9.3.Elements of ontology
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Elements of Philosophy
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Part I, pp. 1 to 131

Study notes: see p. 265

Preface.- (01/02)

A "foreword" encompasses a few concepts by way of introduction.

The Course.

The ancient Greeks, who proceeded as logically as possible, described an intellectual task as follows.

A. The fact.

This is the subject or theme. -- In the theory of reality or ontology, it is "All that is in any way 'something'". The term 'something', understood as "non-nothing" denotes in our language all that is real.

B. The requested (sought).

Here: whether there is 'something' and, if so, what that 'something' is. More mundane: to find out what exactly is meant by the term 'something' or 'reality'. To find out, thanks to research, 'historia' (Latin: inquisitio), what reality can be.

In more contemporary terms: trying to bring 'being(de); i.e. all that is, to (full) understanding. 'Seinsverständnis', (Understanding of Being), to speak with M. Heidegger.

In terms of the logic of understanding: to form as clear and responsible an understanding as possible of what "reality" is.

Note -- The dichotomy or system of "given/requested" comes, among other things, from ancient Greek mathematics: first delineate the given as sharply as possible; then, with respect to all that is available as a result, describe the task (what exactly one shall do with the given or theme).

Elements.

Look at the title! This term - 'term' means "understanding expressed in words" comes from the oldest ancient Greek language.

'Stoicheion', intertwined with 'archè', meant 'element' (principle, premise). After all, Latin translated by 'elementum'. Is 'element':

a. an element from a set (e.g., a schoolboy is an element from the set 'schoolboys'),

b. a constituent within a system or system (e.g., a city district is one part of the entire city).-- Within the "totality" (either collection or system) the Greeks called "stoicheion" all that was encompassed by it.

But there is more: 'stoicheion' becomes 'arche', premise, when it is processed reasoning-logically: a part of a city is an element that allows one to understand the city as a whole. Or conversely: the whole makes a part understandable.

Thus, "element and of ontology" means "all that one must presuppose about things - 'arche' - in order to understand ontology."

Propedeutics.

The ancient Greeks spoke of "pro.paideia" or "pro.paideuma," a "paideia" for the specialized paideia or formation.

"Elements of ontology", in that narrower sense then amounts to "introductory or even elementary (very facilitated) instruction in ontology".

Between dilettantism and specialism.

A 'dilettante(e), being engaged as a hobby, knows "of everything", superficially. A 'specialist(e)', as a connoisseur/knowledgeable person, knows "a bit of everything", thoroughly.

Since this course is "propaedeutic," we choose the middle ground: it provides information, i.e., truth on the subject, and does so as a means of general education.

At Harvard University, the "Harvard principle" is held to be paramount: it does not breed generalists but specialists. Yet it demands first of all a general education in all kinds of (auxiliary) subjects. To what end? In MacLuhan's terms: to avoid subject bias (too one-sided and limited subject knowledge).

A good teacher, a good teacher e.g.

a. knows his, her trade well,

b. but, in our very complicated world, he, she is generalized. If this applies to the profession of teaching, then, in our hyper-specialized world, it applies to just about all professions. Hence, the "continuing education".

As an aside, one of the meanings of the ancient Greek word "philosophia," which we translate by philosophy or "philosophy," was "general education.

Neither fashion nor ideology but method.

'Indoctrinating' is one of the terms that became common since the contestation period. This is: to impose a 'doctrine' or teaching.

Our course avoids "fashions" because, even though there are fashions in philosophizing, "fashions" are superficial waves of interest that come ... and (quickly) goes.

Ideology" is an unrealistic thought construct, often employed by its convinced adherents to control others. Because ideology is 'unreal' (not consistent with data), it is unprovable.

We therefore harbor method. Method" is a reasoned approach or approach. This is how we approach ontology - and through it - the reality it studies.

Sample 1,-- Existence (existence) and being (essence). (03/09)

Parmenides of Elea.

The founder of the Eleatic school lived about -540. He is considered the one who transformed "metaphysics", another name for "reality theory", into ontology or philosophy of being.

Cl. Ramnoux, *Parménide et ses successeurs*, (Parmenides and his successors), Paris, Rocher, 1979, 99/148 (Parménide), says what follows.

The opening fragment of Parmenides' teaching poem talks about a journey,--by chariot with horses, and about meeting a goddess.

a. Some see in it a mere allegory, i.e. an elaborate comparison.

b. Others, however, interpret this as the representation of an actual journey "into the other world." Think of the Siberian shamans who at that time and still today undertake 'soul journeys', for example during healings. By the way: this is characteristic of what is called "apocalypse" or "revelation literature".

Ramnoux: both opinions contain an element of truth. For: compare Parmenides with his predecessor Hesiod of Askra (VIII-th or VII-th e.).

a. Hesiod encounters muses, goddesses of inspiration, who proclaim either probable falsehoods or real truth (this ambivalence in behavior was very familiar to ancient pagans).

b. Parmenides encounters a (submitting) goddess who instills both the 'doxa', the untrue offered as probable, and the 'aletheia', the revealed reality. Cfr o.c., 103s..

Conclusion.-- And Hesiod and Parmenides practice 'apocalupsis' (the ancient Greek word for 'revelation'). But where the former stays within the mythic revelation or apocalypse, the latter replaces myth with a 'being-disclosure' or ontology.

What does Parmenides now claim?

J. Beaufret, *Le poème de Parménide*, (The poem of Parmenides), Paris, PUF, 1955, 75/93 (Fragments).-- 1:28/30.-- "It is a necessity that thou (= Parmenides) 'panta' (all) hear: both the quiet heart of the beautifully rounded aletheia, the revealed being, and the 'doxa', the opinions of mortals in which there is no true faith."

Further: 2:2.-- "These are the two methods". That's the systechy.

But there is more.

6:1.-- "Necessity is to say and think that being is." -- Later called "the identity principle" ("What (so) is, is (so)").-- 8:21.-- "Being is itself ('tauton') and remains itself and it is there according to itself." "Kath' heauto" in Greek.

The latter boils down to: 'his(de), i.e. reality, is there according to itself,--not according to us e.g.! Not according to the 'doxa', the opinions of men! No: what is, is there as it is in itself, 'objectively', independent (at least as far as it is in itself) of every other reality.

Note.-- Whoever doubts this, i.e. whoever denies it, does so in the name of that truth! After all, how can one claim that reality is accessible "only in a more subjective way", if one does not first distinguish this subjective from the objective? whoever doubts this, first (consciously or mostly unconsciously) puts it first.

The given and the requested.
After this introduction, we begin the theme of this sample.

Given.-- The distinction, prevalent since Platon of Athens (-427/-347), between actual existence ('existentia' in mid-century Latin) and beingness ('essentia') as a definition of what reality is in itself. Or in other words, as 'identity' (own beingness) of 'being(s)'.
Asked: To clarify, reveal, "apocalupsis" or "alètheia" of that notion-couple.

True Science:
'Science' weze defined here as "sound, if necessary provable knowledge". Well, Platon, when speaking of "true science," calls it "theorètikè tou ontos," correctly translated, "to enter thoroughly into what is." For, "theoria" since Puthagoras of Samos (-580/-500), means, not staying at the surface, going deeper into something. So e.g. the meaning of the Olympic Games of that time, which one can experience as a superficial spectator, as Pythagoras says, but which one can analyze more thoroughly. So 'Theoria' is not our current term 'theory' (which is too rationalistic- intellectual and means thought construction). Thoroughness' would be an excellent translation.

Often one translates by "contemplation" ("speculation"). In our current language usage, this is "too unreal," too far from the given, to count as a proper rendering of the Pythagorean-platonic meaning.

An applicative model ("copy").
In model theory, the pair "regulatory model/applicative model" applies. The regulatory model is the general rule, while the applicative model is the application.
So what is "reality" or, in ancient Greek, "being(de)"?

J. Brockman, *Morphogenetic Fields* (A New Science), in: T. Maas, ed. *Dwarsgebakken wetenschap*, (Cross-baked science,), Amsterdam, Contact, 1988, 40/50, examines the strictly scientific value - "veracity" - of Rupert Sheldrake, *A New Science of Life*, London, Blond and Briggs, 1981.

Sheldrake starts from a factual fact, namely the brutal fact that established biology faces a series of unsolved problems. Which suggests that its presuppositions are not consistent with the facts.

He broadens these postulates, including with the concept of the morphogenetic field (along with the concept of form resonance), in order to make the unresolved questions solvable, if only partially.

To give an outline: in 1920 William McDougall, a psychologist at Harvard University, observed that rats from later generations learned faster (i.e. not in the same way) in the same situations than those from earlier generations. Hypothesis: it was as if the former, in a mysterious way, paved and facilitated the way for the latter, without the latter having any - according to the presuppositions of the science of the time - contact with the former.

That mysterious way in which that established fact occurs is what Sheldrake calls "morphogenetic field": the late ones are already in the same morphogenetic field with the former and so they live with the latter.

"Actual Value".
Of course, we would have to bring up the whole of the facts and hypotheses (= presuppositions to make those facts understandable) discussed above.

'Criticism' is precisely, in platonic terms, testing for "the real value" of something.

Critics of Sheldrake:
a. he published before his hypothesis was rigorously proven (which in itself, if he published them as pure hypothesis, is not a crime);

b. "His accusers also believe that he is reviving 'pseudosciences' - such as ESP (extra-sensory perception), clairvoyance (in ancient Greek: mantic) and other parapsychological phenomena." (O.c., 50).

Note.--
a. Strictly proven hypotheses are hypotheses when they are demonstrated as real (to the entire scientific community).

b. It is well known that the modern rationalist (who accepts reason only insofar as it presents visible and tangible data for everyone) has all the trouble in the world of accepting paranormal phenomena as real, even if he cannot deny the factuality - the truly experienceable reality - of them. Such prefers his presuppositions to the facts.

Conclusion.-- In the eyes of his critics, Sheldrake's thesis is "unreal," - in the sense of "not reflecting reality. For:
a. the rigorous reality evidence has not (yet) been provided;
b. paranormology (the study of paranormal phenomena) is not yet a science accepted by modern-rationalists,--it is, in their eyes (understand: seen from their presuppositions), "a pseudoscience."

Meanwhile, this proves that Platon's distinction between true science and untrue or at least uncertain science is still valid. Just like Parmenides' distinction between "alètheia" (exposed reality) and "doxai" (opinions), which are mere probabilities.

"What is 'reality'?"
We stay with the same book, Cross-baked Science, 203/219. Rudy Rucker, a former mathematician who has since become a writer of science fiction works (for example: Software), writes an article entitled: "What is reality?".

He begins by stating, "Only two things seem to be truly certain:
a. one exists and
b. one makes observations" (o.c., 203). The rest boils down to a complicated theory on the subject.

Determinations.
a. Scientists wield the word "reality. Usually without delving separately into what can be assumed to be real. Just like that! Uninvestigated!
b. Some, like Rucker, go into it but very superficially. Losing themselves in reflections.

All this indicates that there is room for a separate 'science', namely ontology or theory of reality. For the main question of traditional ontology or 'metaphysics' is still relevant. Proof: the two preceding articles e.g.. Ontology deals with the question: "With what right, 'in the name of what', do we use the term 'reality(s)' both in everyday life and in the professional sciences?".

Existence and nature of something.
Do we read e.g. D. van Dalen, *Philosophical foundations of mathematics*, Assen/ Amsterdam, Van Gorcum, 1978. There the author talks about sets,--one the basic concepts -- elements -- of more recent mathematics, since Georg Cantor.

O.c., 4: van Dalen wants an answer to the question "Do collections exist?"; as well as to the question "Nature of collections". In other words:

a. is there such a thing as a collection?

b. What then is such a collection? Ontologically translated: is there such a thing as a collection or, rather: is a collection something and what is it?

As an aside, a mathematical entity ("something") exists as soon as a logically conclusive definition is found.

It is different with non-mathematical entities.

Reading an apparently sensational report in the New Zealand daily *The Dominion*,-- reproduced in Journal de Genève (Gazette de Lausanne) 29/07/1993, 20.-- New Zealand Prime Minister Jim Bolger is, it seems, afflicted with an evil ability ("un pouvoir maléfique"), which affects his peers irresistibly.

Except for John Major, british prime minister, all the prime ministers who met him lost their posts shortly afterwards.-- His latest victim, in the unwitting sense, is Japanese prime minister Kiichi Miyazawa. This according to *The Doninion* which recalls that, after meeting Jim Bolger, Michel Rocard and Edith Cresson, Socialist Prime Minister in France, had to give up their posts as heads of government.

The Dominion goes on: the Turk Turgut Ozal, the Vanuatu Walter Lini, the Canadian Brian Mulroney, the Australian Bob Hawke, the Polish Hanna Suchoka, but also George Bush, former president of the USA, the Russian vice-president Alexander Rutskoi are on the list of Jim Bolger's unwanted hunt!

Consequence: The Dominion wonders if the invitation that Jim Bolger addressed to Bill Clinton, US President, to visit New Zealand, during next September, is really appropriate.

The Dominion even underlines the fact that Jim Bolger's evil ability goes beyond the realm of International Politics: sport suffers too! He attended the last Rugby World Cup: as a result, New Zealand failed to qualify for the final. So much for the view.

It is not the first time that, in the course of human events, something like "an evil faculty" has been established. Was not one of the XIX-d' century popes in Rome said to possess "malocchio" (the evil eye) by which he brought about mischief?

More than that, that pope was aware that especially Roman circles - not the outside people in Italy - sensed this. Roman mothers, for example, did not want him to bless the children (to prevent mischief)! This is not a frivolous report. Even scientifically trained people - including those who studied "the evil eye" - took this "rumor" about the pope seriously at the time.

The reality question.
Someone is called in French "monsieur ou madame porte-poisse" ("mischief-maker/ mischief-maker"). If one is critical, such a thing is, for the time being, nothing more than a "rumor," a rumor,-- something...that is claimed and told on. Ontologically, the question is: how real is such a rumor? How is that rumor real? -- The existence and essence question, i.e.. 'Real' here in the sense of "reflecting reality".

Content and scope of the concept of reality(s).
To explain that concept pairing, we begin with the expression "All that is" and "real(st)". These are the two conceptual components of the full expression "All that is".-- Applications: "all that is collection"; "all that is mischief(s)".

A.-- The content.
"...real(ish),-- so a.o. collection or mischief(s) ..." The middle term denotes the content of understanding,-- that which is known and thought of when "all that ... is" says,--

B.-- The scope.
"All that ...is". The extremes of the expression denote the extent of the content, i.e., those things to which the concept content applies,--to which a concept "strikes.

Platon.
 M. Heidegger, *Einführung in die Metaphysik*, Tübingen, 1953, 138, says what follows.-- "(In Platon's language) 'ousia' can mean two things.
1. 'Anwesen', presence, of something that is 'present' (op.: given, findable, findable).
2. This present in the 'what' (Note.: being, what it is) of its being-form ("*Im Was seines Aussehens*"), (In the what of its appearance).

P. Fürstenau, *Heidegger (Das Gefüge seines Denkens),* (Heidegger (The Structure of His Thought),), Frankf.a.M., 1958, 118, adds, "Here lies the origin of the distinction between 'existentia', Daszsein, and 'essentia', 'Wassein'." As mentioned above, the mid-century scholastics (800/ 1450) translated the systechy "factuality/ beingness" (contained in the Platonic term 'ousia '('beingness')) thus.

The content and scope - better "the content and scope" - of the concept that occupies the ontology can be outlined as follows.

A.-- *The content.*
This one is existence-and-essence. Both sub-concepts are distinguishable but not separable. For by exposing both aspects (sides) of something, one reveals the reality of it. Does one commit 'alètheia' or 'apokalupsis', revelation.

a. If something was utterly not there (no 'existence', then one cannot say what (essence) it is.

b. Conversely, to be there (existence) something must exhibit a mode of being (essence).-- There is nothing more to be said about the concept of being(s) or reality. All that one adds to this is transgression of ontology.

B.-- The scope. This is "panta" (eo 03), everything.

By what? Because all that exhibits "existence-and-essence" applies to everything. On all factual and even all possible (= conceivable) data. Everything that exists (no matter how) and exhibits being-ness, is ipso facto (= by the fact itself) part of "all that really is". And conversely: "all that really is" exhibits ánd factual existence ánd mode of being.

Note.-- That something is embodies what it is. What something is entails that something is. Note that this is ontological language and not day-to-day or even subject-to-scientific language. By what? Because e.g. a concoction - I think I am an antique statue of a bull (e.g.) - and factually exists (in my imagination) - because such a thing is 'not-nothing' - and is distinguishable by its own way of being from the whole rest of reality. After all, everything which is distinguishable ('discriminable') from the rest has a completely individual way of being.

Application.
What is written just above is the general rule. Now is such a thing practically applicable? Yes!-- An example.-- Just now we saw that some people -- rationalists -- call paranormology "a pseudoscience." The question -- the critical question -- arises:

"How rational (justified) is that assertion? That's the existence question: is there any rationality in that assertion? How is that assertion rational (justifiable)? That is the essence question: if there is any rationality in it, by what means is it distinguishable from the rest of all that is? -- Thus one can go on endlessly about ... everything.

Sample 2.-- From pre-ontological to ontological language use. (10/17)

By way of introduction.
What goes before teaches us that the conceptual content of 'being(de)' or 'reality' includes both actual existence (existence) and mode of being (essence) -- distinct but not separate --,-- that the conceptual scope includes 'panta', everything.

Note.-- A scope of understanding that really encompasses everything is often called "transcendental," (literally: transcending everything), while a non-comprehensive scope is called "categorical.

Language use.
Often ontology is misunderstood by confusing non-ontological language with ontological language.

a.-- For example, we take the concept of collection. -- Everyday language has an excellent knowledge of this word: "I have a nice collection of stamps here". -- But the strictly scientific theory of collection, peculiar to mathematics (especially since Georg Cantor(1845/1918) and the French group Bourbaki, *Eléments de mathématique* (Elements of mathematics), (1939+)), purges this everyday concept. With 'akribeia' (ancient Greek word for 'accuracy'), a definition is elaborated that is rigorously scientific.
b.-- Similarly, in analogous (partly equal partly different) ways, ontology proceeds. It too purges everyday or professional language. Of this we now give a few samples.

A.-- 'Being' and types of being.
A moment ago we were talking about transcendental and merely categorical scope.-- Sometimes -- often more than one might sometimes expect -- even thinkers and intellectuals confuse transcendental with merely categorical scope.

A.I.-- Diachronic.
Thus e.g. "Becoming is not being". -- One can hear e.g. claiming that "the philosophy which works with the term 'being(s)' is incapable of thinking of becoming, development, etc. accurately and truthfully". As a 'reason' it is stated, "Becoming is not being".
Such assertions salvage a fallacy: they project the ambient language into the ontological! In terms of content 'becoming' possesses its own way of being, distinguishable from the rest, and its own existence (its own essence and its own existence). In terms of size, it has its own domain, namely all that becomes.

In other words, becoming is becoming being! Becoming, like evolving, is one type or kind of being which, apart from this becoming being, also includes all that is not becoming.

A.II.-- synchronous.
Here we dwell on several types.

1.-- "Dream is not reality".
This phrase can be heard regularly! But: an oniric or dream reality is not nothing. That so "puny something" can even - just ask experienced psychiatrists or therapists - come across very strongly as "more real than everyday reality." "Fantasms" sometimes control actual behavior much more than the so-called "sensible" things of every day.

In other words: an oniric reality exhibits its own content (existence: in the mind/manner of existence: distinguishable). Immediately the dream refers to its own domain or extent within the total being or reality.

2.-- "Lustprinzip / Realitätsprinzip".
S. Freud, the father of psychoanalytic depth psychology, taught us - within his psychological therapeutic framework of thought that is not the ontological one - the concept pairing "pleasure principle/ reality principle."

Freud starts from a coping couple - the ordinary person suffers from "the uneasiness of (work) culture": going to that same work every morning! - but purifies it and elevates it to a depth psychological systechy.

A hipster man or woman "doesn't like to work," but, within our modern-economic system, where labor represents money and property, they soon experience the nasty consequences: one must eat and drink, wear clothes, live,--not without money!

Again: the lust that is workaholic is its own reality, which, like the dream can determine behavior,-- the reality of the lust. The unpleasant consequences are another 'reality'. Both domains are encompassed by "being.

3.-- "A sign represents reality".
We thus end up in either the semiology of Ferd. de Saussure (1857/1913) or the semiotics of Charles S. Peirce (1839/1914), i.e. the theory of signs.

Again: a sign or symbol possesses a reality of its own, giving it its own existence and its own mode of existence,-- distinguishable from the rest.

A map (metaphorical tasks) and a road sign (metonymical sign) are there "in themselves", really. That to which they refer either metaphorically (o.k.a. similarity) or metonymically (o.k.a. coherence) is another reality analogous (partly identical partly not identical) to it.

A language - the natural, conversational or the artificial - is a collection, resp. system of signs, by convention.

Think of a formula (a 'formula' is a set of signs) like Einstein's: $E = mc^2$ (Energy = mass x speed of light in the square). These, at first glance, unworldly and unrealistic characters "E, m, c, ^{2}" are at the origin of the atomic bomb, because such a 'real-world' formula gives power over nature (and, if need be, over people).

Just as dreams and lust, however "unreal," exercise power, so do the -- unreal to outsiders -- signs of a formula.

Signs,-- in language form, in formula form, are a type of reality i.e. of 'being'. Do we think of the formalized systems (mathematical, purely logistic) : blackened paper, but according to logically strict rules, is not nothing but reality, distinguishable from the rest.-- All this is applied ontology because signs are 'being' types of being.

Note.-- Science is going "from the nominal to the real definition".
A definition or essence describes, as precisely as possible, the content of the concept. And immediately the scope of the concept, of course.

a. The verbal or nominal definition describes within the system of a natural or artificial language: the other words of that language clarify a term. But one remains within the sign system that is the language.

b. The business or real definition also describes but within the system of total reality,--among other things, outside the language system, i.e., direct or indirect contact with the "reality" (= "reality") or "matter" itself.

It is true that the result of that probing contact has to be put into words and thus, in a matter-of-fact, 'real' way, situated within the existing language system. In such a way that the words reflect not only the other words of the language but also and especially the matter itself.-- That is real science, viz. "theoretikè tou ontos" as Platon said (going deeply into what is),-- 'alètheia' (revealing what is 'apocalupsis', bloot, of reality.

Note.-- Let us take a famous novel, namely Heliodoros of Ephesos, who lived, in late antiquity, between 300 and 400, Aithiopika (Ethiopian Fate).

It amounts to a long adventure story, the essence of which is a beautiful, typically ancient love story. The lovers, after all, relive an eros, minstrel life, of a previous earthly existence (reincarnism).

The actants (heroes, acting) are Theagenes and Charikleia.-- For e.g., a historian seeking "a matter-of-fact definition" of what is being told, the question arises, "What is right in the narrative is invented (fictional) and what is right is representation of ascertainable facts in the living world of the time (historical)?"

a. A good work of art is always, in a minimal and essential way, 'fiction' (imagined reality). In this the 'narrativists' (who seek to reduce every story, even the historical, to an imagined construction) are, at least in part, right,

b. But pretty much always that same artwork reflects non-imagined, "historical" reality.

In other words: it is a 'mixed' (partly fictional partly historical) story. - As far as the representation of data present outside the text is concerned, the story realists are right. Note: we do not say "imagination/reality" but rather "imagined reality/historical reality". After all, ontologically speaking, an imagination is a type of non-nothing, 'something'.

Note.-- Three types of modern rationalism.-- "Connubium mentis et rei", marriage between mind (reason) and given. Thus Francis Bacon of Verulam (1561/1626), author of the famous basic work of modern rationalism, Novum organum (1620). In the rationalist spirit, he defines 'science' as 'the control of nature by man'. Here is how Bacon defines rational behavior.

a. The empiricist rationals resemble ants: they pile up factual materials yet without concern for logical consistency.

b. The pure or a-priori rationales, however, resemble the spider who, out of its own body, spins webs,--heretically and even to a certain extent symmetrically coherent, but without caring about testability to facts or usefulness in praxis.

c. The experimental rationales resemble the bee: it obtains the materials from flowers; the design (nectar) it works out for itself.-- "Thus everything can be expected from the close connection of experience (empiricism) and reason (apriorism)."

Thus, it becomes clear that - what Ch.S. Peirce calls "thought signs," i.e. concepts, can be handled in three ways. In particular:

a. empirical rather neglectful,

b. a-priorist rather only presupposed or

c. provided as balanced an experimentalist as possible.

Immediately it becomes apparent that the English father of so-called "English or rather Anglo-Saxon empiricism" was actually an experimentalist.

Note.-- "Positive Thinking."
Three meanings, at least!

1.1. W. J. Schelling (1775/1854), a Romantic thinker within the three great "German idealists" (Fichte, Schelling, Hegel), bases his latest philosophy - he went through stages - not on "concoctions" (as the so-called idealist or a-priority rationalists proceed) but on facts ascertainable primarily through historical science - cultural history in the first place. The presupposition of such "positive or firm 'materials'" he labels "positive Philosophy", in which among other things religions (myths) are given a place.

