ainesidemos.

A.-- Distributive changes (L.26; 38).

If a given becomes either more frequent or rarer within the same time span or space, it comes across qualitatively differently.

Thus, a comet (tailed star) causes a sensation due to its rarity; the sun, due to its daily occurrence, is not sensational.

L61

Recalling a Roman proverb: 'Assueta vilescent' (Things one is accustomed to seem 'ordinary'). One recalls a related observation: "One learns to live with it". -- For example, an earthquake is less or not sensational in cities where it is frequent. – Differential:

frequent	frequent/ infrequent	rare (some)
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+	+/-	-
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B.-- collective changes (L. 38).

If the mass of a given is changed, then that same mass changes qualitatively.

For example—according to Ainesidèmos—a single grain of sand is prickly, and grains of sand, gathered together in a heap, are soft to the touch. Similarly, a small dose (posological quantity) of wine is 'strengthening of the soul', whereas, if gradually increased, it at a certain moment turns into the opposite: too much wine is harmful!

Thus—to refer to an experiment by Anaxagoras of Klazomenai (499/428), the founder of experimental natural science in ancient Greece—a bag filled with air, whose neck is twisted increasingly tightly, will suddenly burst.

Wine dosage differential

little	more	too much
Beneficial	cover	harmful
+	+/-	-

b. *Francis Bacon of Verulam* (1561/1626), the proponent of experimental natural science geared towards causality research (*Novum organum scientiarum* (1520)), observed the same connection between quantity (changes) and quality (changes). His famous 'tables' prove it.

Just as he speaks of the rule regarding experimentation, called 'productio experimenti':

(i) if one gradually changes the cause (ACD; L.24), for example with regard to intensity,

(ii) then, if there is indeed causality, the effect (CSQ: L. 24) will also change, to a proportionate degree.

Thus the law states that the volume of a gas is inversely proportional to the pressure exerted upon it.

L62

Thus, in medical science, it appears that a substance (a poison), if gradually altered, produces an altered medical effect, so much so that, at a given moment, “the effect does not change proportionally, but, sometimes, changes its nature abruptly” (Ch. Lahr, *SJ, Logique*, Paris, 1933-27, 585).

Lahr articulates, here, the link 'gradual change (quantitative)/ sudden reversal'. Lahr concludes: “There are, therefore, cases where quantity constitutes an essential component of the cause”.

c.-- John Stuart Mill (1806/1873)

The empiricist and methodologist (L.24) re-established Bacon's 'table of degrees' (*productio experimenti*) in his famous 'Methods'.

Mill calls what Bacon calls *productio experimenti* the 'method of accompanying changes': “If a phenomenon is changed, while all antecedents (ACD; L.24), except one, remain unchanged, then this one antecedent is the sought cause”. Thus:

(i) change the number or amplitude of the vibrations of a sound-producing body,

(ii) and you shall establish the image of these changes in the sound (qualitative phenomenon, insofar as observed) (oc 589).

d.-- Iossif Vissarionovich Oyugachvili , nicknamed Stalin (1879/1953). *Dialectical Materialism and Historical Materialism* (1937), sets out the four major features of modern dialectics, as it has existed since GFW Hegel (1770/1831) – in the idealist variant – and Karl Marx (1817/1883) and Friedrich Engels (1820/1895) – in the materialist interpretation.

The third major characteristic reads as follows: “Movement (= change) and becoming (of matter) establish something new”.

This movement (change) and becoming establish news in two ways:

(i) in a circular manner: for example, one can generate motion (in the mechanical sense) with thermal energy, whereby that kinetic energy, in turn, is converted into thermal energy;

(ii) in a stepwise (revolutionary) manner, whereby an insignificant quantitative change causes a qualitative leap: for example, physically, water, which, once it reaches one hundred degrees, suddenly begins to boil (qualitative change); likewise the chemical product 'rat poison' (arsenic trioxide), a potent poison, which is curative in small doses, while it is lethal in large doses.

Likewise, in the psychological realm, when 'one drop of water' causes 'the water to overflow': think of bullying, if repeated 'too often', which becomes hateful, whereas, committed once, it is still tolerable; think of a performance, a piece of music, which is initially enjoyable, where, repeated too often, it becomes unenjoyable (*P. Foulquié, La dialectique* , Paris, 1949, 64s.).

L63

One could supplement the application models. Consider the sociological phenomenon whereby the working masses, if not exploited too much, find this tolerable, but on the brink of exploitation find the transgression—what the ancient Greeks called 'hubris'—intolerable and become revolutionary instead of peaceful.

General decision

1. The facts ('factual modes of being' (L.7)) are there: quantity (change) entails quality (change), if necessary abruptly and in the form of a turnaround into the opposite:

2. The question arises: “where exactly is the limit of the leap located?”

(i) *Euboulides of Miletus* (-380/ -320), belonging to the school of Megara (one of the Minor Socratic movements), was a practitioner of

eristics, a method that refutes the propositions of philosophers, rhetoricians, and specialists by means of the method of the countermodel (counterexample).

Two models of eristics have been left to us under his name, which sharpen the problem of the qualitative leap (in the case of gradual quantitative change).

Model 1. -- The bald man: Taking exactly one hair from someone does not mean that he becomes bald as a result; nor does taking two, three, etc. from him; thus, one can take all his hairs without him becoming bald.

Model 2. -- The heap of grain: Exactly one grain does not make a heap of grain; neither do two, three, etc.; so, a hundred thousand grains do not make a heap of grain.

Let us reread, now, L. 25v. (summative induction).

Pater Lahr, *Logique*, 701, says that Euboulides

(i) which applies to each member of a set individually (in its isolation),

(ii) assigns to the entire set (as a whole).

L64

-- We see now what enormous importance summative induction has! If, at least, understood correctly! For here either 'all' (finite set) or 'all possible' (infinite set) is attributed, which one rightly attributes to precisely one element (moment; L.7): namely, that it is non-decisive regarding the qualitative jump. We are faced here with a false summative induction.

It is now clear why we (L.23 (gestalt); 25 (form; formal induction) devoted such care to the correct structure of the summative induction (and not only of the average summation).

With *EW Beth, De wijsb. D. wisk.*, 85, we can indeed admit that

eristic (in the form above), although 'petty' or close to the 'trivial' (vulgar), nevertheless

- (1) is the introduction to a more in-depth investigation and
- (2) can claim full probative value

Yet it is immediately evident that the bald head (the bald one) or the pile of grain covers a—what the ancient Greeks called 'sophisma' (sophism, fallacy). Common sense, even, sees this (perhaps without being able to name the formal fallacy) (L.6).

(ii) Both Gestalt psychologists and dialecticians are holistic thinkers.

They also have an eye for the qualitative. These two factors combined mean that they instinctively ('naively', in the language of logistics and mathematicians) sense the regularity of human valuation (L.16/19: the transcendental 'valuable').

Oh, the jump (crossing the boundary) is a matter of

- (1) feeling,
- (2) threshold sensation (both threshold perception and threshold estimation) and
- (3) perhaps mainly of agreement (or custom). To this end, one should examine each case individually.

Check the following differential.

All (possible), very many, many, quite a lot (rather), few, rather (fairly) few, very few, extremely few, almost none, one, none.

We believe that the three factors in that classification (L.47) play a role. Of course, from case to case, a varying role! Perhaps it is also, as with the primitives (L. 27).

L65

Taking into account what we saw above (L.55), there is ONE differential (at least in the order-theory - comparative sense)

- (i) a system,
- (ii) as it were pulled open, in her middle, by means of an interval

(what the ancient Greeks called 'dia.stèma' (Lat.: intervallum)).

Countless times we have—however varied—seen that one fundamental shape (= basic form) '+ / ± / - ' sliding before our eyes. And look: here it appears again.

all (yes)	no - all (yes)	all (no)
+	+/-	-

In the three cases (pictures (L.55: configurative), 'all' (the sum or totality (L.7: at the bottom; L.33 (at the top); 45: all-encompassing 'mathesis')) plays the role of starting point or – Kantian (I. Kant (1724/1804) – the role of 'a priori'.

With that a priori premise, we combine the contrast (L.52/54) 'yes (+) / no (-)' as a means of differentiation.

If we now reconsider summative induction, then we can consider the following extension of the summative induction idea as fully justified.

There is **(1)** the total summative induction (L.22/32).

There is **(2)** the differential summative induction (L.52vv.).

After all – instead of total wholes (universal sets), as in ordinary induction – differential summative induction also works with wholes (and from the whole (all (yes)/not-all (yes)/all (not)), but with sub-wholes, partial wholes (subsets)

a. If differential-summative induction operates with integers (the sum), it is induction (the reasoning attuned to the whole (set, totality)) and, therefore, truly summative.

b. if, however, it results in parts (partial wholes, partial sum), then it is differential.

c. If it is rather qualitatively—we say 'rather' (i.e., not exclusively)

attuned—then we can safely speak of qualitative summative induction; for we have, repeatedly, established (verification) that equal multiplicity (elements, moments) can also (not only) signify quality.

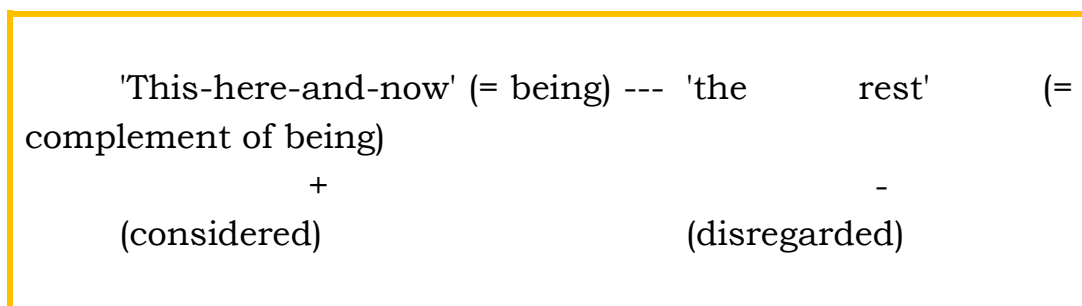
L66

d. If it means a dichotomy, then it is called complementary summative induction. -- Something of which we have encountered more than one appl. model so far (from L.7).

The expression 'the sum and the remainder' is but a single application of this very general rule of thought. Whatever we 'examine' (L.29v.; 37), we examine **(i)** In itself, **(ii)** yet **a.** as distinct from and **b.** nevertheless connected in any way with 'the remainder' (complement).

In that sense we 'think' – whether perceiving or doing whatever – from being (the totality of the actual modes of being (L.7)), yet split into 'this-being-here-and-now' and 'the rest'.

1. This type of differential-summative induction is, fundamentally, always present. If not, we succumb. All consciousness (= awareness) of something (actual mode of being) has the following complementary summative induction as a structure:



2. There is one exception: when we think of 'being' as such (= as the totality of all possible factual modes of being' (L.8: transcendental).

Naturally, 'being' as a summative induction of each being (L.7: fact and mode of being) individually: if all beings individually represent factuality and mode of being, then all beings together do too!

Decision.

Induction—but practiced within a reductive scheme—is, without a doubt, a form of reasoning that has enormous scope.—We believe we have proven this:

1. in the ontological introduction (L.5/19 (especially L.10/13 (the transcendental one)));

2. in the exposition on the most general form of summative induction (L.22/32);

3. in the introduction to comparative ordering (L.33/66), -- particularly in the section on the differential equation (52/66). -- Behind the inductive-reductive method, however, stands the comparative method (L. 33/42).

L67

B.(ii). -- The 'new' and the 'scientific' dialectics as harmology (67/87)

We now have comparative ordering,

(1) based on (summative and/or amplificative) induction,

(2) to know as seeing connections (= partial identities, relations). -- Measuring and differential equation are two basic types.

Descartes' mathesis universalis seems to be a solid, because precise, form of comparative ordering. Yet it seems to need to be supplemented by dialectics, as a relaxed mathesis universalis.

1.-- The 'new' (modern) dialectics (67/75)

A. connection with the foregoing (especially with the mathesis universalis).

The idea of a mathesis universalis, a 'scientia generalis' (Lat.: general science), is:

(a) fiercely opposed by Imm. Kant (1724/1804), the leading figure of the (German) Enlightenment (L.36);

(b) taken up again by J.G. Fichte (1762/1814), Fr.W. Schelling

(1775/1854) and especially G.F.W. Hegel (1770/1831), the three leading figures of German Romantic-influenced idealism (R. Scholz, *Die Wissenschaftslehre Bolzanos* , SB 9, 1937, 407) (L. 62v.);

(c) adopted by K. Marx (1818/1883) and Fr. Engels (1820/1895), the founders of Marxism, in the sense of the dialectics of the Idealists, but rethought in a materialistic way (L. 62v.).

B. Critique of dialectics

(a) The rejection of mathematics as a paradigm (L.45; 50ff.) has led the dialecticians mentioned above to adopt a line of argument which, for people engaged in exact methods, can never be satisfactory.

(b) Yet *Father I.M. Bochenski, The Logic of Religion* , New York, 1965 48/51, who speaks disparagingly of the above-mentioned dialectics, says that dialectics is fruitful as 'a set of suggestions', insofar as it submits to rigorous logical control.

WE translate: dialectics is a fruitful set of lemmas (L.6; 12; 23; 41) or verifiable (working) hypotheses, while preserving Cartesian accuracy (L.47).

We will therefore review the main features (lemmas), as formulated by I. Stalin (1937) (and disseminated worldwide).

L68

The four principal theses (lemmas) of dialectics.

P. Foulquié, La dialectique , 62nd pp., adheres to the simplified, yet, for that reason, not so invalid rendering of *I. Stalin, Dialectisch materialisme en historisch materialisme* (1937, exactly three hundred years after *R. Descartes' Discours de lamethode* (1637), in French (Paris, Ed. sociales).

This little work by Stalin is

(i) merely an echo of the teachings of Marx and Engels (although in Leninian interpretation),

(ii) who, themselves, intended the materialist reinterpretation of

German idealism (especially that of Hegel); so that *both* Descartes' *Discours de la méthode* (1637) and his idea ' *Mathesis universalis* ' (L.50v.) - albeit in a romantic-idealist version - echo in Stalin's little work.

A.-- First entry. - 'Marxism - just like Hegelianism - is a type of organicism .'

Consequence: "There is an active interdependence between the different parts of reality".

Stalinistically reinterpreted: "The individual (the human person, thought of in isolation) is merely an abstraction (understand: something detached from its real context (L.35; 37)).

Reason: the individual

(i) depends on the action exerted upon him by the beings surrounding him (L.37ff.); the individual

(ii) depends on his entire past (i.e. he situates himself in a diachronic whole (L.41: at the bottom)).

Consequence: one can only understand the individual if one situates him (L.38) at the intersection of all influences acting upon him and of his reactions to his environment." (Oc, 62).

Foulquié oc, 63, notes that the Hungarian Marxist Georg Lukacs (1885/1971), known for his * *Geschichte und Klassenbewusstsein* *, Berlin, 1923, regards the above doctrine of the interdependence of parts on the whole as the doctrine of Marxism par excellence. "It is not the priority given to economic motives (L.34) regarding the explanation of history that decisively differentiates Marxism (L.52/54) from 'bourgeois science' (anti-Marxist explanation of history). No: it is the viewpoint of the totality".

L69

Critical remark.

A thinker like Bertrand Russell (1872/1970), the champion of 'human rights' (understand: the rights of man as an individual), who himself thinks atomistically (i.e., places emphasis on the 'atom'

(understand: being separate)), will point out regarding Hegel's and Marx's (and, immediately, Stalin's) way of thinking that it assumes, without necessary and, above all, sufficient reason, that the whole takes precedence over the parts ('atoms', elements).

This, while it is not so certain whether the primacy of the whole ('the totality,' as dialecticians like to call it) is a provable matter. Collectivism and authoritarianism stem from the conclusions drawn from such an interpretation of the relationship between 'atom' and 'whole'.

Well,—according to Russell and his contemporaries—collectivism and, above all, authoritarian structures of authority are not so beneficial in practice.

B.-- Second lemma. -- Marxism - just like Heraclitism (L.53.60), for example, **in ancient Greece - is a mobilism.**

'Mobilis' (Lat.) means 'movable', 'changeable', 'unstable'. 'Mobilist' is a philosophy if, like Stalin, along with Hegel, Marx, and Engels, it asserts that “everything – the totality and the moments (di-mobile elements) – is constantly in motion”.

As Foulquié, oc, 64, says: “everything is constantly transforming itself: both the world of inanimate matter and that of life and of thought. For thought, 'state of rest' would be equivalent to 'death'. This is the case for the Marxists as well as for Hegel”.

Foulquié, oc, 64, quotes *Friedrich Engels* (1820/1895), *Ludwig Feuerbach und der Ausgang der Klassischen Deutschen Philosophie*, 1886-1.

“(...) The revolutionary side of Hegelian philosophy (...). The great basic idea that the world cannot be grasped as a complex of finished things, but rather as a complex of processes.

1. In this, both the seemingly stable things and the ideal representations thereof in our minds (cf. L.14: logical truth), which we call 'concepts', undergo an uninterrupted change, inherent in becoming and passing away.

2. In it, notwithstanding all apparent coincidences and despite all momentary (temporary) setbacks, a progressive development continues.

This great basic idea has, particularly since Hegel, seeped so deeply into everyday consciousness that, in that generality, it hardly encounters any contradiction anymore.” (*Institut fur Marxismus - Leninismus* , ed., Karl Marx/ Friedrich Engels, *Ueber Religion* , Berlin, 1958, 201).

One immediately sees that it is English;

a. regarding the thesis of the first dialecticians and in our Western history of the mind and ideas, Heraclitus of Ephesus, namely that everything both changes and—in time—turns into its opposite,

b. adds the idea of progress, as it became prevalent, especially since the 18th-century Enlightenment (L.36).

Critical remark

Diametrically opposed to this philosophy of change, transformation, and progress, characteristic of German Idealism and Marxism-Leninism, stands, for example, *Agostino Steuco* (Augustinus Steuchus; (.../1550), *De perenni philosophia* , Lyon, 1540-1 (On the uninterrupted philosophy), in which this bishop and librarian of the Vatican Library updates the thesis defended by the Church Fathers (Patristics: + 33/800), in the contemporary manner of the Renaissance:

(i) Pagan philosophy (both the 'hieratic' (= sacred) of the Near and Far East and the 'classical' of Hellas and Rome)

(ii) is the precursor of both Old Testament and New Testament thought and of its philosophical elaboration.

Consequently: since archaic times, one and the same basic philosophy has prevailed over all humanity, and this with an unchangeable 'eternal' (perennity philosophy) essential core.

1. With this stance, Steuco rejected both rigid, closed traditionalism

and the revolutionary, enlightened interpretation of tradition and dissenting humanity.

2. None other than G.W. Leibniz (1646/1716; L.51) defended Steuco's thesis, even the name 'perennis philosophia', and found that it met a need. (*O. Willmann, Gesch. d. Id ., III, 172/179*).

L71

It is remarkable that both Hegelianism and Marxism, in their further 'development', indeed know, besides 'progressive development', also 'becoming and passing away' and, even, a reversal into their opposite.

a. Witnesses: among Hegel's disciples, at least three shades could be distinguished, namely conservative Protestant theists (believers in God), pantheistic Enlightened idealists (pantheism is the conviction that God is not a personal and sublime being, but a kind of universe ground), and Leftist Young Hegelians. This can be found in every history of Hegelianism.

b. Witnesses: *Esprit* (Paris), XVI (1948), 5/6 (May-June 1948), the well-known French magazine, bore the title “ *Marxisme ouvert contra Marxisme scolastique* ” (Open Marxism against 'Scholastic' (understand: closed) Marxism).

This title contains, within itself, the reversal to the opposite! -- Every history of Marxism contains a chapter on that.

C.-- Third lemma.-- Movement (becoming/perishing) creates something new .

We refer to L.60/63 (question 1.62, Ad d).

D.-- Fourth lemma. -- reality - both totality and moments - encompasses 'contradictions', understand: inner tensions.

This is the Stalinist rendering of the ancient saying 'harmony of opposites' (L.55): “The things and phenomena of nature contain 'internal contradictions (contradictions)'.

1. Reason: they all have a negative and a positive side (cf. L.55/66:

differential). Thus they have both a past and a future. Thus they all have both elements that disappear and those that develop.

2. The struggle of these opposites—such as the struggle between old and new, between that which perishes and that which develops, between that which dies and that which is born—that struggle is the inner meaning (content) of the process (event) of that development, of the transformation of quantitative changes into qualitative changes. (...). Dialectics, in the true sense of the word—thus says Vladimir Ilyich Oulianov, nicknamed Lenin (187/1924), the leader of the Bolsheviki (the majority of the aggressive Russian communists)—is the study of the 'contradictions' in the very essence of things. (I. Stalin, oc).

L72

Note --

1. Again: Stalin reproduces, here, the doctrine of Marx and Engels and, indirectly through them, of Hegel. -- Hegel himself had a partially different terminology. He spoke of affirmation (= thesis, proposition), of negation (= antithesis, reversal (reversal)), and of the negation of the negation (= synthesis, summary (reconciliation)). -- This triad (threefoldness) occurs countless times in Hegel.

2. We now provide a Marxist interpretation (= appl. mod.) of that Hegelian tripartiteness "thesis/ relation/ summary" (this is the terminology of Dutch Hegelians).

a. Thesis . -- In the first phase of the division of labor (a main concept or category (L.47), in the archaic times,

(i) everyone can still perform all necessary or useful forms of work (picking, fishing, hunting, for example) themselves;

(ii) the only division of labor is that of man and woman, who, each, have their own type of labor;

(iii) consequence: up to now, every human being is independent of his fellow man and, therefore, 'equal';

(iv) but nature controls a 'divine' power like mankind (what Marxists call 'nature religion').

b. Relationship .

In the second phase, in addition to the sexual division of labor, other divisions of labor (specialization) now occur (for example, there are priests, farmers, slaves, etc.)

(i) not everyone can, now, handle all forms of work (classes);

(ii) consequence: increasing interdependence and, consequently, inequality.

(iii) yet nature, thanks in particular to that specialization, is no longer perceived as a 'divinely alien' power, but rather society with its class equality. In this context, the antagonistic structure 'capital/labor' (plutocrat/proletarian) emerges over time.

c. Summary .

In a future phase, there will be collectivization (communalization) of the means of production (land, factories, etc.)

L73

(i) neutralize the division of labor (specialization with its class formation);

(ii) consequence: mutual dependence will be eliminated and equality (though now no longer archaic, but modern) will be established;

(iii) thus both nature in society (fellow man) and 'divine-alien' power will now be replaced by a totally enlightened humanity (L.36), which will live without nature religion or its remnants. Which, now, recently, is more often referred to by the term 'secularization'.

Critical remark.

1. Dialectics is a variological system of thought: as *HJ Hempel, Variabilität*, 97, says, this new mathesis universalis (L.67) dates from the days of German Romanticism.

He even provides one proof text of this. Fr. W. Schelling (1775/1854), unmistakably a distinctly romantic thinker, writes the following:

“(...) Movement (L.69/73: mobilism) is the essence of science (*note* -
- Compare with Lenin's statement on the essence of dialectics (L.71ff.)).
If propositions (judgments, sentences) are lifted from this element of life

(life as a totality), they die off, just like fruits torn from the living tree.