1.2. A. Comte (1798/1857), the father of "la philosophie positive" or "positivism," put subject-scientific ascertainable facts - from natural science and especially sociology (which he posited as a kind of basic science) - first and not a-priori "ideas" (where "ideas" is used not in the Platonic sense, but in the modern- rationalist sense, for "conceptions" or notions).

Comte saw three capital stages in the course of cultural history: first religion (with e.g. myths), then 'metaphysics' (with mainly conceptions), finally (professional) science, which posits the two previous stages as 'obsolete'. - The latter is a premise that neither Comte nor the positivists ever really got to prove!

2. New Age.-- The "New Age" (French: Nouvel Âge), in its way, puts "positive thinking" at its center. Faced with a task imagine (with a concept or notion) that it will "end well". That's the role of thinking (a kind of self-hypnosis, if you will). This is what the new age pioneers call "positive thinking". In other words: our conceptions or notions are destiny determiners. They co-determine the good or bad outcome of our work activities.

Unlike Schelling's or Comte's positive philosophy, the new age philosophy holds the view that ascertainable facts are found not only in the past but, in the future,

4.-- "Fairy tales are unreal".

The closedness of mind of classical modern-rationalists to all that is fairy tale (myth, legend etc.) is known.

Yet fairy tales, legends, very definitely myths (if religiously understood) represent a reality.

The reason for the "rational unease" is the bizarre. The Spanish 'bizarro' e.g. taught us one type of being. Is 'bizarre' anything at all:

a. for everyday logic and its applications to be 'whimsical' (fantastic, impossible to follow, impossible to make out and

b. is alienating (uncanny, fear - , yes, terrifying). This amounts to one kind of 'wonderment'.

An atmosphere, a work, a behavior, etc. can come across as "bizarre.

One example.

Dr. E. Schertel, *Der Komplex der Flagellomanie* (The complex of flagellomania), in some alternative bookshops, 90f..-- "Very curious things come across when one reads about Pierre Abélard (= Abailard).

Note.-- Abelardus lived 1079/1143 and was one of the most remarkable mid-century (scholastic) thinkers.--"Canon Fulbert entrusted him with his niece Heloise (1101/1164; abbess in later life). For instruction. He was to supervise all her studies. Up to and including 'disciplining' her'.

Note.-- "Discipline," in the early mid-century cultural context included beating (with cane, rod (brush-like stick) etc.,-- accompanied or not by defoliation). "This if she "did not show sufficient diligence".

Heloïse was seventeen at the time and already almost a celebrity for her mind and her extensive knowledge. So that one wonders that, in such a case, physical discipline could still qualify as an eventual necessity or even as something expedient. But the times at that time were in such a state of flogging that one could hardly imagine a human existence without 'flagellatio', flogging.

For Abélard, the affair ended badly: he replaced the flogging with coital elements. Consequence: the enraged Fulbert had him emasculated.

By the way: such "flagellant" relationships between husband and wife were, at the time, really commonplace. They were considered "perfectly decent". So much so that even a saint like St. Elisabeth of Thuringia (= of Hungary: 1207/1231) recruited the Grand Inquisitor Conrad of Marburg (a pious and learned priest) as a regular "flagellator" and thus willingly exposed her "flipside" (behind) to him without feeling hurt in her chastity or her sense of shame.

'Chaste' then was as much as 'without coitus' and as long as this aspect was respected, all the rest was permissible, even among saints." So much for Dr. Schertel.

Note.-- We underlined "one": "one" means "we, in our twentieth century". Who, after the scholastic middle ages, have passed through Renaissance and humanism, through rationalism and postrationalism. We have, inevitably, presuppositions. These function as "spectacles" through which "the facts" are seen, i.e. (re)interpreted. It is not because it seems bizarre, like a myth or a mid-century philosopher's life, that it would not contain (historical) reality. That much 'critical' spirit one should, ontologically speaking, have by now! In other words: 'bizarre' is not necessarily 'unreal'.

5.-- "God is being itself".
Don't we forget it: we are concerned with the distinction between being (transcendental or all-encompassing) and the (categorical) types or kinds of being. One can hear the phrase "God is being itself" quite often.

a. Creationist.
The creationist believes that God creates the rest, outside of God himself ("creatio," in Latin, is "creation"). And this is, as a customary expression says, "out of nothing" (meaning that God creates out of himself as infinite reality or being).

'Nothing' here does not mean "the utter or absolute nothingness". Out of it, nothing arises. From that, God cannot even conjure up a something! 'Nothing' means, here, "nothing outside of God Himself".

This implies that to say that God is being itself is a metonymic expression : "God is being itself" because

a. he himself is source of all possible being and
b. by creating his communicates.--

b. Pantheistic.
The pantheist(s) believes that God and creation, say: the universe outside God (insofar as 'outside' God makes sense here), exist somewhere in one. E.g. through 'ekroè' (Latin: 'emanatio', outflow). God, in that hypothesis, is, fundamentally, not separable from the rest (insofar as 'rest' makes sense here, of course). At most, he is distinguishable from that 'rest'.

Ontological:
a. the general or all-encompassing being is something and
b. divine being, however thought of, is only one type or kind of (general) being. Even though God is omnipresent.

B.-- Being and utterly nothing.

Outside of being, there is absolute nothingness. This expression is actually a figure of speech to express stylistically that outside of all that is, "there is absolute nothing," - with the types of being we remained within being. Now: what to say about that "absolute nothingness"?

The incongruous (absurd).

Another figure of speech is "the incongruous". Is "incongruous" or "absurd" "all that is impossible", i.e., what can be under no point of view. The unthinkable.

"There is an all-encompassing domain of our intentional ('intentional') thinking.-- It is limitless. It encompasses everything.

Reality and unreality. All that is possible and impossible. All that is already thought and all that is yet unthought. All that is contradiction-free and all that is contradictory.

After all, nothing escapes our intentional thinking. Not even that which lies outside of our intentional thinking, for, in thinking that very thing intentionally, it is already intentionally thought". (G. Jacoby, *Die Ansprüche der Logistiker auf die Logik und ihre Geschichtschreibung*, (Logisticians' claims on logic and its historiography), Stuttgart, Kohlhammer, 1962, 11).

The unthinkable can be thought of meaningfully.

Thinking of being and intending to think are, apparently, not the same thing.-- This is shown by "the proof from the incongruent." -- Mathematicians and generally logicians or logicians regularly work with this.

After all, in such a case there are only two possibilities and these are as a model and radical counter-model. Either.... or .... In Latin 'aut' (not 'vel').

Thus one proves that one term or model is impossible (unthinkable), absolutely nothing. With the logically strict consequence that the other term or counter-model is possible, yes, necessary.

Applicable model.

As an example of this general rule the following.-- Asserting that "2 + 2 = not 4; We see -- think -- that this is nonsense, -- absolute nonsense or absurdity. "2 + 2 = not 4" logical-coherent thinking, i.e., as logical sensible thinking, is impossible. Yet we thinkers mean that nonsense. And as nonsense at that. Our intentionally thinking includes and sense and nonsense, i.e. the thinkable and the unthinkable.

Conclusion.

The true extent of "being" (and at once of being theory or ontology) is revealed - aletheia, revelation of what "is" - not in the logically coherent alone but also in the logically impossible.

Sample 3.-- Ontological negation theory. (18/22)

A and non-A. Or: "A is not." Or still: "There is nothing here". And such denials.-- The theme is always: being and nothingness.

Bibl. st.: D. Mercier, *Logique*, Louvain/ Paris, 1922-7, 107s..-- The term 'nihil' (Latin for 'nothing') returns in the term 'nihilism', i.e. the denial of all that is as (higher) value. So - in other words - that all possible (higher) value becomes 'nihil'. This is the strongest denial, of course.

Note.-- As said just above, EO 17: our mere intentional thinking can include this thinking, nihilism. After all, our purely intentional thinking also includes all that is nothing, all that is not - his(de). Even all that is pure nonsense or unvalue or disintegrated being (multiplicity), but then as pure nonsense, unvalue, multiplicity.

1 --Bibl. sample.: R. Regveld, *Heidegger et le problème du néant*, (Heidegger and the problem of nothingness), Dordrecht, 1987.-- Martin Heidegger (1889/1976, Nazi existentialist thinker) is known for his 'Funamentalontology', i.e. "fundamental ontology". This accuses "the entire Western tradition on metaphysics" (from Platen to Nietzsche) of having forgotten being (Seine) in favor of being ('Seiendes').

He sought to establish a "new" foundational ontology. His language is therefore as radical a break as possible with the traditional language of ontologists. He often resorts to poetic language, yes, to 'profundities'. The result is a discussion about the correct interpretation.

"Das Nichts nichtet".

The nothing "not. Traditionally one said, "The nothingness is not." If by this Heidegger means that, outside of being(de), nothing is, indeed, utterly nothing, then anyone can understand this.

But when he introduces the expression "Nothingness is the total otherness of being" ("das ganz Andere zum Sein") or "Nothingness is the total otherness in the face of being", it must first be clarified what exactly he, innovatively, means by this.

Sometimes one has the impression that "the wholly different relative to being" is something enterprising and active,--an active negation. Which in no case can be said of the utter nothingness. If such a thing makes sense, then only when it is said out of the relative nothingness which does not deny absolute being but does deny some type of being,-- a categorical negation.

Dr. J. Grooten/ Dr. G. Steenbergen, ed., *Philosophical lexicon*, Antwerp/ Amsterdam, 1958, 250, says: "Satanism is the view that elevates the negation of all values to some value." O.c., 201: "Nihilism is the doctrine that honors non-being - in an absolute or at least a relative sense." In the field of knowledge, "truth" is thus denied. In the ethical field, the validity of values and norms is denied.

Applied: in the political field, nihilism becomes the justification for any opposition to any form of community life (anarchism, libertinism).-- "The nothingness not"! This is: nihilism, a free choice of the will that endorses negative intentioned thinking with thought, word and deed "not", i.e. denies hollows out all that (value, norm,-- ken value, real community life etc.) is. In this sense in "the other vis-à-vis being (as know-value or truth, as (conscientious affirmation of) all that is valuable,-- as all that is valuable community life etc.)" an active, enterprising power, at the same time within all that is and yet against all that is.-- The German Nazis revealed this.

2.--Bibl. sample*.:* D. Vernant, *Introduction à la philosophie de la logique*, (Introduction to the philosophy of logic), Bruxelles, 1966, 92ss..

Bertrand Russell (1872/1970), known for his anarchic-libertarian human rights doctrine, as well as for his four marriages), in his *Principles of Mathematics*, London, 1937-2, argues that if one claims that an object - 'A' - exhibits "no being at all," this involves "an obvious inconsistency" (inner contradiction or contradiction).

"The expression "A is not" e.g., must always be either false or meaningless. Russell gives a proof from the preposterous: "Supposing A were nothing (which is the counter-model of A), then the phrase 'A is not' could not even be uttered. For "A is not" entails that there is 1. a term 'A', 2. of which every being is denied.

Conclusion.-- "A is". -- Vernant comments: talking about a given 'A' and saying something about it is not possible unless that given represents "a minimum of reality."

Note.-- Russell's reasoning puts an agreement first: as soon as one puts down the symbol 'A' (a blackened piece of paper), there is already a sign. That sign, as a sign, is something. To say of that sign that it "is not there" is to deny it as a sign. As a sign that has already been drawn on paper!

Note.-- What said of "A is not", if 'A' means the utter nothingness or even the utter nothingness as far as actively willed (in the wake of negative intentioned thinking)?

Then the expression "A is not" is valid insofar as it is about utter nothingness, and "A is not" may be valid, viz. insofar as there is no active nihilism.

Of course, with that interpretation of "A is not" we find ourselves outside the merely semiotic or sign language of logicians and mathematicians,--in full ontology.

So much for absolute nothingness and what can be related to it. - Now we turn to the relative or relative nothingness (which is categorical).

Transcendental or all-encompassing - absolute - being can never be denied: as soon as there is being, being must be affirmed ("What (so) is, is (so)").

That transcendental being can never be denied is shown, in passing, by the fact that absolute nihilism can be adhered to with the will but never denied, insofar as the will is a fact: "What is nihilism is nihilism.

1.-- The pure denying nothing.
"Nihil negativum" in scholastic, mid-century language.-- The pure negating nothing denies (a mere description of) a given.

Appl. model.-- Someone, out of curiosity, opens the door of a room. He/she sees "nothing. Unless the walls, of course. No chairs, no cupboards,-- certainly no persons. This is expressed in 'negates', (denying judgments).-- He/she summarizes, "In that room there is nothing". This is a relative or relative nothingness.

Actually, a figure of speech in which the restriction or caveat is concealed: "In that room, as regards furniture or persons (= restrictive judgment), there is nothing."
Strictly ontologically, however, there is 'something'. a. material space to live in, b. space to store in, c. air with bacteria and such to breathe in. Ontologically, that 'empty' room is full of all kinds of realities!

"There is no such thing as race.
An issue of the professional science journal Eos, during 192, says what follows.-- "One of the arguments against racism is undoubtedly that the concept of 'race' is for human beings -- biologically speaking -- a completely meaningless concept."

Eos shows that the genetic differences between the 'races' are too small to keep the classical division of people into 'races' - which do not exist biologically - alive any longer. Eos shows even more: the genetic differences within the same 'race' are - in many cases - greater than those between the 'races' themselves.

Which amounts to a scientific rationale for removing the very concept, "race," from our vocabulary as quickly as possible.

Ontologically expressed: the concept, "race; concerning people, is "nothing. Unreal, i.e. not a representation of reality.

Note.-- The concept of race comes from the pre-scientific language. Thus, as far as people are concerned (notice the restrictive or reserved), this concept has been purged to the point of being excluded! It has been -- to speak with Platon -- introduced as a lemma (a concept to be defined) and, after analysis, discarded ('falsified' one would say with Karl Popper's (1902/1994) *Logik der Forschung* (Research logic), (1934)).

God creates absolutely and relatively.
Cfr. EO 16 (Creationism). -- In the creationist hypothesis, God creates "absolutely" in terms of creation (the actual universe with all its possibilities) as a totality.... -- But he also creates relatively.

Vladimir Soloviev (1853/1900: Russia's greatest thinker) puts it as follows.
He interprets the evolutionary hypothesis put forward by Darwin and others (the development of life species from one to another) radically Biblical. After the creation of matter-without-life, God introduces, at a given moment, the realization of an idea (understand: objective basic pattern) of 'life' which has existed in God's mind for all eternity. Immediately, within a purely inorganic biotope, life arises.

Likewise when, within the world of living (plant and animal) beings, he realizes the idea of "man" (present in his mind from all eternity).

Conclusion.-- Within the totality of creation, God, through relative creation, introduces life (plant, animal) and humanity.-- God's 'creativity' founds, renews,-- restores. In this creationist perspective, our creativity is a "participation" in God's creative power.-- Where first there was "nothing," creativity founds "something.

2.-- The robbing or missing nothing.

"Nihil privativum", in scholastic Latin.-- Being, reality, which, normally, should or would have been there, is denied as absent. Here, at least covered up, a value judgment is made.

Appl. model.

Someone has died. Next of kin open a room, where - it seems - father/grandfather left securities, money, jewelry and the like.-- One finds nothing! Disappointment!

"Life,--that is three times nothing.

The frustrated man can be heard saying this phrase.-- "Three times" is a figure of speech for "whole and all. The axiological or value conclusion of life is expressed in it,-- In the mentality of New Age (EO.14), such thinking that emphasizes, indeed, exaggerates, the puny, is a kind of "negative thinking" that further aggravates the future.

Physical and ethical evil.

A natural disaster is an example of physical evil. Sin, cynicism toward others, e.g., are examples of ethical evil.-- 'Physical' (from 'fusis', Latin: natura) is "all that lies in nature itself". 'Ethical' (from 'èthos', attitude of mind) or 'moral' (from Latin 'mores', morals) is "all that has its origin in the will itself". Confronted with natural or moral evil, we react by noting that there is no good or value. With respect to good, there is nothing (that was expected).

The three time extensions.

Bibl. st.: B. Kuznetzov/ C. Fawcett / R.S. Cohen, ed., *Reason and Being*, Dordrecht, 1986.-- "The past is no more; the future is not yet there; the now is a kind of zero boundary between the two." -- This statement reduces the three temporal extremes (Heideggerian term) to 'nothing'.

Note. - Viewed in the narrow sense, i.e. the reality present in it, the 'now', which we experience from moment to moment, is more than a mere 'zero border'. Projected on Cartesian coordinates, the 'now' does somewhat resemble a zero boundary. But that is only an analogy (partly the same partly different). But as a figure of speech for exaggeration (in which frustration does shine through) it is not bad.

God recreates.

The Bible - e.g. S. Paul - says that, as a result of the Fall (ethical and physical evil), God acts in a creative way. Where first there was lack - nothing that was not expected - there He creates something.

Sample 4.-- The ontology of the laws of being (23/28)

1. A law, in this context, is a judgment that applies to all (possible) cases. Restrictionless! Without reservation. Everywhere and always. Unconditional.--Is there so at least a single law that applies to all that is (so)?

2. Judgmental doctrine.-- After the doctrine of understanding (EO 08v.), a piece of judgmental doctrine.

 Concepts, expressible in terms, are pieces of reality as far as they are in our minds. Except, of course, the concept of 'being' for that includes all possible "bits of reality". 'Being' is, after all, transcendental or all-encompassing, while concepts not expressing being as such are 'categorical'.

The identitive structure of each judgment.

The term "identitive" means "anything that has to do with singularity or identity. We explain this through examples.

1.-- Judgments incorporating the verb 'to be'.

a. "The truth is the truth".

a.1. Subject and predicate (model theory: original (= subject) and model (= predicate)) are seemingly the same. As mere conceptual content, yes! But not as function or role played.

The 'proposition' (= judgment, statement, assertion) includes something that requires explanation (information) i.e. an 'original'. In any judgment, that is the subject.

That same proposition includes something that informs or informs, i.e., a "model. In any judgment, that is the saying.

a.2. Here it is the same concept twice, i.e. 'truth'.

In terms of content, regarding the subject as a separated reality within being, one learns nothing. But what one does learn is the fact that, if there is truth, there is truth. The original, in this case, is the identity of "truth" as reality.

Counter-model: "Truth is not truth!" Anyone who consciously utters this is lying. Is dishonest with the reality that is e.g. truth. Immediately that lie shows lack - lack (EO 22) - of reverence that should have been there. In other words: ontology is inseparable from ethics or conscience.

Logically speaking, one says that, under identitive point of view, in the said sense there is total identity or overall identity. Truth, after all, coincides entirely with truth. Which is also called 'tautology'.

b. "That statement is partially true.

    a. Here subject and predicate are distinguishable.-"That statement" and "is partly true" are opposed to each other as original (which asks for explanation or information) and model (which provides information).

    b. Identically they are an instance of analogy. or partial identity or partial identity. Is after all 'analogous' all that is partly identical partly non-identical or different.

    As an aside, the saying includes a restriction or caveat: it does not say "is true" but rather "is partially true." This shading or nuance easily escapes those working without akribeia or accuracy.

    c. "To claim such a thing is to lie.

"To claim such a thing" stands for "this utterance" and "is lying" stands for "is false." In ontology, what matters first of all is the content of understanding,--not symbols or signs standing for possible realities (as in abstract or literal mathematics or as in symbolic logic or logistics).

'Untrue' is a negation. With this, identitively speaking, we face a case of total non-identity or total difference.

In this case: that assertion is plainly (restrictively, unconditionally, unreservedly) false.

Identical Conclusion.

"Totally identical/ partly identical (analogous)/ totally non-identical" is a differential that goes from "partly yes" to "partly no". With just one middle term "partly yes partly no".

2.-- Judging without (explicitly) 'being'.

For example, "John walks." The subject, original that asks for information, is explained by the proverb, model that provides information, under just one point of view, i.e. 'walking': "John walks". There is much more than that to be said about Jan but, within the limits (restrictions) of the sentence in question, one limits oneself to a portion.

Identitively, then, there is analogy: the reality "John" is only partially identifiable with the reality "walking. Both terms can be employed in many sentences that include other concepts.

In passing: a number of traditional ontologists - not without serious reason - translate explanatory: "John is walking". Just to insinuate, after all, that the verb "to be" is - against all appearances - unnoticed along when one allows other verbs "to be" to function in the proverb.

Parmenides' teaching.

See above EO 03.-- "Necessity is to say and think that being is" (6:1).-For the identity of reality is at stake: "Being is itself and remains itself and it is there according to itself" (8:21).-- "Kath 'heauto", according to itself (and not according to something else, i.e. o.m. according to us). Or : "objective".

A being axiom (in three articulations).

'Axiom', in ancient Greek, is "all that, by its intrinsic value, compels inference." -- Translated: '(basic) premise'.-- We explain.

1.-- The one-person law or identity law.

'Singularity' is "the fact that something coincides with itself." -- In the wake of Parmenides of Elea, Platon says (Sophist dialogue 254d), "Auto d' heautoi tauton". The stranger, in whose mouth Platon puts this expression, is thereby saying, "Something, insofar as confronted with itself, is the same (= coincides)."

With G.Jacoby, *Die Ansprüche der Logistiker auf die Logik und ihre Geschichtschreibung*, (Logisticians' claims on logic and its historiography), Stuttgart, Kohlhammer, 1962, one can say, "Every reality as reality coincides with itself,--is with itself totally identical."

The traditional articulation of the identity principle reads, "All that is, is" (existence judgment) or "All that is, is so" (essence judgment). In one, "All that (so) is, is (so)". For essence and existence are distinguishable but in no case separable. Cfr. EO 09.

Note -- Tautology.

The term "tautology" has more than just one meaning.
a.1. "I am happy and content." -- This is a figure of speech: an emphasizing repetition (think "I'm happy, happy!").

a.2. "The man was tired. The man was tired,. For .... He was tired". This is a 'redundant' or 'redundant' figure of speech. One lapses into tedious repetition (instead of underlining repetition e.g.).

b. In logistics (mathematically constructed logic), a "tautology" is a law: "A statement that is true in all cases (regardless of the truthfulness of its parts.)

For example, "p and q ---> p"(semantically translated: "If p and q are (un)true, then p (taken separately) is also (un)true").
Ontologically understood, the identity law is a "tautology.

"A is A" -- Note that the first 'A' is subject (original); the second 'A' is proverb (model).-- It is one application of our law!

The reason for this law can be expressed as follows: about the total identity of the concept (and the reality denoted by it) 'being(de)' - the original - can be spoken of only

in terms of 'being(de): With anything else than 'being(de)', 'being(de)' cannot be explained (elucidated).

When a Heidegger says "Das Sein - sein lassen", then that sentence must be interpreted in something like that meaning.-- When the positivist Comte says "Facts are facts", then he applies, on a stellar (= positive) plane - the domain of the subject sciences - , what the ontological law of identity says.

Note.-- We saw a moment ago that honesty and reverence are presuppositions of affirming all that is (so).

This implies that ontology is the foundation -- the "founding" -- of ethics (morality). Without reverence for all that is, insofar as it is,--without the honest acknowledgment of it, morality is not conceivable.-- There is, in other words, more to the greater affirmation of all that is insofar as it is, than pure critical detachment.

Immediately, the person who affirms acknowledges that the identity axiom is "his/her/its". There is commitment or involvement in it, -- at least when that endorsement is sincere and honest.

Note.-- Not only does ontology "ground" ethics. It also founds logic.
Every logic or logistics incorporates into its axiomata the law of identity. Without which it cannot even function!

Imagine that, in the course of logical theories or praxis, 'a' would suddenly be identical, totally identical with 'non-a'! No reasoning, the core of logic and logistics, is possible anymore.

2.-- The law of incongruity or contradiction.
We already saw it, EO 17 (The utter nothingness): our intentionality - our consciousness intentionality - includes both model (utter being) and counter-model (utter nothingness).
The absurd (nonsensical, impossible, unthinkable) can be meant as absurd or incongruous nonetheless.-- The identity of 'being(the)', has a counter-identity that does not exist!

Already Parmenides of Elea tried to express it as follows: "It is or it is not utterly (8:11); "It is or it is not" (8:16).--

The phrasing.
"All that is, is and cannot be simultaneously and under the same point of view not so" (existence judgment). -- "All that is, is, and cannot be simultaneously and under the same point of view not so" (essence judgment).
In one: "Being and being like that can never, simultaneously and under the same point of view not be and not be like that".

The primal or first dilemma.

"Is Jan there or is he not?". To speak this way is to formulate a dilemma (two and only two possibilities). One sees immediately that that sentence is an application of what has just been expressed as a law of contradiction.

More generally, "Model or counter-model," understood in the contradictory sense.

"White-and-not-white.

Two house painters stand in front of a "white" wall. Attentively they observe its whiteness. One says: "Well, that wall is white-and-not-white"--this is apparently a figure of speech to express the mixed character of the 'white-on-first-face': "The wall, if looked at more closely (= restriction, reservation), is (at first sight) white and (on closer inspection) not white." Short : "white-and-not-white". If not pure-white.-- That has nothing to do with the contradiction principle.

Note.-- The nihilist(s) can, of course, pretend that the law of contradiction does not concern him/her! But then they logically-epistemologically (to reality, as far as honestly and respectfully agreed) recognize the principle, while with the will, dishonestly, irreverently, they disregard the law. This is invariably the profound freedom of the human mind.

Note.-- There are logical (logistic) and mathematical systems conceivable that accept (explicitly state) the identity axiom but not the contradiction axiom.

In that case, they actually apply it without explicitly stating it in the axioms of the beginning.

Note.-- Marxists, o.k. the 'dialectical' (working with opposites) thinking, regularly speak of "interpersonal contradictions". In doing so, they prove that the contradiction axiom is a more than mere life-affirming thing.

An applicative model.

The European currency system went through a crisis during the summer of 1993.-- Specialists claim that at its core was "a contradiction." Specifically: between the German and French economies.

Germany, under the pressure of the financial burdens of the unification of West and former East Germany, wants to make up the budget deficit, among other things, by keeping interest rates high. France, on the other hand, despite a fundamentally sound economy, needs lower interest rates (which are kept artificially high).

This is to boost its economy (in recession) and immediately fight unemployment, among other things.

Conclusion.-- So within the same economic (monetary) system there is at least a limited 'contradiction'. - In this well-defined sense, the Marxists are right: such a thing as an economic (and immediately political) 'contradiction' really does exist.

3.-- The law of the primal dilemma (excluded third).
The basic dilemma says: there is only choice between model (being) and counter-model (non-being), Well, a dilemma ('dis' (twice) + lemma) that would include a third (or more) choice (hypothesis) destroys itself. After all, it is only "either-or".

The wording: "Either something is (so) or it is not (so): there is no further possibility". This is commonly called: "the law of the excluded third".

We conclude.
With this last chapter on the basic judgments (axiomata) that govern being (and non-being), the foundation of ontology has been laid. Since, in our interpretation which is the classical one, philosophy is essentially ontology, the footing of what follows, three years on, has been laid.

That this is so is shown by what follows.
O. Willmann, *Abriss der Philosophie*, (Outline of philosophy,), Wien, 1959-5, 453, cites Aristotle (Metaph. 10:2; De intrerpret. 3, in fine).
'Einai', being, is not a 'semeion' (creature characteristic) of some separate fact.

Consequence: when one says of something (particular) that it is 'on' (being), then this is a 'psilon', an empty term, for with it one says nothing about that something that refers only to that something. Only in connection with another term does 'einai' (its) meaning".

Appl. model.
a. If I say   "That girl is there", it means, with respect to that specific girl, that she is there, but I don't know anything special about her that distinguishes her from the rest. Of something saying "that it is", one can say anything (as long as it is something).

b. But when I say: "That girl over there is -- Mieke and she is about to get married" only then I am communicating something special (categorical) that is 'semeion', essence, hers and hers alone. Only then do I say real information that concerns Mieke.

Conclusion: 'Being' is thus a categorically empty term.

Sample 5.-- Names: ontology, metaphysics. (29)

Do we nevertheless dwell for a moment on the names of the profession that we are now beginning to see through in its fundamentals.

1.-- First philosophy.

Aristotle of Stageira (-384/-322), Platon's student, called what we now call ontology or metaphysics, "first philosophy." His definition: to study "being as being"! This is: to fathom reality insofar as reality.-- Not this or that being, not one or more kinds of reality! No: all that is being without more.

Since: reality is the basic concept that makes all other concepts possible, it invariably comes first. Even when one does not think about it.

The study of reality as reality is, fundamentally, the presupposition of all possible forms of knowing and study. After all - Aristotle reasoned - what is a scientist worth if his understanding of reality is plainly confused, indeed sometimes thoroughly wrong?

That is also why he called that "first philosophy" also "wisdom" (i.e., insight into human and divine things, i.e., into all things), because the deities know "everything" ("panta") and humans share in that divine knowing.

2.1.-- Metaphysics (metaphysics).

Andronikos of Rhodes (between -100 and 0), a peripatetic or Aristotelian thinker, arranged the works of Aristotle in a particular order.

First, what were then called the "physical" (natural philosophical) works. Then, for the sake of difficulty, the ontological ones. Title: "meta to fusika", "after the physical". -- This name which at first indicated a pure order, became by a play on words -- 'meta', in ancient Greek, can also mean 'above' -- the name for the works which did not merely extend after the physical (visible and tangible etc.) but reached above it.

Since 'everything' extends above all that is not everything, the ontology can be called such.-- In Latin: 'trans.physica', which extends above 'physics'.

2.2.-- Ontology.

This one is the best of the three! But, as it still happens, it came late. Johan Clauberg (1622/1665), a Cartesian rationalist with Platonic influences, was the first to introduce that name.

He displays the best. By what? Because he mentions the term "on(t)," which, in ancient Greek, means "being.

Sample 6.-- Transcendental ontology. (30/35)

One can also speak of "general ontology" but, because "general" here is "radically general" or "transcendental," the term "transcendental ontology" is the best one.

Now that the basic concepts (existence/ essence) and the basic judgments (to be is to be) have been clarified, we will go deeper into the all-encompassing aspect.

In doing so, we note, again, how religion paved the way.

1.-- 'Panta' (all).

All being. All things (in ontology, the term 'thing' is the same as 'something'. With perhaps the emphasis on thinkability (with some)).

a.-- "Panta" in Homer.

It is believed that Homer - in Ionia (Asia Minor) perhaps - lived between -900 and -700. His name is "the blind man." Yet, at least as a poet, he behaved like a seer. 'Mantis', the one who sees, -- much more thoroughly and much more than the non-sighted fellow man who is not so gifted, is -- with the cooperation of the deity -- capable of 'a.lèheia', of wresting from oblivion or 'revealing' all that is ('truth'),-- of 'apokalupsis', revelation. Thanks to his "expanded consciousness" ('mnèmosune' or also still 'anamnesis').

Iliad 2:485.-- "Tell me now, Muses - Mousai - who occupy the Olympic dwellings, for ye are goddesses. Steadfastly present. Thou knowest panta, all. We, however, hear only a 'kleos', an untested rumor, and know nothing (....)." So much for the text.

a. Muses, as goddesses, i.e. higher and highly gifted beings, are characterized by 'parousia', omnipresent presence. ''Pareste,'' literally says the text.

b. Precisely because of this parousia, presence with reality, they possess an informed "expanded consciousness" and "know everything."

Prayer.

The fallibilism or fallibility consciousness of archaic humanity - we hear only kleos, untested rumor - turns to the deity, who is omniscient.

The "blind seer" (i.e. blind as a mortal but a seer as enlightened by the Muses) therefore prays from the outset for "a good work" (i.e. a solid work). An archaic poet does not only write "beautiful verses" (like the present ones). He is at work as a seer in that work of writing verses.

b.-- The ontology as a theory concerning all that is.

(i.e., everything which is 'something', anyway), is talking, matter-of-factly, i.e., according to the object, about the very same 'panta', everything which a poet like Homer was talking about. For as a method, ontology - insofar as it has remained a real 'ontology' as in Parmenides for example - shows precisely the same method, namely, the ontologist 'sees' the being as being. He reveals what he 'sees'.

He commits - so to speak - 'a.làtheia', truth concerning the being. He brings the being out of its hiddenness ('lethè' is 'forgotten', 'oblivion'). Just as the poetic seer uncovers the destinies of men and deities, of the universe.

And yet: the difference is striking.-We just said "the fates of men and deities, of the universe." Poetry, in the archaic-sacred ('sacred' means 'consecrated') sense, is first and foremost concerned with fate. Fate is all that happens to us. All that happens to people. All that happens to deities. All that happens to the immeasurable natural framework in which people and deities are situated. Fate is the history that we - humans, deities, universe - go through. Fate is a temporal thing.

The ontology of a Parmenides is first of all "applied logic". Logic is thought theory. Instead of creating poetry, the ontologist "thinks. He thinks the people, the deities, the cosmos.

Result: abstract concepts to represent the people, the deities, all things that make up the 'fusis', lat.: natura, nature as the totality of all that is. Result: with Parmenides, the form of poetry, the pure form, still remains but the content is not an epic, a mighty appealing story, as with Homer, but a treatise, a 'theory'.
Abstract-logical thinking was immediately - and forever in the West - born!

'Panta', all fate. Yes! But the ontologist sees them as 'panta', all being. As all that is given... to the thinking mind. Who traces the similarities and the connections. In other words, which first of all looks for logical connections (similarities, connections). And translates them not into a (powerful) story but into an 'exposition' (theory).

We say, "translates. Yes, because the mighty unfolding of destiny stiffens into the solidified frame of mind in which destiny must play out.

A question arises: where are the fates now?

2.-- "All that was, is, will be".

Nay: the fates were cast beforehand with the poets -- in an abstract-logical form.

A J.P.Vernant, *Mythe et pensée chez les Grecs*, (Myth and thought among the Greeks), I, Paris, 1971, 82, says: "The same terms serve, in the works of Homer (Iliad, Odusseia), to represent the seer skill of Kalchas, the seer, and, in the works of Hesiod of Askra - Works and days, Theogonia - to represent the role of Mnèmosune; Remembering,".

As an aside, the best translation of "Remembering" would be "consciousness expansion. Expanded consciousness of the one who sees more and differently than the ordinary mortal. Remembering is also the goddess-causer of everything that in humans, mortals, is one or another form of expanded consciousness. For example, a premonition that comes true. So also the intuitive contacts between mother and child. Likewise, the sometimes extremely true words of a card reader who, at times, provides extremely accurate information,-- God knows how.

In other words: what Commemoration is, she causes. In this way she is not only an 'Urheberin' (cause-giver, as Nathan Söderblom once said), but also a 'Funktionsgöttin' (Usener), a goddess who exercises a 'function' with regard to one or another domain (here: the broadening of the daily mortal consciousness).

Vernant: "Remembering knows - and expresses in song - all that was, all that is, and all that will be."

Read Homer, Iliad 1:70 and Hesiod, Theogonia 32 and 38, and thou wilt see it very emphatically stated.

Mnémosunè, a term similar to 'anamnesis', lat.: reminiscentia, orderly memory, thus possesses a knowing of "being-in-the-time-dimensions" viz. past being, present being, future being.

Here we grope for destiny. Knowing destiny amounts to knowing being as past being - no longer being -, as present being - being for a moment now - and as future being - not yet being - . 'Time' is like flowing 'being'. Time flows forth. That is: being flows forth!

Mnémosunè was considered the leader of the Muses.-- Muses and commemorators are a group of introducers of "enlightenment" goddesses. "Urheberinnen des Gedenkens" to speak with the religious scholar Söderblom.

Consequence Homer, Hesiod and others receive inspirations from the main goddess and / or her Muses.

The outworking is: the poet/seer lives through - carried by, encompassed by, directed by the goddesses - with the goddesses, a direct perception - 'theoria', penetrating perception - of all that was before ("ta pro t' eonta"), all that is now (ta nun t'eonta"), all that will be ("ta t' essomena"). Immediately we have the truly antique-Greek terms.

Vernant: "The poet knows the past because he possesses the ability to be there himself in the past as an eyewitness." (O.c., 83). This is because the goddesses 'animate' (carry/ encompass/ direct) him who are themselves 'parousia', presence.

As far as being in the past is concerned, remembering - one of the meanings of 'Remembering' - , seeing, knowing are basically just the same. Concerning the present: to realize from a distance, to see, to know. Concerning the future: to see (in advance) and predict, to see (in the future), to know (in advance).

That is commemorator and her Muses: expanded consciousness. A consciousness that is so 'pante', all the fates, all the being passing in time,-- all that was before, all that is now, all that will be, as an eyewitness 'near' - parousia, anamnesis -, that is precisely in an archaic-sacred culture poetry. Thus also began, but instead of being destiny-description (narrative), destiny (expounding, trading), the ontology.

So that our fear - that the flowing course of time of the epic literature would be lost in the congealing negotiation of being - is actually unfounded, -- at least if we remain at the very origin of Western thought, i.e. where the story of fate grows into the science of fate.

We want to attempt in this course to keep the two together. Such that the theory never lets go of the event. But also so that the event never lets go of its appropriate theory. A destiny without an understanding that makes that destiny transparent is a dull destiny. An understanding that does not reflect a fate is an empty understanding. Fate-and-fate understanding go hand in hand. That is real living ontology. It is ontologically implemented destiny.

The necessary preliminary work.
People who are out of touch with all that is expanded consciousness often think that "inspired" living relieves from all effort. The poet should just let himself be "carried, encompassed, governed" by some goddess! (= naive).

In archaic-sacred civilizations, neither seers nor poets go about their business in this way! Vernant is also explicit. "Being an eyewitness of the past, direct revelation, divine gift, -- all those characteristics which the inspiration of the Muses and of Mnemosune, Memory, exhibits, do not exclude the poet from being prepared for it adamantly: being a seer is learned, practiced."

It is evident that doing ontology is learned, practiced. That's what true philosophy has always been.

Traditionally update.
This includes the relation "teacher, pupil."-- The term -- common among the rhetors or eloquence teachers, for example -- "paraphrasis," recantation, comes in handy here. In ancient Greek this can have two meanings:

a. saying with other terms (including one's own terms), explaining (commenting, interpreting) law others say;
b. distort the meaning of what others say.

In model theory terms: an original (what others claim) is expressed in terms of a (different) model (what one claims oneself).

Vernant, p.c., 83 : when the poet - while 'singing' (i.e. founding poems) - improvises, this does not exclude that he does so on the basis of an accurate representation of a poetic tradition handed down from generation to generation."

We call this "updating tradition". To 'actualize', in this context, is to interpret all that has been handed down, within the actual or present situation,--although in such a way that one remains within the basic assumptions of the tradition. One does revise, if necessary with one's own, yes, new words, but one respects what has been established in 'principia', presuppositions.

It is immediately evident that the ontologist takes an analogous, partly equal partly different, path: he speaks the language of tradition but adapted, fitted into a new - e.g. our postmodern - time frame. We call this "ontological paraphrasing".

Note -- Reference is made to:
-- C. Rehdantz, Hrsg., *Demosthenes (Eight philippic Reden*), I, Leipzig, Teutner, 1865-2, 109/133 (Rhetorischer und stilistischer Index);
-- E.Amon/ Y. Bomati, *Vocabulaire du commentaire de texte,* (Vocabulary for text commentary), Paris, 1993;
-- id., *Vocabulaire pour la dissertation*, (Vocabulary for the essay,), Paris, 1992.

The "big" (transcendental) story.

The total content of every expansion of consciousness is - what we may call with the postmodernist François Lyotard (1924/1998) - the all-encompassing or great story.- - in particular: the beginning of cosmic (the history of deities and of human beings) history is the stake - 'archè', understood here as "the all-controlling origin" - of an unfolding 'being', in which we are situated with our destinies. Towards a future.

1.-- Homer, 2: 484v..

"And now tell me, Muses, who inhabit the divine dwellings of Mount Olumpos - for thou art goddesses, omnipresent in all things, while we hear only rumor and know nothing - , tell me therefore who were the guides, the leaders of the Danaërs."

2.-- Hesiod, Theogonia.

1/5. "Beginning with singing the helikoniadic (inhabiting the Helikon mountain) Muses, who inhabit the Helikon, the great and divine mountain. Often - around the spring with its gloomy waters and the altar of the primordial Kronos son (the supreme god Zeus) - they dance with the beautiful feet (...)"

22/23.-- "It is they who once taught Hesiod a beautiful song as he herded the sheep at the foot of the Helicon."

27/32.-- "(...) 'We can tell imaginary things that seem very and very real. But we can also, if we wish, proclaim true things". Thus spoke the here-and-now truth-telling daughters of the great Zeus (the Muses). As a scepter they offered me, Hesiodos, a beautiful branch, torn from a laurel in bloom.

Thereupon they gave me a song inspired by the deities so that I might glorify "ta t' essomena pro t' eonta", all that will be and all that was before."

Conclusion.-- All being, 'panta', "ta pro t' eonta, ta nun eonta, ta t' essomena", all that was, is, will be.

That is, in fact, the totality in its synchronic and its diachronic dimension.-- When philosophy cultivates the pretense of being able to think everything, this is a paraphrase of poetic-mantic speech. The goddesses stand at the origin of the transcendental or all-encompassing aspect of philosophizing as conceived, since Parmenides, mainly by Western thought. Diachronically this means that one can construct a 'big' story in which all 'small' stories - our fates for example - get their place. Truly a great pretension!

Sample 7.-- Modal ontology (36/43)

Actually, the term "modal ontology" is incorrect: "ontology concerning modalities" would be a correct term.

By way of introduction.

The term "modality" exhibits ambiguity.

a. Phenomenological

(e.g., in Hegel's sense), "modality" means the form or guise in which something can appear: those who trace the "forms" or modes of appearance of human reason, in the course of cultural history, mention the various "modalities" of that reason.

b1. Spelling.

The "form" in which the utterance of a saying within a sentence or judgment can be cast. Thus: a. "It is raining". b. "It may be raining". The first sentence is modality-free; the second exhibits the modality 'potentialis' (possibility), expressed in the term 'perhaps'

b2. Legal.

A legal act may exhibit a modality, i.e., some kind of reservation. In the grammatical and legal sense, a reservation or restriction is at work. A statement (speech) or a judgment (law) does not apply unconditionally or "absolutely" (utterly) but "subject to reservation or restriction. Thus: a marriage contract applies "under proviso" (an additional agreement), i.e. conditionally, not unconditionally.

In this connection, reread EO 23.-- A law applies restrictively! Without more. Without any condition.-- So that, in the doctrine of judgment, a modality is present in a statement, when from the subject the saying is pronounced with reservation.

Ontology of modalities.

Here is the immediate list: necessary - non-necessary (subject to, possible) - necessarily not. "Non-necessary" is also called "accidental" or "contingent".

Models.

a. It is necessary that a, a is (because of total identity of a with itself).
b. It is possible that a is equal to b (because of partial identity),
c. It is necessary that a and non-a do not coincide. Or rewritten, "It is impossible that a and non-a coincide": One can also rewrite, "It is absurd that ...".

Bibl. st.:

-- G. Jacoby, *Die Ansprüche der Logistiker auf die Logik und ihre Geschichtschreibung*, Stuttgart, 1962;
-- O. Willmann, *Abriss der Philosophie*, Wien, 1959-5, 73 (Modalität), 76/80.

Logical modalities.

'Logic' we understand here as 'reasoning theory', i.e. the doctrine concerning inference.-- Platonically speaking, two main types exist:

a. the deduction or 'sunthesis' and b. the reduction or 'analusis'.

Do we take the schedule of both according to Jevons-Lukasiewicz.

A.-- The deductive reasoning.

If A, then B. Well, A. So B.

Appl. model.-- If all girls are beautiful, then so is this and that girl. Well, all girls are beautiful.... So this and that girl among others are beautiful.-- The inference B follows necessarily from the prepositions "If A, then b" and "Well, A".

Collection theorem: if all (universal collection), then some (private collection). Or : from generic to specific (in the old language).

B.-- The reductive reasoning.

If A, then B, Well, B. So A.

Appl. model.-- If all girls are beautiful, then among others this girl and then that girl. Well, this girl are -- girl are beautiful. So all girls are beautiful.

The inference A does not necessarily follow from the prepositions "If A, then B" and "Well, B". In other words: it is not because two girls are beautiful that it necessarily follows that all girls are beautiful!

As an aside, this scheme is the scheme of induction or generalization.-- One sees the ontological modalities emerging at the very heart of logic as a theory of reasoning.

Note.-- The tripartite nature of I. Kant (1724/1804; top figure of the German Aufklärung).

a. Assertive judgments.

"It is raining" One neutrally states that something - raining - is a fact ("assertio" is pure assertion).

b1. Apodictic judgments.-.

"After rain, the landscape gets wet". Even if the necessity is not literally articulated but is subsumed, as in this sentence, still there is (here: nature-given) necessity ('apodeixis' is proof(force)).

b2. Problematic judgments.

"Perhaps it is raining." -- In Kant's language, "problematic" (from "problèma," the demanded) means a possible fact.

Conclusion: Fact, necessary fact, possible fact. One recognizes, somewhat, the time-honored ontological "tropoi" (Greek) or "modi" (Latin), i.e., modalities.

Possibility.-- *Bibl. sample :* John Cohen, *Chance, skill and luck (The psychology of guessing and gambling),* Utr./ Antw., 1965, 165v.;

-- Ton Maas, *Dwarsgebakken wetenschap*, Amsterdam, 1988, 121 (Stochasticized world).

As an aside, 'stochastic' (from the antique Greek 'stochastikos' which means, among other things, "based on guesses") is all that is determined by chance and thus knowable only on the basis of guesses.

In this context: 'at random', in English, means 'at haphazard' or 'based on pure chance', while 'randomize' means, among other things, 'to classify randomly into a group'. Indeed: a world or universe in which "chance" governs the phenomena is a world of the modality "possibility. The incalculable, the unpredictable involves putting a multitude of possibilities or "stochastic variables or factors" first.

The term "probably".

J. Cohen, *Chance, Skill, and Luck*, mentions a fascinating experiment.-- A test of interpretation, viz., conducted by ten-year-old girls.

Given: "What does the sentence "It will probably rain" mean?
Requested: the proper sense, especially of the word "probably.

It is clear, right away: the girls had to delineate the given sentence against the background of the phrase "It will rain" (a restrictionless assertion).

Results.-- Here are some of the answers.

Girl 1.-- "The word 'probably' means that it could or might rain. Or : that it is very plausible either that it will not rain".

One notes the groping of this girl: "maybe" is less likely than "probably"; "very plausible" is too likely.

Girl 2.-- "It is very plausible that it will rain. I suppose it will rain (...). I am not sure it will rain (...). I don't know whether it will rain yes or no. I believe it will rain". Again: searching - groping for a proper language rendering of the term 'probably'.

Girl 3.-- "It might rain. I think it will rain. I am sure it will rain. I doubt it will rain". -- How groping! "I am sure" and "I doubt it" at the same time!

So far: 1 is set objectively (the phenomenon of 'rain' is mentioned); 2 and 3 are more subjective: "Me, me, me,..."

Now girl 4. -- "It might rain heavily. There might be thunder and lightning. It would be fun. Thou wilt probably have a lot of fun with it. He will probably come and get you".

Here all object orientation is gone,-- pure subjective permeation!

Conclusion.-- The four types of interpretation or signification of the sentence-within-subjective provide a differential or range that goes from objective over semi-subjective to pure subjective. Immediately we see three types of "reality" (in the sense of "being attuned to reality").

Note.-- The trial organizers may have forgotten to point out that the task involves ambiguity.
a. What does the phrase mean in and of itself?
b. What do ye personally think, following that sentence?
Those two aspects of the question do intertwine but they are definitely distinguishable or discriminatory!

The ones - 1 - understand, "What do the words mean?"; the others - 2, 3, and certainly 4 - understand, "What do ye think?"

'Rumores', rumors.
One may know that the ancient historian Cornelius Tacitus (55/119; Annales) attached great importance to what in the Latin of the time was called "rumor" (plural.: rumores), rumor - all that is told in the squares and in the homes about people, facts.

This is still true today: An image impression created by a TV reporter, e.g. of a businessman or a politician, can be decisive for the formation of opinion! If one also knows how unscrupulous or sold to interest groups journalists can be! Well, very many people who get such an image impression -- when watching TV, for example -- rarely react according to the objective type (girl 1),-- rather react according to their own subjective or highly subjective wishful thinking (girls 2, 3 and 4). The latter forget that rumors belong to the category of "modality possibility". The image impression created e.g. is possibly true. In other words: "The image impression or 'rumor' is true-without-preservation-of-reviewing-the-truthfulness-of-the-truthmaker".
Modal ontology, then, is not just a theoretically unimportant case; it is topical every day.

Contingentism.
Richard Rorty (1931/2007) was an American success philosopher, in recent years. His *Philosophy of the Mirror of* Nature (1979) a success book, made him a sought-after conferencer,-- alongside a J. Derrida (1930/2004, deonstructionist) and Stephen Toulmin (1922/2009; *The Uses of Arguments* (1958)). A "liberal ironist," he does not take his own "theorizing" very seriously: he is willing to provide explanations to other fellow liberals but not to impose theories on them.-- Pretentious thinker!

In 199 he published *Contingency, Irony and Solidarity* -- solidarity or togetherness applies to him, but in such a way that every singular subject can wrap himself up in his own little nest -- with non-Zean, biblical (godly), sartrian, heathen or whatever ideal for his little eyes. As long as one does not impose one's own, all too individual opinion on one's fellow man, in our world of endless interpretations concerning life and the cosmos, in other words, in our post-modern world. Typically American.

'***Contingentism'*** is the title of his most individualistic view: 'contingent' or 'merely possible; -- coincidental. - The philosophers of the past are all merely contingent, for each of us, taken individually, non-binding thought products. Not that those thought products have remained without -- sometimes profound -- after-effects ("reception" or "reception" say the rhetors of today) -- quite the contrary. But their general validity, their universality, is "to be reduced" to purely accidental, highly subjective constructions.