Unconditional (L.8: absolute; 15ff.: laws of thought), meanings valid once and for all (cf. L.70: perennity) are contrary to the essence of 'true' (understand: dialectical or, at least, mobilist) science, which consists in progress. (...). Merely a restless wheel, a never-stopping rotation (...)" (Hampel oc, 97f.).

2. P. Foulquié, oc,67, notes that both Hegel and the Marxists do not use the word 'contradiction' (contradiction, absurdity, L.8 (proof by absurdity); 15 (laws of thought); 53 (appl. mod.); 60 (Ainèsid.)) in the logical-strict sense, but in the 'variological - looser' sense of either 'opposed' (L.54ff.) or simply 'different'.

In my opinion, it would be better to speak of tension (conflictual tension) (taseological ('tasis' (Gr.) = tension)).

3. P. Foulquié, oc, 68, says that Engels himself admits that definitive, irrevocable truths exist.

L74

Thus, for example, mathematical results exist in that sense, although mathematical science is also subject to historical development (thus Engels; which, regarding the origin and the revolutionary role of Cantorian compilation theory, proves to be correct; L.28ff.) (Cfr. also P. Foulquié , oc, 91/94 (*La relativité en mathématiques*).

Which is therefore confirmed, in a purely scientific dialectical sense, without Romantic or any other ideology, by F. Gonseth, *Fondements des mathématiques* , Paris, 1926.

Religious-historical moment.

It has been noted that Marxists incorporate fundamental religious-historical (hierological) ideas. Such as the idea of being 'alien to the gods'.

a. Naturally, this idea is used in the enlightened (L. 36) sense, that

is, with sovereign contempt for all that is religion, certainly for all that is archaic religion.

b. Yet that idea is more accurate than that Enlightened meaning itself covers.

WB Kristensen, *Collected Contributions to the Knowledge of Ancient Religions*, A'm, 1947, 273, says the following. He speaks of 'the demonic gods of the 'totality'' (oc,272), i.e., essentially, the entire polytheism of archaic-ancient mankind (the ancient East, Hellas, Rome). Listen.

“Good and bad (L.56ff. (the Gypsies)) originated from the (highest) gods: downfall and rising (L.69; 71), the opposites (L.52ff.), which constitute the enduring life of the world and in which (the Babylonians) saw the divine totality (L. 55: harmony of opposites). The will of these gods was fate, the 'Moira' (ancient Greek for share in good and evil), 'divine' but inhuman.

'Righteous', in the ordinary (understand: our Biblically influenced) sense of the word, they were not: by their conduct (the gods) denied the laws which they had established for men. And the ancients were fully aware of this 'contradiction' (note: 'contradiction') in the 'divine' being. Some of the most impressive pieces of religious literature that we possess bear witness to this: **(1)** the book of Job; **(2) a.** the Babylonian Lamentations; **(2) b.** the bound Prometheus”.

One could not express it more clearly, from a religious-historical perspective!

L75

WB Kristensen, oc, 289, says, regarding Heraclitean thought: “The ancients call Heraclitus 'the obscure one', and not without reason. For, in a truly 'ancient' (understand: archaic-ancient) spirit, he considered the mystery of totality more important than the 'rational' (understand: secular, belonging to ordinary life) relations of existence.

Heraclitus says (Fr. 54): “The hidden harmony (harmoniè afanès) is stronger than the observable one.” Heraclitus means the following: the

integration (L.55) (= order) of things and processes can

(i) be based solely on what we all, without distinction, see, touch, feel and, immediately, reason (perceptible harmony);

(ii) moreover, be supported by invisible, intangible, imperceptible and, without particular insight, unreasonable data (hidden harmony).

WB Kristensen, oc, 289, adds:

The importance that the idea of totality was considered, even in later times, is evident from the fact that it has never entirely disappeared from religious and philosophical thought up to the present day.

Thus: **(i)** formulated philosophically, **(ii)** but viewed religiously, this idea returns in Hegel's dialectics, where thesis, antithesis, and synthesis (L.72) form the triad (= threefoldness) of the self-development of 'reason' (vernunft).

Indeed, neither the dialectic of the German Idealists (especially that of Hegel) nor the dialectic from Marx to Stalin and his successors is fully—that is, also in its backgrounds—understandable if one does not take into account what Kristensen says.

It has also been regularly observed that—especially in the Marxist-Communist interpretation—dialectics has 'something' of a religion, however profane and atheistic it may be. But not of the religion of the pure, holy Supreme Being (high god, Hochgott), but of the demonistic primeval religions, of which we catch a glimpse in Gezelle's * *De Gypten* * (L.58ff.).

rightly states , **De Moedergodin in de Oudheid* *, The Hague, 1960: “(In three myths of Hellas) Gaia (= earth mother) displays a duplicity that reveals a demonic trait in her character.”

L76

2. -- Contemporary Dialectics (76/87).

(1) Let us summarize once again what (modern or new) dialectics,

referred to as *mathesis universalis* (L.67), as a basic method for the analysis of factual modes of being (L.7), entails.

With *H. Arvon, Le marxisme*, Paris, 1960-2, 33 pp., we can say: “*Engels*, in his *Herrn Eugen Dühring's Umwälzung der Wissenschaft*, Leipzig, 1878 ('Anti-Dühring') and in his *Ludwig Feuerbach* (...) (L.69),-- *Lenin*, in his main philosophical work, *Materialisme en Empiriocriticisme* (1908) and *Stalin*, in his *Dialectisch materialisme en historisch materialisme*, cited several times above, they have all – in that order – clarified the presuppositions (lemmas; L.6; 67) of the Marxist method (...).

It turned out that four principles were put forward upon which dialectics rests:

1. The totality (L.68v: organicism)
2. movement (L 69/71. mobilism).
3. qualitative change (L.71 (62));
4. 'contradiction' (L.71/75)”.

These four headings are, incidentally, explained in Arvon's little work, oc, 34/40 (analogous to Foulquié). –

(2) Foulquié, oc, 76/122, dwells at length on what he calls 'scientific dialectics'

Given its current importance, we summarize its main propositions.

A. 1. Hegelian dialectics and Marxist or Marxizing dialectics had, as disadvantages, that they arose purely speculatively, outside the results of definite or positive sciences; also: they are 'a simplistic schematism' (oc177). Nothing more.

2. Contemporary dialectics, however, although inspired by the purely speculative, is based on the results of specialized sciences (L.1) and is less rhetorical (L.1).

It recalls the motto of J. Fr. Herbart (1776/1841): “Everyone ought to regard all specialized sciences. Everyone ought, however, to be a 'virtuoso' (specialist; L.1/2) in precisely one specialized science”.

Foulquié, oc,78/97, demonstrates this for:

1. the humanities, **2.** the natural sciences, 3. **mathematics** (l.73v.),
4. logic (logistics).

L77

B.-- Here are the entries (L.6; 41) of the current dialectics.

They can be classified under two main viewpoints (L.42 (synchronic); L.41 (diachronic)).

This corresponds, broadly speaking, to **1.** totality (synchronic) and **2.** to **4.** movement; qualitative change; contradiction (diachronic). One sees: the fundamental lines live on.

A.1.-- Intentional. (77/78)

See L.7;9/10;30,-- The current dialecticians-specialist scientists point out that all scientific work (not so much the results) is an interaction between the investigating subject (= noetic side) and the investigated object (noematic side).

a. Note: --

The terms 'noetic' (subject) and 'noematic' (object) do not come from the dialecticians, but from Edmund Husserl (1859/1938), the great founder of intentional phenomenology, which treats subject and object jointly (L.13). If we use them here, in parentheses, it is because they perfectly reflect what contemporary dialecticians (and, incidentally, also Hegel, who understood the 'subject/object' interaction very well) want to say.

b. Note: -

In other words: scientific work is 'encounter' (L. 13). This entails that
(i) the encountered material (object) with which the specialist scientist has to deal must first be processed, as it were, vitally, before it can be formulated rationally-intellectually (something that Hegel, too, understood very well, as a thinker influenced by German Romanticism (L.67; 73));

(ii) the encountering researcher must first, as it were, commit himself ('engagement'), before he can intellectually and rationally formulate the data (the object) (which Hegel, again, saw very well, due to his romantic background: for German Romanticism—for Schelling (L.73) and Hegel, as well as for the Marxists, who, on a romantic basis, thought through—philosophy, respectively the discipline and rhetoric, is “the life coming into full consciousness” (A. de Waelhens, *Existence et signification*, Louvain/Paris, 1958, 75 ss.)).

The dialecticians immediately distanced themselves from the life-alienating, detached enlightened 'rationalism'.

L78

A supporting text.

A. Lautmann, *Essai sur les notions de structure et de existence en Mathematiques*, II (*Les schémas de genèse*), Paris, 1938, 147 (cited by Foulquié, oc, 101): with Leon Brunschvicg (1869/1944) - who wrote about *Les étapes de la philosophie mathématique*, Paris, 1912-1 - A. Lautmann acknowledges “the necessity of linking two things inextricably:

a. Elaborating (designing) – or, simply, understanding the mathematical theories, on the one hand, and

b. The experience that the intellect acquires regarding equity in that elaboration and/or understanding.

A. Lautmann expresses this differently: “Every attempt, in the realm of logic, that would wish to steer the course of development of mathematics a priori (meaning: by merely proceeding from presuppositions), in other words, disregards the true nature of mathematical truth. This is, after all, bound to the designing (meaning: lemmatic) work of our intellect.” (oc,101).

A.2.(i). -- Lemmatic-analytic (l.6: 41).

The current dialectic connected with scientistics (the theory of science) points out that all scientific work or scientific practice constantly assumes an interaction between, on the one hand, the

lemma, which they call 'a priori', and, on the other hand, the analysis, which they call 'a posteriori'.

Note: -- 'A-priori' means, in Latin, 'in advance', 'beforehand', 'at the forefront'; and 'a-posteriori' means, also in Latin, 'afterwards'.

Note: -- We can also express the word 'interaction' differently—now that we are beginning to understand what current academic dialecticians mean by it: Instead of 'either (subject, lemma) or (object, analysis)', the dialectician states “both (subject, lemma) and (object, analysis).”

One piece of evidence.

“No Categories (= fundamental concepts), originating from our understanding ('catégories mentales'), that could do without any experience. But neither is there any experiential insight ('intuition empirique') without data provided by the understanding.” (Thus Foulquié, oc,98).

Thus in current theory: “The distance that was formerly assumed between the axiom (theoretical presupposition, a priori) and the empirically established fact simply does not exist”.

L79

Foulquié, oc, *ibid.*, explains further: “The axiom emerges from the facts and the fact only becomes known thanks to categories (= basic ideas) that transcend experience:

“The analysis of the means and methods, carried out as accurately as possible—the methods at the service of our observation—forces the coupling ('rapproche') of the so-called fact in itself ('le fait brut') and theorizing ('spéculation').” (Foulquié borrows this last sentence from *F. Gonseth* (1890/1975), *Preface* in *Georges LeMaître* (1894/1966; the world-famous proponent of the theory of the primeval atom), *L'hypothèse de l'atome primitif*, Paris, 1946).

We assume that the fact that someone like Georges Lemaître allowed

Gonseth to write the preface for his work suffices as an argument from authority. Lemaître, after all, was fully immersed in scientific practice: he was therefore able to judge the theory concerning that work with a sound understanding of the subject.

A.2. (ii).-- *Abstractive*.

1. 'Abstractional' means that, here in scientistics (the study of science), the specialist scientist, usually, but not always (one need only think of the scientific determination of singular (= unique, one-off) and concrete (fused with other singular data) factual modes of being (L.7)),

(a) begins with the singular concrete,

(b) to end with the general (universal) and, thereby, the alien ('abstract'). (L. 64v.).

Well then, that which either conforms to that 'abstract' or opposes it, we call 'abstractive' (related to the abstract).

2. In other words, dialectically speaking, there is an interaction (and...and... (L78) between, on the one hand, the given given that has merged with the environment in a unique way and, on the other hand, the abstract attitude that the specialist adopts towards that singular-concrete ('this here and now'),

***Evidentiary text*.**

"A totally abstract term (idea, concept), without any reference whatsoever to concrete reality, would be meaningless." (Foulquié, oc, 99).

In other words, a regulative (= abstract) model without applicative (= proving applicability) models is empty. Conversely: applicative models without a regulative model are blind.

In this context, 'empty' means something like 'not explained by means of examples (applications),' and 'blind' means something like 'not explained by means of concepts' (ideas, categories).

L80

As is known, this 'blind/empty' connection (L.55) dates from I. Kant (1724–1804), a leading figure of the German Enlightenment (L.36:

Enlightened thought), when, in his critique of John Locke (1632/1704), the founder of the English Enlightenment, who claimed that all knowledge originated from the senses ('sensu' (Lat.) = sense), and in his critique of Gottfried Wilhelm Leibniz (L.51;70), the founder of the German Enlightenment, who claimed that knowledge originated from the intellect, he wrote:

“Leibniz intellectualized the phenomena (i.e. the data insofar as they reveal themselves (L.13: 'truth' as unconcealment), just as Locke had sensitized the concepts of understanding (...)”

To rectify this double one-sidedness, he stated succinctly: “Thoughts without content (understand: examples, applications) are empty; insights (understand: sensory perceptions, phenomena) without concepts are blind”.

With this—see L.71/73 above: thesis (Locke's one-sided sensory knowledge); courtship (Leibniz's one-sided intellectual knowledge); summary (Kant's 'dialectical' conception of knowledge)—Kant overcame two very one-sided Enlightenment epistemologies (theories of knowledge).

Immediately, he gave an applicative model of dialectics regarding abstractive knowledge. (O. Willmann, *Die wichtigsten philosophischen Fachausdrücke, in historischer Anordnung*), Kempten/Munich, 1909, 94).

Fundamentally, with this, Kant touched upon the root of the two main types of the Enlightenment, namely intellectualism (Descartes, Leibniz, for example) and empiricism (Locke, Hume, for example).

One also speaks of two main types of 'rationalism', but then 'rationalism' is understood not as 'rational - intellectual behavior', but as 'Enlightened' (secular; L.74) behavior', in which, admittedly, 'reason' - understood as critical reason - plays a leading role, but then in two forms: an intellectualist and an empiricist one.

Dialectics deals with those opposites (L.65: harmony).

Note: -- **a.** -- in educational methodology one speaks of 'inductive method' (cf. L. 30ff.) and of 'deductive method' (L. 26; question 32 (M = VZ1)), in 'programmed' education.

To understand the peculiar terms, it must first be said that, in Latin—Scholastic textbooks—an appl. model was introduced with 'exempli gratia' (literally: by way of example, application), abbreviated: 'e.g.'. Furthermore: in English, the lingua franca of cutting-edge technologies, 'regel' is called 'rule'. Well then,

(A) The inductive method regarding the data to be learned offers, first, one or more application models, in order to arrive, from there, at the detachment of the regulative model ('rule'). It is called 'Egrule' (abbreviated: Egrule).

(B) The deductive method, in this regard, offers first the regulative model ('the rule'), in order to illustrate it, subsequently, with appl. models. It is called 'Rul.eg': (abbreviated: Ruleg).

b. - Dialectically speaking, it reads, once again: not 'either (inductive) or (deductive)', but 'both (inductive) and (deductive)'. (L.32, where both methods, placed in a reductive framework, are actually conceived and practiced 'dialectically' together, rather than apart):

That is, then, the true reason why we always proceed reductively, even in deductive matters. Reason: dialectically speaking, the two belong together!

B.1.(i). -- Complementary (supplementary).

See first L. 33 (supplementary); 37ff. (Collective structure).

Historical explanation.

Foulquié oc, 101, states that the idea of 'complement' (complement; L.7 (ontological); 33 (methodological); 66 (methodological)) was introduced into epistemology (the study of science) by the Danish physicist Niels Bohr (1885/1962), Nobel Prize winner in Physics (1922).

This is to settle the struggle (L.71 (I. Stalin, on the subject)) between the (adherents of the) corpuscular theory regarding 'atomic structure' (the atom as a collection, or system (L.38) of (the Latin) 'corpuscula' ('particles')) and the (adherents of the) wave theory (the atom as a collection, or system of 'wave motions'), — a struggle that has raged (in optics) for two centuries.

L82

Evidentiary text.

1. *J.-L. Destouches, Principes fondamentaux de la physique theorique*, Paris, 1942, 158 (Foulquié, oc,162), says: “The idea of 'complementarity' (complementary character), introduced by Niels Bohr, consists in attributing an equal partial reality to both the particle aspect (corpuscular) and the wave aspect of the phenomena.

Moreover, in this specific case, 'complementarity' means that, when conducting experiments (experimental; 1.42), either one or the other aspect always emerges; in other words, that the two moments never appear together.

One therefore paid close attention: the second aspect mentioned by Destouches is purely coincidental with regard to the idea of 'complementarity'.

Note: -- We rightly point out here that 'complementarity' tolerates contrary (L.53ff.), privative (L.53), and correlative (L.54), but not contradictory (L.52ff.) opposites. Unless, for example, in the aforementioned case.

2. Foulquié, oc, 105ss., further adds: “The idea of 'complementarity', first developed in microphysics, was later introduced into other specialized sciences.

a . Bohr himself, for example, applied them regarding the question of (the essence of) life (biologically). What is called alive reveals itself to us in two forms:

(i) a physical-chemical aspect and (ii) a 'dynamic' (meaning: more than merely physical - chemical) aspect, which transcends both physics and chemistry”.

b. *Gonseth, Déterminisme et libre arbitre (Entretiens présidés par F. Gonseth)*, Paris, 1944, 181ss., proposed introducing the idea of 'complementarity' regarding the question of (the relationship between freedom ('libre arbitre') and determinism (whereby everything is 'determined', i.e., predetermined and, at the same time, unfree)”. (oc,105).

That concludes the outline of a psychological application.

B.1. (ii) -- Unitary scientific.

Let us retake, L. 33 (internal and external comparison).

Foulquié, oc, 106, calls this 'caractère organique du savoir' (organic nature of knowledge).

The term 'unity science', strictly speaking, originates from the 'Viennese Circle', a group of thinkers (R. Carnap (1891/1971) in the first place), based in Vienna between approximately 1920 and 1938. This group is usually referred to by the name 'Neo-positivism' (L. 36: A. Comte founded Positivism) or 'Logical Positivism' ('logical', because linguistic research was conducted on a logical basis) or, also, 'Logical Empiricism' (80: Locke, Hume, et al. were precursors to French Positivism).

L83

a. Well, once in the USA, several members and supporters founded The Unity of Science Movement.

b. Although the Neo-Positivists were anything but 'dialecticians', they nevertheless set in motion a movement which was merely the 'scientistic' (purely scientific) re-establishment of what the dialecticians had actually sought since German Idealism (L. 67): the organic elaboration of all knowledge

Evidentiary text.

“In fact, (not only are the data of the sciences mutually complementary, but) all branches of human knowledge. Thought, after all, is not made up of pieces and fragments that stand alone: just as in a (living) organism (L.68), there is, here too, a continuous connection.

a. Thus, one cannot understand the role (le jeu) of a single organ without knowledge of (all other; L.7; 66, 81 (complement)) organs with which it is associated (synchronic; L.41ff.; 77).

b . As Georges Cuvier (1769/1832), founder of paleontology and re-founder of comparative anatomy, demonstrated at the time, the change in a single organ entails anatomical changes in all other (L. 60/63) organs (diachronic). (...).

c. (...) Language (...). The meaning of words depends on the context (L.7; 66: complementation).

1- It suffices to change a single word ((L60/63) to give all other (L.66) terms of the sentence (= pronunciation) a changed shade.

2. Moreover, this shading (nuance) (...) is only visible once the sentence is constructed, just as if the synthesis (L38: coll. Str.) were relatively independent of the elements (moments) it brings together. (Foulquié, oc, 107).

Current structuralists have confirmed this insight into the coherence (L.39ff.), although they too are not pure dialecticians.

L84

Evidentiary text.

F. Gonseth (L.79), *Les mathématiques et la réalité* , Paris, 1936, 43 (Foulquié, oc,107), says: “Words, with their meaning insofar as the dictionary assigns it to them, are merely the materials which verbal architecture (l’architecture verbale) employs. The meaning (sens) of the buildings (of language) is anything but a mere juxtaposition or, even, a concatenation of the separate meanings of all usage.

So too, the beauty (L.56) of, for example, a temple is not merely the individual beauties of the marble pieces, the porphyry blocks, the gold particles, etc.

With these two proof texts, the first term of the analogy (comparison) is given, namely the model (exemplar).

Now the second term, namely that in which the model is depicted, namely thinking (knowing). Evidentiary text.

1. A theologian (the scholar), *H. Bouillard, Conversion et grâce chez saint Thomas d'Aquin* (L20), Paris, 1943, 219 (Foulquié, oc, 108), writes:

“Whenever man evolves, an unchangeable truth (L.70) stands firm only thanks to a simultaneous evolution of all concepts, which, among those concepts, maintains one and the same connection”.

2. An educational psychologist, *P. Guillquær, Journal de Psychologie*, 15.11.1925 (cited by *G. Bachelard* (1884/1962), *Essai sur la connaissance approchée*, 250), writes: “In all education, progress consists less in connecting an answer (reaction) with a perception (stimulus) than, rather, in modifying (L.60ff.) the perception (stimulus) itself”.

3. *F. Gonseth, Conférence à l'Institut Henri-Poincaré*, said: “Every advance in knowledge has an impact on (all other) parts of that knowledge”. Foulquié, oc, 107s., citing the preceding texts, adds: “The new achievements (of science) are not simply added to the others: they become an integrating (L.38: coll. str.) component thereof, so that they form a single whole with them”.

One can see it: there is an analogy between an organism and knowledge.

L85

Note: -- With regard to language as an 'organism', it can be added that German Romanticism (L.67; 73; 77) was the first to examine

language in all its complexity.

Two German-language products still show clear traces of this:

(i) Karl Ferd. Becker, *organismus der Sprache* (1827; 1841: on a comparative basis and starting from logic and syntax (grammar), Becker tries to expose the ideal structure of language);

(ii) especially, however, *Wilhelm von Humboldt* (1767/1835), the classical humanist, founder, in 1811, of the Humboldt University of Berlin - who, from a linguistic point of view, studied the entire culture both of a single people (and its 'national spirit') and of all peoples (and their linguistic connectedness in all their multiplicity) (as in his magnum opus: * *Über die Kawi-Sprache auf der Insel Java**, 3 vols., 1836).

1. "One will have to wait until the end of the 19th century to see how von Humboldt's 'linguistic structuralism' is both taken up and justified by the research of Ferdinand de Saussure (1857/1913). He, after all, demonstrates that words form integrating constituents (L.83ff.) within a system (L.39/41)". (*H. Arvon, La philosophie allemande* , Paris, 1970, 109; 112/115).

2. Nevertheless, in contrast to contemporary structuralists, von Humboldt maintains the individual (L.69) as a truly existing person: "Within the agreement (both national and international), there exists, after all, such a remarkable individualization (Willmann now quotes von Humboldt himself:) that one may assert, with equal justification, that the entire human race possesses only one language, that every man individually possesses a language of his own." (*O. Willmann, Gesch. d. Id.* , III, 774; for Becker, above: id., 784). -- Cf. 'and ... and...' L.78: 82.

Note: -- Theodor W. Adorno (1903/1969), of the *Institut für Sozialforschung* , founded in Frankfurt in 1924 , also opposes Hegel's (and Marx's) idea of 'totality' ('ganzheit') (L.68). Like many others who were witnesses to Russian Leninist Communism, he sees totalitarianism in it.

B.2.-- historical (evolutionary).

Finally, a word about the diachronic (L.41) moment.

Under penalty of letting go of all thinking,

(i) we are compelled to use the concepts that our generation accepts and

(ii) which we, through our contribution, gradually (L.60/63), transform, by using them, to a certain extent, differently (newly): (Foulquié , pc, 108, cites *F. Gonseth, (Mathématiques et réalité , 236, :)*

“A living concept (i) is not created out of nothing (...); (ii) it emerges from its 'past' and changes (L. 60ff.; 71) itself through being used”. (Foulquié continues thereafter): Consequence: the content of our concepts is not without ambiguity ('ambiguity')”.

In existential language: our thinking is:

(i) 'thrown' into an existing situation, which we do not choose;

(ii) 'designing' new thoughts. In other words: our thinking (i) has a history and (ii) makes history itself.

Evidentiary text.

Foulquié, oc, 109, refers to the revolution (since clarified by *Thomas Kuhn, *Deconstructuur van gewetenschappelijke evoluties** , (Meppel, 1972-1, 1976-2)) that the, at least at the time, recent theories regarding the microstructure of matter (microphysics; L.81) represented for the age-old idea of 'matter' ('substance').

Notwithstanding that revolutionary re-establishment of the idea of 'Matter', “the word 'matter', by which we now designate that reality which differs so much from what our ancestors thought of it, remains laden with the meaning they attached to it”. (Oc,109).

S. Gagnebin, in: *Dialectica (Revue trimestrielle , Paris/Neuchâtel, depuis février 1947), No. 6 (June 1948), 272, writes:*

Thus, while the scientist transitions from a former horizon to a new one, he nevertheless continues to rely on a foundation whose soundness is no longer fully acknowledged.

And Foulquié, *ibid.*, adds: “The concepts must be revised or – as G. Bachelard and F. Gonseth put it – they must be dialectized”.

General decision

Open thinking. “Our mind ought to remain 'open'.

L87

This 'openness' - according to Foulquié, *oc*,114 - entails

(i) prepare oneself for every idea and every fact that contradicts established ideas;

(ii) moreover, go beyond what contradicts established ideas.

1. After all, we live with the fact of our natural tendency, which prompts us to cling, in a lazy manner (*paresseusement*), to acquired positions.

“We – thus *G. Bachelard, La formation de l'esprit scientifique* , Paris, 1938,7 – chew over, uninterruptedly, the same achievement and all become – in this, equal to all misers – victims of the gold that we caress”.

2. “One ought to say 'no'

(i) both to the science of the past

(ii) as to the new hypothesis (*lemma*), which emerges.

Reason: “Every knowledge, if one acquires it at the moment of its creation, is polemical (controversial) knowledge” and “There is a whole *eristic* (L.63) at the root of *heuristics* (method of discovery, art of discovery)” (both sentences are taken from *G. Bachelard, *la dialectique de la durée **, Paris, 1936, 24; 68).

Conclusion : an open philosophy is first and foremost a philosophy that says 'no' (*ibid.*)

3. “Yet the scientist ought not to harden himself in his denial (L.72): the 'philosophy of the 'no' is merely negative in order to be all the more open.

a. For example, a 'non-Kantism' is

(i) absolutely not the pure rejection of what I. Kant (L.80) thought;

(ii) indeed a Kantian-inspired philosophy, which transcends the established ('classique') Kantian doctrine, which opens it up to other viewpoints". (Ibid.).

b. So, also, regarding logic (logistics), the fact that "some modern thinkers, who 'dialectize' the principle of the excluded middle (L.15) (L.86: below),

(i) alongside the two-valued (working either with 'true' or with 'false' (L.15)) logic of Aristotle (L.4; 5),

(ii) designed a three-valued (operating with 'true', 'false' and 'neither true nor false') or, even, a multi-valued logic (= logistics) (Foulquié, oc,118), - This is, apparently, an openness which is ontological (transcendental: L9) and, finally, rests on the idea of being.

L88

II. Theory-based models (88/158)

1.-- A doctrinal model of comparative ordering (88/93)

A.-- G.G. Granger, **Pensée formelle et sciences de l'homme **, *Paris*, 1967, 1/6, sets out how structuralism, in his view, goes back to the following three types of thought.

(a) Linguistics

The linguistics of B. de Courthenay and, especially, Ferdinand de Saussure (1857/1913), which assumed that language (as 'code' or available system of signs) was a coherent whole, especially of pairs of opposites (L.85; 53).

(b) Mathematics

Bourbaki's mathematics; -- a group of young mathematicians, whose collective pseudonym is 'Bourbaki', have, since 1939, starting from re-founders such as G. Cantor (L.28ff.), rethought the entirety of traditional

mathematics and centered it around the idea of 'structure' (of a 'system') of mathematical 'objects' (think of order, algebraic, and topological structures). Cf. L.41.

(c) The 'system technology'

The 'system technology' of *Martial Gueroult* (1891/1976), who conceived an analysis of, for example, the works of R. Descartes (L. 36; 50ff.; cf. with Sartre's interpretation of Descartes) as the assembling, on the basis of texts and testimonies, of Cartesian philosophy as a system with a well-defined structure; thus in his * *Descartes selon l'ordre des raisons**, Paris, 1953. Granger says that Gueroult fitted the logical consistency (cohesion) of Descartes' assertions into the idea of a '(relatively) closed system'.

Note: The expression 'system technology' is misleading; 'system analysis' would be better. Cf. L.38/41.

B. -- Against this background, we grasp the importance of the origins of *Ch. Bally/ A. Sècheyne/ A. Riedlinger*, publ., *Ferdinand Saussure, Cours de linguistique générale*, Paris, 1916-1 (1931), 7/11 (*Preface to the first edition*). In this work, Saussure's pupils outline the method by which they—like M. Gueroult in this respect—constructed the coherent system of semiological linguistics through systematic comparison, drawing from the surviving evidence of their teacher's instruction.

L89

C.-- We restructure, however, the preface according to the reductive scheme (L.6; 12 (= lemmat. analyt. form); 23; 26 (syllog. form); 24 (operat. form); 41). Cfr L.78!

a. Observation.

a.1. -- given (situation):

(i) The publishers had followed Saussure's teachings (so they had an idea);

(ii) After the thinker's death in 1913, the corpus (i.e., the total collection of texts; L.22 (inventory)) consisted of very scarce notes: "One

was compelled to resort to the notes recorded by the students—during three series of conferences at the University of Geneva (1906-7; 1908-9; 1910-11).” (Oc,6).

In other words, the summative induction or inventory (L.11; 30v.), which guarantees the completeness of the observation, was the first task.

a.2. A faithful reconstruction

(i) based on the available data (a.1.)

(ii) make a faithful reconstruction of the theory of the saussure both in its elements and in its totality (L.38; 63v.: coll. structure; organism).

b. Reduction

The corpus, or bounded collection of texts, is now being processed—in two ways: substantively and textually.

b.1. - Abductive reduction (= lemma).

The question assumes (= hypothesis (L.6, etc.)) that something like a coherent doctrine can be found in the corpus. -- This is the regressive reduction.

b.2 -- Progressive reduction = analysis

1 .-- If a consistent doctrine is involved, it must be discoverable through a methodical comparison of the texts. In other words, one designs the research.

b.3. -- Peirastic reduction (= analysis 2).

We summarize the research in two aspects.

(1) Substantive reduction.

What were we going to do with these materials?

a. A first critical work (L77/ 79: praxis) became necessary

1/ for every course and **2/** for every trifle (L.46: simplest given).

b. One ought to compare all (L.22: summative) versions (en comparant toutes les versions), -- in order to penetrate to a thought of which we possessed only echoes, and even then sometimes contradictory (L.15; 52; 37) echoes”. (ibid.).

b.2 . “F. de Saussure belonged to the type of people who constantly renew themselves (L. 69. 86: dialectics)”, -- which naturally made the comparative ordering (L.33/87), the basis of the reconstruction, even more difficult. The (dialectical) 'living' is difficult to 'fix'!

(2) Rhetorical (textual) reduction.

Note-- Anticipating the 'rhetoric' course (L.1) (Second Year), we say the following regarding it:

A. “All intellectual products ('oeuvres de l'esprit') – according to Geruzez (a rhetoric specialist, cited in the text) – come into being based on the sequence of three operations:

- a.** the invention of ideas (heuristics. L.34; 87 (dialectics));
- b.** the ordering of these ideas (harmology; L. 20ff.; also called 'taxeology', -- from the ancient Greek 'taxis', order(ing), arrangement of a multitude (elements) according to a unity (structure));
- c.** text formation (= design or, Anglo-Saxon, 'design'), which is traditionally referred to as 'stylization' (hence: stylistics). This threefold structure dates back to Aristotle, at least.

B. “These three operations are **(i)** distinct and **(ii)** yet; they are strongly interdependent (l. 81ff.: complementary)”.

(A. Langlois, *Le style (La Chose et la Manière. Du XVIIe au XXe siècle)*, Bruxelles, 1925, 56 (*Rhétorique*)). More about this next year!

A. -- “And then? The textual form, inherent to oral instruction, often in conflict with the form inherent to the book (to be produced), presented us with the greatest problems.” (ibid.).

From this it appears - from the text of the French preface - that rhetorical or textual problems do indeed exist **(i)** (l.7: factuality) **(ii)** as a mode of being (L.7).

B -- First of all, the text compilers proceeded summatively (L. 22/32), but now, with regard to the possible text formations. This was done in order to make a rationally justified choice from that 'sum' of

possible texts. All rational behavior proceeds, first and foremost, from the sum (collection) of possible types of behavior.

Here there were four possibilities;

- (1)a. publish particularly original text excerpts;
- (1)b. publish a single course in full;
- (2)a. publish everything in the original text form;
- (2)b. compose your own text from the entirety of the corpus (including Saussure's personal notes) cf. L. 89 (summative index).

L91

Note: This method is typical of structuralism, which, as seen in (L.88), draws on Saussure's linguistic method.

For example, in order to properly study the various forms (types) of 'totemism' (an archaic religion), *Cl. Levi-Strauss* (1908/2009), the cultural anthropologist, first proceeds summatively. In his short work **Le totemisme aujourd'hui **, **Paris**, 1962, he briefly sets this out.

1. Once the object of study is given, here: totemism;
2. the analysis can begin, but then as an analysis of at least two terms (L.7: factual views), in any case related to one another (L.41; relations, structure, system).
3. This analysis, however, proceeds first summatively (collectively).

In this case, Claude Lévi-Strauss first makes, purely speculative (L. 79), -- what here schematically represents, a collection ('sum'):

nature --	'category' 'category'"individual' 'individual'
culture --	'group'"person"person"group'

Cl. Levi-Strauss, oc, 22s. adds: "All these terms are chosen arbitrarily, -- calculated, in order to distinguish in every (fourfold) series (L.46; Cartesian mode of ordering), two modes of existence, the one collective (= e.g. 'group'), the other singular (= e.g. individual, person)".

C.L. Lévi-Strauss adds, paradoxically: “In this preliminary phase (of the analysis), one could choose any terms (e.g. 'x' in place of 'nature' and 'y' in place of 'culture'; etc.), provided they are distinct (L.51: exact.)”.

One sees: Lévi-Strauss, in France, the Cartesian land, continues the tradition of accuracy.

4. Only then is the 'empirical' (L.23v. (St. Mill); 36 (D. Hume)) given. (the object of study) - in that light - empirical analysis).

L92

For example

(a) Australian totemism, with its 'social' and 'sexual' contents, presupposes (L.78ff. (dialectics)), as a lemma, a relationship (L.41) between a 'natural category' (empirical: e.g. a plant or animal species, a collection of phenomena or objects) and a 'culture group' (empirical: a religious society, the totality of either the men or the women).

Existentially (L.13; 18; 30; 77ff.: the meeting of the phenomenologists), a social group enters into a typically religious connection with, for example, thunder (phenomenon), a lucky stone (object), the kangaroo (animal species), etc.

(b) The North American Indian totemism, within which an 'individual', through sometimes very harsh and severe 'trials', creates a 'bond' between him (her) personally (singular) and a 'natural category' (as under (a) above).

(c) The Mota type (Banks Islands), within which a newborn is regarded as some embodiment (type of union) of a plant or animal, either encountered or consumed by the mother at the moment she becomes aware of her pregnancy; -- which amounts to the union 'natural individual' / 'cultural person',

(d) The Negro-African type, within which the cultural group (e.g. some local population) collectively (L.38) e.g. a single 'sacred' individual

(a crocodile, for example), locally, 'venerate' and 'protect', this, as a form (type) of religious connection.

C.L. Levi-Strauss, ob. 24, says: “Purely 'logically' (theoretical, the four connections (L.35ff.: relationships) are equivalent ('equivalent'). Reason: they were generated by one and the same (theoretical) operation (*note* -- The list, middle L.91) but, in fact, only the first two (category/group; category/person) were arranged under the actual name used 'totemism'”

In other words, the empirical use of language is not logically justified.

So much for this methodological explanation. It provides an initial insight into the structural method. It is entirely 'comparative ordering' (L.33/66). Harmonology is the foundation for proceeding logically.

L93

C -- *The empirical choice (from the 'sum' of possibilities).*

We simply refer to the Preface.

a.-- “Publishing everything in the original text form (L.91, ad (2)a) was impossible. The repetitions, inevitable in a loose exposition, -- the overlaps (whereby parts of the text are, in part, identical), -- the varying wordings, -- all this would have given such a method of publication a dissimilar appearance”. (Oc,9).

b.-- “To limit oneself to a single course (L.90, ad (1) b) - and, even then: which of the three courses given by Saussure? - amounted to stripping the book of all the riches which were abundantly spread over the other two.

Even the third, the most definitive, would not, taken on its own, have been able to provide a complete picture (L.89: ad a.2. (task)) of **(i)** the theories and **(ii)** the methods of F. de Saussure”. (ibid.).

c.-- “It was proposed to us to record specific particularly original text sections (L.90, ad (1)a), as they were available.

Although this initially seemed to appeal to us, it soon became apparent that this method would distort our master's vision. After all, only fragments were brought across the bridge, -- and this, of a construction whose value only becomes apparent when it is present in its entirety (L.89, ad a.2.(taak)). (ibid).

d.-- “ We ultimately stuck to a bolder way out, which – we believe – is also more rational (L.90, bottom):

(i) on the basis of the third course (L 90, ad (1) b),

(ii) a reconstruction (an overview), a representation of the coherence ('synthèse'), yet in such a way that we made use of the totality of all available textual materials ('corpus'; L.91, ad (2) b), including the very scarce notes of Saussure”. (ibid.).

B.4. - *Evaluative reduction.*

The 'evaluation' or summary judgment reads as follows: “In other words, we ventured into a recreation that was all the more precarious, insofar as it ought to be a completely accurate representation of Saussure's thought. (L.86 (historical/evolutionary)).

The book emerged from such comparative and reconstruction work (ibid.).

L94

2.-- *Phenomenology as comparative ordering (94/112).*

1.a. -- *M. Heidegger, Sein und Zeit, I, Tübingen* , 1949-6, 27/39, briefly outlines the essence of Husserlian phenomenology (L.13 (idea of encounter); 18 (lived method); 30 (intentio, the orientation of consciousness); 77 (intentio as interaction (work) between subject and object)).

b. Heidegger characterizes phenomenology, in the tradition of his mentor Edmund Husserl (1869/1938), in two ways:

(i) the correct information about the word 'phenomenon' (phenomenon, given) and

(ii) stating what the phenomenon is (di phenomenology). “The

expression 'phenomenology' contains two components: 'phenomenon' and 'logos'. Both derive from ancient Greek terms 'phainomenon' (that which shows itself) and 'logos' (stating showing what something, namely the phenomenon is)". (oc, 28)

c. Phenomenon

None other than *G. van der Leeuw, Phänomenologie der Religion*, Tübingen, 1956-2, 768, reproduces Heidegger's idea with utmost accuracy. Here is what phenomenologists understand by (the term) 'phenomenon': "the phenomenon (...) is that which shows itself.

This involves three things:

- (a)** The phenomenon is 'something' (cf. L. 7);
- (b)** that 'something' reveals itself (cf. L.13: truth, phenomenologically understood as 'unconcealment');
- (c)** This same 'something' is called a 'phenomenon' precisely because it manifests itself.

Whereby - according to van der Leeuw, *ibid.* - the 'showing oneself' is a relationship (L.41) between:

a/ that which reveals itself (the so-called 'noëma' (Husserl's term for 'object')) and

b/ the one to whom it reveals itself (the so-called 'noetic' moment, the subject)".

That's all from Van der Leeuw.

Explanation.

All phenomenologists will tell you that, by that definition, Husserl imposes a 'reduction' (here in the sense of 'elimination' (reduction to the pure phenomenon; purification)) (called the phenomenological reduction or purification).

Comparison

Expressed in the terms of C.S. Peirce (1839/1914), who, in his pragmatic manner, had a keen awareness of the phenomenologically understood 'phenomenon', one can say that the following 'impurities' must be banished from attention insofar as it is directed towards the pure phenomenon.

IA. Everything that the 'tradition' says about it does not belong to the phenomenologically pure phenomenon.

1. Peirce calls this the 'method of authority'. It consists of thinking about the pure phenomenon and saying what others think about it. -- Strictly speaking, this involves authoritarian thinking.

2. This attitude can also be called the 'method of orthodoxy'. Reason: 'orthodoxy (not to be confused with sincerity) means, in Dutch, 'that which adheres to the way of thinking of others'. – What tradition says is what others say. In other words, tradition is one type of basis for orthodoxy.

'Orthodoxism' (adhering to what others, who present a 'faith' to you, say) is a second type.

IB. Anything that can be labeled as a 'merely subjective judgment' regarding that phenomenon does not belong to the phenomenon, in the strict sense.

1. Peirce calls this the 'method of tenacity,' which can be translated as 'method of stubbornness.' Peirce himself speaks of someone who, regarding free trade, wanted to read only pro-free-trade newspapers—this, so as not to compromise his 'own' judgment: for that man, it was—expressed in a Husserlian way—not about the 'pure' phenomenon of 'free trade,' but about what he—stubbornly (= not open: L.86v.)—thought about that phenomenon!

In other words, what we all, taken separately (singularly, individually), think about the phenomenon ought to be clarified.

2. Peirce also calls this, in a second way, the 'a priori method' (L.78). By this, Peirce means a reaction against both the method of individuality and the method of orthodoxy. The one who, although adhering either to individual or to group judgment, breaks through this by introducing free discussion. If you will: the free-discussing form of the two preceding

ones.

Their flaw is: they do not proceed from the phenomenon itself, but from their own (individual or group) judgments (prejudices), called 'a priori' by Peirce, regarding the phenomenon.

L96

3. The Enlightenment thinkers who call themselves 'freethinkers' yet fall into preconceived opinions are a type of 'apriority' – or, as is also said, 'foundational' – thinking. The Western European Enlightenment thinkers (L. 36; 67; 70; 80 (two types of 'founded' (understand: apriority) thinking, the intellectualist and the empiricist)) proceeded, “authoritarian” (as Karl Popper and his pupil W. Bartley say), from the premise that 'true' knowledge

1/ either, if axiomatic-deductive geometry was to be intellectually 'grounded',

2/ either, if the experimental natural science, or a sensually perceptible manner, was to be 'founded'.

a. Figures such as G.E. Moore (1873/1958), the commonsense thinker—in his **A Defence of Common Sense** (1925)—and, from 1934, Karl Popper (1902/...), as well as, for example, W. Bartley, **Flucht ins Engagement** (* *Versuch einer Theorie des offenen Geistes* *), Munich (Szczyrny Verlag), 1962, have pointed out the foundationalism of the Enlightenment thinkers.

Consequence: the pure phenomenon is inaccessible, even to that free-thinking type. Reason: if the phenomenon does not fit into their frame of reference, it 'does not' 'reveal' itself.

b. Peirce says, *The Fixation of Belief*, in: *Pop. Sc. Monthly*, xii (1877), 1/15: “To deem the influence of natural preferences permissible, -- however, in such a way that, under the influence of those preferences, the people;

1. speak to each other and

2. to view things (understand: phenomena) under different lighting conditions, in order to gradually develop opinions corresponding to

natural causes.

Behold the type of apriority thinking.

Peirce sees, primarily, two types among them: **1.** artificial products; **2.** a number of 'metaphysicians' (philosophers). Peirce says: "Systems of that type usually do not proceed from observable facts, -- at least not to a great extent.

They were preferred, above all, because their axioms (presuppositions, a priori's) appeared to correspond with 'reason' (understand: 'reason' interpreted rationalistically).

This expression 'to correspond with reason' is a technical term: it does not mean what corresponds with observation, but that which we are inclined to believe." (ibid.).

Peirce illustrates this with an application model.

Platon, for example, considers it "corresponding to reason" that the distances of the orbits of the celestial bodies are mutually proportional to the various string lengths that produce harmonic sounds in a musical instrument.

L97

Many philosophers have been guided—as regards their most important conclusions—by considerations of that type. (*Note*—Platon, indeed, especially towards the end of his life, thought in Paleoputhagorean terms (L.2; 48; 94); we will discuss the musical (better: 'choreia'—bound) interpretation of planetary and stellar relationships later.

Peirce speaks, here, purely in modern physics). - Peirce continues: "It is clear that a person other than, for example, Kepler himself) finds Kepler's theory (*note* -- J. Kepler (1571/1630) is known for his laws of the solar system), which asserts that the orbits of the celestial bodies are proportional to the (...) orbits of the various regular bodies, "more in accordance with his 'reason'". (ibid ").

IC . Anything that can be called theoretical does not belong to the phenomenon, in the phenomenological sense, such as hypotheses (= abductive or regressive reductions), proofs (such as ideological reasoning (L.1)).

Husserl himself captured this in a concise expression: “zu den sachen selbst” (Back to the data itself).

1. Peirce expresses this in his own way: 'external permanency'; or also: 'the scientific method'.

By the term 'external durability', he means that the phenomenon

1. is independent of our 'internal' processing (representations, reasoning, tastes) and

2. emerges in a repeatable manner as independent of our subjective processing.

2. Peirce, evidently, thus identifies 'phenomenon representation' and 'scientific method' (so that 'scientific' here should be understood in the very broad sense). In other words, unlike the rationalists (Enlightenment thinkers) mentioned above, who equated 'scientific' with 'intellectual' or with 'perceptible through the senses' (L.96).

ID Do not belong, wonder of all, to the phenomenon:

1. -- The 'I' (subject) as a source of 'acts' (e.g. aversion to a theory or, for example, to the myth, which one wishes to investigate as a phenomenon);

L98

2. The acts (as Husserl says), that is, the modes of approaching that same 'I'—except, of course, a type of act (and, immediately, of 'I'—involvement; as van der Leeuw says (L.94: the one to whom the phenomenon reveals itself)), namely the 'pure' opening up; the pure 'attention' (as an object-, phenomenon-oriented act).