The "grand narratives" - we are thinking of the Biblical vision of beginning, middle (Christ) and end (Jesus' return), - and the idea of progress of the Moderns - do not often make much impression on most contemporaries of today, if they hear anything at all about them. Everyone settles into his or her own worldview and outlook on life. And thus lives, as solidly as possible, in society.

So that "contingentism" or "chance thinking" stands for the presupposition of an infinite multiplicity of subjects-with-individual-views that are due to or attributable to chance.

Again: one of the possible uses of the modality 'possibility'. Contingentism: an endless series of possible highly individual subjects-with their own-individual-thinking products.

Which is basically a very accurate representation of what planet Earth is showing today,-- in this post-biblical and post-modern era.

See: -- R. Ronty, Contingency, *Irony and Solidarity*, Kampen, Kok - Agora/ Deurne, Denis, 1992;
-- id., *Solidarity or objectivity (Three philosophical essays),* Meppel - Amsterdam, Boom/ Deurne, Denis, 1990.

This philosophy is yes one of the possible philosophies. Not the only possible one!

Impossibility.

Bibl. st.: Charles Lahr, S.J., *Logique*, Paris, 1933- 27, 495.-- The impossible, the absurd or incongruous, we already met EO 26 (Incongruity Law). We shall now, under point of view of modality, deal with it in more detail.

1.1-- Round Square.

The thesis we are defending is: nominally, i.e. according to the pure sound of words (pronounceable terms), this is possible, but real or objective, i.e. insofar as the realities indicated by the terms are thought of in themselves, this is not possible at all. In other words, this is impossible.

C. Lahr, nurtured by the French Cartesian tradition, proves this as follows.

a. Analysis.-- Note that 'analysis' here is to be understood (not in a Platonic sense of "reductive reasoning" but) in a Cartesian sense as division into, separate elements of a totality (what Platon would rather call 'stoicheiosis' (elementatio) or factor analysis).

1. Surface.

If one starts from "surface," then one finds that in "round" and "square" both are a type of surface. "In this sense" - note the restriction or caveat - they go together perfectly. Are they 'possible' and 'conceivable'.

1.1. Geometric shape of lines.

It is impossible for a circular line to coincide with the four rights of a square. Such a coincidence is perfectly unthinkable,--impossible, absurd, incongruous.

1.2. The length of lines from the midpoint.

In the case of a circle - round - these, as rays are all of equal length, while in the case of the square they differ in length.

Consequence: they cannot possibly coincide and - as an entity or "being" - they are inconceivable.

b. Synthesis.

Again (not in the Platonic sense of deductive reasoning but) in the Cartesian sense of summary view of the analysis or division into factors: in a matter-of-fact sense - not word-for-word sense - the total analysis in the terms "round square" shows not one reality or being but at least two, impossibly existing in one.

Note.-- In the language of Bertrand Russell - in 1905 - "It is untrue that there exists one and only one x which is at the same time round and square". Such a phrasing says explicitly at least nothing about the impossibility modality - it is necessarily true - but it is implicit in it. Which must be shown from the proof.

1.2.-- "Two plus two is five".

Nominally possible, business or real unthinkable.-- One can think the separate elements -- two + two and five side by side but as a sum or totality such that those two elements coincide, they are unthinkable.

2.-- Non-felt pain.

Here we can proceed - from an experience-based definition both of the concept of pain and of the concept of unfelt pain. It is part of the very definition or essence of pain that we feel it! Again: the unfelt and the pain can be thought of side by side (apart), but not in one.

Note -- 'Harmology' is order (order) doctrine. This is the theory concerning relations (relationships), including structures.

Harmologically viewed the unthinkable or impossible, in the above cases, is application of the concept of system (system).

For example, the numbers 'two', (two + two) 'four' and five. The numbers form one coherent system in which every separate element shows one and only one identity (total identity with itself) in such a way that, within that system, the other numbers are included but differ essentially from it in terms of identity. Now, if one element of a system, - here: one number, e.g. 'two + two = four', loses its identity and is confused with 'five', then all the others (the complement or other part of the division) lose their identity at once as well.

So it is with the words of a language system: if a word loses its identity (meaning), then all the other words of that language are compromised. The synonyms prove this but in pairs. Or at least jointly (because collectively they have a single meaning (identity)).

Harmony.

Werner Jaeger, at Harvard at the time, argued that especially from the Paleopythagoreans (-550/-300) the concept of 'harmonia', literally: (ordered and thus beautiful) aggregation,--which implies contradiction-free aggregation, was one of the basic concepts --categories -- of ancient Greek life and thought, especially regarding art (we think of the magnificent building and sculpture works).

The absurd does not fit in there, unless as an element within a harmonious whole.

So that, finally, the term "impossible" is a matter of harmology (and thus of harmony understood in its antique-Greek sense).

Note.-- Logistic modalities.

There is an essential difference between the traditional-classical logic or theory of thought (which we represent here) and the more recent (though already prefigured in the stoic-antique theory of thought, among others) logistic or formalized, mathematical-symbolic logic. The latter 'calculates'.

a. The "classic" logistics

This is called bivalent, because it 'calculates' with only two 'values' concerning propositions (= judgments), namely true and untrue(false) judgments (realis and irrealis in the grammar). Such a logistic - which itself is regularly called 'logic' - is then called 'two-valued'. The ancient stoics (in the wake of Zenon of Kition (-338/-264)) elaborated such a logistic.

b. The modal logistics

This knows, in addition to true and false sentences, also sentences in which possible/ impossible/ necessary true or - untrue expressions appear.

Already Aristotle of Stageira (-384/-322; Platon's most brilliant student) knew this. In grammar this appears as the potentialis and the irrealis.

Note.-- In traditional logic, the terms "true" and "false" are not a logical but an epistemological fact because they do not concern the derivation from prepositions of postpositions but the degree of representation in the judgment of the reality intended by that judgment (something traditional logic disregards).

Note.-- G. Jacoby notes that -- e.g., in Platonizing anthologies -- modalities are discussed but not in a transcendental but in a categorical sense.

a. God "is necessary" (a necessary being).

bl. God's "ideas" (these are his conceptions concerning the realities (to be created)) are "non-necessary," -- possible.

b2. The actual world - Biblically speaking: creation - is, as realized ideas, "factual.

Lot analysis.

Fate analysis is the theory concerning fate.

Clearly, there is a modal aspect to destiny analysis. Does one not hear it said that a fate is "an unavoidable and therefore necessary evil"? Platon knows, apart from the 'nous' (lat.: intellectus), i.e. mind, what he calls 'ananke', i.e. fate. This is all that, in the universe, is opaque to our human mind but as an unavoidable necessity "to be taken in". 'Fate' but in the heavy, impenetrable sense.

Sample 8.-- The transcendental. (44/72)

Bibl. sample.:

-- E.W. Beth, *The Philosophy of Mathematics from Parmenides to Bolzano*, Antw. / Nijmegen, 1944 (11/28 (The Praesocratics), 29/56 (Plato));

-- O. Willmann, *Die wichtigsten philosophischen Fachausdrücke in historischer Anordnung,* (The most important philosophical terms in historical order), Kempten/ Munich, 1909, 61f.;

-- id., *Abriss der Philosophie (Philosophische Propadeutik),* (Outline of Philosophy (Philosophical Propadeutics),), Wien, Herder, 1959-5, 382/388 (Die Transzendentalien);

-- id., *Geschichte des Idealismus, III (Der Idealismus der Neuzeit),* (History of Idealism, III (Idealism in the Modern Era),), Braunschweig, 1907-2, 1036.

The later mid-century scholastics knew a series of 'transcendental' or -- as being(s) -- all-encompassing concepts: besides 'ens' (being) there are, according to them, 'unum', the one,-- 'verum', the true, -- 'bonum', the good (valuable).

We adhere to this limited list because it is apparently sufficient.

As O. Willmann asserts: the transcendentalisms are the series of notions formed by the aggregation, indeed, interlocking, of the Paleopythagorean (and eleatic) presuppositions the one and true, and the Platonic (already Socratic) presuppositions the being and good (valuable).

The microsocratic (small socratic) Eukleides of Megara (-450/-380) - one of the rare minds of the condemned Socrates who, in his last, tragic moments, assisted him together with others, even rare people - first drew up the list of transcendentalia: being (the), i.e. all that is real in the broadest sense of that word,-- truth i.e. being revealed or exposed ('a. letheia', apokalupsis),-- goodness, i.e. being insofar as it is amenable to value judgments and therefore as valuable, assessable, estimable, of value. truth, i.e. reality revealed or laid bare ('a.letheia', apokalupsis),-- goodness, i.e. being insofar as it is amenable to value judgments and thus as valuable, assessable, estimable,-- unity, i.e. being insofar as it consists of punctual units and enclosing, encompassing units or connections (think of the four, which is the encompassing unity or connection of four separate or punctual units).

Eukleides - according to Willmann - thus paved the way for the "synthesis" or list of transcendentalities as, following Socrates' lead, Platon gradually conceived them.

Beth, o.c., 36, dwells, in the context of unity, on Platon's stoicheiosis or factor decomposition, as the Platonic philosophy of language conceived it.

Behold what is broadly understood by transcendentalism.

Sample 9.-- The transcendental unit. (45/48)
Let us begin with a current presentation.

A.-- Our categorical concepts.
a. The singular concept.
This coincides with the "punctual" (reducible to nothing smaller) unit.

So: the actress Marilyn Monroe. As an actress, she is single, unique, individual. The individuology deals with such "units.

b.1. The private concept.
Marilyn Monroe is one member - element - of the private (specific, species) collection of actresses that make up the American actresses.

In antique-medieval terms : the American actresses are one kind of actresses who belong to the genus (the universal collection) of actresses without question.

b.2. The universal (general) concept.
All that is actress (without more), makes up -- in antique-mediaeval terms: the genus (genus) of actresses. We now say, since G. Cantor especially, "universal collection".

B.-- Our transcendental or all-encompassing concepts.
The Greek concept of pante, everything (EO 30),--in the diachronic form, "all that was, is, will be" (EO 32),--in short, be(de), is all-encompassing.

This is an exceptional form or modality of generality or universality. It involves a generality and 'whole-ity' that radically includes everything, which was, is; will be, which never was, is, will be but could be (all that is possible).

In other words: a radical generality and generality. Not a categorical one.
Behold the pedestal. Now let us see how the ancients began to see this.

The paleopythagorean unification theory (henology).
"To them", unum, the one (in the punctual and in the comprehensive sense). This is the basic concept.

Note: the henology of the paleopythagoreans is, in fact, a harmology or unification theory. Ancient Greeks who did calculations e.g. assumed that "to them", the (punctual) unit, our '1' was not a 'number' (understand: a multiplicity of punctual units brought to unity). However, 'numbers' were built up from that unity: only the number 2 was a 'number', i.e. a collection and system of two units. So a number, in the ancient Greek sense, is a (comprehensive) unit of punctual units.

If one remembers this well, one will understand much better the ancient Greek conceptions of "the true and one."

Combinatorics.

Combining' is linking and decoupling things in pairs,--into 'configurations', i.e. forms of joining together -- and even into one another.-- When the ancient Greek children learned to calculate, this was done with e.g. pebbles. Two pebbles in a row form a line, however imaginary. That is the configuration of the line on the ground of two pebbles. Three pebbles make a triangle of e.g. (we say "e.g.", because one can also "combine" so that they lie on a line-on-ground-of-three-pebbles). Four pebbles make up a square.

Go on and on about 'combining'. So that combinatorics is actually 'configuration science'.

Note.-- So it is perhaps - perhaps - to be understood that, among the ancient Greeks, a pebble - a punctual unit - did not constitute a 'number(shape)' or 'configuration' because they were too busy combining - that is, working with more than just one pebble (punctual unit). Two pebbles can be combined. That is also the playing basis of the "first number", understand: "the first combination".

Similarity (collection)/coherence (system).

Unity' is connection. Relation is either similarity ("totum logicum", o.g. purely comparative thinking created whole, - so said the mid-century scholastics) or coherence ("totum physicum", in the 'fusis', nature, itself located connection, -- so said the same mid-century scholastics).

This is - still - the preposition par excellence of set theory and of systems theory.

Further explanation.

When combining, the ancient Greeks looked at the (encompassing) unity (= connection) of (punctual) units.

A. The encompassing unit may be similarity: after all, a collection relies on "a common property" (= similarity spread over a set of specimens).

B. The encompassing unity can be coherence: a system relies on a single, remarkable "common characteristic" (= similarity), namely the fact that its parts - however different - belong to the same whole (totality).

Collectively, therefore, specimens - elements - by similarity make up a collection and parts - subsystems if need be - by coherence make up a system (if need be: supersystem).

This so-called recent insight possessed and manipulated e.g. the paleopythagoreans perfectly.

The true and one.

'Being(the)' was thus for paleopythagoreans always "unity/unities; Whoever uncovered that -- a.lètheia, bring out of concealment,-- apo.kalupsis, literally: bring out of concealment, reveal --, made the truth concerning reality emerge. The true unity,-- behold what the paleopythagoreans actually sought. Versta: the unveiled, exposed unit(s).

Appl. model.

Part of paleopythagoreism can be summarized as 'arithmo.logy', (configuration science, combinatorics; Latin: numero.logy). To translate by 'numerology' is thus very misleading, for 'arithmos', aggregation and conjunction, means configuration.
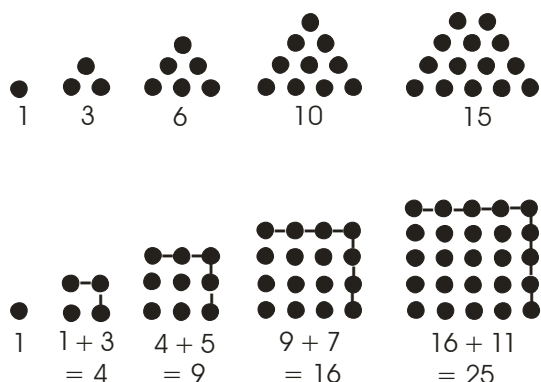
This is how we understand the so-called 'triangle numbers' and 'square numbers', where our separated geometry and our equally separated numeracy (arithmetic) were still in one. Look closely: the 'numbers' 1, 3, 6, 10, 15 (triangular numbers) are the original, -- just as the numbers 1, 4, 9, 16, 25 are. The models (in which the numbers are 'depicted') are the configurations.-- Talk about model theory!

Appl. model.-- The "choreia".

This word is difficult to translate. Choreia includes -- combines -- ... dance types controlled by number forms or configurations, instrumental music (combining sounds), song (poetically combining words-and-thinking images),-- in the cosmic framework of the celestial bodies (astrological aspect) with their combinations (positions among themselves).

This is the basis of the paleopythagorean quadrilateral - the middle ages called them 'quadrivium' -: number mathematics, space mathematics, music (understand: choreiology), astronomy. Note: this quadrilateral is an amalgamation and amalgamation!

Appl. model.

Units/units. Units/ unity.-- The immortal soul, centerpiece of paleopythagoreism (as, later, of Platonism), is denoted as an 'arithmos', an (encompassing) unity of (separate, distinguishable) units (faculties e.g.).-- Again: the soul is together-, yes, together!

Appl. model.

All that is clean, kalon.-- According to the paleopythagoreans, beauty, i.e., that which commands admiration and wonder as not ordinary, was a matter of "unity-in-quantity (of punctual units).

Beauty, by the way, in the sense just defined, was a, general Greek concern. Did they not know the term 'kalokaigathia', that which is clean and good (valuable)? Something could not be good, sound, valuable, under all points of view, without being simultaneously clean.

'Harmonia'

The summary word is "harmonia," gathering and merging.

A testimonial.

O. Willmann, *Geschichte des Idealismus,* I, 272.- Willmann was a connoisseur of Pythagoreanism. Here is what he writes: "The (punctual) unity -- later also called 'monas', monad, in distinction from 'them' -- is there for every 'number' (plural of units),--is not yet itself, however, a 'number' but is in all numbers and their presupposition."

"In all this the twofold meaning of the term 'them', the one, came in handy (...): the one as punctual unity is 'element' ('stoicheion'), but in the sense of 'henosis', unification, it is the connection which makes every 'number' a 'number'. For all that is 'number' is repeatedly something that is 'one',--in the sense of "unity-in-a-many."

Thus the terms are to be understood: "hen archa panton", the one premise of all things;-- "to hen stoicheion kai archa panton". The one element and premise of all things (cfr Aristotle, Metaph. 14:4, 17).

At once, in the archaic-Greek sense, "the one" (and the true) was divine and even model (image) of the deity. Willmann expresses this as follows: "Similarly, the deity (as understood by Pythagoreanism) is before things: it is thoroughly distinct from them and yet it is in them. Thus she is the presupposition ('archa', (arche) of them".

The one and true.

'True' in ancient Greek means at some point not only 'bare' but also 'ideal'. For the Pythagoreans, unity-in-quantity-of-units is not only what is actually abstractible, revealing, but also what is 'desirable' and 'ideal'. This dual meaning has remained to our days.

Sample 10..-- The transcendental 'goodness'. (49/58)

Bibl. st.:
-- O. Willmann, *Geschichte des Idealismus*, (History of idealism), I, 447; 451;
-- G.J, de Vries, *Plato 's image of man*, in: Tijdschr.v. Phil. 15 (1953): 3, 426/ 438;
-- E.W. Beth, *The Philosophy of Mathematics from Parmenides to Bolzano*, Antw./ Nijmegen, 1944, 29/56 (Plato),-- esp. 30 (Anamnesis / stoicheiosis), 36 (Filebos 18b / d (Theuth), 42 (Stoicheiosis), 44 (Stoicheiosis).

Outline of Platon's philosophizing. (49/52)
We write "philosophize" - not "philosophy" - because throughout his life Platon evolved. Hence the fact that no closed system can be found in his dialogues. Indeed, 'dialogue' was a decisive element in his thinking: Athenian democracy stood or fell, since Herodotos of Halikarnassos (-484/-425; Historiai, i.e. investigations) especially visible in the structure of the discourse itself, with dialogue. First all possible opinions must be brought up for discussion - in free discussion - before one takes a stand and thus defends a 'thesis' (proposition; lat.: propositio) on rational grounds.

This is also why Platon advises his students - after hearing his teaching - to talk freely with each other, yes, to argue about what he was lecturing. Which he, in the Seventh Letter, himself expresses as follows:

"(...) In virtue of repeatedly discussing the subject as well as In virtue of intimate living together, suddenly - we think of the aha-erlebnis - the intended idea springs up in the soul - like from a spark of fire the light that is kindled - and then paves its own way further'". (Platon, *Der siebente Brief* (*An die Verwandten und Freunde des Dion zu Syrakus*), (The seventh letter (To the relatives and friends of Dion at Syracuse)), Calw, Gerd Catje, 1948, 35).

In other words: just as in paleo-Peopythagoreanism so also in Platonism the soul, in the archaic-antique sense of 'life principle', is central. But not individualistically but dialogically: through repeated discussion and at the same time intimate coexistence - that is the ancient friendship which at the same time becomes a 'thinking society' - the soul arrives at the right insight.

So much for the method of theoria or fathoming of a theme. It is practically the pure continuation of the pythagorean 'hetaireia' or thought society. Let us not forget that, in ancient Greek, 'hetaireia' meant erotic cohabitation with someone" (prostitute, court maker). Such was the depth - up to and including eros - of thinking together.

Outline of the main content

Although virtually impossible to summarize, Platon's philosophizing is nevertheless "compressible" into the following triad.

"The soul consists of a great monster, a lesser lion, and a little man." (G.J. de Vries, a.c., 432).

Explain this. The soul of man, individual and immortal (in which Platon closely followed folk religion), exhibits three basic aspects:

The big monster
('diaiata', i.e. soul and living as well as eating and drinking, night life (bed, dream life), eros (sexual life), labor (economic life),

The lesser lion
(the noble sense of honor, reflecting the pride of the lion),

The little man
(the spirit in man,--which includes thinking and reasoning, mind and will).
One will immediately notice that Platon does not have a high opinion of the average human being! Which is quite right: he had, under the guidance of his distinguished teacher Socrates, become so well acquainted with the flaws and lower "soul tendencies" of his contemporaries that this was reflected in the structuring of his philosophy. So remember very well the basic triad: big monster, lesser lion, little man. A perfect differential! From big over less big to small!

This triadicity is reflected in the rest of his "system.
The peoples Platon sometimes classifies, into three types,--according to the degree to which they exhibit one of the three soul tendencies--monster/ lion/ human (peoples psychology).

But above all his sociology or social science reflects the triad: in his ideal or utopian "state" which he himself says very explicitly is hardly achievable (Platon was anything but naive), he provides workers (= monster), protectors (lion), thinkers (man). Such was his concern to speak and write not "catagogically" (downtrodden-naturalistic) but "anagogically" (elevating-idealistic). In this sense he was a thoroughly educational and even an educational thinker.

That he wanted to be educational is evident in his ethics moral theory). Three types of "virtues" (those that make man a "virtuous being") dominate his ethics:

a. contemplation ((sofrosunè') which does not eradicate the monster) in our deeper soul - that true meaningless according to him but purifies it and elevates it on a higher plane;

b. manliness or pensive courage ("andreia") which also purifies and exalts the "proud lion within us.

c. wisdom ('sophia') which brings the little man in us to full development.-- These three together -- together -- and in unison or harmonia, as with the paleopythagoreans -- constitute the 'dikaiosune', lat. iustitia, -- usually translated by 'righteousness', -- better translated by 'conscientious living'.

Cosmic dimension.

It would not be Platon, and even an ancient Greek, if man and his coexistence were not situated in the cosmos.

As O.Willmann, o.c., 447, says: the basic triad - monster, lion, human - reflects "body/soul/mind". But one understands these terms correctly, i.e. platonically.

'Body' is that which situates us in the material reality called 'cosmos'. This term in itself has no pejorative meaning because Platon has the greatest respect for the body (one thinks of his body-care ideas such as gymnastics and dance). 'Body' is that which makes us solidarity with the encompassing reality which is experienced first of all as matter,-- matter ('hulè'), with its qualities and ... unfortunately its gaps.

Hence a well-defined suspicion of it. 'Soul' is that which situates us in the purely spiritual, incorporeal world (among others and primarily the world of 'ideas' or cosmic reality models). Some of it is mortal, some of it is immortal.

'Mind' - 'nous', lat.: intellectus - is that which allows us to grasp being(s) and thus our ontological capacity. It makes our soul a typically human one, transcending all animal souls. Thanks to our mind we grasp what Platon called 'ananke', incongruous and therefore difficult or even impossible to grasp with the mind fate: it is the counterpart of it!-- Which gives us a real noölogy.

Willmann, o.c., 447, emphasizes that the triad "monster/lion/human" situates us in the triad "matter/life/idea." Which is therefore purely "cosmic.

In other words: man is a microcosm, the world-in-the-small, -- model and image of the macrocosm, the actual universe-in-the-large. Immediately Platon, with other Greeks, distinguishes three well-defined "layers" (gauges of being): being material, being alive (being animated), being ideal or merely immaterial.

So much for a "Gesamtschau" or "summary view" of what Platon held as the basic structure of his established philosophy.

An ancient legacy : 'stoicheiosis' (52/55)

Bibl. st.:
-- E.W. Beth, *The Philosophy of Mathematics from Parmenides to Bolzano*, Antw. / Nijmegen,1944, 30, 34v., 36v., 42 , 44;
-- P.T. van Dorp, *Aristotle on two workings of memory* in: Tijdschrift v. Philos. 54 (1992): 3 (Sept.), esp. 478/ 491 (Platon's Menon).
-- Let us reread EO 47v. (The true and one), for Platon's teaching on the subject is a further, 'dialectical' elaboration of it. What we now outline briefly.

1.-- P.T. van Dorp's opinion.
Aristotle, in a booklet on memory, following in the footsteps of his teacher Platon, claims that human memory has two degrees.

Gradation 1. Mnèmè, memoria.
In the *Menon dialogue* Platon, through Socrates, claims that Menon does have 'mnèmè', memoria, less developed memory. His insights are, after all, based entirely on what he has heard and remembered. Thus he knows about many themes what people claim about them. He even accumulates this knowledge into a kind of comprehensive, encyclopaedic insight.

But, on closer examination, this kind of memory is a "know-it-all" memory, consisting of loose data,--without ordered coherence--without comparisons,--i.e., without connection or unity. Which amounts to a loose quantity-without-unity.

Gradation 2. Anamnesis, reminiscence.
This is, potentially only with Menon, the young knowing aristocrat, the thoroughly developed memory. First of all, this 'memory' - actually: expanded consciousness (EO 30). is based on "one's own, not someone else's research". Not on hearsay and memorization. Then: instead of merely loose, juxtaposed data this expanded consciousness works out an ordering of the loose data so that the connections (similarities, connections) are exposed (alètheia, apokalupsis).