This entails the purging of all purely psychological (psychologically relevant) interest. In other words, 'phenomenology' is not 'psychology'.

Husserl himself says , in his **Die Idee der Phänomenologie ** (**Fünf Vorlesungen **), The Hague, 1950, 44 (ed. and introduction, W. Biemel): “The 'I' (as person, as 'thing' (understand: given) within the framework of the world) and the experience (as the experience of this person, -- possibly, situated - although, perhaps, entirely vague - in 'objective (understand: measurable) time'), -- these two, I and experience, are 'transcendencies' (understand: data situated outside the actual phenomenon). (...).

The purely 'immanent' (understand: situated within the phenomenon itself) describable by the 'phenomenological reduction' (understand: purification); in that case, I mean (as a phenomenologist) precisely 'this there' (understand: the given, the phenomenon) and not what it 'transcends' (i.e., by reference to what is outside, it). Yet, solely and exclusively, is meant what the given (phenomenon) is in itself.” (ibid., 45).

II. Likewise, the actual existence of the phenomenon, situated outside my consciousness, does not belong to the pure (purified by the phenomenological 'reduction' - banishment) phenomenon.

While the purifications were, hitherto, purifications regarding the mode of being (L.7), the latter concerns the correct characterization of the factual nature of the phenomenon.

For example, the flower 'molu' (*Homer, Odyssey* , X, 305), which Odysseus receives from the god Hermes (Hermeias), with a black root and a milky-white flower, to visit the 'beautiful-haired Circe', the sorceress, with it without danger, is – phenomenologically – nothing more than what Homer says about it. Or, apart from that textual given, also, for example (what Hans Reichenbach (1891/1953), member of the Vienna Circle (L.82), calls 'transempirical' can be verified, as a 'magically active flower' remains “placed in parentheses” (purified).

L99

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For example, when someone claims to see a 'lilac' color around

someone's outline; as a phenomenologist, one can only say that someone claims to see a so-called 'aura'; nothing more.

Again: with Hans Reichenbach, the phenomenologist, unbiased (L.94/97), leaves open whether this type of 'lilac', which is certainly not a physically (and thus either intellectually or sensually perceptible (L.80; 96)) given (phenomenon), is perceptible and/or testable in a 'transempirical (= suprasensory, mantic-paranormal (L.27; 64) manner', and notes only the assertion (with its ideal content).

This, in contrast to the rationalist (Enlightener), who already 'knows' (!) a priori that "such a thing does not exist".

Note— Cf. L.9 (on the misinterpretations of the idea 'being'; 87(bottom: dialectical openness)). -- The correctly understood ontology shows the phenomenologist the way regarding the type of factuality, Cf. L. 7.

In this way we interpret *Heidegger* 's words (*Sein und Zeit* , I, 35): "Phenomenology is the manner of gaining access (...) to that which ought to become the theme of ontology".

Decision:

L. 94/99 (Ad (i) phenomenon) has clarified for us (analysis; L.6; 41) what we, all, lemmatically (L.6; 41), know phenomenon (that which, in whatever way, presents itself) to be.

That analysis was comparative: by comparing the pure phenomenon with what tradition, purely subjective judgment, theoretical processing, the self and its acts, and our inner consciousness say about it, we have distinguished it (though not yet separated it) from what it is not. Husserlian: purification ('Reduktion').

Bibl. sample

Except for the works mentioned (articles):

-- *IM Bochenski, Philosophical methods in science* , Utr./Antw., 1961, 27/44 (*The phenomenological method*);

-- *H. Albrecht, Deutsche Philosophie heute* (*Probleme/ Texte/ Denker*

), Bremen, 1969, 21/37 (*Edmund Husserl*).

L100

c. (ii) Say out.

a . The ancient Greek word 'logos' (still resonating in phenomenology, according to M. Heidegger, *Sein and Zeit*, I, 32 - means (...) something like 'déloun', to make public (show) that which is being discussed in the exposition. (...).

The logos, which brings something up, reveals something ('fainesthai'), namely that which is being spoken about—both with regard to the one speaking (medium) and with regard to those who are involved in that conversation.

Bringing something up 'shows' ('apo-'), proceeding from that very thing about which the bringing up is concerned. In that 'speaking about' ('apo.fansis'), insofar as it is genuine, what is expressed (articulated) ought to have been drawn from that which is the subject (...). That is the structure (L.38; 41) of the logos as 'apo.fansis'. So much for an example of Heideggerian 'speaking'.

b. After all that we have said above, this seems self-evident. And yet: someone like *H. Arvon, La Phil. Allemande* , 140 (speaking about Husserlian phenomenology), distinguishes stages in phenomenology. Thus there is purely descriptive and, moreover, 'eidetic' (what Max Scheler (1874/1928), himself also an excellent phenomenologist, calls 'ideative ') phenomenology.

We explain this in more detail using two application models.

Appl. Model 1.

E. Husserl, *Die Idee d. Phän.*, 56f., gives us 'the porridge in our mouths':

(i) "I experience – he says – a singular intuition ('Einzel. anschauung') or, also, multiple singular intuitions of e.g. 'red'".

This means, in common-sense language, for example, that I see this red here and now, then that red there.

(ii) Purely descriptive phenomenology .

This would consist in rendering these singular observations (intuitions are direct observations) as accurately as possible (bringing them up—to use Heidegger's words), as a novelist or poet does. Nothing more.

(iii) Ideative (= eidetic) phenomenology. Cf. L .22/32

(summative induction). -- “I separate what that 'red' otherwise means (= phenomenological 'reduction' (purification)). (...).

L101

I execute, contemplating purely, the 'Sinn' (meaning, 'sense') of the thought 'red without further ado' ('Rot Uberhaupt'), (...), something like the general 'red',

(i) that, thanks to (pure) contemplation (= intuition, situated in perception), from this red here and now and from that red there and then, was abstracted and

(ii) that, taken separately from red in all cases, is identical.

a. Immediately, the singular red, in its singularity, is no longer intended (= purely descriptive phenomenology),

b . but 'red-without-further-qualification' (= ideative or eidetic phenomenology)”; (E. Husserl, oc,56f.).

Note: --

1. A little further on in the text, Husserl speaks of “pure contemplative and ideating ('ideierende') attention”. This means that the pure contemplation of the general essence (here: of 'red') is simultaneously ideation, i.e., the founding of the idea ('red'). Hence the name 'ideative' phenomenology.

2. Phenomenologists also use the term 'eidetic' phenomenology.

The reason is that, in ancient Greek, 'eidos', idea, essence, gives rise to the adjective 'eidetic', which means the same as 'ideative'.

Note: --

Now, compare what has been said about summative induction (L. 22, 32) with Husserl's ideation (concept formation). It is immediately clear that it is the same process, yet approached differently. Husserl wants the phenomenon (given) to be 'pure', cleansed of all 'impurities' (L. 91). The emphasis lies on the purified perception ('contemplation'), and only then on the inductive process (summation).

Historical verification.

Here too, the thing is older than the concept. -- Already Socrates of Athens (469/399), the founder of philosophy of concepts, and Plato of Athens (427/347), the founder of philosophy of ideas, practiced the phenomenological method in their own way.

Rode .

(i) Socrates

a. departed from common sense;

b.1. aroused the intuition (contemplation) of a given – such as the just – by means of examples (= appl. mod.) and

b.2. attempted to define the general concept ('just') as precisely as possible.

L102

Appl. Mod.

In *Platon's* dialogue *Menon*, the process is shown to us: Menon says that 'virtue' (understood as all general concept) is specified threefold or even multiplefold. For the man, 'virtue' (understand: soundness) is “helping to govern the city-state soundly”, for the woman “sound housekeeping”, and for the child—the third-age man, a multitude of others, “something different every time”.

Let us briefly formulate this Socratic maieutics (= phenomenology) in a reductive scheme (L.26).

(A) Observation.

1. Given . -- It is a fact: in Athens, in the agora, the word (= term) 'virtue' (or 'science') is used; -- and this not always in a completely identical sense. -- Consequence: a small 'Babylonian' confusion of

tongues.

2. Task (requested). -- Socrates wants to arrive at concept formation inductively. This, in the form of a conversation ('dialogue') -- not authoritative (L.95).

(B)I. Regressive (= abductive, hypothetical) reduction.

Suddenly, one of the interlocutors, confronted with (L.13: meeting;77) the theme—the lemma—believes he has found a definition: “if virtue is sound polis administration, then I understand both the word 'virtue' and the actual mode of being (L.7) indicated by it”

Or: “if science is 'sensory perception', then I understand both term and reality as 'science'”. A new lemma emerges. It awaits analysis.

(B)II. Progressive (deductive) reduction.

(i) “If virtue is sound polis administration, what then if one claims that it is 'sound housekeeping' (female viewpoint)?”. Let us examine.

(ii) “If science is sensory experience, what then if another definition reads: “true, (i.e., consistent with the given (L.14: logical truth)) opinion”?”. Let us examine.

(B) III. Peirastic (testing) reduction.

Socrates (or one of the dialoguing ones) points out the identical in the multiplicity (L.35).

(i) Virtue is, for both men and women, **1.** a sound approach, **2.** a governing approach. Yet sometimes in the city-state, then in the family.

(ii) Science is, for example, sensory experience, insofar as it leads to true opinion. -- Falsification exists partially. Verification exists as well.

L103

(B) IV. Evaluative reduction.

Since there is both falsification (demonstrating that the lemmas do not hold, except partially) and verification (proving that the lemmas (proposed definitions) do hold), the analysis must be continued,

(i) The virtue, as embodied by children for example, is indeed a sound

and governing approach, but then for example of their own lives. Etc.

(ii) Science, as mathematics, for example, shows it, does not rely (directly) on sensory experience, but on reasoning.

Consequence: true opinion can be based not only on sensory experience but also on intellectual insight.

Result: as a general characteristic (L.25ff.: 'k'), 'true opinion' can be retained, but then based either on sensory experience or on intellectual reasoning (cf. L.80 (intell. and empir. rationalism); 96; 99) or on a 'transempirical' basis (L.99). -- Which, of course, ought to be examined (tested).

(ii) Platon

a. departed, naturally, also from the common-sense data, in order to, on the basis of

b1 . application models

b2. to arrive at a single 'idea' (regulative model) (ideation). However, the emphasis is different than with his teacher Socrates.

In the so-called *Seventh Letter* , apparently, if not from *Platon* himself, then from someone who accurately reproduces his teaching, Platon says the following: "As regards every being (L.7), there are three ways of becoming acquainted with it, which allow one to acquire knowledge of it.

(i) The first way of getting acquainted is the name.

For example—according to Platon (ibid.)—'kuklos' (L.23; below), circle. Behold something that is expressed, -- namely, what is called 'kuklos' (circle) by means of that 'name'.

(ii)a. The second method of introduction is the definition (determination of essence).

According to Platon, this consists of nouns and verbs (*note* : Platon is the first to analyze sentence structure as 'onoma' (noun, name(word)) and 'rhèma' (verb, predicate); -- which still lives on in Noam Chomsky's language as 'nominal and verbal' constituent of the sentence).

Here—thus Platon always says—: “That whose extremes are everywhere equidistant from the center.” Behold a definition of the essence of that being, whose name is 'round', 'circle', 'ring'.

L104

It is clear that the regulative model (L.26) is expressed here: for all data 'around', 'circumference', 'circle', the extremes are, everywhere, at an equal distance from the center point.

(II)B. *The third way of getting acquainted is the image ('shadow').*

So, in this case, the drawn circle, which is then erased again.

Clearly, the applicative model (L.26) is meant here: this circle drawn with chalk, which is subsequently erased again, is a single (singular) instance that illustrates the general idea of 'circle'. Nothing more. For there are countless others that, likewise, 'represent' the general idea or 'are its shadow'.

Up to that point, this is what Socrates, as a conceptualist (philosopher of concepts), would also have accepted. But listen to what Plato says immediately afterwards: “the circle in itself (understand: the general idea 'circle'), to which all these things (name, definition of essence, representation) relate, does not undergo – what they do undergo, namely – arising and passing away (here, for example, being drawn and erased; being spoken and – words fly away – subsequently no longer being audible), for the circle in itself is different”

Here shines through what is called 'transcendent' ('transempirical' L.98v.) idealism: the idea 'circle' reaches, somewhere, above both the word sounds (name, definition) and the material realizations (drawing). This is also called 'light metaphysics':

“If **(i)** names, **(ii)a** defining descriptions by means of words, **(ii)b** sensually perceptible intuitions and perceptions (= images), which are connected with statements about the essence of things, are presented as information,-- if, furthermore, we follow the correct 'dialectical' method in doing so, without passionate know-it-all attitudes, only then

does the light of purely immaterial perception and of the purely intellectual grasping of the inner essence of things reveal itself" (*Platon, Seventh Letter*).

The idea is a light that illuminates.

L105

In summary: both the naming, the definition, and the production of one or more specimens (images) are merely the meager prelude to the higher idea, which a light equal breaks through.

One can illustrate the leap from one thing to another in a contemporary way.

1. A computer can, with great ease, be filled with
(i) the name,
(ii)a definition and its screen can, with great ease,
(ii)b to display a visible example (shadow, image, example): itself, however, is a blind machine, nothing more

2. Only 'the noble soul of man, object of education' (thus *Plato, Epistle VII* , because it is related to the idea (though not wholly, for the idea is merely thought content, whereas the soul is a living being)) sees, through both naming (giving) and definition (as a formula) and exemplification, the pure phenomenon in its general form (= idea, concept).

Bibl. sample

Except for the authors cited above:

V. Goldschmidt, *Les dialogues de Platon (Structure et méthode dialectique)*, Paris, 1/12 (*Les étapes de la démarche dialectique*).

Note : -- Both Socratic maieutics and Platonic dialectics therefore do indeed contain a phenomenological core.

1. And yet: there is a major difference! Both thinkers thought, well, individually, of course. But what they thought—alone and solitarily—was tested and clarified in the group (the discussion group), in dialogue (philosophical conversation). That, precisely, is what is missing in

Husserl (and many a phenomenologist).

2. Jacob Levi Moreno (1892/1974), although far from being a phenomenologist, drew attention to the group process ('group dynamics') in his own way.

This founder of sociometry has—without realizing it—re-established an ancient Greek model for us, phenomenologists: the clarifying-testing conversation.

3. Jules Romain (1885/1972), -- with us, Ina Boudier-Bakker (1875/...) and others, who are called Unanimists because they mapped out the mutual relationships of people (first of all, on a vital level (L.77: levels of encounter)), have, in their own way, likewise sharpened our eye, as phenomenologists, for the underlying group relations.

L106

4. Let us listen to what Plato (ibid.) literally writes: “Precisely from repeated conversation (about that subject), as well as from intimate coexistence, that idea suddenly emerges into the soul, like a lit light from a spark of fire, and then makes its own way further.”

In other words, our soul is connected to the souls of our fellow human beings in a subcutaneous way, precisely and especially when we search together.

Note: -- Phenomenology and phenomenological psychology; -- On p. 98 we stated that there is an essential distinction between phenomenology and psychology. Nevertheless, a phenomenological psychology is quite conceivable. A brief word on that.

1.-- “Every intellectual (that which originates from the intellect) experience and, indeed, every experience merely by virtue of presenting itself, can be made into an object of pure contemplation (L.100v.) and grasping”. (*E. Husserl, Die Idee d. Ph .*, 31).

2.-- “To every psychic experience corresponds (...), on the basis of phenomenological 'reduction' (purification; L 94ff.), a pure

phenomenon". (Ibid., 45).

In other words, in such a case, the psychic experience itself is the object (thanks to introspection and retrospectiveness) of 'Wesensschau' (di ideatie (L. 101)).

Appl. Model 2

Max Scheler (1874/1928), **Die Stellung des Menschen im Kosmos **, Darmstadt, 1928 (1930), 60ff., gives us a second application of ideation ('Ideierung'), which is one of the possible types of phenomenology (L. 100) that allows us a broader perspective. -- We 'translate' it into a reductive schema (L. 26: 41).

(A) Observation.

1. Given : I have pain in my arm (according to Scheler's application mod.).

2. Requested .

(a) the academic interpretation (which Scheler calls 'technische Intelligenz' (technical intelligence)). In other words, the positive scientific approach (L.1).

(b) the phenomenological approach (specifically its ideative form), as an illustration of what philosophy is, distinct from specialized science.

L107

(B) Abductive (= regressive) reduction

(a) Scientifically oriented.

A problem typical of 'technical intelligence' (definite science) would be something like this: 'I have pain in my arm, here and now.

(i) How did this pain start?

(ii) How can that pain be eliminated? Determining that would accordingly be a task (see 'requested') for positive science" (oc, 60).

Regarding (i) The pathologist (nosologist) responds, for example, as follows: "if a tumor of a malignant nature is proliferating in that arm, then the painfully surprising fact is explained". The diagnostician then has his lemma (hypothesis). – Behold the first degree of 'positive' interpretation.

Regarding (ii) The physician (physician) indicates, for example, as follows: “if the diagnosis mentioned above is correct, then normally this type of medicine should have a therapeutic effect and the mechanism of action would be explained”.

Behold the second 'positive' reaction. With the second entry.

(b) Philosophical (phenomenological-ideative).

Listen to how Scheler outlines the typically phenomenological interpretation. “I can, however, also interpret that same pain as an example (appl. mod.) of the essential situation that is alienating and astonishing in its most profound sense, that this world is simply ('at all') stained with pain, evil, and suffering. -- In that case, I will phrase the question differently.”

(i) “What is, then, actually, the pain itself (L.100ff.: purely observing), apart from the fact that I endure it, here and now?” (L. 7: actual mode of being; -- this is the typical phenomenology).

(ii) “How ought the universe ('der Grund der Dinge') to be (conclusion) that something like 'pain without further ado' (L.101: red-without-further-ado) is possible?” (L. 7: complement; situating phenomenology).

Note: One sees that Scheler, here, implicitly, presupposes the 'more than merely identical connections' (L.37ff.), the distributive and the collective structure, as self-evident.

(B) II. Deductive (= progressive) reduction.

(a) Scientific

Regarding (i). -- Starting from his entry, the diagnostician will begin to analyze the symptoms by deducing them from his diagnosis.

L108

Regarding (ii) -- The doctor will deduce, based on his entry, that the medication present in his mind is worth trying.

(b) Phenomenological-philosophical.

M. Scheler provides no entry of a philosophical-phenomenological nature. Therefore, we propose to introduce *P. Ricoeur, Finitude et culpabilité (II : La symbolique du mal)*, Paris, 1960, 151/332 (*Les 'mythes' du commencement et de la fin*), here, -- at least partially.

a. The Sumerian-Akkadian creation drama ('enuma elish').

In this, evil (suffering, pain, suffering) is situated within the primordial disorder ('primordial chaos').

The Babylonian, for example, who still lives from that, will reason as follows:

"If, indeed, in the beginning there was only disorder, and if our sovereign, at the start of the year, did not properly perform the order-establishing rites that removed evil, then this pain in my arm, here and now, is understandable"-

Deductive: if I **(i)** meditate on the myth once more and **(ii)** verify whether the prince performed the rites correctly, then I will obtain verification (testing) regarding the cause.

b. The Orphic Puthagorean Myth.

In this, evil is situated in a primal error of the immortal soul in a previous life (which, analogously, is called 'karma' in India).

The Neo-Platonist, insofar as he lives by that tradition, will reason as follows: "if, indeed, I, in a previous life, committed a mistake that entails punishment, then this pain in my arm is explained".

Deductive: if I **(i) obtain a definitive 'conclusion' regarding an inherited fault of mine** in my evening examination of conscience (as the Paleo-Put-Hagoreans taught) or **(ii)** in a mantic (L.27; 99: transempirical) examination with a clairvoyant, then I will be able to exercise immediate testing.

c. The tragic myth .

In this, evil is attributed both to human freedom and, above all, to deities (L.59 (Earth Mother); 74 (Demonic gods of totality)), who 'drag

along' that freedom in senseless acts with all the disastrous consequences thereof.

The ancient Greek, still living on that 'tragic' tradition, will therefore reason as follows: "If, indeed, I – dragged along by an 'extraterrestrial' 'power' ('being') – have allowed my freedom to be abused, then I understand that harm is being done to me such that my arm hurts".

L109

Deductively: if I, now, assuming this, verify whether this is so and free myself from it by means of an exorcism (banishment), then I will immediately know where I stand.

d. *The Adam myth.*

In the Bible, evil is attributed, now in its 'metaphysical' (transempirical) root, to the fall of the first parents (Adam/Eve), which entails as an aftermath the situation of original sin (lack of true insight, passionate forms of behavior, suffering, sickness, death):

If I, as a descendant of the first parents, share in the original sinful aftermath of their 'first sin' (original sin), then I understand that I suffer pain in the arm.

Deductively: if I now, in faith, assume that by interpreting suffering differently—namely, as atonement and compassion for the suffering Son of Man—I gradually break free from the grip of original sin, then I must, normally, experience this in my life.

Note: Philosophy, taken as a whole, has, in terms of thorough explanation (abduction, hypothesis, regressive reduction), not advanced much further than the myth, that is, the story, which, in historical form, states the basic situation of humanity, indeed, of the entire cosmos; (L.100: phenomenology as 'stating', formulating).

Usually, the role of philosophy consists in translating the myth into more rational-intellectual or empirical (L. 99: interpreting the transempirical either intellectually or empirically) terms.

1. Indeed, the myth, as a story concerning the fundamental situation, moves not so much on the empirical and/or intellectual level, but on the mantic (L.27 (64)) or the transempirical domain.

2. Indeed, just as the Xosa Negro-African, regarding a herd of five hundred animals, knows 'immediately' (mantically, clairvoyantly, transempirically knowing), whether and how many and exactly which animals are missing, so too does the mythteller know, immediately (mantically, paranormally, transempirically), what the basic situation of man and the universe looks like.

L110

It should be noted that the mythteller ought to be a true mythteller.

a. After all, artificial myths have been cobbled together by poets according to imagined structures (such a thing is nothing more than 'poetry'). Among 'native peoples', there are also 'fables' in circulation, which are also labeled as 'myths': these serve for entertainment (they lack the main philosophical content regarding life and the world).

b. The true mythteller is recognized by the fact that he practices pure contemplation, characteristic (among other things, but not exclusively) of the phenomenology interpreted by Husserl.

1. The true mythteller does not merely state what tradition (L. 95) asserts; he does not—certainly not— express his own singular 'subjective judgment' (L.95); nor does he proceed from apriori opinions (L.95v); even less does he wish to peddle mere 'theories' (proofs) (L. 97); if his 'I' (L. 97) and his 'acts' (ibid) play a role, then it is merely that 'act' that makes it possible to 'purely open oneself to the phenomenon (= the mythical content). (L, 98)

2. The true mythteller situates the content of the myth in reality with extreme precision (cf. 1.27) (correct characterization of factualness: L. 98ff.).

Decision.

The mythteller, if genuine, is a phenomenologist on a transempirical (paranormal mantic) level.

That is also the reason why, in myth-friendly cultures, not just any 'storyteller and miracle teller' is allowed to lead the rites that establish happiness (of, for example, the tribe or the individual). After all, he ought to be more than a storyteller!

We do say 'to establish happiness (= salvation)', so as not to have to use the term 'magic' (for that is true magic), with the odium (hatred) that clings to that usage in enlightened cultures (L. 98ff.). - Better expression: 'agogy' (L.3).

(B) III. *Peirastic (= testing) reduction.*

(a) *Scientific*

Regarding (i) Once the diagnostician has noted the verifiable symptoms, he will soon know whether his lemma (= provisional diagnosis) was correct.

L111

Regarding (ii) The therapist (physician), once he has administered his medication, knows, based on the result, whether or not he had the correct lemma (his idea of 'medication') in mind. Cf. L.14 (pragmatic truth).

(b) *Phenomenological-philosophical.*

1. Let one first read carefully what (L. 14) has been said about truth of fate and about the non-experimental method (L.42).

2. We adopt the Adam myth within our Biblically-Christian dominant culture.

a. Since St. Paul, especially, and his exposition concerning the mythical (transempirical) fact "that we all – each of us, individually (singular) – have sinned 'in Adam', our chieftain, this, at the instigation of 'the serpent' (Satan), the Catholic Church (and, immediately, countless believers) believes that that myth:

(i) insight (information) - light (L.104v.) - provided;

(ii) applied in a ritual manner (in Baptism, Confirmation and Eucharist (= Christian initiation)), has a saving effect (agogical moment).

b. Let us compare, once again, with the Xosa Negro-African, who sees immediately (L.27; 109): in that case, the phenomenon (=given, actual mode of being (L.7)) is empirically-intellectually (L. 98ff.) testable (verifiable).

1. However, the actual mode of being (phenomenon, given) that the mythteller describes, since it concerns the incomprehensible basic situation of the universe and humanity, is indeed testable (many have sincerely believed that it was), but not empirically-intellectually, as the Enlightenment (L. 36; 67; 70; 7300; 95ff.; 99) presupposes. And, if it is verifiable, it is usually in the form of fate truth.

2. The magical rite, however, offers one type of more or less empirically – intellectually testable – experiment (L. 14: pragmatic truth); for example, if, after a myth-accompanied ritual, one of those present, intentionally 'treated' in and through the rite, emerges physically healed. It is evident that, in that case, the myth is being processed experimentally. In that case, one might, possibly, speak of a genuine 'peirastic verification'.

L112

Bibliographic sample

1. *Joseph Schelling* (1775/1854) – cf. L.67; 73 – the romantic-idealistic thinker, once wrote * *Introduction to the Philosophy of Mythology* * (published in 1825). In it, after decades of study, he defends the idea that myth as myth contains truth (see *S. Jankélévitch, trad., Schelling, *Introduction à la philosophie de la mythologie* *, I and II, Paris, 1945; -- I, 81ss. (Quatrième leçon)).

2. *Lucien Lévy-Bruhl* (1857/1939), the friend of *Emile Durkheim* (1858/1917), like Lévy-Bruhl, a strongly sociologically oriented thinker. Lévy-Bruhl is known for his thorough study and interpretation of what

he initially called the 'primitive mentality' (attitude of mind), - later, the 'primitive habits of thought' ('habitudes mentales'). His final position reads:

“ (i) There simply is no 'primitive mentality' that supposedly distinguishes itself from the others (the moderns, the 'Cartesian') by two characteristics, namely 'mysticism' and 'the prelogical'.

(ii) There is indeed a 'mystical' mentality, which is more pronounced and easier to perceive among the 'primitives' than in our (modern) societies. Yet it is present in every human mind (whether primitive or modern).

Behold what Lévy-Bruhl has left us as his definitive position in *his M. Leenhardt, préf., Les Carnets de Lévy-Bruhl* , Paris, 1949 (posthumous work).

Cfr. *J. Cazeneuve, Lucien Lévy-Bruhl (Sa vie, son œuvre, avec un exposé de sa philosophie)*, Paris, 1963, 128.

Note-- 'Mystical', 'mysticism' - here, in this usage - means something like 'transempirical' (L.98v.).

In his * *La mentalité primitive* * , Paris, 1922, *Lévy-Bruhl* says : “(...) Let us attempt (...) to distrust our own habits of thought; let us attempt, rather, to discover the habits of thought of the primitives by means of the analysis of their collective ideas and of the connections between those ideas. (....)

By not viewing the intellectual activity of the primitives from a worldview that does not suit it, (...) we can cherish the hope of not distorting it within the framework of our description and analysis.”

L113

3.-- 'Formal logic' as comparative ordering (113/118)

The theory of thought, as founded by Aristotle of Stageira (-384/-322), is usually called 'formal' logic. Cf. L.25 (formal or form-based induction). Indeed, 'classical' ('traditional') logic revolves around form

(what the ancient Greeks called 'morfè', (Lat.: forma)). The question arises: what exactly is that form? For misunderstandings exist regarding it.

1. The Scholastics (800/1450) spoke (L.30) of the direction of our attention (consciousness) towards something ('being(the)'). This direction was re-examined by Franz Brentano (Austrian School) as the intentional structure of our consciousness. -- Now, the Scholastics distinguished an *intentio prima* and an *intentio secunda*.

a. ' **First orientation** ' was called the fact that, in our daily lives, we are simply occupied with things and processes, without thinking (reflection), without returning to what we do and think. Pre-reflective. - That is how I look at that photo there. And at the movie star in it.

b . ' **Second orientation** ' was called the fact that, once we look at, for example, the photo with the diva in it, we realize that we are looking and pause to consider the fact that we are looking (and no longer at the photo of the diva). Reflective. In a loop, I return to my own act (the looking), reflecting. Then the photo (and, past that photo, the star) comes through, as if viewed by me.

Formal or form logic concerns itself, first and foremost, with the *intentiones secundae*, the secondary orientations of our consciousness. For in these, ideas (concepts), judgments, and reasoning manifest themselves.

2. G. FR. W. Hegel (1770/1831), the dialectician (L.113), liked to describe all life as desire. That desire was, then, a focus on an object that responds to some need.

a. A first desire (orientation) was, for example, the fact that I see a beautiful red apple lying there and want ('covet') to eat it. In that case, I covet the apple itself as a physical (gross material) reality. - Think of a paper-loving mouse that devours the photo (instead of looking at it).

Moreover, Hegel is so convinced that life, for man, is desire, that he calls it the 'desire for desire': every human being wants to be desired by his fellow man, that is, a desiring person (not merely a desired thing). On this, in Hegel, rests the intersubjective and social moment of life. Cf. L. 106 (conversation, living together).

b.1. A second desire (orientation) lies in the fact that I can also 'desire' the same beautiful apple from just now in another way: I look at it merely because it is beautiful. Without devouring it in its juicy fleshiness: the form, insofar as it is (aesthetically) beautiful (L.56), is, in that desire, the object; no longer the matter. It is still the apple, but only in its beauty—being—that directs me toward it.

b.2. A second desire (orientation), yet colored differently, lies in the fact that I, as a biologist for example, look at the same apple, yet, likewise, without desiring it materially, but in its form, merely because it is an apple (and, for example, no other fruit). Without eating it, it represents value to me (L.16), but then cognitive value. My concern is form, insofar as it represents (cognitively) a mode of being of its own (L.7). 'Form' here is 'that by which something differs from the rest (complement).

It is that second form, the object of the desire for knowledge and truth, that leads traditional logic to be called a 'formal' logic.

3. A. Cournot (1801/1877), *Traité de l'enchaînement des idées dans les sciences et dans l'histoire*, I, 1911-2, 1/2, says that man, insofar as he seeks ('desires') order, seeks a form.

Well then, the form (their own factual mode of being) of the phenomena (data) becomes information (knowledge form) in the idea (concept). Or again: the form of reality comes to (full) consciousness in the idea thereof.

Thus, for example, the form inherent in the matter of the apple comes to consciousness (and becomes information, a form of knowledge) in the idea 'apple'. Behold the pedestal of age-old logic.

4. G. Jacoby, *Die Ansprüche der Logistiker auf die Logik and ihre geschichtsschreibung*, Stuttgart, 1962, 106/118, explains why and how Aristotelian (= traditional) logic is called 'formal'

L115

(1) “Forma' (= form), in the sense relevant to the technical language of logic, dates back to Marcus Tullius Cicero (-106/-43), the quintessential Roman rhetorician and politician. Cicero, namely, translates (the Platonic) 'eidos' (L.101), idea, understood as a general idea (concept), (...), by the term 'forma' when dealing with logical matters”. (oc,106).

The other common Latin translation for the same 'eidos' was 'species' (think of the word 'speci.fiek').

The 'forma' of Cicero, understood in this way, became, over

(i) Marcus Fabius Quintilianus (+35/+96), the great Roman rhetor (textualist; L.1),

(ii) also about the greatest Church Father of the West, St. Aurelius Augustine (+354/+430), known for his turbulent youth, in Western logic”. (ibid.). Cf. L. 21 (St. Augustine as hermeneuticist).

(2) G. Jacoby, considering the adjective 'formalis' (= formal; formal), says: “Formal' is what logic has been called at least since the 13th century.” (ibid.).

As an adjective, Anicius Severinus Boëthius (+480/+525), the minister of Theodoric, the prince of the Ostrogoths (ibid.), seems to be the importer.

Note: To what extent the general idea (= forma) was decisive, already for the founder of logic, Aristotle, is evident from what G. Jacoby, oc, 107f., says.

“There is a second forma – idea in circulation: Aristotle calls the 'forms' of the syllogism (L. 26; 32; 43 (at the bottom)) 's.chēmata' (= schemas). The ideas incorporated into that schema he calls 'hulè' (Lat.: materia, substance (= matter)), i.e. raw material.

'S.chèma' = schema) comes from 'echein' (to structure). 'Schèma' is therefore the structure (L.41), the model (understood as regulative or general model) (L.26), the mold, the stamp mark (...), of what has been processed by the 'schema' (form of thought and reasoning). (...).

The syllogism forms (also called 'figures' in Latin) organize (...) the occurring ideas, in terms of content, based on their identity relations (L. 35v.), i.e.

(i) according to 'genus' (= universal collection) and 'kind' (= sub- or particular collection),

(ii) according to 'all' and 'not - all' (= some) (L. 65)". More on that later.

L116

(3) *AN Whitehead* (1861/1947), with B. Russell (L.36), the author of *Principia Mathematica* (1910/1913), the foundational work on formalized or 'formal' logic (= logistics), in his *Wiskunde* (Basis van het exact denken), Utr./Antw., 1965, 11v., outlines, in three stages, how the 'forma' or abstract-general idea gradually permeated mathematics as the principal idea.

Whitehead says:

a. Mathematics began as a science when someone—probably an (ancient) Greek for the first time—attempted to prove theorems.

(i) about all things (L.7: factual modes of being) and

(ii) about not all (= some) things (L.65), without specification (explanation) regarding certain individual (= singular) things.

Such theorems were first put forward for geometry by the Greeks (L. 43: Euclid of Alexandria) (here: proposed and elaborated). Consequently, geometry was (L.40: axiomatically-deductively) the Greek mathematical science par excellence (L.48; -- Descartes:51).

b. After the rise of geometry, it took centuries (especially François Viète (Viëta; 1540/1603, who introduced algebra ('logistica speciosa' (i.e., calculating with 'species' (L.115) or general ideas)) instead of the

earlier numerical calculation ('logistica numerosa'), before algebra (called 'algebraic calculation' by Vieta) was truly effectively established, -- despite a few weak attempts by later Greek mathematicians.

Appl. mod. -- The ideas 'all' and 'not all' (some) were introduced in algebra by using letters instead of the invariable numbers of arithmetic.

Cfr. O. Willmann, *Gesch. d. Id.*, III (*Der Idealismus der Neuzeit*), Braunschweig, 1907-2, 46/69 (*Einfluss des Pythagoreismus auf Mathematik und Astronomie*), for the details.

1. Instead of saying " $2 + 3 = 3 + 2$ ", we generalize in algebra and say "For all numbers x and y , it holds that $x + y = y + x$ "

2.-- Likewise: instead of saying " $3 > 2$ (greater-than relation)", we generalize and say "for all numbers x , there exist some numbers y such that " $y > x$ (greater-than relation)"

L117

Note: We can further illustrate Whitehead's exposition using the following scheme (developed according to O. Willmann's exposition) (L.115: figura, Gestalt (L.25)).

idea (form):	'formula speciosa'	'formula
either universal	either universal	numerosa'
either private	either private	singular
. + . = . (sum)	$x + y = z$	
non-operational	operational	e.g. $20 + 5 = 25$
		operational

Cf. with L.65 (all (yes) -- not- all (yes/no) -- all (no)).

As O. Willmann, oc, 49, notes, is:

- (i) formula the diminutive (diminutive) for forma;
- (ii) our 'formule' (the Dutchification) merely, properly understood,

the form reduced to a diminutive of tasks.

Furthermore, 'formula speciosa' is 'ideal formula' ('formule' is formula) and 'formula numerosa' is 'numerical formula'.

We refer to the general idea 'operational' (L.24) "if acd, then csq" -- Which, here, becomes: "If the forma (universal idea) algebraic then the forma operational (in the mathematical sense)".

Note: O. Willmann, oc. 50, notes that, for example, R. Descartes (L.43ff. (36)) and Pierre Fermat (1601/1665), who founded both the principles of infinitesimal calculus and the foundations of probability theory (in his correspondence with Blaise Pascal (1623/1662)), simultaneously founded one type of application (appl. mod.) of both letter calculus and functional theory, namely analytical geometry.

Consider the fact that the idea 'circle' (L. 23 (kuklos); 103 (Platonic)) can be 'expressed' by means of the 'formula' (semiotic idea or small symbol) " $x^2 + y^2 = r^2$ ".

Note-- A. Warusfel, *Les mathématiques modernes*, Paris, 1969, 5, states that, since Carl Fr. Gauss (1777/1855), all great mathematicians have been keen to put ideas (by means of letters, of course) in the place of numbers.

c. Whitehead continues. -- Only in recent (...) years has it become apparent to what extent the ideas 'all' and 'not-all' (some) belong to the foundations of mathematics.

L118

As a result, more and more subjects have been made accessible for mathematical research. So much for AN Whitehead.

a. Regarding this last point, cf. L. 26; 74; 88; G. Cantor's set idea, which, among other things, belongs to the foundations of the 'new' mathematics.

b. One need only read, for example, the preface to *M. Barbut, *Mathématiques des sciences humaines**, *I et II*, Paris, 1967/1970. The author, Paul Fraisse, a professor at the Sorbonne, discusses the dialogue between mathematics and the humanities.

1. He articulates the objective sharply: “research in the sciences—whether in the humanities or not—performs an uninterrupted pendulum movement—“dans un mouvement dialectique” (“in a dialectical movement”; L.82ff.)—from the 'facts' to their articulation and from the articulation to the 'facts' (L.77ff.), yet in such a way that the interval (L.55) between formalized knowledge and the wealth of facts is made as small as possible”.

2. But listen to what the author adds to this: “The necessity, namely to provide a new-mathematical basic language, also to the humanities (alpha sciences), is that of a tool ('un outil'). Mathematical formalization does not absolve one from knowledge of the facts: the only thing it does is better delineate the facts and render them more accurately (L.51; 91: Lévi-Strauss).

Brief explanation

Sometimes the rule of three is ridiculed. And rightly so! Just take a look at its structure (L.41; 115).

(i) Starting from the form (universal set; e.g. $100/100$, $5/5$, etc.),
(ii) one passes over the element (moment: e.g. $1/100$, $1/5$, etc.),
(iii) to calculate either the element or, especially, the partial form (subset or particular form; e.g. $5/100$, $2/5$, etc.).

Millions of people of the commonsense type (L.6) save themselves from their 'mathematical' predicament by means of a full structure!

Consider what L.65 (basic form) says and recognize this basic form, even in something as simple as the Rule of Three: “From all ($100/100$ is only one way of saying 'all!'), over exactly one to not-all (some)”.

L119

4. -- *The Idiographic Theory of Thought (119/125)*

The foundation of traditional logic is the idea (comprehension, concept, notion).

There exists a multitude of conceptual definitions of the idea, each of which highlights one or more aspects of it.

a. For example, *Ch. Lahr, Logique* , 491: “The idea (...) is the pure intellectual representation of an object”. One sees that Father Lahr takes a rather psychological approach: 'representation' is a psychological concept.

b. *M. Müller/A. Halder, Herders kleines philosophisches Wörterbuch* , Freiburg i.Br., 1959, 27f., says: “Representation of an object in its generality”. In other words, whereas Lahr leaves open whether the idea always represents the general (L.100ff.: ideative phenomena) in the object, Herders Wörterbuch places the general, immediately, in the definition itself.

c. Yet the same little dictionary says, on the following page, that Romanticism (L. 67; 73; 112) gives a new definition of the idea. The 'essence' (L.7: actual mode of being) of something—such as a person(ality), a creation, a historical event or period—lies precisely... in:

- (i) the singular - (das einmalige, the uniquely occurring),
- (ii) together with (L.36: coll. Str.)
- (iii) the concrete, i.e. the fusion with the rest (L.7: complement; 66).

The (romantic) idea of something consists, therefore, in the representation of the singular-concrete nature of an object.

Decision

(a) alongside the traditional idea (the general-abstract 'form' (L.113/118)), object of formal logic,

(b) Romanticism accepts the singular-concrete form, represented in the equally singular-concrete idea (representation), object of idiographic (= concrete) logic. Cf. L.100: descriptive phenomenology.

Explanation

Let one not think, now, that (predominantly German) Romanticism is the sole discoverer of the singular-concrete. – For centuries, the proper name has been the technical term by which the singular-concrete nature of a phenomenon (object, given) is expressed. Grammatically, it is distinguished from the common noun (= denoting an abstract-general essence).

But there is more: philosophically, too, attempts have been made to precisely situate the singular-concrete objects (theory of order).

L120

(a) Aristotle of Stageira (-384/-322).

1. “The thing – 'ousia' (something, actual mode of being (L.7)) – is not the general, but always something concrete – 'sunolon ti' (something that exists in itself as a whole) –. It consists of a singular form and of a singular matter”. (O. Willmann, *Gesch. d. Id., I (Vorgeschichte und Geschichte des antiken Idealismus)*, Braunschweig, 1907-2, 568).

2. “The content of the definition, which represents the general (the 'katholou'), is, for Aristotle, nothing more than something stated of singular data ('epi ton hekasta').) (ibid.).

3.” Just as that which actually exists, so too, in Aristotle, knowledge (...) culminates in two points.

“At one time, knowledge of the concrete is the goal; at another time, knowledge of the abstract is the goal.” (oc, 560).

One sees that, already in this ancient Greek, the Romantic duality is clearly present. But with a clear emphasis on the general, of course.

(b) The Conimbricenses (The School of Coimbra (Portugal)),

A philosophy of the Jesuits, who, besides Scholastic philosophy, also directly studied ancient Greek philosophy, defines the singular in their * *in universam dialecticam aristotelis**, Coimbra, 1606, as “that whose characteristics (l.25; 38 (coll. str.), all taken together (L.26), can indicate nothing else” (Id, cuius omnes simul (all together) proprietates alteri (something else) convenire non possunt).

They describe this definition with a distichon (two-line verse): “forma, -- figura, locus, stirps, nomen, patria, tempus, unum perpetua reddere lege solent.

(Translated: the form, -- the material appearance, the place, the origin, the (proper) name, the fatherland (region of birth), the time, -- usually, time and again, represent the singular ('unum')).

Logically expressed: “If all these characteristics together, then the singular (of which those characteristics are)”.

In other words, as Scholasticism says: “Individuum ineffabile” (The singular is ineffable). But one can literally 'describe' it, by the detour of the necessary and sufficient characteristics, which, each individually, are insufficient, but, collectively, sufficient, -- to both characterize and situate the singular as singular.

L121

St. Thomas Aquinas (1225/1274), the leading figure of Scholasticism, asserts that the collection of such characteristics ('huiusmodi formis aggregatis') is insufficient to characterize the singular as such. However, he apparently understands them abstractly— generally—whereas they ought to be understood singularly—concretely (In IV Sent., 1. II, dist.3, q.3, a.3c).

Appl. Model

Let us take Roxana, one of the Persian wives of Alexander III the Great.

1. form (general - abstract idea): a woman.
- 2a. figure (view) beautiful;
- 2b. place: Baktrian (an area that would partially cover present-day Turkestan, Iran and (the North of) Afghanistan);
- 2c. descent: daughter of Oxuartès, the satrap of the Persian ruler (Baktria was part of the Persian Empire);
- 2d. (proper) name Roxana;

2nd. homeland (region of birth): Baktrianè;

2f. time -327: married as a Persian princess by Alexander III the Great (-356/-323); -319: departure to Epirus, to Alexander's mother, Olympias; -316: imprisoned by Kasandros, king of Macedonia (-354/ -297); -310: murdered by the same ruler.

One sees that all characteristics are singular features, which collectively either typify (beautiful, woman, etc.) or situate (Baktrian, daughter of Oxuartes, married to Alexander, etc.) the uniquely individual nature of this famous woman. This, although they never exhaust the countless characteristics of the single individual (inexpressibility of the singular).

Applicable Model

Let us take *Philippe de Dieuleveult*, the treasure hunter from *La chasse aux trésors* by the French-language TV stations. He has to look for the village blacksmith in Cameroon, for example. That village blacksmith is a singular figure (something singular). Once out of the helicopter, he asks a group of Negro-African women working in the fields if they know him and where he is staying. They point, for example, in the direction of the village. This is a first characteristic (L.26: k = characteristic).

The series (L. 46 (Descartes) of characteristics that the following interrogators provide him on the way have a structure.

L122

Notwithstanding any divergent indications (= characteristics), *Philippe de Dieuleveult* (1951/1985, French journalist, disappeared in Zaire) obtains a growing convergence (confluence) of the characteristics, until he – finally – in the blazing sun of the Black Continent, sees the village blacksmith, seated in front of his miniature blast furnace, at work... Just two hundred meters outside the village, in the wilderness!

(i) He had received his 'lemma' (L 6, 41) from Paris:

1 . a village blacksmith,

2. somewhere in the vicinity of X, a village proper name unknown

to him,

3. Somewhere there, on the map, in the vicinity of the capital of Cameroon, Yaoundé. The lemma was nothing more than that series containing three elements (L 46. Cartesian 'set')!

(ii) His 'analysis' (L.6; 41) consisted of:

(a) information necessary in itself (= singular, separate), but insufficient (= information: L.114 (bottom)), which may, if necessary, be divergent (differing);

(b) jointly (= collective; L.22 (summative ind.)), which as 'gestalt' (form: l.25) convergent, coinciding in one identical, singular, given) and, immediately, sufficient information (= information).

Bibl. sample

-- O. Willmann, *Gesch. d. Id.*, III, 112ff. (*Der Aristotelismus der Renaissance: die Patres des Kollegiums von Coimbra*);

-- H. Pinard de le Boullaye, SJ, *L'étude comparée des religions* , II (*Ses méthodes*), Paris, 1929-3, 509/554 (*La démonstration par convergence d'indices probables*), fl. 511/516 (Nature du 'singulier'); 517/521 (*La preuve par convergence dans la vie courante*).