The encompassing unity in the multiplicity of punctual units thus becomes clear. But that is precisely stoicism. Finally, such an expanded consciousness or 'remembrance' tests what is thus known ('true', 'revealed', 'exposed') against the experienceable and approachable reality. That then is the second, 'developed' and 'mature' form of memory.

In passing: van Dorp calls the first, less developed awareness of reality - for that is 'memory' in ancient Greek - an 'animal' or animal memory. That is - in our interpretation - the consciousness of things, inherent to the (big) monster - home - and - food, nightly (bed) life, sex, labor - and the (less big) lion - sense of honor.

2.-- E.W. Beth's view.

Where van Dorp talks about anamnèsis, expanded awareness, and thinks about stoicheiosis, factor analysis, there Beth is busy with factor analysis (as a mathematician) while he thinks about anamnèsis, expanded thinking.

Neither of them comes to think of both - stoicheiosis (factor analysis: the one in the many) and anamnesis (expanded awareness: the one in the many) - clearly together.

Beth, of course, also talks about the Menon dialogue.-- Everyone possesses in the soul, center of paleopythagoreism and platonism, a learning capacity.

Task: to disconnect this ability to learn, yes, to enter thoroughly into reality, from the dull perception and the equally dull remembering of perception. Instead of "all that becomes" then comes "all that is". Ontological power! Even more: "and in particular the good" (o.c., 32).-- But more about that later.

Method: dialogue, with questions-and-answers. What 'Platon calls "huh dialektikè technè" or, better, "huh dialektikè epistèmè", dialectics (as a skill, technè, yes, as a science, episteme).-- This is how the "theoria", the fathoming, proceeds.

As a model of "anamnèsis," deeper consciousness, Platon gives in the *Menon dialogue* a slave solving a difficult mathematical problem.

As an aside, even a slave counts in Platon's eyes as possessing anamnetic memory! If one knows how aristocratic Platon thought!

The (mathematical) knowledge, science, of the slave arises thanks to anamnesis, "o.g. stoicheiosis." Listen to Beth's definition: stoicheiosis is "a constructive construction from certain primal elements" (o.c., 30). Or still: "the explanation of things by means of a decomposition of them into primal elements or 'elements'" (o.c.,35).

This is - in our parlance - "The one in the many". The encompassing unity in the punctual units!

The linguistics of the time as a model.

Beth, o.c., 36, 47.-- Platon maintains -- in which he somewhat resembles the more recent structuralists -- that the "real" philosopher operates as "a linguist" (Beth, o.c., 47.). In the Filebos dialogue (18b/d) Platon sets out the method. It is perfect stoicheiosis or factor decomposition.-- We give the text.

A.-- In passing:

Thoth or Theuth was, among the ancient Egyptians, the god or at least the divine - understand: psychic - being who invented hieroglyphic writing. As such, Thoth or Theuth is an "Urheber" (N. Söderblom), an enabler.

"When someone - either a god or at least a divine being - according to an Egyptian story, his name was Theuth - noticed that sound was infinitely diverse, he was the first to recognize that in that infinity the vowels were not one but many and, further, that there were other sounds which, although not vowels, nevertheless exhibited a certain sound value and that a certain number of these, too, could be found. He distinguished a third kind of letters which we now call 'consonants'.

Thereupon he split the consonants until he distinguished each one separately,-- in the same way the vowels and the semi-vowels until he knew, of these also, the number.-- He called each one separately of them and all together 'letters'.

B.-- But he recognized that none of us could learn one letter separately -- without all the others. He recognized that this fact reveals a connection that makes all letters one. That was the reason of valley he assigned to them a science which he called "hè grammatikè", grammar, letter theory". So much for Platon's *Filebos*.

Those who have all the foregoing "in their heads" ("anamnesis"), immediately see that here "stoicheiosis", factor analysis, is at work and in a pure way! "All separately" (punctual unity). "All together" (encompassing unity). "All ... one" (punctual units ... one encompassing connection). "One connection".

The terms employed speak for themselves, -- without comment.-- "One ... separate / all others" (complementation or dichotomy, peculiar to any system). Either all or none! That is the system idea,-- pure. One sees at once that Platon, especially the Pythagoreans, imitates.

Beth, o.c., 47.-

1. The true philosopher proceeds in the same way as the linguist. Before examining the language (as a whole), he fathoms the words, for a language is "made up" of words.

But words consist -- are built -- of syllables and so first these must be fathomed. -- The syllables, in turn, are decomposed (into that of which they are composed) into the elements of the sounds laid down in writing. These form the starting point for linguistic fathoming.

2. In the same way, true natural philosophers proceed when they fathom the cosmos, the 'fusis', lat.: natura, nature. In the first place they establish what the universe can be dissected for. Here reference can be made to predecessors of Platon.

Anaxagoras of Klazomenai (-499/428; a modern looking natural philosopher) postulated 'homoiomereia', homoiomeres. 'Homoiomereia' meant "similarity of the parts of a whole" (common property). Anaxagoras put forward elements formed by similar parts.

Leukippos of Miletos (-490/60....) and his pupil Demokritos of Abdera (-460/-370), both known as 'atomists', proposed 'atoma', indivisible particles, of a material nature. Hence still today our concept of the 'atom'.

Diodoros Kronos of Iasos (+/- -300; megarian dialectician) proposed a kind of smallest dust particles.

Platon defended this thesis in his speech, at the end of his life, called "*On the Good*." This shocked - according to Aristotle who had heard it - many listeners or because - before talking about "all that, from a human point of view, is called 'good'" - it began with mathematical problems. Platon must, in that speech, have often mentioned Pythagoras and the paleopythagoreans. As his predecessors.

Well, what we mentioned in the previous paragraph about the real philosopher and the real natural philosopher - their stoicheiosis - made up the beginning of that speech "On the Good".

That reason sought the presuppositions of the fact that real philosophers and real 'fusikoi', physicists, thinkers of nature, work stechiotically, i.e. paying attention to the comprehensive one in the many of the punctual units which make up -- build up -- that comprehensive one. This is obviously a very difficult subject, which we do not wish to dwell on now. We are only interested in factor analysis as a method.

The being and the good. (5/58)
Curious: Platon, to speak of the good, begins with element analysis! With the many in the one and the one in the many!

But an ancient proverb sets us on our way: "bonum ex integra causa, malum e quocumque defectu". Everything that is sound, i.e. that has all its elements, is good. Everything that lacks even one element is not good.

In other words: value (fullness), 'goodness', stands or falls with the flawlessness, 'wholeness' (as people say nowadays). Every defect violates the (total) value! - Let us reread EO 22 (The robbing or lacking nothingness).

The good.
E. De Strycker, S.J., *Concise history of ancient philosophy*, Antwerp, 1967, 113.
"God is the measure of all things." This is what it says in the *Laws* (a text by Platon).
Now we know that, for Platon, ideas are the highest standard or rule of conduct. And mainly the idea "the good". Are we then to regard this idea as "Platon's god"?".

Indeed: if the term "god" means the reality that is pure perfection, "goodness," worthiness, then "the good" is "Platon's deity.

In other words, not a personally conceived god(s) but perfection-without-others is the idea "the good."

All ideas, i.e., all objective exemplars of all realities we can experience, are "divine" somewhere. But the idea "the good" is divine without more. From what? Because anything which is somewhat "good" and therefore valuable, however poorly or imperfectly it may be, is so because the idea "the good" is present in it and yet transcends it. Although reaching beyond all realities - like the one (EO 48) - , yet "the good without more" is intimately present in all realities - like the one (EO 48).
"The good" is thus the being(s) insofar as it is amenable to appreciation.

Take an application.
A speech. If it is expertly put together and thoroughly recited, the protosophists call them "good. What is the reason for this? Because it achieves the stated goal.

But for Socrates (and Platon) this is only a first degree of "goodness" or worthiness. If, moreover, it is also conscientious - 'righteous' (in the ancient language) - , only then is it not lacking any element and is it sound', 'whole'. And thus good-without-another as speech (as far as this is possible in the material world, of course).

In this reasoning concerning value (fullness) of e.g. a speech one feels the struggle - by Socrates of Athens (-469/-399) against the sophists or 'wisdom teachers' of the time.

a. They very definitely formed experts, - thanks to instilling 'techne', skill.

b. Toward, in many cases, neglecting the formation of "righteousness" (conscience).

'Good', therefore, for them was "all that involves expertise." Socrates deduced a surprising deduction from this.

Abstract model: if A (competent), then B (good); well A (competent); therefore B (good).

Application: if someone is competent, he/she is good; well, the thief/thief is competent (in terms of taking away someone else's property); therefore, he/she is good! The thief - said Socrates - would in this premise be a model of 'goodness', worthiness! Well, no one with a minimal ethical commitment and an equally minimal sense of citizenship will accept that conclusion. After all, it points to the unacceptability of the premise that everything that is expert is ipso facto also (morally and socially) good.

Conclusion: pure expertise without conscience is insufficient, lacks an element.

By the way: also the other way around! A merely pieced together and poorly recited speech - no matter how ethical - is not good, because it lacks an element, namely expertise.

Well, in expertise and in conscientiousness, "the good without more" is present, but it does not coincide with it, for it reaches higher and is more general as the basis of all that is valuable anywhere.

As an aside, rhetorically, Socrates' and Platon's stance is powerful. From what? Because they took the sophists, who expertly took people by "their weak spot," in turn took their conscience-denying expertise further the degeneration of the society of the time.

In Socrates' case, this stance ended tragically: Socrates, on false charges, was sentenced to death and, although he was able to flee (which his accusers had counted on), he allowed himself to be administered the poison cup and died an exemplary death in the service of "the good without more."

What "the good (without more)" actually is, we do not know directly. We do not directly grasp that highest and all-embracing idea (meaning: basis of reality). We do grasp it through models: for example, in the value of a speech, which allows us to sense the original, the idea of "the good without more", in a single type of it;--for example, in good behavior, which allows us to grasp the original, the good without more, as a model.

This lets us sense the "desmos," the connection, or the "sumplokè," the interrelatedness, of the good things that are immediately experienceable, and the all-encompassing idea "the good," which shines through "in those more or less good things. "The good" is the indirect light that illuminates the value of what somewhere participates in it. Light which cannot be grasped unless indirectly - via models of it. This is called "light metaphysics".

The being is the good.
The sophists, in sometimes brilliant feats of expertise, conjured up a sham reality for the (naive) people.

Platon continued Socrates under point of view of ontology. Non-conscientious speech presenting itself as expert is a sham reality. A non-conscientious speech that presents itself as "good" is a sham reality.
In both cases there is "more nothing - mè on - than something - on or ontos on -".

Socrates doggedly fought the false realities that the sophists peddled to the "gullible" people,--in their "technai", expertise, in all kinds of cultural fields. Especially concerning the power of the word. The trivium, grammar, rhetoric, dialectics (in the sophist sense of 'the art of reasoning'), originated with the sophists.

Instead, Socrates compelled his auditorium to "enter into all that is really real and not sham." Instead of the superficial 'technai', skills, Platon founded, in Socrates' wake, the "theorike tou ontos", the fathoming of being, the ontology.

Pythagoras had already put the 'theoria', the penetration, first: whoever attends the Olympic Games can do so superficially (for profit or curiosity). He can also do it thoroughly, i.e. to the 'grounds' or 'elements/presuppositions'. That is "theoria": as an observer (watcher) trying to grasp not the apparent reality but the actual reality. This coincides with "the good".

Sample 11.-- Transcendental ontology: subsections (59/72)

From what precedes it is clear that ontology is one science but has several aspects.

Being(de) is the basic concept. The blottting out, by means of observational research (what Platon calls 'theoria'), of being(de) is 'truth' concerning that being(de). Blotting out the either encompassing or punctual unity in being is 'truth' about the one. Blotting out the good in all that is, is the 'truth' about all that is valuable in being(the).

Truth, unity, goodness demand a separate chapter within the general or transcendental ontology. About which a little more now.

Being(de) and spirit.

It was noted that at the same time we are defining the concept of "human mind." For what is this other than "the capacity to grasp being, truth, unity, value"? 'Mind' is therefore reason and intellect (reasoning ability), but also mind and will (value ability). So one does not confuse 'spirit' with mere intellectual-rationalism. The human soul, in which the spirit is rooted, is more than mere reason and intellect.

A.-- General ontology. (59/62)

The object is: all that (so) is. This is: all that exhibits existence and essence. "How existent is it?" and "How is it existent". Or, "How real is it?" and "How is it real?"

The observational response to this includes - as we will show further - and analusis, reductive reasoning ("What does the given set forth?"), and sunthesis, deductive reasoning ("What inferences flow from the given?").

By what means? By learning of something - the given - its existence and essence by tracing its presuppositions (reduction, analusis) and inferences (deduction, sunthesis).

Yet about that a separate chapter entitled: "The hypothetical method".

The creature form or "form" for short.

Something' (gr.: ti; lat.: aliquid) is 'reality' (gr.: pragma; lat.: res) because it exhibits being-form or shape for short. Because of that it is both situated within the totality of being(de) and distinguishable from the rest within that same totality of being(de).

Unseparated, but distinguished.-- We'll explain that now for a moment.

The creature form.

In ancient Greek : 'eidos' or 'idea'. Literally: the existence of something, i.e. the being of something insofar as it tells our mind something (suggests a concept).

Actual existence and mode of being are summarized in the term '(creature) form'. We explain this because the term 'form' gives rise to slight confusion.

1.-- The space mathematical form.

Take a cube. It exhibits a geometric configuration or "shape. If it is empty, one can put a content in it. Or: the cube can be made of metal or wood.- In those cases a systechy or couple shows itself: "form/content", Or "form/dust". That which is in it and that of which it consists is content or substance.-

The "form" is the arrangement of the parts.

2.-- The ontological (being) form.

'Eidos; 'idea', -- lat.: forma.-- That is the summary of existence and essence, existence and being, of something (the given).

For example, a (metal) cube has a creature form that includes and geometric form and (metal) substance of which it is composed.

Thus, the ontological form of a cube filled with milk includes both its geometric form and its content (milk).

The regulating and steering role of the creature form.

The essential form is practically always contained in a 'kinesis', lat.: motus, a process (change, movement). Precisely in this two characteristics emerge.

1.-- The essence form is normative, regulative.

The processes (behavior) of e.g. a cube filled with milk depend or (are governed by) the form of being as a premise: if one tilts the cube (which is open), then the milk runs out! If one closes that cube, then one changes the form of being (and, when tilted, the milk no longer runs out). If one fills it with solid matter, then it may tip over (because the form of being has changed!).

In antique language: the essential form is 'metron', lat.: mensura, measure, of processes and behaviors. Or norm, rule of conduct.-- Expressed differently: everything behaves according to its own nature.

2.-- The creature form is cybernetic, steering.

The earliest Greek thinkers thought "cybernetically," Aristotle summarizes: a constitution e.g.-he says-presents three basic concepts:

a. 'telos' (lat.: finis), purposefulness;

b.1. 'par.ek.base', deviation,

b.2. 'ep,an.orthosis' or 'rhuthmosis', corrective or feedback.

That's teleology (goal theory).

All archaic and ancient cultures know that cybernetic scheme. So does Biblical revelation.

a. The paradise objective.
The still attached to the mythical stage thinking of the early Bible tells us that Adam and Eve, the primal couple, lived "in a paradise."

This is: an ideal state, although on the way to further salvation history.

B1. The Fall.
The deviation occurs through sin, i.e., the disregard of paradisiacal purpose. The Fall, in the context of the "tôledôt" or descent history as understood by the Biblical writers, leads to "original sin; i.e., the deviation that is transmitted to "posterity" with procreation.

b2. Redemption.
Yet, immediately after the "first sin; God - Yahweh, the Triune deity - sets forth a redeemer. That is the feedback or corrective.

This is how the Bible thinks. This is how the church fathers think. This is how tradition-bound theologians think. They think steeringly. The form of being is not our human understanding. -- 'Ousia', creature form, - that is the unity of actual existence and being. So with Platon.

Heidegger translates this by "Seiendheit," literally, "beingness. The property by which something is what it is. Our concepts are 'reflections' of that beingness. This is called "the mirror man" (R.Rorty).

Appl. model.
"Mieke is a teacher." -- It subjugates the original, is 'ousia', -- in scholastic Latin "obiectum materiale" ("material object"). This is "Mieke" as she is. Objective. In itself.

The saying, the model, is a single aspect of Mieke' s 'ousia' or form of being. A sample (with inductive, i.e. generalizing and generalizing value). Nothing more.

In other words: the abstract concept of 'teacher' - in our mind - is applicable to Mieke but Mieke's total reality - her 'ousia' or form of being - exceeds by far the reality indicated by that one abstract concept.

In scholastic language, the model is called "obiectum formale", the formal object,- -this is: that which in the material object or total reality, is exposed and fixed in one abstract concept.

In other words : it is true that we are 'mirror people', because our mind (in its concepts) reflects reality. But those reflections are usually only aspects, samples. Unless in our transcendental concepts (but then those are too general).

Note.-- We recall Aristotle's text: " 'Being', einai, is not a kentrek, 'sèmeion', of something (categorical). Immediately: if one says 'being', on, (op.: of something categorical), then this is an empty word, 'psilon', because it means nothing (op.: categorical). Only in connection with another term (op.: of a categorical nature), 'being' acquires (op.: categorical) meaning, and 'being' without such a thing does not give thought content (op.: of a categorical nature)." (Ar., De interpret. 3, in fine).-

For example: "Mieke is a being, a reality". That sentence does mean that Mieke "is there", but it says 'nothing' (categorically, i.e. what only refers to Mieke) and is thus - categorically speaking - 'empty'. The juggling with 'being' and 'being' and the other transcendentalisms - one, good, - true - take this into account: that is precisely why a 'real' (corresponding to reality) ontology and philosophy needs other than merely ontological information, namely categorical information.

If not, it talks "in the air" and "in the thin air." Today, such information comes a. from everyday knowing, b. from the professional sciences, c. from surveys e.g..

In other words : transcendentalism is an omnipresent light that illuminates things but is not those things themselves.

B.-- *General ontology (62/72).*
The other transcendentalisms form sub-capitals of the general ontology. A word about them.

B.1.-- *Aletheiology (truth ontology). (62/64)*
The doctrine of truth has already been brought up indirectly many times: 'a.lètheia', (// apokalupsis) is "to be(de) revealed". The blotting out and exposure of what is.

Concerning being as transcendental reality and being as categorical realities within comprehensive being: it is the 'ousia', existence/ essence, that is exposed and offers 'truth'.

To say that being and truth are interchangeable (convertible), therefore, means that reality is blockable (insofar as it is hidden, of course,--which is never quite the case) and thus accessible (at least in principle) to our truth-oriented mind.

Traditional ontologists also call this accessibility 'intelligibility' (comprehensibility, meaningfulness). Others speak of the 'rationality' of all that is. This term is good if it is not interpreted in a one-sided modern way.

'Rational' here means 'open to revelation (reality)'. Not that brutal grasp of e.g. professional sciences on reality that many a modern thinker advocates.

The axiom of (necessary and) sufficient reason or ground.

The fact that archaic thinkers already searched so early for the 'arche', premise - we think of Anaximandros of Miletos - or put forward some 'stoicheion', element (which plays the role of 'arche') or some 'hupothesis', supposition, betrays the fact that the principle of sufficient reason was the light that illuminated their search.

This informing principle reads: being has a (necessary and) sufficient reason or ground (explanation, premise, hypothesis),-- either in itself or outside itself."

This is the basis of the hypothetical method, which plays such a decisive role with Platon.

a. Deductive (sunthesis).

Scheme (Jevons/ Lukasiewicz).-- If A (premise, reason or ground), then B (intelligibly sensible, 'true; not absurd).-- Well, A. So B.

Example.-- If all water boils at 100° C., then o.w. this water here and now. Well, all water boils at 100° C. (Law,-- natural law). So this water here and now boils at 100° C..

b. Reductive (analusis).

Scheme (Jevons/ Lukasiewicz).-- If A (reason or ground), then B (sensible). Well, B. So A.

Sample.-- If all water boils at 100° C., then o.w. this water here and now. Well, this water here and now boils at 100° C. (sample, established fact). So all water boils at 100° C.

Note -- One sees that the stoicheiosis or factor analysis here forms background, premise: from all (elements) one concludes to just one (deduction) and from just one (element) one concludes to all (reduction and this as induction or generalization). In the reduction one concludes from the application to the general (so one thinks for the moment (as a lemma) anyway) rule: if one case of water boils at 100° C., why not all water? Because, if this hypothesis is so, then this one case becomes understandable, sensible, intelligible, explainable.

Thus one reveals being, thus truth about reality is revealed. So one sees from the examples that the principle of sufficient reason or ground is one - and a very important - aspect of ontological truth.

The "arqumentum ex absurdo".

The proof from the incongruous, i.e., the utterly incomprehensible (EO) 26), has its root in the being-truth: all that is, is disclosable, 'true'; all that is (utterly) nothing, is unrevealing (and is at once utter illusion),'false'.

Epistemology.

'Episteme', lat.: scientia, science.

a. In the broad sense: all that is knowledge is object of epistemology or knowledge theory.

b. In the narrower sense: all that is strictly scientific knowledge ('cognition') is object of knowledge theory,-- better: science theory.

Note.-- Others introduce the term "gnoseology" for knowledge theory in the broad sense: "gnosis," in ancient Greek, is knowledge.

In modern cantianizing circles it sounds like 'kriteriologie', doctrine of 'criteria', means of discernment, concerning certain knowledge. Or as 'critique of knowledge', critical or discerning - testing research into the value of knowledge,-- one of the many forms of 'criticism' which is so 'in'.

'Truth' as 'agreement with'.

Logical truth is the fact that a judgment corresponds to the reality intended by it. This is then "a true or corresponding to reality judgment".

But there are also other correspondences.-- These are -- instead of passive or idle -- truths (as in logical truth) active correspondences or truths.

Thus: the ethical truth that means that a person's practical life or behavior conforms to the presuppositions he/she holds.

Thus: the artistic truth that means that a work (artwork) conforms to the design that its creator has in his mind.

Thus: the theological truth that means that what God creates is consistent with his ideas on the subject.

By the way, Nikolai Gogol; Ukrainian writer (1809/1852), described the caricatures of God's ideas, visible and tangible in people's daily lives and their sometimes heavenly flaws and sins. With much humor, irony, and even sarcasm, Gogol looked on, -- laughing because a caricature provokes laughter,-- weeping because such a caricature is bad. What is called "the tragic laughter" of Nikolai Gogol.

We thus touch upon types of ontological truth and immediately the foundations of epistemology (logic), ethics, art theory, theology) as applications of the theory concerning ontological truth.

B.2. Harmology (relationship ontology) (65/68).

The doctrine of unity has been discussed several times (including when it came to stoicheiosis). Now a brief explanation.

'Harmotto' meant "I join together or assemble." Harmology, then, is "doctrine of assembling and merging," -- doctrine of order. This invariably involves punctual, irreducible units being brought into comprehensive unity. Or vice versa. Think of the paleopythagorean concept of number (EO 47).

The combining, pairwise arrangement, of elements one after the other is essential.

Thereby, subjectively viewed, 'mnèmosune', remembrance (EO 30, 32) or 'anamnèsis', lat.: reminiscentia, orderly awareness or remembrance (EO 52) is a possible condition. To proceed in an orderly manner inevitably involves an expanded consciousness.

Identitiveness

Reread EO 23.-- Something is totally identical with itself (reflexive identity). Something is part-identical with something else. 'Part-identical' is also called 'analogous'. Something is totally non-identical with something (thoroughly) different.-- Behold the differential or range.-- In this, ordering is at work. And so also combining,-- going in pairs (on something and something else). Thus, e.g., on the subject and the predicate in a sentence, within the same concurring view.

Comparative Method.

'Compare' here means "to look at side by side." For sometimes the term 'compare' is used in the sense of 'equating with something else'. Compare, here, is taken in the very broad sense of "combine," viewing together.

Similarity and coherence: connection.

For this we refer to EO 46 (Similarity (collection)/coherence (system)). -- When one 'combines' more than one data - element -, compares them with each other, then two main types of (comprehensive) unity or relation quickly stand out: they show resemblance, at least in part (and difference); they show coherence, at least in part (and break, gap).-- This is how one can order data.

Relation Theory.

Encompassing unit is relate. Or "relationship. Similarity is one type; coherence is a second type.-- In logistics, the study of relations is called 'relation logistics'.

When it is said "Being and one are interchangeable (convertible), this means that reality consists of an (infinite) number of punctual units, aggregable into encompassing units. Or still: all that is, is one gigantic network of relations,--of similarities (collections) and of connections (systems).

This is at once the possibility condition of set and system theory, the study of "totum logicum" and "totum physicum."

Digression.
Let us briefly touch on some distinguished encompassing units or relations.

Bibl. st.: J. Royce, *The Principles of Logic*, New York, 1912-1; 1961-2, esp.72ff..
The basic relationship is called "encompassing" ("implication"). Thus: dancing and singing involves a. dancing and singing simultaneously and b. dancing and singing in turns ("dancing and/or singing"). One can also invert the expression: "Simultaneous or alternate dancing and singing is peculiar to dancing and singing."