Note-- Sub-ideas/ overall idea .

Let one reread, now, L.120, the distichon concerning singularity: after all, the enumerated 'indicia' (indications) are merely partial or sub-ideas of the total idea, which constitutes the characteristics of the singular (L.37ff.: part/whole).

(c) The 'Badische Schule' (The School of Baden, (Heidelberg Tradition)) also concerned itself with the problem of the singular, yet 'axiologically' (philosophical of value; L.16) and historiographically (historically).

L123

The Pair of Opposites (system: L.53; 55; 88; 98) 'idiographic/nomothetic' is of interest to us here.

1. Analogous to Wilhelm Dilthey (1833/1911), who introduced 'verstehen' (understanding, 'comprehending method') as typical of the humanities (as opposed to what he understands by 'natural sciences'), -- where 'comprehending method' means "the grasping, as a phenomenon (L.94ff.), of the total structure (L.41: structure) of man, yet in its ever-changing, individual (= singular) form (L.119: singular form)";

2. Wilhelm Windelband, the leader of the Neo- -Kantian Badener School—he lived from 1848 to 1915—introduced the distinction in the empirical or experiential sciences (L.80: type of enlightenment) between 'natural sciences' = nomothetic sciences and historical sciences = 'idiographic sciences'.

a. 'Nomothetic' means 'that which establishes laws (universal characteristics - L. 115ff.)';

b. 'idiographic' means 'something that describes singular forms' (L.119ff.).

So that we find here, in a new form, the duality that O. Willmann believed he discovered in Aristotle (L.120: 'two points'). Let us refer to Windelband 's rectoral address ' *Geschichte und Naturwissenschaft* ' (1894).

3. *Heinrich Rickert* (1863/1936),

Likewise from the Baden School, in his **Kulturwissenschaft und Naturwissenschaft ** (1899), Windelband takes up the distinction between history and history, which he calls, as a cultural science, a science of the singular. This is in contrast to natural science, which "always has an eye for the general". As a typically philosophical task, Rickert mentions logic, which, according to him, falls into two types:

(i) traditional logic, which makes the study of the general possible (L. 114/118), and

(ii) a 'new' logic, which makes the studio of the singular (L.119vv) possible.

Exactly what we, here, in the final pages, attempt to do.

Bibl. sample

Geoffrey Barraclough, Scientific Method and the Work of the Historian

, in his *Logic, Methodology and Philosophy of Science* , in: Proceedings of the 1960 International Congress, Stanford-University Press, 1962.

L124

Decision.

If we take the 'idiography' of the Baden School seriously, then the introduction of a sense for the singular becomes imperative, both in logic and in empirical science. Immediately, this also entails the introduction of method and structure in this regard.

It seems to us that, for the Romantic theory of Ideas (L.119), the Jesuits of Coimbra provided the idea as methodologically useful. Although this is, of course, open to refinement, it serves furthermore as an entry.

(d) Georges Canguilhem (1904/1995)

He is one of the foremost epistemologists (philosophers of science) in France. He works in the footsteps of G. Bachelard (L.86ff.), insofar as the latter wanted to assign a leading philosophical role to the history of science. He can be compared with M. Foucault as an epistemologist (L.42; 44/47), -- also as a historian of science.

Bibl. Sample.

Francois Guéry, *L'épistémologie (Une théorie des sciences)*, in: A. Noiray, dir., *La philosophie (Dictionnaire)*, 3 t., Paris, 1972, t.1, 156/163 (*De la philosophie à la médecine, de la médecine à l'épistémologie : Georges Canguilhem*).

From Canguilhem 's book *Etudes d'histoire et de philosophie des sciences* , Paris, 1975-3, 389s., we cite an idiographic text which proves, in black and white, that the romantic theory of the concept 'makes sense'.

a. Physicians—as Canguilhem literally states—have always experimented, in the sense that they have always expected information inherent in their behavior whenever they introduced something (new). Usually, the doctor must make a decision in an emergency or urgent

necessity. He is always dealing with individuals (l.119 singular-concrete form).

b. Well, both the urgent necessity and the singular character of the objects of medicine lend themselves poorly to knowledge of the 'more geometrico' type. (*Note* : This term is an allusion to the Cartesian *Baruch (Benedict) de Spinoza* (1632/1677), who developed a philosophical ethics, **Ethica, more geometrico demonstrata** (published only after his death), in the style of Euclidean geometry (L.51 (mathematics as leading); 80 (intellectualism)). (...).

L125

c. “Every day the physician performs therapeutic (healing or, at least, intended as such) operations on his patients” (Cl. Bernard (1813/1878), French epistemologist) (...)

1. But – just like Claude Bernard or anyone else – one cannot state in advance where the boundary (L. 60/66) between the harmful, the neutral, or the beneficial lies, or, moreover, this boundary may vary from one (individual) patient to another. Likewise, it is the duty of every physician to state explicitly and to make it clear to others that in medicine one experiments, i.e., that one provides care under one condition, namely, while trembling.

2. Moreover: a medicine that is concerned with developing the sense of the singular (L.124) in the living human being who is the patient can only be an experimental medicine. Without experimentation, no diagnosis, no prognostic in the treatment of the sick is possible.” (Oc,389).

d. Without wishing to utter 'paradoxes' (shocking statements): a medicine that would focus solely on diseases—whether nosological (L.107) data or pathological (ibid.) data—could well be, during longer or shorter periods of 'classicism' (*note*: 'Classicism' stands, here, for 'intellectualism' (L.124; -- 51; 80)), a theorized, axiomatized medicine. The 'a priori' (L.95; 110) fits well with the nameless (*note* : 'Nameless' = non-singular).

e. Canguilhem's decision: it is not justified – and, moreover, absurd (meaningless) – at the same time:

(i) the assertion that one is concerned with caring for the singular essence in the sick person and

(ii) wanting to defend the sentimental anathema ('condemnation') against all experimentalist (i.e. primarily eager to experiment) behavior in vague philosophizing ('philosophèmes'), so typical of so-called 'humanist' or 'personalist' medicine.

Note: 'Humanistic' (emphasizing the human being) and 'personalistic' (emphasizing the human being as a free person) medicine is, usually, also focused on the singular in the patient: "The doctor treats the sick, not diseases".

L126

5. -- The idea of the 'understanding' (= 'verstehende' comprehensive method) (126/158)

The founder is *Wilhelm Dilthey* (1833/1911: L.123) with *Einleitung in die Geisteswissenschaften* (1883); *Ideas about a description of psychology* (1894).

1. The personal object: these are the expressions (projections) of the soul life.

a. Foreground object, for Dilthey and the 'Geisteswissenschaftler' (adherents of the 'humanistic (= understanding) method'), are

1. the behavior

2. The history,

3. The sub-aspects of behavior and history, such as language, law, economics, education, art, etc. Reason: these phenomena are expressions of the human spirit.

b. Background or depth object is

1. Life (in the romantic (L.67; 73; 112; 119 sense).

2. especially the inner life (hence the fact that psychology is so central), inherent to the human mind. Life, inner life, and the

human mind express themselves ('project' or 'objectify' themselves) in the aforementioned foreground phenomena.

Digression (excursus).

German Romanticism begins around 1797, -- first in Berlin, then in Jena; The four leading figures were:

(i) August Wilhelm von Schlegel (1767/1845; theological and literary studies; home tutor; professorship in Jena).

(ii) Friedrich von Schlegel (1772/1829), brother of the previous one; studies of science and philology), the author of the truly romantic-philosophical groundbreaking work **Philosophie des lebens **.

Let us not forget that the verse from *Goethe's Faust* “ *grau, mein freund, ist alle theorie, grün des lebens goldner baum* ” (Colorless, my friend, is all theory and colorful the golden tree of life) expresses the atmosphere of Romanticism; -- Hegel learns from Fr. v. Schlegel the idea of '(cultural) historical becoming';

(iii) Ludwig Tieck (1773/1853) history and literary studies; travels throughout Western Europe), the revealer of ' *Geheimnisvolles, dämonisches leben der natuur*' (mysterious, demonic life of nature (L. 56/57; 57/59; 74/75)); great influence on Russian literature and on occultism in Europe;

(iv) Baron Friedrich von Hardenberg (1772/1801) poet's name 'Novalis'; extremely careful upbringing due to his educated mother; studies in law and engineering), the poet of the *Hymnen an die Nacht* and author of *Heinrich von Ofterdingen* (unfinished novel).

L127

They published a literary-critical journal, *Das athenaeum* (1798/1800). The name 'Romanticism' was given after *Romantische dichtungen* , published by L. Tieck in 1800.

c. Object structure.

This is twofold:

(i) the singular life (I, you - we, -- the groups, cultures (for besides singles or individuals, there also exists, for example, the singular group), --- such as the four Romantics mentioned above; in other words, the singular can be collective);

(ii) the totality in which singular life always situates itself:

a. this totality is, to begin with, that of the singular itself (L. 33; 82: internal comparison);

b. she is, moreover, that of concreteness (integration; L.119: complementary totality; situatedness), characteristic of the singular: I, you, -- we, -- we sit embedded in

(a) cultural totalities, such as ethics and law, economics and politics, education and the media, art and specialized science, etc.;

(b) cultural frameworks, such as society, -- the state, the church , etc. (L.33: external comparison).

Note: It is, therefore, not surprising that there exists a comprehensive psychology (M. Scheler (L.106ff.), whose phenomenology already displays the main features of understanding psychology; *E. Spranger* (1882/1963), with his *Structuurpsychologie* ; etc.), a comprehensive psychopathology and psychiatry (*Karl Jaspers* (1883/1969), with his *Allgemeine Psychopathologie* (1913)), and a comprehensive sociology (*Max Weber* (1864/1920), with *Wirtschaft und Gesellschaft** (*Grundriss der verstehenden Soziologie* (1922))).

A multidisciplinary spirit flows through the *verstehende menswetenschap*. This is intrinsically supported by a sense of the whole (totality) (L. 82)

L128

2. The appropriate method,

(1) First of all, an entry.

a. “Dilthey and his school have,

(i) alongside the scientific-explanatory (method, in psychology),

(ii) the requirement of an 'understanding' (method) (...). Karl Jaspers (...) placed,

(i) alongside the study of 'causal' (L.24: *acd/ csq*) or 'causal' relationships,

(ii) the study of 'understandable' relations”. (*Ph. Kohnstamm, Personality in the making (Sketch of a Christian educational science)*, Haarlem, 1929, 12).

b. “Man has—so it seems to me—by nature two equally important, but not identical, yet complementary interests in knowledge:

(i) a type of knowing interest, which proceeds from insight into natural laws -- this, based on the need for a technical praxis (method of action (cf. L.106: technical intelligence; 114: desire for knowledge);

(ii) a type of knowing interest, which stems from the need for socially and morally meaningful praxis. This is – as technical praxis also presupposes – aimed at understanding regarding possibility and rules of the game (norms) specific to a meaningful, dignified 'being-in-the-world'.

This type of interest regarding understanding of meaning (purposefulness) has **(i)** to do with communication among contemporaries (synchronic) and **(ii)** to do with the communication of the living with past generations, -- this in the form of transmission of tradition”. (*K.-O. Apel, Szientistik, Hermeneutik, Ideologiekritik* , in: *K.-O. Apel et al., Hermeneutik und Ideologiekritik* , Frankf.aM, 1971, 26f.).

Decision:

Interpersonal communication is accompanied by its own type of knowing, of understanding.

(2). Now, the analysis.

A.-- It is known that, from the Paleoputhagoreans (L.2, 48. 94. 97), virtually all ancient Greek schools of philosophy placed exceptional emphasis—precisely, as part of the learning process—on friendship in all its shades:

“Besides state and family ties, the Paleoputhagorese also had that type of 'free association' (L.39: social 'sustèma'), which arises from *sumpatheia* ('sympathy'): friendship. Puthagoras called it '*enarmonios isotès*', a resemblance based on understanding.

L129

(*Note*: 'En.(h)armonios' literally means 'well joined together; 'in perfect agreement' (L.20)). The friendships of his pupils were 'celebrated friendships', such as the loyalty of Damon of Surakousai (Syracuse; Sicily) and Fintias (*note* : Fintias, condemned by the turannos (absolute ruler) Dionusios, but granted a suspended sentence, is replaced in prison by Damon: Fintias returns at the very last moment to be executed). (...). (*O. Willmann, Die Gesch. d. Id.*, I, 333f.).

On L.105ff., we gave a type of application of that '*sumpatheia*' (and the knowledge inherent in it): the Socratic-Platonic dialogue. -- It is clear that understanding forms a part of this.

B.-- Ph. Kohnstamm (once the leader of the Amsterdam School (continuation of the Mannheim School (Selz) and the Cologne School (Lindworski) regarding cognitive psychology, as well as a personalist thinker)) presents, in the aforementioned book, application models of both scientistics (L.36; 83: positivism and related forms; 88ff.: structuralism, also one type of scientistics) and hermeneutics (the method of understanding).

BI-- Appl. mod. of scientific :

In reductive scheme (L.6; 41) this reads as follows.

(A) observation

(A)1. Given (= theme).

a. Robert Brown (1773/1858; Scottish botanist) discovered, one day, the (seemingly) disordered movement, describable by the word 'dance' (L.35: analogy = partial identity), of the tiny particles (system 1: a highly divided, but not dissolved mass), in suspension in a liquid (system 2). Cf. L.39ff. (system theory).

b. When I look through a microscope at the particles of pollen or gum (*note*: 'Gum' is a type of gum resin from the Siamese *Garcinia* tree) (= system 1), suspended in a liquid (= system 2), I see them 'dance', endlessly, up and down. This is 'Brownian motion'.

(A)2 . Requested (= problem)

A 'scientific' or, in particular, causal type of explanation.

(B) Abductive reduction.

a. The 'molecular' theory regarding material systems (such as fluid particles);

b. the laws of collision relating to the interaction between system 1 (the collection liquid) and system 2 (the pollen present in suspension form, respectively, and jet gum particles).

L130

With this twofold hypothesis, ordinary physics and/or chemistry, both possibly at the microphysical or microchemical level, can 'explain' ('Erklärent,' says Dilthey).

It should be noted that the 'ideal' type of explanation attempts to be a mechanical explanation as much as possible (L.45: mechanics).

(B).1. The both deductive and peirastic (experimental) reductions

We are skipping these here. They would be the 'proof of the pudding'.

B.II.A. -- Appl. mod. of the human sciences.

By 'human science' we understand, here—in contrast to the humanities (hermeneutics)—that type of knowledge of one's fellow man which behaves according to the epitome (model, paradigm) of

scientistics.

Kohnstamm quotes, abbreviated, such an applicative model from G. Heymans (1857/1930), *über 'verstehende' Psychology*, in: *Zeitschr. f. Psychol.*, 102 (1927), 6ff (oc 17)

Regulatory model (Heymans).

The experimental method (L.42) – according to Heymans – is twofold. At one moment it is 'explanatory', namely when we conduct experiments with natural things outside ourselves. At another, it is 'comprehending', namely when we conduct 'experiments' with our own inner life.

Applicative model 1.

The experimental approach to another person's inner life.

Let us take—according to Heymans—the genesis (= process of origin) of envy (jealousy, jealousy). Here, Heymans proceeds in a typically Cartesian manner (L.46: beginning with the simplest given, ending with complexification; 30/32 (beginning with summative induction, ending with amplifying induction)). The *mathesis universalis* serves as a model for this, consciously or, usually, unconsciously (L. 45/51). We translate this into the explicitly reductive schema (L.6; 41).

(A) Observation.

a. Themes

The given is the repeatedly ascertainable fact of envy.

b . Problematic

A (natural) scientific explanation is requested.

(BI. Hypothesis (= abd. = lemm. = regress. Reduction).

If the origin of envy is analogous to all physical origins that, as much as possible, obey the order 'acd (sign)/ csq (following)' (L. 24: 128), then the origin of envy will also be both experimental and reproducible in the expression 'acd/csq'.

L131

Translation into the 'stimulus-response schema':

(i) acd = stimulus: if the pp (= test subject) is confronted with:

a. (in his eyes) important

b. good fortune,

c. insofar as these fall to others (= fellow human beings)

(ii) csq (= answer) then this pp. responds to this with a. the symptoms, ('signs', 'manifestations') b. of discomfort (feeling).

(B) II. *Design of experiment(s)* (= deductive progressive reasoning).

If the aforementioned hypothesis is correct, then it must be testable in at least one (L.33: ampl. ind.) model. Heymans says, literally:

“ **(i)** To begin with—even if we ourselves had never experienced envy, we would (...) create the experiment in which 'people' (understand: pp.), who hear of important good fortune that fell into the hands of others, react to it with signs of displeasure.

(ii) Then we would 'collect' several such cases. -- That is our intention.” (Oc, 17).

(B) III. *The actual experimentation* (= peirastische ed.).

Since Heymans merely 'designs' (in the cited article), we presume the actual execution to have been successful.

(B) IV. *Evaluative reduction.*

Heymans says, literally: “We could further inform ourselves regarding

(i) the more precise circumstances (= acd), under which this 'feeling' occurs,

(ii) the other 'properties' of the persons (= pp.) in question. From this we could - e.g. thanks to the method of correlation theory (L.51: Cartesian mathematization) - obtain a conclusion (clarification) regarding

(i) the general (L.101: the general red (Husserl); 115: formal; 123: nomothetic) antecedents of the sentiment in question and

(ii) the favourable conditions that facilitate its occurrence.

That was – according to Heymans – the non-insightful and non-competent 'inductive' method (...). (ibid.).

Appl. Model

The experimental approach to one's own inner life.

(A) *observation.*

1. "We could, however, secondly, also turn our gaze inward (introspective method).

Let us imagine the case

(i) acd. (stimulus): that a person known to us receives either a high distinction or the grand prize in the lottery

(ii) csq. (response): to which we, by assumption, react with a feeling of discomfort"

So much for what we, reductively, would call the theme (the given).

2. "Whereupon we attempt to account for the factors involved therein (factor analysis) in a more precise manner. -- In that case, we would, at least in my view, create an experiment which, according to the latest terminology (technical language) of psychology, however, would entail the 'verstehende' or 'insightful' method" (oc,17v.).

Thus, literally, Heymans, concerning what we reductively call the problematic (the requested matter).

(B) I/IV. -- Kohnstamm and Heymans respectively do not develop the abductive, deductive, and peirastic reductions. This means that, here, we are dealing with only a lemma. Nothing more.

Critical remarks

(1) It is difficult to see how someone who, in Heyman's hypothesis, has never experienced envy, would know even approximately (i.e., understand with knowledge of the facts) which pp.n, with which acd.n, with which csq.n, he ought to choose! What is (L.7: actual mode of being) 'envy' apart from any lived envy? Is envy, as a - (even) not (unconscious) - lived experience, even conceivable?

We believe so, but then in the sense we discussed L.9: even the merely observable bv is 'not-nothing'.

(2) Kohnstamm, oc, 18, objects to the term 'experimenting'.

Reason: inherent to the idea of 'experiment' is what he calls 'intentional purpose'

(i) That one places fellow human beings - intentionally - in a situation in which they will - probably - react with envy, is one thing.

(ii) But do you see yourself, in appl. mod. 2 (one's own inner life), intentionally allowing envy to 'arise' or causing it to 'arise' within you? Not only is envy not arbitrary (at least, partially: one can let oneself go in an experience); it is, even less, arbitrarily repeatable.

L133

(L. 42).

(3) Kohnstamm, oc, 18v., criticizes, then, the physical (L. 39; 99) system theory, applied to data that are not merely physical (such as people, for example, exist).

a. To investigate jealousy, we proceed—following Heymans' description precisely—in exactly the same way as the physicist.

1. (i) It opens and closes a current (= ACD; L.24);

(ii) he observes that - with that opening and closing - each time (= one - unambiguous relationship) a neighboring compass needle changes position (= CSQ; L.24).

2. Converted into physical system theory:

(i) ACD: on specific events (current opening, - closing in a system (= electrical grid),

(ii) different events (changes in compass needle position) follow each time in a system 2 (compass); -- from which we conclude that the first are the cause of the second (the effect).

b.1. In Heymans' second application model,

(i) we - in a system 'I' (introspection), which turns the gaze inward - introduce changes by means of ACD (stimuli), to see what reaction that 'I' system offers to that (= csq = reactions),

(ii) to clarify a problem in a system 'you' (the other, the fellow man), namely his reactions to the stimuli he has undergone.

2. If, in the system 'I', specific acd (signs) are consistently followed by specific csq (consequences), -- for example, by someone else's happiness or envy, -- then, in the system 'you', — at least this is what Heyman's method (not his explicit words) presupposes (= lemma, hypothesis) — specific csq (reactions) must likewise follow specific acd (stimuli) with regularity.

3. Heymans immediately introduces the axiom (presupposition) of the essential equality of system 'I' and 'system' 'you'. This is a hypothesis that the physicist can never, or need never, formulate if he has to process non-human data (see appl. model of scientistics - L.129ff.): the reason is that this essential equality simply does not exist.

L134

Kohnstamm says, literally: “Instead, therefore, of considering the equality of the two methods proven by Heymans’ argumentation, we can, precisely through that argumentation, sharply demonstrate the difference (L. 35; 52; 73ff.; 82) between the 'explanatory' (human-scientific) and the 'comprehending' method.

The understanding method presupposes

(i) except for the axioms on which the explanatory method proceeds,
(ii) at least the axiom of essential equality between 'ourselves' and the 'system to be investigated’”.

B.II.B -- Appl. model of the humanities.

We pause for a moment to consider what Kohnstamm, who was in tune with his time, tells us regarding what he, naturally, in his time, called “the problem of post-war youth dance”. (oc, 13v.).

Note-- Kohnstamm mentions two types of 'post-war dance' (L.47: classification into types (categories)), namely

(i) the foxtrot, a fast, jerky four-beat dance, - a dance consisting only of walking steps (without figures), - originating from Anglo-Saxon

America;

(ii) jazz, a dance originating from North America but from Negro-American circles, with the 'striking characteristic' (L. 26: 'k') of either individual or collective improvisation (action made on the fly); as a sub-style (L.47: categories), for Kohnstamm's period, the 'new orleans' (1917/1930; -- followed by Middle Jazz (1930/1944), Be-Bop (1944/1949), Cool (1949/1954) and, from 1960, Free Jazz). -- This as a cultural side note.

(A) Observation.

(a) Themes

“(The fact that) .. especially younger people (L.120: the (general) form), in the prime of their lives (time), judging by their clothing (L.120: material appearance) in not unfavorable circumstances (L.120: unclear), both sexes (= gender; L.120: the form) gathered (L.120: place), to the tunes of macabre (= sinister; L.58v.: sinister = eerily threatening) music (which we no longer feel, we grew up with it) (L,120: unclear),

L135

with the clear signs of boredom on the face (Kohnstamm describes the demonistic dance here - Gypsies dance differently than we do - Gezelle - cf. HA 93 Polydemonism - new in European history: boredom) (L. 120: material appearance), moving back and forth in such a sinister manner ('sinister' = sinister) (L. 120: unclear), for a considerable time (L.120: time)”

Note: This confrontation with the description of a singular phenomenon (the youth dance of that time (= temporal singularity)) proves how flawed the description of the conimbricenses turns out to be upon (somewhat) detailed verification! Which the Fathers of the Collegium of Coimbra, incidentally, will undoubtedly have realized well as well.