Immediately we have already faced the "logical sum": "(simultaneously or alternately) singing and/ or dancing". The "logical product" is then "singing and dancing simultaneously".

The negatives or denials.
a. 'Either sing or dance' (in Latin 'aut') is contradictory among themselves. Like x and non-x.

b. "Neither singing nor dancing" (doing nothing of the two) contradicts "singing and/ or dancing". Like x and y versus o.

Note.-- It is seen that J. Royce combines, assembles, and intertwines like the ancient practitioners of stoicheiosis.

Digression.
Bibl. sample.: H. van Praag, *Measuring and comparing*, Teleac, de Haan, 1968.
Addition is one-syllable relation or bijection. "For every spank I received from him, I had rendered him one".

Topological arrangement (intermediate arrangement)
is situating something between two other pieces of data. "Between x and y I situated z". This encompasses the concept of "interval" or "spacing".

As an aside, in mathematical topology this is a basic insight. One kneads a supple ball of clay without making it fracture (i.e., within the interval of maximum extensibility)

Sequence is the arrangement of one element after another, -- obviously in time. Sequence can be serial or cyclic (= circular, as the recurring order of weekdays).

Digression.
Interpretation theory is one of the many applications of clarity relationship.

We already saw one type, namely the one-unambiguous relation or "addition. But there is the "many-unambiguous relation" and the "one-unambiguous relation". Thus Alkmaion (= Alkmeon) of Kroton (-520/-450; student of Pythagoras) already recognized that the 'symptoms' (signs) of an ailment are open to more than one interpretation (which includes "one-ambiguity").

The ability to summarize a multitude of data is sign of "much- one". Up to there some "summarizing units" or "relations" often encountered.

The pairing "element/ premise".
This pair forms a basic pair. Pedestal of logical proceeding. 'Logic' here in the traditional sense of "study of conditional sentences" or "implications", derivations. "If A, then B." Study, i.e., of hypothetical sentences.

1.-- Stoicheion.
a. 'Stoicheion', lat.: elementum, meant "All that, as a specimen of a collection or as part of a system, helps to co-found a totality (collection, system)."
So: all the parts of a line-shaped thing. So: every letter of the Greek alphabet. Even the needle of a sundial.

b. 'Stoicheiosis', lat.: elementatio, factor analysis, is "the building up - together - and assembling - of a totality from copies or parts or, conversely, breaking up a totality into its copies or parts".

Example: in later antiquity especially, a 'stoicheiomatikos' was an astrologer. Those who drew up horoscopes built a coherent picture of a destiny from the elements of the cosmos - ta stoicheia tou kosmou, elementa mundi - , i.e. heavenly bodies (with their deities: astrotheology).

As an aside, even S. Paul knew this meaning (in Gal. 4:3; 4:9; Col. 2:8; 2:20).

As an aside, the paleopythagorean "arithmos" (EO 47) is one type of stoicheiosis.

More than that: to philosophize is, in fact, stoicheiosis: to put together a view of life and the world.-- Systematic philosophy, even today, are applications of such a 'Weltbild'. (M. Heidegger), for it attempts to find the general concept of 'being' in all possible subspheres of total reality (which then becomes particular or categorical ontology).

Note.-- What the ancients called "elementation" or factor analysis, R. Descartes (1596/1650; father of typically modern, very science-influenced thinking) called "analysis et synthesis": an all too vaguely conceived totality - collection, system - he breaks down into its specimens, its parts, -- in order, thereupon, to rebuild the totality - to assemble and join together. Which then gives a "clear and distinct" totality.

Descartes' "analysis" (division) is not a misunderstanding of totality or "Gestalt": it is, however, the distrust of an excessively vague view of that totality, -- which only comes to its full extent through that "analysis.

2.-- Arche.
'Arche', lat.: principium, 'principle; i.e. that which is to be put first.

Actually, 'arche' is "all that controls (determines, defines at once: "all that controls something in such a way that this something becomes but intelligibly 'true' - if one puts that controlling in front".

Consequence: 'archè' is preposition.

Thus: the beginning of something (the presupposition of the "methodos gennetikè", the genetic method, which examines something, bottoms it, in its course).

Thus: the origin.

Thus: the rulers of a country. Without the beginning, the origin, the rulers, that which is governed by them is incomprehensible.

The principle of (necessary and) sufficient 'archè'.
Reread EO 63 (The axiom of (necessary and) sufficient reason or ground).

Both of Jevons-Lukasiewicz's schemata begin by stating the principle of sufficient reason: "If A, then B." This is followed by the twofold application:

a. deductively (sunthesis), where the sufficient reason is known (Well, A. So B);

b. reductive (analusis), seeking the sufficient reason (Well, B. So A).

In other words: both forward (deductive) and backward (reductive) the archè is central. And immediately the immortal principle of sufficient 'ground'.

Thus one understands the coupling: "stoicheion te kai arche", elementum et principium, element and premise.-- That which is "reason" or "ground" is an element of reasoning. Now that element of reasoning can be a punctual unit -- element -- but also a comprehensive unit -- totality.

Conclusion.-- Element, premise, assumption: three terms that concern the entailment (implication) ("if, then").

B3.-- Axiology (goodness ontology). (69/72)

The good -- value -- has also already been discussed: especially Socrates and, in his wake, Platon talked about it as if it were a main issue.-- Now for a brief situational point.

'Axia', lat.: valor, value.-- "The good", in ontological language, means "being insofar as it represents value (fullness) and is at once 'a good'". To say that "being and good are interchangeable (convertible)" means that "all that is is subject to value judgments." What is, is valuable. What is nothing lacks value-fullness.

Platon, in his *Nomoi* (Laws), says: "Man applies gratitude - Note.: appreciation - to three possessions: the deities, his soul, his body."

G.J. de Vries, *Plato's image of man*, in: Tijdschr.v.Phil. 15 (1953): 3, 430v., saying: "Hence the soul, as much as it should take care of itself (*Faidon* 115b), should satisfy the desire that it should take care of all that is inanimate (*Faidros* 246b)". Thus, e.g., a premature "liberation" of the soul from the body by suicide is impermissible (a.c., 431).

In other words: one does not ascribe to Platon a radical dualism (soul / body). Nor an absolute body contempt. He does have an order of precedence.

Platon, in his psychology or soul science, distinguishes - we saw - three "parts" (aspects). Reread EO 50: the great monster, the lesser lion, the little man. First of all, this classification is, in Platon's eyes, an incomplete one: still other 'parts' or aspects of the soul are to be found, eventual. But also: Platon is doing value psychology here,--not with a view to radical elimination but with a view to correct situating.

Because of the large sample, our soul is focused on values such as:
a. diaita, dwelling and food (which in Platon's view is very valuable),
b. sleep (he gives advice with a view to a "good" sleep),
c. sexuality (eros and reproduction,-- family life),
d. economic goods (thanks to labor).

Because of the lesser lion, our soul is focused on
our own honor (with all that that entails).

Because of the little person, our soul is focused on
all that is incorporeal, yes, transcendental being.

This is a multiple list of 'goods', i.e. valuable realities. One sees it: neither what the great monster nor what the lesser lion 'values' is excluded, even if in the lesser man the center of gravity of the 'true' (ideal) man is situated.-- Cfr de Vries, a.c., 431/433.

Healthcare.

It is no secret that the paleopythagoreans emphasized all that was higher (anagogical thinking). Nevertheless, caring for all that is body (health) is an integral part of the paleopythagoreans' sense of value.

Bibl. st.: O. Willmann, *Gesch.d.Idealismus* I, 302.-- Says Willmann: pythagorean medicine imposed a profound reverence for the thoroughly 'sacred' (the sacred) that health involves. Thus, to promote one's health was called "to sofotaton ton par hemin," that which, among all human things, is eminently 'wisdom.

This term summarizes the ideal of archaic and ancient man (something like being general and well formed).

a. Wisdom involves taking care of your health and, if necessary, restoring it.

b. Wisdom is even an "element" and "premise" of health, for the "sofrosune," the health of the soul, i.e., its "wisdom" or general and sound formation, assures physical health.

As an aside, in the same vein Platon speaks, who by the way the older he got the more he appreciated the Pythagorean "wisdom.

Medicine.

Consequences -- Ailments Pythagorean medicine - following in the footsteps of archaic, sacred medicine - tried to tackle in the first place via the soul. The soul, after all, is one with the body to such an extent that, if the soul is 'healthy', then the body, too, will inevitably exhibit 'health'.

Thus one understands the role of choreia (ED 47), the encompassing unity of dance, instrumental music, song (poetry) in a cosmic framework - Platon would also recommend this - in Pythagorean medicine. Thus, among other things, music - correctly chosen music then - led to control of soul states and to alleviation of body pains.

Magic.

As a rationalistically raised thinker, Willmann is troubled by the paleopythagoreans' use of magic. - The soul of man is a 'divine' (understand: psychic) entity that brings to life the body, which then shares in that divinity ('daimonion'), -- under the guidance of an accompanying 'daimon' (angel). This allows for 'incantations'.

Note.-- It is not the place here to go into occult methods at length (of which the paleopythegarean exorcism (incantation) is one type): however, we do note, in passing, that the structure "body ('daimonion', i.e. occultly gifted)/ soul ('daimon', (i.e. occultly gifted)/ ('daimon' (i.e. occultly gifted companion(s))" is a recurring structure or encompassing unity. With this difference that, in the Biblical world, the Triune deity governs all this.

The concern for cleanliness.

A 'good' (value) that is emphasized again and again is "all that is beautiful". This is, in the ancient Greek sense: "everything that, because it is not ordinary, commands admiration and astonishment". It can be physically clean. It can also be technical or skillful (a beautifully built ship, for example). It is above all, in the case of Pythagoreans and Platonists, ethically clean behavior: don't our people still say of an unscrupulous act "That's not clean", or "That was ugly of her"? Clean' still has the connotation of conscientiousness in our vernacular usage ('righteous' in antique language).

O. Willmann, *Gesch.d.Idealismus,* I, 301: "The thought that music, i.e., the skill of the muses (EO 30; 32 (Mnèmosunè)), in the highest sense, is philosophy itself, -- thought repeatedly expressed by Platon, was already to be found among the Pythagoreans."

One hears it correctly: philosophy, defined by Pythagoras as 'philosophia', wisdom-loving, would thus, in Pythagorean and Platonic eyes, be musical!

This is somewhat different from the so-called "rationalism" or "otherworldliness" usually attributed to Pythagoreanism and Platonism by unqualified people!

'Philo.sophia', i.e. fallibilism! 'Fallibilism' is "awareness of fallibility." Religious thinkers like Pythagoreans and Platonists were acutely aware that an earthly mortal "cannot possess wisdom." Only deities and 'daimones', gifted lower deities, possess - think of the muses - the wisdom, i.e. the general and sound education which can possibly bring them home to the full reality. A mortal can at most 'participate' in this. Nothing more.

The choreia was the means par excellence for establishing contacts with the muses,-- contacts so desperately needed by the thinking "philosophos.

The paleopythagoreans practiced logical sharp thinking. Thus they practiced the skill of definition.

"Preferably the maxima (tops) of properties are the object of reflection: 'What testifies to the highest wisdom? The harmony of numbers (note: one usually translates by 'number')". "What testifies to the highest wisdom in human things? Medicine. "What is the most beautiful? The harmony". "What is the strongest? The insight". "What is the best? The 'eu.daimonia' (the happiness,-- literally: having good daimonia or psychic or divine life force)!". - "What is the most revealed ('true')? The depravity of men!" (O.Willmann, Gesch.d. Idealismus, I, 283).

As we can see, 'harmonia' is first of all unity and conjunction, then, since the time of the palaeo-Pythagoreans, beauty, i.e. everything which, by its uncommonness, arouses admiration and astonishment. But that is the object of stoicheiosis, factor analysis,-- based on the pythagorean "henology" or unification theory (which, in the punctual units, notices the comprehensive unity and, in the comprehensive unity, destroys the punctual units).

Conclusion.-- Just as pythagorean (and platonic) philosophy is no longer conceivable without being at the same time health promoting (in the holistic, comprehensive, sense: physical and spiritual), so it is also not conceivable without being musical,-- through and through beauty loving. This by religious ceremonies in which the muses were invoked,--as inspiratrices, as givers of higher, 'daimonic' or even high divine energies. -- That structure or encompassing unity is true 'philosophy'.

The concern for the ethically good.
This theme was already developed higher (EO 56vv.),--in a platonic sense.--Only this: 'kalokaigathia', i.e. the encompassing unity of the beautiful and the good. "To kalon", lat.: pulchrum, the beautiful. "To agathon", lat.: bonum, the good. Both in one-unifying: the fact that the beautiful and the good are one. That's the antique Greek term "kalo.kai.agathia," collapsed to "kalokaigathia.

On this anagogical (directed toward the higher) note, we can close the chapter on the transcendental with a clear conscience. If only our current postmodernists, with their emphasis on the downward, the "catagogic," could learn something from the Pythagoreans and Platonists!

Sample 11.-- The hypothetical method. (73/80)

Bibl. st: E. De Strycker, S.J., *Concise history of ancient philosophy*, Antwerp, 1967, 103v. (The hypothetical method).

'Hupothesis', laying a foundation, -- foundation,-- in logical language: premise (condition). The verbal form: if, then. Such conditional sentences make up the core of traditional theory of thought or logic and its applications (methods).

But ontology applies them before logic does.

Platon derived the hypothetical method from the (applied logic and method teachings of) experts of the time.-- In Platonic dialectic language, a 'hypothesis' or 'supposition' is "all that is put forward (without proof) between interlocutors and from which something else can be inferred (deduced):

And this is twofold: either the hypothesis is known as an axiom or known and accepted premise (deduction, 'sunthesis') or the hypothesis is sought - from some data - (reduction, 'analusis').

In the case of searching for the correct hypothesis(s), Platon uses -- first -- a "lemma" or "preliminary premise" (a "working hypothesis" we now say), -- until when it appears that this preliminary hypothesis may or may not turn out to be valid.

Appl. model.

a. Establishment: pregnancy. b. This 'fainomenon' (phenomenon, phenomenon which shows itself) or "what is immediately given" becomes transparent, understandable, 'true' (revealed), if one presupposes that sexual intercourse took place. That is then the 'hupothesis' or 'explanation' (explanation that makes sense).

This is an example of "analusis" or "reductive reasoning.

Conversely: a. sexual intercourse; b. pregnancy. The 'fainomenon' or ascertainable fact is deductible from the 'cause'. This is then 'sunthesis' or "deductive reasoning".

From subject-matter mathematics to ontology.

The ordinary practice of mathematicians at the time was "sunthesis," deduction.

A number of basic notions (one/many;-- point, line, plane, body etc.) were put forward as well as a number of basic judgments (axiomata, postulates). Without proofs, i.e. without deduction from already given premises. But from these one led a whole series of surprising derivations or 'deductions', -- in mathematics called 'theoremata', propositions.

Today it is called and still is called: 'the axiomatic-deductive method'. What is initially "hidden", concealed, in a very limited number of basic notions and basic judgments, is systematically "revealed", "exposed" and thus -- in the antique sense -- "true" (alèthes) in the propositions which -- strictly logically -- result from them.

Platon, as an ontologist, recognized that the presupposed concepts and judgments of mathematics were themselves susceptible to "analusis" or reduction. In particular: what are the (broader) prepositions of those basic concepts and basic judgments? The mathematical 'hupothesis', presuppositions, such as "one/many" and "line, plane" etc., are somewhere 'realities', 'onta' or being! Among many other being or realities! Now what if one first tackles that basic concept (with the basic judgments, as "All that (so) is, is (so)" (EO 23/28 (Laws of Being))? Not to mention the couple "one/many" and "encompassing unity of punctual units" (EO 47/48: The True and One).

Certainly the transcendental or all-encompassing concepts (with their judgments) are presuppositions of the basic mathematical concepts.

In other words, "if transcendental concepts and judgments, then purely mathematical concepts and judgments - understandable, in their essence or are exposed and thus, antiquely, 'true'". At least part of the truth concerning the basic concepts and judgments of mathematics thus becomes clear. Understandable.

This very abstract proposition becomes very concrete when one asks the question differently, namely, "What kinds of realities are mathematical realities?" Even today there is fierce discussion about this among scholars. If one is in the dark about all that is real, then one is immediately in the dark about the answer to the question of the right kind of realities that are mathematical entities!

Conclusion.
Platon's ontology was a foundational study or presuppositional analysis of mathematics. By applying his reductive method to the mathematical foundations themselves.

From all knowing to ontological knowing.
Not just mathematics but all kinds of types of knowing - technai and just folk insights - were subjected to reduction by Platon, in Socrates' wake.

Let us reread EO 56 (A speech) for a moment: there we see Socrates and "the encompassing unity in the punctual units" (when he says that a speech lacking conscience as an element is not (completely) good) and "reality" (when he brands a speech that propagates false realities as unreal) as ontological presuppositions. In this case: of a speech. This is foundational research or presuppositional analysis of a speech.

In passing: at once the postulates or axiomata of the sophists are subjected to investigation. That is: not simply accepted but examined. "Critically examined" one would now say. Criticism' presupposes norms because it is 'value judgement' or 'evaluation': how can one make value judgements, if one has no presuppositions 'in the name of which' one judges, condemns? In other words: one exercises a reduction or analusis.

Categorical ontology.
'Categories' are fundamental concepts. Well, Platon's analysis of e.g. the (foundations of) mathematics or of the (postulates of the) sophists and their speeches is downright "categorical ontology" of those objects of analysis. -

"In the name of" a transcendental ontology. Thus, he put forward the basic notion of "one" and "good" (to say nothing of "being") to be critically evaluated.-

To test something for its true value or its true unity is "criticism": it is invariably done "in the name of" preconceived notions and judgments.

In other words: the more critical a person is, the more he uses preconceived 'hupothesis', axiomatic things! Which he/she assumes as fixed - consciously or often unconsciously -, as solid.

Categorical ontology is thus 'criticism' of some category or domain of reality, -- "in the name of the transcendental." That is why we were dwelling on those transcendentalities. They are the basis of our reduction or analysis, -- "if being, one, true, good, then basic concepts for criticism".

Immediately, "in the name of being (reality), unity (likeness/coherence), truth (revelation), goodness (value)" one can judge things and do so with a solid starting point.

The method is clear: first get to know the category (domain) well - mathematics, speech, sophistry -; then fall back on the transcendentalisms.

Platonic theoria. (76/80).

As has been noted several times, "theoria," fathoming, is going deeper, while observing, into something.

1. Intent,

in Platon's case, is: to get to know existence (actual existence) and essence (mode of being) thoroughly, at least as thoroughly as possible. Or, in more modern terms: to blunt the ontological status (the place something occupies in reality).

2. The remedy.

The hypothetical method. Going deeper, while observing, into something - the theme -

a. analusis, reduction, toward the prepositions,

b. sunthesis, deduction, towards inference.

Applying this hypothetical scheme to something implies that one discerns its existence and essence (EO 09) more closely. For one analyzes - reductively or deductively - what reality or, as the case may be, false reality can be found in that something. At the same time what unity, goodness or sham unity, sham goodness is present in that something.

Because one wants to discern existence and essence, one does transcendental or general ontology. Because one wants to discern the existence and essence of something, one does categorical or particular ontology.

Practical.

Do we take the thief/thief.

a. Basis analysis.

Schema (Jevons-Lukasiewicz).-- If A (premise), then B (intelligible).-- Well, B. So A.

In that case, "A" is a lemma, a provisionally introduced premise. Hence the name "lemmatic-analytic method," attributed to Platon as the first.

What are the premises on which stealing starts? One of them is the axiom that everything that is owned - by others, that is - can and, above all, may be taken away thanks to stealing.

Other hupothesis: provided that one takes into account the injured party's reprisal (and fending it off). Still: expertise both in extorting and in repelling the reprisal. Still: conscience at least "put in brackets" (in ancient Greek: 'epoche', lat.: suspensio). Or still: suppressing conscience either consciously or repressing it unconsciously (which is, among other things, in ancient Greek, 'para.frosune', thinking beside reality. This is: fleeing the ethical reality.

"Not wanting to have conscience.

'Para.frosune', thinking beside reality, thus exhibits two main types. The 'wanting' can be unconscious: then psychologists, today, speak of 'repression'; the 'wanting' can also be conscious: then it is 'repression'. More times than not, it is impracticable to make out ("uncover") whether it is conscious or unconscious.

A narrative.

Stories can be brilliant 'phenomenologies', descriptions of beings ('fainomenon'), that which shows itself immediately and is therefore 'true', revealed, from the outset + 'legein' (articulate, represent, describe)). Such we see from the archaic myths to the most recent jokes.-- So what follows.

Blinded.

"A young man became aware that being married is not without its problems. To show his genuine love for his wife, one evening he blurted out, "Honey, guess what I did for you today. "Probably pulled a stupidity for the umpteenth time!" -- "No, no! I took out a life insurance policy". To which she : "I always knew that thou art a mean fellow. Just think: that insures his own life now!".

S. Kierkegaard (1813/1855; founder of existential or life and commitment thinking) spent his entire life trying to instill in Danish Christians who were - Biblically speaking - pagans the realization that they did not realize that instead of being true Christians they were in fact pagans. His whole rhetoric - method of persuasion - was aimed at this. Hence his so-called 'aesthetic' works.

Everyone among us has experienced how difficult it is to overcome prejudice: the woman just now was so convinced of her own opinion of her husband that - without thinking about what he said - she condemned him a priori. This time with a tragic irony: life insurance is precisely not a selfish act! So unreal - alienated from the reality that was her husband - was she! Perhaps a great many sophists, at the time of Socrates, were equally alienated from the realities of their value-free, indeed cynical, expertise - technai. This led them to silence "the voice of conscience" in order to gain "power" and "prestige" (the lesser lion of Platon's (soul science).

And, as educators, "sophistai," to instill in others that acquisition. Which involves a type of antifrasis, speaking against one's better judgement.

Practical: Do we again take the thief/thief.

b. inference analysis.
Scheme (Jevons-Lukasiewicz).-- If A (premise) then B (intelligible). Well, A. So B.
Here no 'lemma' or 'prolepsis', provisional preposition is needed, because the preposition is known rather than asked (sought).

What is sought is: the inferences. What inferences can be derived, deduced, from stealing? Again: the method is 'theoria', observing the existence and essence of stealing. Again: fate, because in this way one exposes the fate of a single person, of a society.

Ethical, i.e. when the intimate conscience is looked at. But also 'political', i.e. when looking at the (consequences for the) fellow man in - the same - society. With all ancient Greek thinkers this was a main concern.

Note.-- Up to and including the 1950s, this "ethical-political" view predominated. From those years on, this was replaced by what has since been called "the human sciences." The latter, however, want to be 'value-free'. That is: they adhere strictly to the firm or positive facts,--without any value judgment (certainly of any religious or moral (ethical) value judgment).

A scheme of storytelling.
A deduction of the consequences of stealing can, among other things, use the scheme "omen / sequel". Here:
a. there is first a portent (a fact that issues from what follows), i.e. stealing;
b. there is then a sequel (the facts or fates on which the stealing e.g. issues).

The thief, for example, no longer has inner peace: not for a moment is he/she absolutely sure of the success of the theft (which is always a dare) nor of the reactions of the aggrieved.

Fellow humans have no peace anymore: not for a moment is one sure that a thief does not strike somewhere. One person distrusts another.

Immediately a general atmosphere is established: the more stealing succeeds, the more people with a weak conscience are induced to do the same. Others extend the unscrupulousness of it to the other spheres of culture: possessions, yes, but why not damage a good reputation, for example?

This is again categorical ontology, in which the category 'stealing' is further ontologically illuminated in a deductive manner.

An update.

The decomposition of inferences is found, among other things, in "the pragmatic maxime" (maxim of Ch. S. Peirce (1839/1914; founder of pragmaticism).

Bibl. st.: Kl. Oehler, Einl., *Charles S. Peirce, Ueber die Klarheit unserer Gedanken* (How to Make Our Ideas Clear), Frankf.a.M., 1968, 62/63ff..

Here, translated, is the maxim: "Go deeper into the 'effects', consequences, which - in a conceivable way ('conceivably'), - can have practical scope. Thus we come to understand that the object of our thinking exhibits such effects. If we proceed in this way, then our understanding of these effects is the totality of our understanding of the object".

The text, as several times with Peirce, is difficult to articulate. What he means is: to think out an action, an experiment in which the object of our thinking - the given - is involved, is the way to its (experimental) understanding.

Appl. model.

What do we mean when we call something "hard? Apparently this: that many other substances -- if one makes them act on it (act, experiment) -- do not leave scratches in it.-- "The whole concept of this property -- hardness -- (that is so for all other properties) lies in the thinking of the effects. There is absolutely no distinction between a hard and a soft object, so long as those objects were not tested." (O.c. 66/67).

Peirce: it is claimed that such a pragmatic definition betrays "a skeptical (doubtful) and materialistic principle." Yet it is merely the application of the logical principle that Jesus recommended, "By their fruits ye shall know them." Yes, it is very closely intertwined with the presuppositions of the Gospel. (O.c., 62/63).