(b) Problematic.

1. “When I enter a 'modern' dance studio: even then I wonder, I am

faced with a problem, I seek an 'explanation'. For I do not 'understand' why (now see the text of the theme).

In other words, an explanation is requested, however in such a way that 'understanding' is also present in that explanation.

2. That the type 'explanation' also includes understanding is evident from what Kohnstamm writes (oc,13):

“In seeking a solution to this problem (...), I proceed very differently (*note* : take the expression 'very differently' with a grain of salt: 'partly' differently is meant) than when seeking an explanation of Brownian motion (L.129v.) (= scientistics).

I am well aware that there are still people walking around here and there who defend the view that problems—that of the Brownian movement and that of youth dance—must be approached in the same way. Thus: that one must bring back the fox-trot or jazz in an analogous (L.35) manner (*note*: This is called the “reductionist” or “reducing” method).

1. to the movement of atoms and molecules (L.129: molecular structure of substance), in the brain, nerves and muscles;

2. to the movement in the gramophone (which plays while the young people 'dance'); just as Paul Langevin (1872/1945); French physicist, well-versed in X-rays, relativity theory) and Albert Einstein (1879/1955; mathematician and physicist of German origin, known for his 'Einstein's Law' (the relationship between photons (light particles) and electrons (atomic particles) (1905), as well as for the theory of relativity) reduced the movement of Guttegom particles to molecular mechanics (L.129v.; 45: mechanistic conceptual model)”.

So much for Kohnstamm's literally reproduced position (oc,13).

L136

(BI. *hypothesis* (= abd. = regress. ed.).

1. We quote, first, Kohnstamm's relevant text: “What I actually do,

when the problem of post-war dance interests me, is:

(i) to go and talk to those young people, to find out why their behaviour bears this, to me, strange mark (L.59: the eerie-looking dance of the Gypsies).

(ii) In other words, I try to come into inner contact with them, to experience their lived experiences (L.132: lived experience),

(iii) in order to determine, thus, under what circumstances (L.133: system 'you'/ system 'I') I myself could arrive at similar (L.134: essential similarity) behavior (L.126: behavior), -- As long as I have not succeeded in doing so, the problem remains unresolved.

(iv). One could express it as follows: I attempt to subsume (= situate) this movement (L.135: moving back and forth) – in contrast to the Brownian – not under the category (L.47: Cartesian classification into types) of the interaction (the causality) of the thing, but under that of the action, the spontaneous or personal causality (oc,14).

2. Now we present the Dilthijan scheme, (L. 126ff.: the proper object 128ff.: the appropriate method)

(i) a. the object itself is, first of all, the foreground object,

1. the dancing behavior (L.126),

2. situated in contemporary history (L.125),

(i) b . As expressions of **1.** Life, **2 .** and indeed soul life , **3 .** inherent to the human spirit (L.126), which is the object of spiritual science;

(i)c. structured

1. as this dance group-here-and-now (singular),

2. within the post-war youth subculture (specifically; L. 127).

(ii) a The appropriate method. (L. 128: Paleoputhagorean sumpatheia ('sympathy'); L. 105: unanimism) is, essentially, inner contact, as Kohnstamm very rightly says;

L137

(ii)b. via conversation (L.105: Socratic-Platonic conversation (dialogue):

a. repeated conversation;

b. 'intimate coexistence' (thus, literally, *Plato*, in the *VIIIth Letter*)),-- which Kohnstamm expressly presents as an introduction to inner contact.

3 . Result: the singular-concrete idea

(L. 119 (global); 122 (one total idea / many partial ideas such as - after Aristotle (L.120), the School of Coimbra (L.120v.), the convergence method (L.121v.), the Badische Schule (L.122/124), G. Canguilhem (L. 124v.) - Wilhelm Dilthey and the geisteswissenschaftler (L.126ff.) they tried to make operational-scientific (L.24: operational).

(B) II/IV (deductive, peirastic, evaluative ed.)

1. - It goes without saying that, with the scheme outlined above (Diltheyan scheme), we absolutely do not personally endorse, for example, Dilthey's 'historical relativism' (with great reason, therefore, we have separated Dilthey's method from his personal ideology (L. 1:97) and 'integrated' it into the great immortal Puthagorean-Platonic tradition, incorporating all possible other achievements (reconcilable with that great tradition)).

2. Kohnstamm, too, does not provide an effective elaboration of his theme. It will be returned to in the following course years.

3. Only a few texts by Kohnstamm himself remain, of a fundamental methodological nature.

1. "There must be something (L.7) in which two people participate, - a common share - even though they are, time and again, different individuals, - both when they agree and when they disagree.

When I write, for example: "17.19 = 323", the reader must – first – have understood what I mean—and thus, in a sense, have thought along with my thoughts—before he can say whether it is right or wrong.

All use of language (L.85) is a—more or less clearly conscious—

attempt to let others experience our profound perceptions (L.132) with us. Written language brings about the miracle of carrying those profound perceptions across the chasms of space and time (L.70 (De perenni philosophia); 128 (traditional hermeneutics)).

L138

Therefore, solipsism is (*note.-- Max Stirner* (1806/1856) (pseudonym for Kaspar Schmidt), in his * *Der Einzige und sein Eigentum* * (1845), took the individual, finite-transient 'I' as the basis for a type of behavior ('moral philosophy') that elevates egoism (selfishness) to the highest rule of conduct ('norm'), with the elimination of all altruistic (= elements benefiting one's fellow man (L.19: Solovyef's tenderness)) elements), as Max Stirner puts it (...), a claim that has not become aware of its own presuppositions". – So far Kohnstamm.

2 --"Now, if every understanding is based on a shared experience in a certain sense, this does not mean that understanding is nothing other than having the same lived experiences.

Appl. Mod.

1. It makes little sense to say of two people walking together in the snow: "they understand each other because they both experience the cold".

2. There is no 'understanding' here (Kohnstamm evidently means 'understanding' in the scientific sense, which is also what we are discussing here; -- it is immediately clear that 'walking together in the snow' does indeed represent a commonsense understanding (L. 6, 118), the basis of scientific 'understanding'.

There is no (scientific) understanding here.

Rode:

- (i) there is only joint 'perception';
- (ii) no problem (L.129: asked = problem) has been posed, to which an answer is expected;

(iii) no categorical formation (understand something like 'reasoned knowledge') of the content of consciousness takes place for that purpose.

3. Spranger (L 127) quite rightly says:

“ **(i)** The purely visual (= intuitive, unreasoned representation of the series of inner experiences of a fellow human being is just as little (scientific) understanding as the mere possession of visual stimuli is 'seeing' (in the sense of 'perceiving').

(ii) Rather, (reasoned) knowledge (...) rests on grasping 'categorical' (L.138; vg1.47), i.e., analyzed, determinations (clarifications) and connection forms.

L139

Decision:

'Verstehen' is, immediately, **(i)** to experience along ('Nacherlebens'), **(ii)** that which is at least 'categorically' formed (understand: thought through). So much for the quote from Spranger.

3.-- Spranger further states the following (Kohnstamm,oc, 16v.).

(i) 'Understanding' is one type of 'explaining', namely explaining insofar as applied to that level of data (L.7: factual modes of being) which can be thought of as 'meaningful totalities'.

(ii) 'Understanding' means **a/ interpreting** data **b/** from a totality **c/** as meaningful (situated within that totality).

(iii) 'sense' (understand: meaning) is present in that which,

(iii)a . in a totality that is logical in nature (knowledge system),

(iii)b . functions as an essential component ('konstituierendes Glied',
- literally: an element that constitutes an indispensable component of that totality) in a totality which is axiological (L.16; 122) in nature (value - system), according to its own situating laws, at the level in question.

We translate into more understandable language:

(i) If one can place something (L. 7), either thinking (logical whole) or evaluating (axiological whole), within a whole (situate),

(ii) then it shows that, in that whole, it has a 'place' (understand: meaning). -- Well, 'verstehen', according to Spranger, is essentially giving something such a place (= meaning).

In this context, naturally, humanity (inner contact) is presupposed as the basis for such a sense of meaning.

1. Consider, for example, Kohnstamm, who, through conversation, establishes contact with dancing young people and who, within that conversational contact, gives them a place ('meaning') in our cultural whole and, immediately, in their subcultural whole.

2. Consider the poet G. Gezelle (L.56: 58) who, by means of shared experience, literally immerses himself in the world of a girl herding calves (Voetjes) or, in the same 'understanding' manner, works his way into the dance of the Gypsies—via a poem by Emmanuel Geibel, simply to become absorbed in it as an art lover, yet formulated in a poem, so that his shared experience can be passed on to us, readers of his poem (L.137: to make others share our experiences). Through which we, in turn, can immerse ourselves in the world of the children, or Gypsies, respectively, as in a subcultural totality.

L140

3A. *The logical whole.*

Kohnstamm gives an applicable mod. of 'knowledge system' (epistemological system (L.13/16: the transc. truth; 42; 124)), regarding understanding.

“ **(i)** If Jan and Piet experience 'something' (L.7) together, Jan experiences, in the same sense, what Piet experiences and vice versa.

(ii) But, if Jan 'understands' Piet (in the stricter sense), then Jan can be either at the same level or at a higher level than Piet, but not at a lower one (*note*: 'Level' here apparently means something like

intelligence level).

a. If we were to ask a child why it plays with or is captivated by a teaching tool of Maria Montessori (1870/1952; Montessori was a physician, but also an educator, who, in 1907, founded the Case dei bambini in Rome and initiated the Montessori method), it would only be able to answer—if it is even capable of doing so—: “Because it is pleasant.” The child in question speaks, immediately, as if it were merely a matter of pleasure.

b. But, if *Karl Groos* (think of his * *Die Spiele der Menschen* *, Jena, 1907-2; of his * *Die Spiele der Tiere* *, Jena, 1907-2) or *Maria Montessori* (think of her * *Wetenschappelijke opvoedkunde* * (1916), her * *Het kind* * (1930), her * *Van het kind naar de adolescent* * (1948))—the former in his theory of play, the latter in her explanation of the meaning of teaching aids—make us understand that behavior, then they fit that behavior into a—understandable (read: transparent) whole of meaningful coherence—for us, but not for the child.

So much for Kohnstamm himself regarding the methodical level of understanding (cf. L.33ff.: there is ordinary and there is methodical comparison).

L141

3B.-- The axiological whole.

Kohnstamm, oc, 16, gives us both appl. and regul. mod, of understanding value.

a. “Understanding always presupposes an perceived (read: more thoughtfully processed) integration **(i)** of the understood behavior, **(ii)** into a specific value domain (L.126: sub-aspects; 127: cultural totalities, cultural frameworks).

1. This entails that 'understanding' - always - conscious 'Wertbeziehung' (= involvement with some value), in the sense indicated by Heinrich Rickert (L.123) in the (...).

2. That commitment to values can be of a very different nature—as different in nature as the motives (*note* : psychoanalytically, one can include the (unconscious) drives) that underlie an action,

(i) Very often it will, for example, consist in relating to (= orientation towards (L.16: estimation; 113v.: Scholastic, resp. Hegelian orientation)) certain vital (l. 77) feelings of pleasure or displeasure.

(ii) but it can (...) also lie much deeper (L.18v.).

b. *Appl. Mod* .

1. Thus, for example, I have only solved the problem of the dance (L.58: 134) when it has become clear to me which feelings of pleasure are connected with it, despite appearances, and which feelings of displeasure (inhibitions) prevent another expression.

2. I 'understand' the pitiful sobbing of a little girl when I hear that her dearest doll is broken.

c. *Decision*

Understanding presupposes, therefore,

(i) that I, from my own observation, am at home in the area of value where the lived experience lies, and

(ii) also, that I perceive (= thoughtfully situate) how the experience is arranged, more or less consciously, within it by the one I understand. - Which does not entail that I unite with that arrangement, and even less that I accept it as definitive.”

So much for a first approach by Kohnstamm to axiological understanding. A second approach follows now.

L142

(i) “To 'understand' a behavior, it is necessary that we

(a) partially agree with,

(b) but not become completely absorbed in it. In other words, we must be able to detach ourselves, in a certain sense, from that behavior,

to rise above it—or, at least, stand opposite it.” (oc, 19).

(ii)a. First Appl. Model.

We cannot fail to quote here, KO Apel (L.128), ac, 39, “In every conversation between people, it happens that one of the partners

(i) no longer attempts to take the partner seriously, hermeneutically (= understandingly), in his intentions,

(ii) but to approach him from a distance, as a quasi-natural event (L.130/134: scientific model), namely at the moment when he no longer attempts to maintain the intimate togetherness in and through speaking, in communication, that he, on the contrary, rather attempts to judge what the partner says as a symptom of an objective state of affairs (= factual mode of being (L.7)), so that he, like an outsider, can 'explain' it, -- and this in a language in which the partner does not participate.

(iii) The relationship of the physician to his patient exhibits a characteristic (L.25) of this nature, namely the partial breakdown of hermeneutic 'communication' to replace it with 'objective' (meaning: scientific) methods of knowledge (L.130/143: human science), --- particularly, the relationship of the psychotherapist to the neurotic (= neurosufferer)”.

(ii) b. Second appl. Model

Kohnstamm, oc,, 16, specifies, in an analogous sense.

1. Understanding is by no means synonymous with experiencing together, in the sense of 'sympathizing with', 'taking sides', or 'identifying (axiologically) with' the person with whom one experiences together.

For example, the much-quoted “tout comprendre, c' est tout pardonner” ('To understand everything amounts to simply 'forgive' everything) is – as a psychological observation, at least – I will not yet go into the pedagogical relationship between 'understanding and forgiving' here – simply incorrect (...)

2. The foregoing therefore states that understanding a behavior does

not mean that the person who understands declares 'solidary' ('unites') with the affirmative or negative assessment of him/her whom he/she understands. In other words, I can

(i) to understand that someone believes something to be true or finds it pleasant or beautiful, respectively ,

(ii) without me sharing that opinion (L.137: both when they agree and when they disagree).

L143

Bonus

Kohnstamm, oc, 236, cites a text by *Eduard Spranger, Psychologie des Jugendalters* (1924-1; 1953-23).

The context, in Kohnstamm, speaks of play. "In that sense, Spranger has made a remarkable statement. To characterize what he means by an 'overarching unity' (L. 139ff.), he says the following.

a. Assuming that psychology had the sole task of describing (L. 100: purely descriptive phenomenology) what is experienced within individual consciousness itself, then the answer to the question "Why/ how does a child play?" would simply come down to this:

"Because/due to the fact that it derives a sense of pleasure from it." Reason: the purely subjective (= lived) meaning (L.139) of the game is derived from this. In that case, there was not yet any theory regarding the particular form and direction of the urge to play.

b. As soon as, however, we assert, in the sense of the theory of, for example, Karl Groos (L.140): "The child plays to practice the performance of future, vital activities", from that moment on we transcend that which is truly experienced in play.

After all, this "in order to" (Note -- L. 139: meaning) does not yet appear in the soul of the child in a fully thought-out form. -- We are faced here with a 'comprehensive meaningful coherence' (= 'overreaching unity'), which, to begin with, is 'übergreifend' (transcending above) the immediately (understand: unthoughtfully) experienced meaning".

Note -- Kohnstamm, oc, 19, says that 'a(p)perception is “fitting into a certain context”. What Spranger's 'meaning' (L. 139) is. And Herbart's 'Apperzeption' (in the educational sense) (L.76), Cfr L.105 (Platon's idea). Cf. L. 137 (sing. concr. idea).

L144

4.-- Understanding oneself

Kohnstamm, oc, 19, devotes a few lines to self-understanding, 'self-comprehension'.

(1) In order to understand ourselves, we must also be able to detach ourselves (from the primary experience or shared experience) from our own behaviour. This is by no means always easy.

Consequence: self-deception occurs so often. After all, we 'perceive' our own behavior in an incorrect, usually 'flattering' (= presented too favorably) manner. (...)

(2) Already the Paleoputhagoreans (L.2; 48; 94; 97; 128) had the self-deception that was so strongly emphasized by the depth psychologists (Sigmund Freud (1856/1939), neurologist and psychiatrist, founder of psychoanalysis; Carl Gustav Jung (1875/1961); Alfred Adler (1870/1937)), by

1. Says *O. Willmann, Gesch.d. Id.*, I, 321:

“The wise man (i.e., the one who wishes to come to himself) ought to examine himself: “Insofar as you do not 'know' (understand: 'comprehend') yourself, consider yourself a madman ('nomize mainesthai')” says an 'akousma' (i.e., a typical Paleoputhagorean doctrine), which, in its own way, interprets the Delphic 'know thyself”

2. Further on (oc,330), Willmann says—always speaking of the Paleoputhagoreans—: “The summary of all goods, insofar as they concern the human subject in his ideal, is eumemny ('eu.daimonia'). (.....).

When “Eu.daimonein anthropon, hotan agathè psuchè prosgenètai” (“(...) that man possesses a good daimon whenever he emerges as a good soul”) is stated as the Paleoputhagorean doctrine, the basic meaning in which the word 'eu.daimonein' was still understood—at the time of the Paleoputhagoreans—shines through:

(i) 'eudaimon' is anyone who possesses a good (= eu) guardian spirit (= daimon) (L.49: Thoth as guardian spirit in usage) -- something like this amounts to 'a person with a good 'spirit' (both life force and 'angel'), reason: the guardian spirit and the soul - thus the Feruer doctrine (*note*: 'Frawasji' (= feruer) is, among the Mesopotamians (Iraq, Iran) 'daimon', -- what the Romans called 'genius' (masculine) or 'iuno' (feminine)) and, even, to some extent, Heraclitus of Ephesus (L. 53; 60; 69; 73), where he says “Ethos anthropei daimon” (“In behavior the daimon (shows itself)”), the relationship 'guardian spirit' 'soul' too, are interchangeable;

L145

(ii) 'Kako.daimon' is the opposite (L.53: privative opposite) of 'eu.daimon'.

3. Willmann, oc. 363, returns to that daimon doctrine regarding Socrates of Athens (L.101ff.), who himself claimed to possess a 'daimonion' (= daimon), with a special gift, namely the inner voice (a phenomenon that is, incidentally, more frequent than the Enlightenment thinks).

Aristotle, too, following Plato, of course, shares the belief in eu- and cacodemony (oc, 528ff.), -- and indeed, as a fundamental given regarding knowledge of the soul.

(3) *M. Heidegger* (L.5; 6; 13; 94), *Sein und Zeit* , I, 142/148 (*Das Dasein als Verstehen*); 148/153 (*Verstehen und Auslegung*), deepens understanding, on an ontological level (L.5/19), in the sense that being-in-the-world as a human being entails that one has, somewhere prior to all reasoned or theoretical activity (L.77; 138), a kind of understanding of oneself as being-in-the-world-together-with-others.

After all, thrown into a situation (passive aspect: thrownness), man designs, in any case, always some form of existence, which is being-in-the-world-together-with-others as a human being. (Forgive us this typically Heideggerian language!).

(4) *John Dewey* (1859/1952), the pragmatist founder of the so-called 'experimental school', (L.42; 130), in his article *Le développement du pragmatisme américain*, in: *Revue de Métaphysique et de Morale* (Paris), 29 (1922): 4 (Oct.-Déc.), 410/430, sets out how CSS. Peirce (1839/1914) (L.94/97) stands at the origin of American Pragmatism, - Peirce, who, later, - to react against W. James (1842/1910), the great psychologist, founder of pragmatism in the strict sense, who, however, assigned a primary role to utility value, -- placed emphasis on the idea (L.104ff.; 137; 143), but to be tested by means of either 'pragmatic truth' (L.14) or fate truth (L.14).

"The change in human existence that arises from the application (of the idea) constitutes its 'true' (understand: life-) meaning." (ac, 413).

Peirce drew the conclusions from his stance against the mere usefulness of truth: he changed 'pragmatism' to 'pragmaticism' to indicate that the idea, in itself, played a key role.

L146

(5) K. Marx (L.67) says it in terms of 'atheist praxis': "Since - in the eyes of the socialist man - all that is called 'world history' (L.126: history) is reducible:

- (i)** established for production by man thanks to human labor and
- (ii)** regarding the creation of nature at the service of man, that socialist man therefore has the visual proof, the irresistible proof, of the fact that man came into being solely thanks to himself.

In other words, from the fact that he himself is his own process of origin (his own process of production)". (We take this excerpt from *Manuskript 1844* from *Jean-Yves Calvez, La pensée de Karl Marx*, Paris,

1956, 550).

In other words: the idea of 'self-activity', characteristic of Peirce and the Pragmatists who interpret him differently, such as James, Dewey, et al., becomes, among the Marxists who wish to reproduce Marx's thought integrally (L.89: faithful reconstruction of the doctrine), aggressively atheist self-activity or ... in a misuse of the ancient Greek 'praxis'.

Decision.

The self-understanding of contemporary man is reflected:

(i) negative, in the idea of 'self-deception'; Heideggerian: 'of the Man' (the 'man', i.e., the unawakened, average or, even, current mass man absorbed in everyday events); Peircian: the man who, instead of examining himself personally, adheres to idiosyncratic, orthodox, or 'liberal-apriority' opinions (L.94/97), where the scientific method is appropriate;

Marxist: man, who, religiously, believes that he is dependent both on nature and, even more so, on the supernatural, -- as an 'opium guzzler';

(ii) positive, in the idea of 'self-activity', in one of the three variants just outlined.

With Dilthey, there is something analogous, but less pronounced. We will return to this later.

L147

General decision

To conclude this short chapter on self-understanding, we draw attention to Cardinal John Henry Newman (1801/1890; founder of the Oxford Movement), in which he maintains that, in a process of reasoning, the whole person reasons with his entire being—and indeed, from 'the first principles', which Newman does not mean in the formal (abstract-general) sense (L.115/118), but in the singular-concrete sense (L.119/125).

Indeed: he “means by this the premises of personal reasoning, which are unconditionally accepted as certain by the person (understand: the singular human being), -- usually without reflection (= thinking, self-criticism), -- even without the thought that reflection would be desirable. They are judgments which lie, as it were, immovably anchored in everyone’s personality, -- entirely fused with his concrete existence. And which are different for everyone”. (*Dr. Zeno, OFMCAP., John Henry Newman (An Introduction to His Thought)*, Tielt/ The Hague, 1963, 47).
- Cf. L.95 (purely subjective judgment).

5.-- *The feasibility limits of empathetic co-experience.*

Kohnstamm, oc,19ff., touches upon the core of the Dilthean method with the question of feasibility. “A condition must (...) in any case be fulfilled if one speaks of 'understanding': the very basis of shared experience must exist.

And, with that, we arrive at a very fundamental question: “is that basis the same for all people?” This means: do we indeed have the right, always and everywhere, to proceed from the axiom of essential equality between ourselves and the other, which we have come to know, higher up (L.133/134), as characteristic of the method of understanding? Kohnstamm answers that question in a highly nuanced manner.

a. *The empirical evidence.*

L.80 (empiricism). -- “Judged purely empirically, (...) the axiom of essential equality is highly doubtful.