As above: Platon examines the consequences, individual (ethical and social (political), of stealing. Thus the object of his thinking, stealing, becomes clear(er): he creates a clear (...) understanding, insight - theoria - of that object.

In his "pragmaticist" way, Peirce similarly proceeds. -- Both examine the deductions from introducing into life a provisional understanding of something.

Actually, this is a "historical" method: the concept of democracy, for example, only really becomes clear when it is introduced as an actual regime, -- that democracy!

Platon's "historical dialectic".

We reread EO 49 (Platon 's philosophizing). There the method was outlined: dialoguing, in intimate thinking together, going into a theme. This is called "working dialectically."

In the wake of the Eleates (Parmenides), logic plays the leading role therein. This leads some who do not know Platon well to believe that movement ('kinesis'), coming-and-going, history (the whole of destiny) play no role, unless a ridiculous one, in his thinking. His method is said to dwell purely in the 'transcendent'.

Citing W.C. Salmon, *Logic*, Prentice-Hall, Englewood Cliffs, N.J., 1963, 30/32 (Reductio ad absurdum).-- Cited State 1.

1.-- Definition.

"Well spoken, Kefalos" I replied. "But as for 'righteousness' (conscientious living): what is that?" -- "To tell the truth and pay your debts" you say. Nothing more than that? Are there no exceptions even in that

2.A.-- "If no exceptions, then what (if consequences)?". - "Supposedly, a friend, good in spirit, gave me weapons for safekeeping. At some point, not good in spirit, he asks for them back. Is it duty to return them? No one will maintain that such a thing is my duty or that, if I do so, I am acting conscientiously.-- Likewise, I will be attacked (when I assert) that I must in conscience tell the truth to someone who is not in good spirits."

2.B.-- To define well is to define restrictively (with reservations) if need be. "In this thou art perfectly right" he replied.-- "But, if this be so then 'telling the truth and paying your debts' is not a good definition of righteousness."

One sees it: the unforeseen, yes, unforeseeable fates that make up history play - logically - the role of presuppositions from which deductions are derived.

a. If with spirit, then duty to return. If not with spirit, then duty not to return.

b. Coincidences thus play an integral role in dialectics - conversation between thinkers on a logically strict basis. This is called "historical dialectics", i.e. reasoning together, logically rigorous, taking into account more than merely abstract data and presuppositions. - This limits the number of 'absolute' statements considerably.

Sample 12.-- The dietary-synagogical method. (81/92).

Bibl. st.: E. De Strycker, *Concise history of philosophy*, 104v..-- 'Diairesis', lat.: divisio, division.

Classifying within an encompassing unit (here: a generic or gendered concept) is typically platonic activity. After all, the species - 'eodè', lat.: species - are encompassed by the 'genè', lat.: genera, genera.

To clarify, the genera represent the universal collections; the species the private collections. 'Sunagogè' summary, - also 'sunopsis', is the opposing thought movement.

The classification moves from the more general concept to the less general; the summary moves from the less general concept to the more general.

Stoicheiosis.

Rereading EO 52vv.-- It is clear: classification and its inverse, summary, are applications of the stechiotic method that goes from the encompassing unit to the punctual units and vice versa.-- Ordering concepts is one type of ordering action.

Commonplaces.
Bibl. Sample : O. Willmann, *Abriss d. Phil.*, 132.
'Topos', lat.: locus (common) place.-- A commonplace is a main viewpoint that summarizes a multitude of things (an encompassing unit).

Topics' is the theory concerning the 'topoi', loci, commonplaces,--which we now accept both for the logic of concepts (categorems) and for ontology (categories).

Schedule.-- A "schedule" is a comprehensive unit of platitudes.
Such schemata are legion.
Consider the psychoanalytic scheme "conscious/subconscious/unconscious". Or: "Lustprinzip/ Realitasprinzip". Such concept sets - schemata - serve as "paradeigmata", paradigms (Kuhn) or textbook examples for psychoanalysts when they deal with human problems. Someone comes in, tells (anamnesis). Meanwhile, in the mind of the attentively listening analyst, the schemata emerge and illuminate what is being told, - revealing what the reality is in/behind the words of the story ('truth').

Such is the value, the use value, of platitudes (including in the form of a diagram).-- The question arises: do such platitudes exist for logic and ontology?

A.-- The categoremen. (82/84).

Bibl. st.:
-- O. Willmann, *Gesch.d.Id.,* III, 1037 (Universalies);
-- id., *Abriss d. Phil.,* 121ff. (Die Definition);
-- D. Mercier, *Logique*, Louvain/ Paris, 1922-7, 99/104 (Les prédicables ou catégorèmes).

'Katègoroumena', lat.: praedicabilia, also: 'quinque voces', all that can be revealed of something, made public. Thus, since Porfurios of Turos (233/305; Neoplatonist), known for his Eisagoge (Lat.: Quinque voces) as an introduction to Aristotle's logical works, there have been five main viewpoints.

1.-- Genos', lat.: genus, genus (universal collection or class). Thus e.g. "living being".

2.-- 'Eidos; lat.: species, kind (private collection or class).... Thus e.g. 'plant', because she is a species or type of "living thing".

As an aside: immediately a third main point of view emerges, namely that which makes the plant distinguishable (discriminable) from all that lives outside the plant (e.g. the fact that it roots in the earth or something else, germinates, lives and dies over time). That which makes the difference, the ancients called "eidopoios diafora", lat.: differentia specifica, specific or specific difference.

The last two "voces" of the five.

1. 'Idion', lat.: proprium, property. But note: according to Mercier, it is the essential or nature-necessary property that is at issue. Thus e.g. in the case of "living being": being alive.

2. 'Sumbebèkos', lat.: accidens accidental property. Thus e.g. the fact that a plant can be found in South Africa is purely coincidental.

The tree diagram of Porfurios.
That stoicheiosis is involved in the categorems is evident from what follows:
a. something (ousia, substantia); **b.1.** inorganic something; **b.2.** living something; **b.3**. vegetable something; **b.4**. animal something; **b.5.** human something.

One sees that the transcendental or all-encompassing concept of "something" is spread over five "categories" or kinds of being. This is on the basis of species or specific differences.

Thus the encompassing unity in the five punctual - categorical - units is revealed. The basis: similarity and non-similarity. Which points to the idea of collection (or the idea of 'class' so that one can classify things into 'classes'). This is how one organizes things. Yes, one can define them (genus x species difference = species).

Definition.-- To define something - to give it its essence - is a quasi-daily necessity. To express oneself clearly, for example, involves being able to define with crystal clarity the matters at issue.

We have a practical, "operational" formula, based on the first three category names: gender x species difference = species.

Application.
Bibl. st.: F. De Wachter, ed., *On the utility and disadvantage of postmodernism*, Kapellen, Rickmans, 1993.

For three decades there has been much discussion about 'modern' and 'postmodern' (literally namodern).-- The book cited attempts to bring order to the jumble of ideas. Inspire us to one of the main ideas to 'define' what postmodernism could be.

A.-- Gender (encompassing collection or class).
Beginning with a model (one also likes to say "metaphor" now).

a. We are all on the train that travels at fast speed, purposefully - mechanically, through the landscape. That is the modern, technical-machinetic substrate or substructure.

b. Meanwhile, we sit carefree, enjoying, looking at the fleeting series of landscapes. Enjoying the impressions (a kind of impressionism). Not working like the train driver. But aesthetically absorbed in all there is to experience. That's the postmodern-avantgardist-above.

As an aside, we do say "avant-garde," because a modern avant-garde of artists - think Guys and Baudelaire, past century, lived through that duality "train/aesthetic pleasure.

Another model:
a. there is the modern metropolis; **b**. we stroll around in it, enjoying - not working - involved but aesthetically-distant.-- The duality: site/ enjoying strolling! Typical of the postmodern.

Shattering.
The similarities and coherences - the connections or comprehensive units - fade away for the stroller or train passenger to enjoy: there are so many landscapes, there are so many views of life and the world side by side, after each other! One does not have the time to "go deeper into it" (platonic theory). Unity-in-the-many becomes multiplicity-in-the-unity! This is certainly not the ideal. But let us adhere to Nietzsche's "fröhliche Wissenschaft", (joyful science), -- so as not to succumb to the tragic seriousness of the lives of traditional humanity. Airily enjoying the welfare state!

Species difference/species (included collection or class).
The actual gender is "culture," spread across two types, modern and postmodern.

a. The paleopythagorean model.
Defining, i.e. outlining something so that all its copies and only those copies are indicated by it, was an exercise of the paleopythagoreans, according to O. Willmann, *Gesch.d.Ideal.* I, 283.

For example, "What is a lull in the wind? An air mass at rest.-- What is level sea? A sea without waves.
Note the structure (encompassing unit):
1. gender: air mass, sea;
2. species difference: at rest, without giving birth. Together: the species, eidos or kind.-- One sees it: methodically! Ordered!

b. Application.
"What is postmodern? The modern (train, big city), aesthetically-airy lived through". Both models in fact cover a definition without its external form.-- Thus one understands what De Cauter, in mentioned book, says: "Postmodernity is: **1**. modernity**2**. in its final state.

Conclusion.-- 'Modern' and 'postmodern' do differ but also run together. To seek to define them is to bring 'modern' and 'postmodern' together, indeed, to merge them as the ancient stoicheiosis taught us.

Note -- The book attempts to make this main idea, just defined by means of models (metaphors and real definitions), true with regard to architecture, yes, art in general, bodily societies, New Social Movements (= NSB), multiculture, polycentrism of cultures all over the globe, views on life and the world of all kinds.

Genetic summary.
The "methodos gennètikè" (genetic method) sees the phenomenon diachronically, -- in its course ('process').

It can be argued that the rare experience of "big city/ strolling" or "train/ enjoying" has become commonplace over time. As Luc Anckaert, in: Streven 60 (1993): Oct., 857, says: "Modern avant-garde culture becomes an everyday experience in our time." That too is defining but historically, diachronically,--looking at the cultural evolution from merely modern to postmodern. For that is what the definition boils down to after all: the postmodern is a type of modernity.-- Whether that means the end of it (De Cauter), we will leave here and now in the middle.

B.-- The categories. (85/86).

Bibl. st.: O. Willmann, *Abriss d. Phil.*, 394/ 400 (Die Kategorien).
Since at least Aristotle, if not before him, the ontological fundamental concepts, as they circulate in traditional ontology, have been called 'categories'. -- 'Katègoria', lat.: praedicamentum, fundamental concept.

Both 'katègoroumenon' and 'katègoria' come from 'katègoreo', I reveal (a.k.a. on the court: accuse already expose). 'Category' is thus, like the categoremes, a principal point of view that, from something, makes something revealable.

As O. Willmann, *Abriss d. Phil.*, 394, says: with Aristotle, the concept of category is situated in the theory of language -- particularly in the theory of judgment.

Coherence.
The background now - as opposed to that of the categorems, which relied on similarity - is coherence. The something considered is considered a system. Together, yes, togetherness within that system and outside of it o.g.v. coherence.

The list of Archutas of Tares (= Archytas of Tarentum; -445/-395; paleopythagorean).-- This scientist and statesman has to his credit a list that one finds with certainty with Aristotle.

A.-- Thing (something) / relation.
a. 'Hupostasis' lat. 'substantia', independent something,--in the broadest sense of "all that is contemplable in itself"
b. "Pros ti", lat.: relatio, relation.-- Thing and relation are the basic system or basic pair.

As an aside: a relationship is something that is between at least two things; substances, selves. A bringing together, yes, merging of at least two entities.

As an aside, 'su.stoichia', pair of opposites, is a typical pythagorean term.-- Thing and relation are the basis. The rest of the list is 'supplementation'.

B.-- Some pairs of concepts.
1. Quantity (quantity) / quality (quality).
"Poson/ poion", lat.: quantitas/ qualitas.
a. Quantity: "two miles from here";
b. quality: "a sunny landscape" (two miles/sunny).
Note the hidden quantities and qualities: "Danig (quantity) he saw his female gaily (quality) where "gaily see" is a quality of someone.-- "Pigeons with power (quantity) flew through the airspace (where "with power" is "many in number").

2. Place/Time.

"Pou/ pote" (lat.: locus/ tempus).-- "On the beach was a beautiful pearl" (on the beach). "Yesterday it was raining" (yesterday). "Jantje arrived there on time" (there/ on time).

Note.-- Such place and time definitions situate very well. And also: they 'singularize' i.e. indicate the uniqueness, the only, the singularity of something. They also 'concretize' : something is always 'concrete' - Latin: concretus, fused i.e. found in some set of circumstances.

A figure like Napoleon, for example, is only 'understandable' ('true', revelable as he was) if one situates him in the course of history and also brings him home to his country, France. That time and place boundness is the 'concrete' of it.
More to the point: the singular or sole is always fused with the framework in which it is. Consequence something is invariably "singular-concrete".

3. Activeness (activity) / idleness (passivity)

"Poiei/ paschein" (lat.: actio/ passio).-- "He just let himself do it" includes the two 'movements' or 'processes': letting (passive, undergoing), doing 'active', (acting on).-- "Thrown into the world we design that world".

4. Workmanlike and idle disposition.

"Keisthai/ echein"(lat.: situs/ habitus).-- Often one does not translate but says it in the Latin terms, i.e. situs and habitus.

In Greek and Latin, intransitive verbs are used.-- "I am straight. I am frightened" (active state, both spatial and local and psychological, inner).-- "I am well because I am armed (passive state, both inner and outer).

Note.-- This last systechy is related to the conjugations of the ancient languages. Yet they remain valid in our languages as well. For stipulations of states are a permanent part of language.

Conclusion.-- Supposedly, someone is given a subject to discuss or to write a treatise on. The pairs above can serve as platitudes to facilitate 'invention' (gr.: heuresis, lat.: inventio). In other words: they have 'heuristic' value.

Indeed, if one can develop from a theme those ten aspects, one will already have come a long way in developing the theme. After all, one finds "thoughts. And indeed a system of thoughts.

Restrictive notions. And judgments. (87/92) .

We saw it already EO 87 ("Are there no exceptions even there?"). There we saw that there is real generality and sham generality. Which frees us from the so-called "absolute" statements.-- We will now go into that in more detail.

Dialectics

Bibl. Sample : A.Gödeckemeyer, *Platon*, Munich, Rösl., 1922, 126ff,.-- Gödeckemeyer states it as follows.

What is the main concern of Platon's dialectics? Answer: to get clarity, in pure thinking, about the susceptibility of ideas (concepts) to be treated together and in combination (stoicheiosis), as well as, in that connection, about the arrangement of concepts in encompassing (more general) and encompassing (less general). Of which we saw models before.

The importance of the point of view.

A first restriction or reservation springs from the point of view or perspective from which one judges.-- "Observation shows that something -- depending on the point of view from which it is approached -- can be interpreted both as unity and as multiplicity."

Appl. model.

"For example, a human being is, insofar as he is compared with other human beings, a 'unit' (note: belongs by virtue of common properties to one and the same collection or class). However, insofar as he is approached in isolation and taking into account his internal structure ('composite'), he is a 'multitude' (op. consisting of very different and thus 'many' parts)". (O.c., 123)

Note -- 'Perspective' - a concept underlined by Fr. Nietzsche - is made clear via the following model: a tree, viewed from afar, is small; close up, it is large. Yet, in itself, as 'substance' without 'relation' (the two main points of view of categories), it is one and the same tree. So it is not Nietzsche but rather the Platon, so undervalued by Nietzsche, who realized the perspectivity of our judgments. And articulated it clearly, in logical language. Long before Nietzsche.

Thinking.

Thinking according to Platon exhibits two aspects, one logical and one epistemological.

1. Logical aspect.

Gödeckemeyer, o. c., "All thinking is union or connection, i.e. of nouns (subjects) and verbs (sayings). All thinking proceeds as follows: with a subject a saying is connected.

In which the saying is either confirmed or denied. All thinking, then, is judging,-- affirming (uniting) and denying (separating). These are the elementary forms of it". Cfr. EO 23 (Judgmental Theory).-- One senses, throughout Gödeckemeyer 's text, the doctrine of identitivity.

2. Epistemological aspect.
Logically, the sentence or judgment is considered in itself - as substance. Epistemologically, that same sentence is considered "in relation to" some reality, the thing being judged.

Gödeckemeyer, ibid..-- "All judgments strike at a fact of which it claims something. It follows that it can be true or false. 'True', in so far as it pronounces with regard to the given what is;--'false', in so far as it treats nothing as something." -- Cfr EO 64 (Epistemology).

Note.-- It is clear that the diuretic-synoptic method is at work here again: the connecting of concepts relies on encompassing and/or being encompassed.-- What is particularly striking is that Platon also 'connects' views or perspectives among themselves. And that he also 'connects' judgments and realities that are being judged. All the while through 'stoicheiosis', the essential core of his dialectic.

Yet we continue in this 'connection mania'! -- Do we quote a connoisseur.-- W.N.A. Klever, *Dialectical Thinking (On Plato, Mathematics and the Death Penalty)* Bussum, 1981, 32.

"V. Goldschmidt summarizes the logical démarche (*note* : method) of socratic dialogues in the formula "Et alia. Et oppositum. Et idem non". Translated: "Also other. And the opposite. And the same not". In doing so, he hit the structure right (V. Goldschmidt, *Les dialogues de Platon (Structure et méthode dialectique),* (Plato's dialogues (Structure and dialectical method)), Paris, 1947).

Socrates is repeatedly confronted with certain conceptualizations.-- A concept -- e.g., "the good" -- is identified -- provisionally -- with another concept -- e.g., the useful -- and thus understood. In that case, "the good" is broadened or "specified" to "usefulness.

The analysis as Socrates performs it, however, now teaches that other (et alia) than useful and helpful things are also called 'good'.... That, in other words, this definition is too narrow.

Indeed, ongoing research shows that "the good" is the opposite (et oppositum) of "usefulness. So that "it only becomes evident that the determination of 'the right' has turned into its opposite" (State 343a)."

In other words: describing the good as "what is usable" goes up to a certain point (= restriction or reservation). Yes, not only is the usable only an encompassing concept, within the encompassing unity of the good as a more encompassing concept: some forms of usability can be called radically non-good!

Conclusion: starting from an overly narrow definition, one arrives at two startling observations:
a. Other things are also good,
b. some useful things are not good, the opposite of good. That is platonic dialectic. It is restrictive thinking, i.e. it pays attention to the limits of what is asserted.

Klever's conclusion.
"In scientific knowledge - let us not forget that this is why it is still to be done - we realize coherence, structure, system. This is done by interweaving our ideas with each other.

Note: In Platon's terms: sumplokè, interweaving; desmos, connection - : "Only by mutual interweaving of concepts - 'ton eidon sumplokèn' - does insight arise (Sophistes 259th)". "To want to separate everything from everything is unphilosophical" is added - for the benefit of fanatical 'analytics' (op.: dissenters) - (O.c., 54).
Klever adds, "That then is Platon's last word on scientific knowledge. As one can see, he has thus arrived at the threshold of systems theory (...)" (O.c., ibid.).

Applicable models. (89/92)
G.J. de Vries, *Plato 's image of man*, in Tijdschr.v.Phil. 15 (1953): 3, 426/438.
"Thus the body can become a hindrance to the activity of the soul. Then it is a 'prison' in which the soul is shut up - like an oyster in its shell - and from which it yearns to be freed."

Behold a platonic assertion. And now the true, i.e. real and not sham, scope. "These are perhaps the most well-known "Theses of Platon".

They are indeed fundamental. But ... like all his 'theses', they have no more than limited validity. (A.c., In other words, when one reads Platon truly and not shamelessly, one should always situate one of his theses (= judgements) in the whole framework of his dialectical thinking: they are theses-with-preservation. That is: they refer to, are interwoven with other propositions.

Those "other propositions" (et alia), indeed those "contrary propositions" (et oppositum) read, e.g., that "the soul must take care of all that is inanimate as much as it takes care of itself" (*Faidon* 115b; *Faidros* 246b).

Other model.
The soul itself chooses its "daimon," the extra-natural being who co-determines its "happiness" ("eudaimonia" or "kakodaimonia," happiness or unhappiness). But -- "et alia", "et oppositum" -- "after that choice, she is bound to that daimon" (a.c., 436).-- Such is the twofold, inner contradictions encompassing concept of 'destiny' with Platon.

Another model.
Platon considers it possible to think of life as a game. "All the mourning and merry play of our life" he calls it somewhere. By this he does not at all mean a smiling or dejected underestimation of human existence. Man is, in his eyes (he was deeply religious), "a plaything of deity": precisely that is "the best thing about man." Thus he speaks - always de Vries says - "with deity before his eyes and impressed by it" (a.c., 437).

Life, according to Platon, is a mixture - together - yes, together - of sometimes harsh disappointments (he has experienced many), and of joy. According to Platon, who is a reincarnist, the deeper reason, situated in the "anamnesis" is the fact that man, before his earthly existence, enjoyed "a blissful spectacle and sight". The memory of this has an after-effect: more or less consciously, man strives for precisely this "blissful experience" in order to live it anew.

Realizing this, man can conceive of this earthly life as "a play" (mourning and rejoicing).-- That is the thesis.

But now the restriction or reservation (et alia et oppositum): the (theatrical) play is "ambivalent" or "bivalent. The play can have a good nature of being ("as a shadow of the heavenly life"). It can also exhibit a non-good nature of being: as merely "a game".

Only the highest and all-embracing idea "the good" is not two-valued: it is undivided good,-- absolute good,-- good-less. All the other "goods" (values) are "mixed; good-and-evil. Thus, e.g., the drama (weeping and rejoicing) that is life.

Another model.

Dialectic is stoicheiosis, gathering-yes, merging-and doing so of sometimes opposing propositions. Thus e.g. what follows.

People sometimes accuse Platon of being at the cradle of "Western rationalism." This is because he is a logical reasoner through and through. Which the whole Western tradition, each time different, has imitated.

But look: in the universe, the cosmos or 'fusis', nature (the totality of all that is) Platon notes two 'forces'.

a. 'Nous', lat.: intellectus, spirit (reason, reason,--spirit, will),--"insight that accompanies objective" (de Vries, a.c., 427).

b. 'Aneke', lat.: necessitas, fate. This second 'force' is 'reasonless' but inevitable co-cause of all that the cosmos shows. In particular: the divine, understand: the higher, yes, paranormal, model of everything is prevented by this 'necessity',--"to a certain extent" (restriction, reservation).

Conclusion.-- Thesis: nous, reasonableness, 'rationality'. Opposite proposition: ananke, unreasonableness, 'irrationality'.

Latest model.

We simply cite.-- de Vries, a.c., 437.
"The play of our lives,-- finds its limit in ethical (and related political and pedagogical) action. Where the freedom of play collides with the responsibility for one's fellow man. Where duty intervenes.

Man is called - in his life, yes, even before - to moral decisions where the memory of a spectacle enjoyed (in a pre-existence) and the prospect of an all-encompassing play can support but not replace the seriousness of the choice. Then to want to play would be an illicit anticipation (presumption) which presupposes a harmony which is not (yet) present.
In the theoretical and artistic, man can fully experience "the freedom of the game."
Does this not recall the stages of S. Kierkegaard? He states that in a first existential stage man can "play" (with conceptions,-- theoretically;-- with enjoyments: aesthetically). But there is already, in that stage the ethical, responsible stage at work: life is seriousness which limits the playing with conceptions and enjoyments.

Now we reread EO 56: Every defect violates the total value! In other words: proposition: play; opposite proposition: seriousness.-- That's dialectics.

One's own opinion/ the opinions of others.

Socrates, in his wake Platon held their own opinions, at least on basic points, especially: 'ethical', matters of conscience, and 'political', matters of community. This is one aspect. The other - et alia, et oppositum - are the opinions that 'differ!

Bibl. st.: A.R. Henderickx, *The justice in The State of Platon* in: Tijdschr.v.Phil. 7 (1945): 1/2, 19/34.--

Kefalos thinks that the 'dikaiosunè', justice - understand: conscientiously in living together behave - consists in speaking truth and honesty,-- Polemarchos in doing good to his friends and evil to his enemies. Thrasumachos : dikaiosune, justice, means benefit only to the one who is the stronger, the more powerful;-- Glaukon: one holds 'dikaiosune' to mean "a lesser evil"; Adeimantis: a sham justice provides man with all earthly happiness.

Behold the perspectives (EO 87 (The Importance of the Point of View) with the opinions in its wake. This includes the ambiguity of what one designates with the same term (with a multitude of sometimes contradictory meanings): dikaiosunè, justice, conscientiousness.

This was, in passing, the basis of the nominalism of the sophists. "Dikaiosunè" is only an "onoma," a "nomen," a word-sound. What the word sound actually covers depends on each person's perspective and interpretation.

In contrast, Socrates and Platon argued that, amidst these many views and interpretations, there is an idea of "justice" at work that is objective,--though it is differently interpreted from region to region and from individual to individual.