(i) There is not only development, but also atrophy (wasting away) of the capacity to experience events of a certain nature.

(ii) If we consider, moreover, the great differences in the way people view things, the problem of the abnormal man, and the differences between peoples and races, then we must acknowledge that empirical proof seems to argue against rather than in favor of that proposition (= axiom of essential equality). (oc,20).

L148

Appl. Mod.

“Someone who assumes, as a starting point, essential (= fundamental) differences in the basis of human experience, such as the adherent of the theory of the Übermensch (*note* -- Friedrich Nietzsche (1844/1900) made this term world-famous), who views the power-seeking man as fundamentally different from the herd man, who submits to general norms, will certainly not be able to be convinced (understand: persuaded) on the basis of the purely empirically provided material (*note* -- This is all that actual people produce regarding true 'understanding'). (ibid.)

Note -- Kohnstamm alludes here to Fr. Nietzsche's third style of thought, in which he dismisses past and present humanity as outdated, indeed, reprehensible ('Sklavenmoral' (slave ethics)), insofar as it 'believes' in established values (especially inherited religions and, with regard to philosophy, Platonism (L.103/105));

2. In which he predicts, in an unspecified future, the Übermensch (understand: superior man), as the only 'meaning' (L.139; 143) of present-day humanity ('Herrenmoral' (= ruler ethics)).

It is immediately clear that, in Nietzsche's experience, an unbridgeable chasm yawns between the 'slaves' and the 'masters'. Unless one assumes that the 'inner contact', so typical of understanding, is possible across that chasm (L.137;143).

In any case: something like tenderness (altruism; L. 19), as Christianity (Solovjef) understands it, seems entirely ruled out.

b. Kohnstamm's testimony of faith.

We quote the text without comment. Reason: Kohnstamm makes no claim whatsoever to the general validity of his 'first principles' (L.147),-- to put it in Newmanian terms.

Although, oh, a Biblically minded person can hardly doubt Kohnstamm's viewpoint. In that sense, his starting point is more general than his singular personality.

“When we (...), in our considerations, proceed from the essential unity of humanity (apparently meaning that 'unity' insofar as it manifests in understanding), and from the assumption (abd. = hypothetical = regress. ed.: L.136v.) that all people are predisposed to understand one another—however great the obstacles (L.147v. = empirical material) may be that, in a singular-concrete case, stand in the way of mutual understanding—then we must make clear to ourselves that we (...) are stating an axiom (L.133v.).”

1. This axiom is, first of all, to be understood in the axaiological (L.141/143) or value-theory (L. 16; 122; 139; 141/143) sense of the word.

2. Secondly, this axiom is to be understood in the religious sense, namely as a testimony of faith.

Note -- Oc, 72, Kohnstamm reveals a hint of what he means here, or rather, what he understands.

1. There he discusses William Stern (1871/1939), the founder of personalist (L.125) psychology. “For Stern, God also lacks self-consciousness—whom he (...) designates as 'die Gottheit' (*note*— the abstract—general 'deity').

2. A religious personal relationship (understand: a 'understanding' of God), in the sense of an 'I-Thou' relationship (*note*: this expression by Kohnstamm is reminiscent of the 'ich-du-beziehung' (I-Thou relationship) of Martin Buber (1878/1965)), is, for Stern, not possible. He calls himself an 'adherent of a personalist pantheism' (*note*: pantheism

(i) acknowledges divinity, as omnipresent reality,
(ii) but acknowledges no personal God (with the self-awareness that the person has as a person)).

3. Kohnstamm then recalls how, in a previous work (Waarheidsprobleem, V), he mentioned the facts, “in my own experience”—he says—which made him feel 'forced' (sic!) to a different

confession: “Whoever (he continues) has found his Lord, to Whom he knows himself bound unconditionally, can no longer deny the existence of the 'I-Thou relationship'. (ibid.)

In other words: for Kohnstamm, that relationship with God seems to be the epitome of all 'I-Thou relationships' (the basis of all understanding).

L150

Kohnstamm further states: “We thereby accept a fundamental proposition as a guideline for all 'comprehension' work (L.78ff.;89) of science ... because we do not wish to abandon that proposition, despite the objections it encounters. Objections which, as a result, become problems for us. We refuse to accept everything that seems to us to be in conflict with that essential comprehensibility as ‘That is simply the way it is’, as a 'final' (word, relevant) to which we would have to resign ourselves.”

1. Only the completion of the task of science—which, at least in principle, never ends—could refute this 'premise' (L.26: VZ), namely the axiom of essential equality.

2. On the other hand, we must clearly be aware that, for the same reason, someone who takes the opposite viewpoint cannot be refuted by scientific methods of proof either.

In short: for Kohnstamm, whether or not the axiom of comprehensibility holds can never be determined purely scientifically. The conclusion (= testing = *peirastische ed.*: L.137) lies outside and, perhaps, above every definitive (positive) science.

The traditional Enlightened Rationalist (L.80), whether intellectualist or empirist, will brand this as 'irrationalism', the blind leap into the unenlightened (irrational).

However, in the place of Kohnstamm, who does not touch upon that question, here at least, we answer: You, Rationalist, whether

Intellectualist or Empirist, just like Kohnstamm (the irrationalist), do not prove your own starting point, other than in a foundationalist manner (L. 95/97).

What it comes down to is: you, enlightened one, likewise do not prove, purely scientifically at least, your axiom—namely, the axiom of absolute rationality—by means of—mere—skilled (professional) science. In other words, you too are, if you are willing to honestly admit, 'irrational'.

For the bibliography, see L. 96 (by Bartley). For Kohnstamm, the following description (not a 'strict definition') is valid: “The method of understanding attempts, on the basis of the supposed essential correspondence between ourselves and other persons, to order (L.33; -- 20ff.) their behaviors (L.126) and experiences (L.132), by fitting them (L.139/143: 68ff. (dialectical); 82 (current dialectics) into the value domains – known from our own experiences.”

So much for Kohnstamm's thesis.

L151

c. -- *Our own thesis.*

This builds on Kohnstamm's theorem, but two remarks are relevant.

a. Relying scientific work solely on a testimony of faith is, certainly, Biblical (and accepted by us), but being purely (professionally) scientific, it is nevertheless a bit convoluted. Therefore, we return to two previous positions.

b.1. Strictly speaking, a spiritual science that bears witness to a (religious-Biblical) faith amounts to some form of fideism or philosophy of faith.

a. 'Faith', purely philosophical – is:

(i) free consent

(ii) with the assertions of someone (fellow man, God),

(iii) based solely on the inner contact (L.136:149: 'I-Thou

relationship') with that same person (fellow man, God) and, at the same time, on the (possibly, unlimited) trust in the credibility of his claims.

b. 'Fideism' is that type of philosophy (possibly: a specialized science, as with Kohnstamm) that assigns to the faith described above either a higher or an equal role in relation to intellectual-rational action.

1. That the Rationalists (L.80) object to this is understandable: a mere inner contact with commensurate trust alone can never transform a faith into an intellectually—reasonably—justified faith.

2. Where Kohnstamm (and other types of fideists) are right is that they consider reason (intellectualist, empiricist), as the foundational rationalists conceive of it, to be too narrow—indeed, a refined form of irrationalism. In that sense, fideism is a single type of liberation from the narrow-mindedness of the Enlightenment thinkers.

Decision.

Neither fideism nor enlightened rationalism. But a third way.

L152

b.2. (i) *The dialectization of the humanities method* .

Let us renew, now, L.77/67 (The lemmas of current dialectics).

We particularly cite two entries regarding Kohnstamm's leap of faith.

1. What is purely scientifically neither provable nor refutable (L.150) does not, by that reason, need to be founded in a belief.

a. - Essentially, Kohnstamm introduces his data from faith experience—the 'I-Thou relationship' as a model—into the humanities merely to provide an entry for analysis. Nothing more. Reason: otherwise, that religious conviction plays virtually no direct role in his expositions.

b. - But why, then, not simply introduce the Platonic lemmatic-analytical method (L.6; 41)? After all, Kohnstamm's faith makes

scientific sense only as a lemma, as a provisionally accepted idea! Instead of one applicable mod. (faith lemma), why not the regulative model (lemma überhaupt (= simply), universal)? It is precisely through this that the typically religious lemma finds its proper place. Cf. L.78ff.

Note: Naturally, we refer—expressly—to L. 41: there, the Platonic lemmatic-analytical approach is interpreted as 'reductive'. See, now, L. 32 (the editorial basic scheme; 134; 135; 136; 137: applications).

2. When Dilthey himself determines that

(i) without 'explaining' the natural sciences (= scientistics; L.152ff.) - e.g. in examining the influence of the environment on behavior (L.126: behavior; 127: the totality).

(ii) It is impossible to 'understand' the humanities; when he establishes that

(i) without (precisely a type of) 'understanding', namely the understanding of the fundamental principles (= lemmas) of the specialized science in the sense of scientistics, as we saw (L.150: irrationalism of the Enlightenment thinkers; 133: axiom of essential science).

(ii) if the 'explaining' of it is not achieved, then he applies, whether he likes it or not, the principle of complementarity of the dialecticians (L.81ff.). Moreover, he proceeds from a type of unified science (L.82/85). -- This proves that dialectics grasps and solves problems.

L153

Bibl. sample

O. Pöggeler, *Einführung* , in: O. Pöggeler ua, *Hermeneutische Philosophie*, Munich, 1972, 17f..

Note: With regard to the pessimism concerning empathy (L.147ff.), reference can be made here to

(i) the psychology of the actor or actress who, in an extremely curious way,

(a) inner contact (L.136) and

(b) ability to represent (L.153 (appropriate method);137 (singular-concrete idea)), regarding the behaviors to be portrayed and the bearer thereof (the fellow man), to actually and sometimes very repeatedly demonstrate. This is then called the 'born actor' (in the sense of 'representer' based on intuition and empathy).

(ii) the (para)psychology of the sensitive (sensitive, 'seeing'), for which we refer to L.27 (the Xhosa-Negro-African, who, **(i)** immediately, **(ii)** 'sees' (or, how much and which listens)). Cf. L.110 (the true 'seer').

Upon further investigation, it can be said that the 'seer' acts identitiously (L.35ff.), that partial identity with the object of his 'seeing'. This (paranormal 'mantic') 'act of understanding' improves, in a remarkable way, Kohnstamm's one-sided pessimism (cf. L.64 (bottom); 99 (transempirical verification by Hans Reichenbach)).

Naturally, this ('lemma') presupposes that one overcomes the prejudices of the foundational Enlightenment thinkers; a 'mantic' phenomenon, a paranormal phenomenon—once established—is a lemma, worthy of analysis.

It should be noted that, once again, the complementary and multidisciplinary approach established by the dialecticians applies here. The humanities scholar excludes nothing—a priority (L.95/97)—not even the much-despised 'paranormal' phenomena, as an object of analysis.

b.2. (ii) *Phenomenology and 'hermeneutics'*

The elder Dilthey (O. Pöggeler, oc, 15) racked his brains over the fact that 'life' (L. 126v.)

1. both in understanding oneself (L.144/147) and in understanding one's fellow man (L.128/143; 147/153),

2. (i) experience (i. more or less consciously living through), **(ii)** expression (L.126 (expressions); 136 (expressions)) and **(iii)** representation (L.137 (the Singular-concrete idea)).

Maw – as has been repeatedly stated since Hegel (and, before him, since German Romanticism (L.67:126)) – life coming to (more or less full) realization (= self-awareness) is the mystery of the elder Dilthey.

This raises the problem of the proper positioning of phenomenology (f. its ideative (L.100ff.: 119) form).

“If life were not, from the very beginning, the bearer of the capacity to grasp meanings and express them ('signifiante'), then understanding would be impossible (...). Should one not, then,—secretly ('subrepticement')—take refuge in all the possibilities of a 'philosophy of the mind' ('Philosophie des Geistes'), precisely when engaging in 'philosophy of life'?”

That type of difficulty of a fundamental nature is in need of clarification—and not otherwise—when one seeks its solution in the direction of phenomenology as an approach for hermeneutics (= 'humanities' (...)). (*P. Ricoeur, Le conflit des interprétations (Essais d'hermeneutique)*, Paris, 1969, 9).

This 'learned' formulation by Ricoeur, an excellent expert on the philosophy of the humanities, amounts to outlining the correct relationship between 'humanities' (hermeneutics) and 'phenomenology'.

1.-- Phenomenology (L.94/112) is – summarized once again –

(i) a phenomenon (actual mode of being, insofar as it manifests itself immediately - visually),

(ii) to express, i.e., correctly understood, to put into words. If it concerns eidetic phenomenology, one expresses, in doing so, the (general) essence of the phenomenon.

(iii) A phenomenological psychology (L. 108) could, then, treat both self-understanding (L.144/147) and understanding (the inner life of) one's fellow man (L.128/ 143; 147/153) as objects. That is a first point of meeting.

W. Daim, Tiefenpsychologie und Erlösung , Wien/München, 1954, 18ff., says regarding the matter: “(...) Phenomenology is (...) the first step into the details of human spiritual life (as a description of phenomena

observed in an accurate manner (here: of the spiritual life of ourselves and our fellow man)”.
L155

2.-- Humanities (L.126ff.) (according to W. Daim, *ibid.*) comes down to:

(i) The clarification **(ii)** of the phenomena viewed phenomenologically **(iii)** with a view to their 'meaning' ('clarification of meaning'; L. 139/143).

In other words: the humanities situate the (phenomenologically) grasped phenomena (of (soul) life) in their origin (L. 145 (thrownness)) and purpose (L.145 (design); 143 (to - to)) ('meaning').

Eduard Spranger in particular (L.127; 138ff.) has emphasized this, - specifically with his idea of 'structure' (L. 41).

(a) “The definition that Spranger gives of 'structure' corresponds to the conceptual description of 'gestalt' (L.25; 64) (...): “An internally organized whole, the parts of which (L.37ff.) are in an organic (L.68 (organicism); 83; 85 (organism)) relationship (L.35 (identitive relationship); 37 (more than identitive relationship)) with one another, while the essence of the parts and their functioning are determined by the whole” (*S. Rombouts, Psychologie voor opvoeders* , Tilburg, 1954-1, 1957-2 (*Algemene psychologie*), 257).

(b) The major difference (between 'Struktur' as defined by Spranger and 'Gestalt' (Wertheimer, Köhler, Koffka, etc.)) lies in the fact that:

(b)1. Wertheimer (M. Wertheimer (1880/1943), student of Stumpf and Külpe, founder of Gestalt or form psychology; W. Köhler (1887/...), student of Stumpf; K. Koffka (1886/1941), student of Stumpf (1848/1936; student of Brentano (1838/1917; School of Graz)) were intellectual peers of Wertheimer) applied the principle of 'totality' to the phenomena of the psyche, i.e. to psychological phenomena, without the soul;

(b)2. Dilthey, Spranger et al. apply the principle of the same totality—

first of all—to the soul itself. “Gestalt psychology remains the study of 'phenomena', -- structural psychology becomes true soul-science again” (S. Rombouts, *ibid.*).

The 'soul' **(i)** does not merge into a set of consciousness phenomena, **(ii)** nor into a complex of 'Forms': what takes place in consciousness are merely expressions (L. 126; 136; 153), manifestations, of the 'active self' (= the living soul unity as bearer of the acts).

L156

“The 'moderns' – Spranger means his immediate predecessors and contemporaries – have reduced the human self to a 'flowing process'. No: there is a constant spiritual subject – something that remains unchangeable amidst the changes. The definitive development of his life lies within man himself.” (S. Rombouts, *oc*, 257ff.).

Well then, - according to Spranger - the soul (the self) is a 'structure', which

(i) a closed coherence of both possibilities for experiencing and for activity,

(ii) directed towards values (= axiological aspect) - one need only think of his 'to - to' (143: meaning),

(iii) centered (founded on a single starting point) in the spiritual 'I' (the individual soul) (*ibid.*).

This only fully justifies the term 'humanities', the behavioral and historical science of the manifestations ('objectifications', 'projections', 'works') of the spirit, understood as the spiritual self (L.134)

“Tell me what you value, and I will tell you who (= what type of 'structure') you are,” -- thus Spranger. The individual soul, after all, is what it reveres as the predominant life value, as it were.

If, therefore, one wishes to 'understand' someone (inner contact), one ought to penetrate the singular-concrete system of values that

determines the individual 'structure'. After all, it is precisely that type of configuration of cherished values (L.55: configuration) that organizes a person's behavior, their history. -- cf. Newman's 'first principles' (L 147),

Appl. Mod. of structure type

Take the economic man; he lives to acquire ('earn') money, financial power, financial prestige, etc.: the meaning (= to) is all that money and involvement with money are.

a. virtues: frugality, industriousness, monetary ethics. –

b. relationships: he views things—e.g. works of art—from the perspective of marketability and 'making money out of them'; fellow human beings, e.g. his wife—as a 'housewife' (who facilitates making a profit for him), as a 'businesswoman' (who brings him 'profit'), possess 'monetary value' before she is a 'fellow human being' (her 'usefulness' takes precedence); above all, 'know-how' (scientific knowledge cleverly usable for business) is 'money'; etc.

L157

Appl. Mod of structure type.

Let us now take the aesthete (art lover). He lives to enjoy the graceful, the sublime—in a word, beauty—and to make others enjoy it. The aesthetic is the 'meaning' of his life, or at least the main meaning or dominant (value).

a. Virtues: sense of beauty, through which he 'beautifies' everything.

b. Relationships: things: -- e.g. a simple street corner -- he 'sees' as something 'beautiful', a girl is something 'delightful' to him, etc.; fellow man in the strict sense: his wife ought to admire and enjoy along with him; she herself is, preferably, 'delightful' (physically, in terms of adornment); money — the primary purpose of the economic man — is to him a usable thing “to buy something beautiful with”.

In other words, he too knows and appreciates economics, but this time subordinate to his singularly concrete primary value, which is aesthetic value.

As Spranger himself emphasizes: in no individual soul is even a

single value type missing, but they are always all present; yet one predominates and, immediately, all others (complementation; L.66) are subordinate to it.

Thus, Spranger distinguished science (with the 'theoretical' man), economics (with the economic man), art (with the aesthetic man), social life (with the social man), politics (with the man of power), and, finally, religion (with the religious man).

Cf. his *Die Lebensformen* (1914), where 'life forms' denotes structural types. The Americans, G. Allport and P.E. Vernon, in 1951, tested the value of this typology of mental structures and found them verifiable if one applies them mutually inclusively (not mutually exclusive). Cf. L.126; 127.

Note -- Humanities and depth psychology.

1. Spranger – along with others (Stern, Bühler, Kafka, Kroh) – has emphasized “the one, all-encompassing process of life and development” (S. Rombouts, oc, 264) in his texts on children and youth.

2. Since the great 'three' (Freud, Jung, Adler; L.144), anthropology has deepened its horizon towards the unconscious, subconscious, and superconscious layers of the human mind. Cultural science (culturology) has also been enriched with 'depth psychological' perspectives.

L158

The structuralists (l.88ff.) also analyzed behavior and culture, respectively, as a decipherable code (secret language) that is, at least partially, unconscious.

Freud's psychoanalysis, in particular, as the psychology of the unconscious, is rather medical (neurological, psychiatric) in its aim: it seeks to understand the pathological (the sickly, especially neurosis). To that extent, it is understanding human science.

However, since it shifts the center ('de-centrement', say the

structural psychoanalysts) not into the mind (the (conscious) self), but into the unconscious layers, it is not a human science, Cfr L.156 (134).

1. Unless one assumes, as the tradition of enlightened consciousness thought (L.80) holds—highly characterized by conscientiousness (lemma, which assumes that man, in his essential core, is consciousness)—the asserted—think of the daimon doctrine of the Paleoputhagoreans, commonplace for centuries in ancient Greece (L. 144ff.)—that spirit is more than 'conscious spirit'. A proposition which we readily accept here as a lemma.

2. Viewed from the Paleoputhagorean-Platonic tradition, depth psychology is merely the study of the unconscious mind (I). In that sense (and only in that traditional sense), 'depth psychology' is truly a humanities discipline.

On L. 2, we said that the Paleoputhagoreans did not want to break with the ancient (= archaic) 'wisdom'. Rightly so, all archaic cultures are—very clearly—aware of the unconscious mind.

Only the Enlightened Rationalists have, erroneously, deemed it necessary to put forward a 'radically 'new' starting point. Recent depth psychology has shown that this, too, was a lemma that is falsified upon analysis (psychoanalysis).

Decision.

- (i)** Represent phenomena accurately as phenomena;
 - (ii)** they 'understand' (by situating them in 'in order to' structures of the soul (I));
 - (iii)** phenomena, accurately described, and soul, 'understanding', - and this into the unconscious.
- Behold the humanities in full.

L159

Bookmark

Foreword. -- L.1/3. -- philosophical logic (theology of thought. -- L. 4/158.

I. -- introduction (the pedestal). -- L. 5/874

IA ontological pedestal. -- L. 5/19 (I) 'If anything, then fact and mode of being (L.6/10); (II) 'If anything, then one, true, valueable (good) (L.10/19))

IB . harmological (order-theoretical) pedestal, -- L.20/87.

B. (I).1. -- summative induction; -- L.22/33 (amplification induction: L.30/33).

B. (I).2 . -- introduction to comparative ordering. -- L.33/66.

A. -- **the lemma** (1. Collecting; 2. Comparing internal and external relationships; 3. Identical and non-identical relationships; 4. Domains of applicability). -- L.33/42.

B.-- **the analysis** (= appl. mod). -- L. 42/66.

1. the measuring equation (L.42/51; mathesis universalis: L.45/ 51).

2. The differential equation. -- L. 52/66 (Typology of Opposites (L. 52/54).

2.1 -- the idea of differential (L.55/60).

2.2.-- the impact of (gradual) quantitative change on quality, (L.60/66),

B (II).-- the 'new' and the 'scientific' dialect. as harmology. -- L.67/87.

1 -- the new (modern) dialectics. -- L.67/75 (The four lemmas).

2.-- contemporary (= scientific) dialectics -- L. 76/87. -- (intentional (L.77ff. (encounter)); lemmatic-analytical (L.78ff.); abstractive (L.79/81 (intellectual and/or empirical Enlightenment)); complementary (L.81ff.); unified scientific (= organic) (L.82/86); historical (evolutionary) (L.86ff.)

II.-- theoristic models . -- L. 88/158.

1. one thematic model of comparative text ordering, (L.88/93; - Structural analysis (L.91ff.: collecting/ empirical)).

2. phenomenology as comparative ordering (L. 94/112; c(i): phenomenon (L.94/ 99; c(ii): to express (L.100/112). -- Historical verification: Socratic maieutics (L. 101/103); Platonic dialectics (L.103/105). -- Introduction to mythology (L. 108/110; L.111/113).

3. ordering 'formal' (abstract-general) logic as comparative). -- 113/118; mathematical application (L.116/118)).

4. the 'idiographic' (sing.- concr.) theory of thought (L.119/125).

5. the idea of the 'understanding' (= verstehende, comprehensive. Spiritual science) method (L.126/158; 1. Scientistics (L.129v.; 2. Human science (L.130/134); 3. Spiritual science (L.134/158).

Deo trino gratias.