Conclusion.-- Not the trade middle (Kefalos), not the circle of friends (Polemarchos), not the then mentality of a good portion of the fellow citizens with their cynicism (Thrasumachos), not the eternal seeking of compromise by a portion of the then citizens (Glaukon), not the soulless opportunism (Adeimantos) is the right position! Even though there is a lot of descriptive truth in that (as positive science).

For Socrates - Platon, the soul, essence of human beings, must be examined to find the correct definition of conscience.-- Meanwhile, democratically all opinions come into play.

The dietary-synoptic method distinguishes (classifies) them, -- the opinions, but summarizes (summarizes) them. Critical judgment.

Sample 13 -- The inductive (generalizing/verbalizing) method. (93/97)

Socrates of Athens - with him Platon - is known for applying the "inductive method" very frequently. Briefly outlined:

a. of at least one specimen with a (striking) characteristic, one decides on all, yes, all possible specimens of a collection;

b. from at least one part with a (salient) property, one decides on the all parts system. The first mode of induction is called 'generalization', the second 'whole-ization' or globalisation. Both lead to a totality, consisting of elements or parts. One feels the breath of stoicheosis! In particular: the bringing together, yes, merging of punctual units into a comprehensive unity. But now on the basis of perception.

Anaxagoras and others. (93/95)

Socrates followed a long tradition in this. The Milesians, under Thales of Miletos (-624/-545), had started a tradition of nature observation. One finds extensive traces of this in Herodotos of Halikarnassos (-484/-425; Historiai) and Thukudides of Athens (-465/-395; Peloponnesian War) - as far as human science is concerned - and in Anaxagoras of Klazomenai (-499/-428).-- Let us dwell a little on the latter.

Natural Science.

D. Gershenson / D. Greenberg, *Anaxagoras and the Birth of Scientific Method*, New York, Blaisdell, 1964, claims that, with Anaxagoras, we stand for a true natural science in the present sense. Why? Because he held a unified theory of natural phenomena that he supported with (rationally speaking) sound observational foundations coupled with sound logical processing.

a. Cared for and of 'akribeia', accuracy, attesting to observation.-- Instead of passive experiences he posited active observations, i.e. trials or experiments.

b. Construction of Logically Rigorous Theories. - In his time, thinkers in Hellas began to articulate rules of logical behavior.

a/b. It was precisely the fusion, - the bringing together,- yes, merging of both methods, the observation, yes, the experiment and the applied logic, that allowed him a solid insight into both the nature of matter and that of the universe - the cosmos or nature - as a totality. This understanding is - according to Gershenson/ Greenberg - still characteristic of the contemporary natural sciences.

From the visible to the invisible.

Already Herodotos, Hist. 2: 33 e.g., upholds this very scientific principle: "From the known I conclude to the unknown" (he says literally). More to the point, his scientific critique of Homer's texts (which he partly misinterprets, since Homer was a seer-poet (EO 30) and had no scientific pretensions) proceeds from the same axiom: "Homer assumes something unknown that is not open to scrutiny. I know nothing of that stream Okeanos". Homer, like the average Greek of his archaic time, believed in a world water, Okeanos. - Cfr. Fr. Krafft, *Geschichte der Naturwissenschaft*, I (*Die Begründung einer Wissenschaft von der Natur durch die Griechen*), (History of Natural Science, I (The Foundation of a Science of Nature by the Greeks)), Freiburg, Rombach, 1971, 145, 173.

With Anaxagoras the wording is clear: "Opsis ton adelon ta fainomena", literally: seeing the invisible things, (...) the showing (= immediately given) things.

In other words, "ta chrèmata", the immediately given things are via reasoning (and/or 'seer's gift') - the necessary and sufficient reason for non-immediately given things to be joined (either as premise or inference).

Cf. EO 76/80 (Platonic theoria): Platon, in Socrates' wake starts from precisely the same premise.

Stoicheiosis.-- The unity in the multitude (of punctual units) and vice versa!

A.-- Generalization.

Anaxagoras illustrated his scientific expositions with experimentation: "This shows that in Anaxagoras' day, it was not uncommon to substantiate direct observation with active experimentation" (Gershenson/ Greenberg, o.c., 42).

Immediately he pointed out the repeatability by everyone of the processes thus demonstrated. He situated them in a collection (class) with one and the same property.

Appl. mod.-- O.c., 40.-- He blew up e.g. a wine bag. twisted its neck until the compressed air firmly hardened the pliable bag. Then he showed that, once so far, the bag resisted the pressure of a considerable force.

Caused - he said - by air which is thus a material and tangible reality. Indeed: he had first caught air, seemingly in 'nothing', in such a flexible wine bag.-- Well, this applies not only to this one specimen of air but to all (possible) specimens (generalization).

One sees it: the inductive - and then experimental-inductive - method had, with Socrates and Platon, solid predecessors.

B.—Globalisation or 'whole-ization'.

Here too one starts from exactly one 'part' but not to generalize as before but to 'globalize', i.e. to grasp the overall reality.

Appl. mod. - O.c., 16.-- A grain of wheat -- As long as its constituents are properly ordered -- can live, can grow e.g.

Second stage of (biological) experimentation.-- Anaxagoras plants the grain in the earth. Twofold process or 'kinesis' (lat.: motus):

a. the specific structure ("encompassing unit") of the grain is destroyed and its scattered particles take on the appearance of inanimate matter;

b. precisely because of this, or at least simultaneously with it, a new plant arises which will then itself bear grain, because it, in turn, exhibits the same species structure or "encompassing unity of punctual units." If that is not stoicheiosis; this time in the form of seeing a system, which - incidentally - repeats itself.

O.c., 34: "A structure or configuration is built out, from disorderly elements, into an ordered totality." Thus the author s summarize Anaxagoras's thought.

Platon b..v. will emphasize this same structure and do so cosmically, like Anaxagoras: "The spirit - nous - which governs the universe is the same as the right order" (Kratulos 413c).

So much for what preceded Platon regarding generalization or generalization (induction).

We shall see that what Anaxagoras tried to accomplish in the natural sciences, Platon, following in Socrates' footsteps, transferred to the human level, i.e. within the conscience and in society. Psychology, sociology, culturology are thus gradually and very touchingly getting off the ground. And all this in the wake of Proto-sophistic, which emphasized human coexistence and the expertise that can be exercised in it.

Note.-- Sophistic, with its argumentation, i.e., with its will to persuade and to carry on practically and above all theoretically, was not so new! Do you see Anaxagoras and others persuading when they carry out an experiment in the audience? That same audience they had to convince of what they were doing. Science without argumentation does not exist.

Closure speech (syllogism).

A closing sentence is a triplet of sentences, two of which are the logical prepositional phrases and one of which is the logical postpositional phrase. From the two prepositional phrases (VZ 1 and VZ 2) one concludes with the postpositional phrase. We have already seen repeatedly that this can be done in more than one way (EO 76/80).

If A, then B. That is sentence 1.-- Well, A. So B. (sentence + conclusion).-- Well, B. So A. (sentence 2 + conclusion).-- That is the syllogistic scheme of deduction and reduction, of forward and backward reasoning.

The three main types of Ch. Peirce (1839/1914).

Of the 256 possible "combinations" concerning syllogism, 90 are logically valid and 5 to 6 are common. Yet we dwell on what Peirce teaches us.

1.-- Deduction.

All the beans in this bag are white. Well, this bean/these beans (a handful e.g.) come from this bag. So this bean (singular)/ these beans (private) are white.-- Now we move the first preface to the back.

2.-- Reduction

(in the form of an induction - generalization).

This bean/these beans (singular/ private) come from this bag. Well, this bean/ these beans are white. So all (universal) beans in this bag are white.-- Again, we move the first preface to the back.

3. -- Hypothesis

("abduction" in Peirce's language).

This bean/these beans are white. Well, all the beans in this bag are white. So this bean/these beans come from this bag.-- This is also a reduction but now not a 'generalizing' induction but a hypothetical reasoning.

This somewhat delineates the domain of inductive reasoning. The induction is a hypothesis, because one has no deductive proof of it: it is only an assumption. Peirce's hypothesis is actually a 'whole-ization': from a part one concludes to the (belonging to the) whole or system which, in this case, is the bag. Although the whole case can also be referred to as a mere collection, of course.

The Socratic induction.

Socrates is characterized by Aristotle as follows. "Socrates dealt with the ethical virtues.-- He was the first to seek -- with a view to this -- to articulate general definitions (...). The valid reason for this was his will to reach decisions by reasoning ('sullogizesthai') (...).

Two elements are with reason Socrates' own achievement: inductive reasoning and general definitions" (Ar., *Metaph*. M 4: 1078 b17-32).-- We saw this already EO 80 ("Are there no exceptions even there?").

Very specifically, Socrates was shocked by an emerging elite of 'specialists', who were experts in one or another 'technè', craftsmanship, skill, (proto)science. If one will: 'specialists'. They were experts in agriculture, shipbuilding, etc., but lacked conscience ('justice').

Consequence: such specialists were in his eyes a potential danger for the 'polis', society. For they were - ethically - 'professional idiots'.

The socratic dialectic.
He sought them out, -- those specialists and their mermen, the sophists. Dialogically he reasoned. - To do this, Socrates takes samples from the totality of actual behavior -- the unscrupulous as well as the conscientious. To generalize eventually. This is: to induce.

Also the other opinions.
Democratic-minded as he was - he testified in his life to a far-reaching freedom of criticism of the established morals, he began by assuming that he was "an ignoramus." In order to induce the contrarians, the ordinary interlocutors, to come out of their shell. He was aware that he too only knew samples and not the whole. As a result he learned a lot, including and especially from the sophists.

This is how the dissenters came to speak. Democratic. This is: other samples - because other views (EO 87, 92) - came exposed ('a.letheia', 'apocalupsis', truth).

In short, dialogic induction. That is the core of Socrates' dialectic. That reflects all of Platon's dialogues.

Applic. mod. "Thus Socrates observes that only then do we call someone "a good runner, a good wrestler, a good singer," if by his own will he cannot also run, root, sing well. Not if he fails against his will". (E. De Strycker, *Bekn. gesch*., 74).

From these samples, Socrates concludes that ability includes both possibilities: being able to perform, being able to fail knowingly and willingly. That is then "the common characteristic" (of the collection of "able" people).

Sample 14.-- Types of inductive method. (92/115)

Do we dwell now, on a multitude of inductions.

1.-- The summative, "formal" or "Aristotelian".

What one has determined of each member of a set or of each part of a system taken separately, one summarizes by asserting it of all the members or parts together.-- The generalization and/or 'whole-ization' here amounts to summary. Cfr EO 81 (Dietary and/or synoptic method).

Appl. model.

In his Analutika (= logic) Aristotle says: "Man, the horse, the mule - each species taken separately - live long. Well (in a then interpretation) they are the (only) animals without bile. So all bile-free animals taken together live long". - We have supplemented Aristotle's text with "each taken separately" and "all taken together" to clarify what he actually meant.

Note.-- 'Summative' conveys perfectly, for 'summa', sum, is each taken separately collectively. 'Formal' is but an unsuccessful phrasing, for 'formal' here means 'summarizing'; 'Aristotelian' is a purely accidental epithet, of course.

A stricter formula.

One thinks of a teacher who, after checking each homework separately, counts them again: all together! The number is the sum of all separately. This is represented - 'depicted' - in a number.

I.M. Bochenski, O.P. *Philosophical methods in modern science*, Utr./Antw., 1961, 146.

He calls the summative induction "complete induction" (again, another title).-- "Are xi, x2, x3, ... xn elements of a class a and all its elements -- other than these, therefore, there are none -- and does F (note: some trait or property tested) accrue to x1, x2, x3, ... xn, then f accrues to all elements collectively of a".

Note.-- One does not forget that summative or summary induction is the essence of all induction types. By what means? Because a generalization or 'whole-ization' invariably presupposes such a summative induction.

So e.g.: I observe that two times a specimen of water boils at 100° C.. I summarize this and state a hypothesis: all possible water must also boil at 100° C. Without that summering of the two specimens,-- two times a specimen of 'water' -- one cannot possibly generalize,-- to all (possible).

2. -- Amplifying, knowledge-expanding induction (99).
The summative induction reasons: from all separately to all collectively.-- The amplificative reasons: from at least one to all (possible).

In other words: the summative induction summarizes the tested specimens. The amplificative induction extends - 'extrapolates' is also said - to the testable, but not yet tested specimens. So : on the extension of the summative results.

2.A.-- Collection Theory.
One could also say; 'metaphorically'.
Sentence 1: This bean/these beans come/are from this bag.
Sentence 2: Well, this bean/ these beans/ are white.
Conclusion: So all the beans in this bag are white.
From the whiteness of one or some to all (possible).

2.B. -- System Learning Count.
One could also say "metonymic.
Sentence 1. This is a part of a bean.
Sentence 2 : Well, this one part is white.
Conclusion: So the whole bean is white.

From the whiteness of one part to the whiteness of all parts or the whole. This distinction rests, in the case of Platonic thought, on the dichotomy found in Platon, namely, all and whole. Which the mid-century scholastics translate by "totum logicum" (collection) and "totum physicum" (system).

A paradigm.
The school teacher is taking the children for a walk in the forest: "visual education". Suddenly a girl comes running with a beautiful striped plume.

Inductive, 'Whole-ized reasoning.
1.-- Immediately obvious: that plume is a part of the whole bird (the system).

2.-- So much for summative induction.-- From that single plume one now reasons to the total bird: a child, acquainted with some birds, says that that plume "with those nice stripes" is a plume of a magpie.

That's the amplifying or knowledge or information - expanding induction. -- This, of course, is conjecture or hypothesis. Further research can confirm or deny, 'rule out'. Which means that the amplificative induction is a restrictive, caveat-inducing reasoning. The induction is not absolutely necessary (ED 37: possible).

3A. -- *The baconian or causal (causal) induction. (100).*

Francis Bacon of Verulam (1561/1626), known for his '*Novum organum scientiarum'*, (1620), pushed for a more experimental approach in the professional sciences and in philosophy. 'Science' he saw as the mastery - free from any ethical or religious 'value' - of nature by (modern) man. By experiment and reasoning -- the two as with Anaxagoras of Klazomenai (EO 93) in one -- one "tortures nature" so that it reveals its secrets. -- That is the background of his type of amplificatory induction.

Causality

The causal connection between two phenomena is an application of it. In particular: the omen is the cause; the sequel is the effect or consequence.

Bacon's reasoning: if cause, then effect (sentence 1); well, effect (sentence 2); therefore cause (sentence).

Causal induction.

Causal induction reasons from one or more instances of the same type of causality to all possible instances (the whole set).

If all water boils at 100° C., then this water and that water (sample). Well this water and that water boils at 100°C. (experiment twice). So all water boils at 100° C..

That's the inductive core. Now the causal induction.

If sufficient heating, then boiling point of water. -- Well, boiling point of this water and that water.-- So sufficient heating of this and that water as specimens of all water.

From two instances of causation ("encompassing unity of two punctual units, namely the cause (heating) and the effect (boiling)) one reasons to all instances."

This is simply the application of Anaxagorean or Socratic induction to causal processes.

"For all water, if it is sufficiently heated, it then boils at 100° C.. Well, this water and that water, after being sufficiently heated, reach the boiling point 100° C.. So all water, if sufficiently heated, boils at 100°. That then is a second formula.

Natural Law.

When a phenomenon is always and everywhere true, then it is lawful.-- Clearly, sound induction leads to lawfulness. From some cases one reasons to all.

3B. The operative (operational) or use induction, (101/102).

Here one can distinguish more than one type.

(A) The educatoral induction.

It starts with showing e.g. a pen. To which a term - here the word 'pen' - is associated. It goes on to (learn to) use - handle, of that of which a correct understanding, a practical understanding then, is to be imprinted in the first place. When a child has written several times - at least once - with a pen, it concludes from that - from the use, from the handling - that - from now on - the pen will be useful again and again. And, immediately, it has a practical or coping concept.

The reasoning.

From at least one time of handling an object of which it needs to acquire a (practical) knowledge, the child decides on all (possible) subsequent times of handling it.

Summative induction: the number of times the child handled it.

Amplificative induction: the number of times it will interact - on the extension of the summative induction.

Eg.rule.

We are in 'programmed' education.-- From one or more examples - applicative models - a learner decides on a general rule - regulatory model.

As an aside, 'eg' comes from the Middle Ages "exempli gratia" (= by example), shortened to 'eg'; 'rule' is Anglo-Saxon for 'rule'.

Note.-- What is called "deductive method", in the same programmed teaching, is: first the general rule; then the examples. What is then called "rul.eg.

(B) The operational induction.

'Operatio', lat., is 'operation'. -- From the actual utilization -- at least once -- of a scientific concept, one decides on its "operational or usable character," -- in all (possible) further cases.

For the physical sciences, a P.W. Bridgman (*The Logic of Modern Physics* (1927-1; 1960-2)); founder of physicalist operationalism) was pioneering. In pragmatist tradition, he found that theoretical concepts coincide with their use(s): from the repeatable practical use of a concept one concludes its paradigmatic character: one possesses a paradigm (Th. Kuhn). And this is of an operative or use nature.

In the human sciences -- for psychology -- this induction was introduced by a Stevens (1935), a Tolman (1936); -- for sociology -- by a Lundberg (1953), and Zette (1954).

People from other perspectives (phenomenology e.g.) have criticized this method. For it presupposes a minimal number of "factors" or "parameters! How does the operationalist(e) find these parameters? Apparently like any other human being: first and foremost by an intuitive grasping; after which the operative application becomes possible.

Appl. mod.,-- Thou wilt make a survey of the parents of thy children as to hum willingness to cooperate with thee as a teacher.

How will you define the concept of "willingness to cooperate"? First by a vague intuition. Like everyone else. By what can one tell that someone shows "willingness to cooperate"? By the assertions? Yes, insofar as they are sincere: not everyone who "says" he wants to cooperate is therefore already "willing"!

By what is sincerity to be known? The criteria - means of knowing - must be laid down. For example, "I recognize willingness in the fact that parents have shown that willingness at least once in an act". Such an 'act' is one parameter. Without that 'act' your notion of willingness hangs in the air.

To have pointed this out is the great merit of the operation(al)ists. Intuitions' are at best 'hypotheses' or - platonically - 'lemmata', provisionally adopted concepts. Until they are operationally defined!

Note -- One rereads now EO 76/80 (Platonic theories) : the analysis of foundations and the analysis of inferences contain something operational. This is, moreover, shown in EO 79 (The pragmatic maxime), where the importance of an action, an experiment, involving the object of investigation, is very clear. "By its fruits one knows the tree" said Jesus.

As an aside, A. Gödeckemeyer, *Platon*, Munich, 1922, 111, emphasizes Platon's reasoning from consequences: in itself, conscientious living is "of higher intuitive value"; but the external consequences of conscientious behavior, individual and social, tangibly and palpably "operationally confirm" "that higher intuitively sensed value. However purely theoretical Platon was, the tangible parameters were an integral part of his thinking.

The structural induction. (103/107).

Structuralism - which, incidentally, takes many forms - is characterized, among other things, by the primacy of concepts defined as mathematically as possible, which illuminate empirical research like a light. For the reason of its high inductive value, we dwell on an applicative model.

Bibl. st.: Cl.. Lévi-Strauss, *Le totémisme aujourd' hui*, (Totemism today), Paris, 1969.

The term 'totemism'. -- It is known that the term "totemism" was introduced -- by religious scientists --ethnologists -- following a term of the ojibwa language, a language north of the North American Great Lakes.

The expression 'ototeman' means, approximately, "He belongs to my (blood) kinship". It is decomposable into: 'o' (third person), -- 't' (interposed consonant to keep vowels apart),-- 'ote' (kinship) between me and a cousin,-- 'm' (possessive),-- 'an' with 'o' (beginning) third person indicating).

This is how people expressed clan affiliation. "Makwa nindotem" means "The bear is my clan". The ojibwa say, e.g., "Pindiken-nindotem" ("Come in, clan brother"). They bear many animal names.

Conclusion.-- Central is a relationship, viz. between a. an ojibwa and b. an animal, which is his totem animal.

The structural induction.

First and foremost, it is certainly operative. From at least one confirmation (tested case) one concludes to the scientifically-operative value for all (possible) further cases of a preconceived term or concept.

But there is this.

Empirical research is blind, to some extent, if one does not possess a research scheme of concept pairs (relations) that are informative.-- Levi-Strauss does this as follows for all that might be called "totemism.

nature	category	category	single	single
culture	group	person	person	group

In "nature" he situates object, plant, animal that is "totem", in "culture" the people who adhere to totemism (individually or groupwise).

One sees it: thus he has at his disposal a 'grid' of aprioric concept pairs. On the basis of these he will then examine and classify the empirical facts, as confirmations or denials. In other words: the combining - up front - of elements is typical.

Note that the theory of collection governs the combinations: nature group (= category) / nature person and culture group / person.

According to Lévi-Strauss, Australian totemism (social, sexual) fits into "category/group"; the individual totemism of North American Indians, within which the person honors a set of plants or animals as totem, fits into "category/person"; on e.g. Mota (Banks Islands), the child born is an 'embodiment' of a plant or an animal, - eaten or found at the moment the mother becomes aware of her pregnancy "single/ person"; in Polynesia and Africa, some animals - crocodiles, lions, panthers, etc. - are revered and protected by the group: "single/ group".

Note.-- Some structuralists run high on this classification. But, -- frankly -- what does one know with it regarding the full phenomenon of "totemism"?

To begin with, only the first two relations-category/group and category/person-are usually called "totemism. Relationship three - single/person - is called "prelude to totemism" and relationship four - single/ group - is called "testimony to totemism."

Therefore, we refer, briefly, to an account concerning 'nahualism' ('nagualism'). Which provides us with empirical material, - concrete, living. Experienced. More than the carcass of the relation "individual (nahual) / person"!

Bibl. st.: I. Bertrand, *La sorcellerie*, Paris, Bloud, 1905-5, 16ss. (Nagualism).
Back then, yes, centuries ago, because the custom is pre-Christian, nahualism existed. Because the social structure of such 'totemisms' was sometimes very 'esoteric' (inaccessible to the general public), it is sometimes a groping for the right information.

Nevertheless, the following "story" (o.c. 17s.; taken from an earlier work: M. Gougenot-des-Mousseaux, *Les hauts faits de la magie*), (The feats of magic).

Padre Diego - we are in Mexico - was a very characterful man. One day, for the reason of a serious crime, he had to administer a punishment to an Indian.

Consequence: the Indian wanted to avenge himself,--in the manner of a nahual sect.-- He takes post at the edge of a river through which the missionary had to wade, on horseback, to visit a dying person. The riding animal had only just entered the river: it suddenly stood still. P. Diego, seeing what was happening, looked down and discovered a caiman trying to yank the riding animal into the water.

Then, invoking God's help, he moved the reins vigorously: the horse rushed forward, dragging the caiman out of the river with it. The horse's backward kicks and a hail of blows, delivered to the caiman's head,--with an iron-studded stick, forced the aquatic animal to let go.

The caiman lay stunned on the bank. He continued on his way. He finished the visit to the sick person. And lo and behold: a messenger arrived there with the news that the Indian - whom he had punished a few days before - had died. The unfortunate fellow had succumbed to the backward hoof beats of Diego's riding animal.

Padre Diego hastened to test such a story: the caiman lay lifeless on the shore and the Indian showed precisely the same marks of the hoofbeats from which the caiman, his nahual, had died. There, reduced to the essential, the story.

The inductive scope lies not so much in the report - for it is not an imagined narrative - per se as in the fact that such stories are audible all around the planet. At least for those who do not operate with the rationalist bias.

We will look at this further: when facts, independent of each other, repeat themselves -- however bizarre they may be,-- when, in addition, they 'converge' (i.e. point in precisely the same direction), then we are faced with what is called: 'the convergence induction'.

A structure.
The structure - encompassing unit - is the following:

a. A person - child, -- man/woman - imagines becoming one with a 'totem' - a pole, a plant, an animal;-- a group of objects, a group of plants, a group of animals (remember Levi-Strauss's very thorough list of place changes ('permutations')) - .

b. The animal, - something in the animal (its soul, its spirit?), responds with an oncoming unification. Result: two beings, with their fates, become one 'occult' (= invisible) being. Such a structure is the core of nahualism.

Further result: "life-similarity". This is the fact that well-defined life-important fates become common from the unification rite onward - the "repercussion" from the stricken animal (fatally stricken) to the nanual-vendor is one of the strangest symptoms of this.

Nahualism and Bible Beliefs.

Ethnology, yes, but religious science as well.-- I. Bertrand, o.c., 16.-- The nagual is - among other things - the entity ('génie', (gr.: daimon; lat.: genius, which still has the root 'gign-ere', to conceive,) which controls the birth of a child. He shows himself in the form of an object, plant, -- here: animal (= totem).

What do the followers of the secret society do, when under the pressure of the Christian occupiers, parents have their child baptized?

a. Parents are asked to curse the Holy Trinity Christ and Mary, as well as the saints.

bl. A rite precedes baptism: the magician draws blood from the tongue or ear of the baby and offers it to the nahual as a means of unification. What's more: once an adult, the child has to live up to the preceding rite in another way. In a solitary place, a sacrifice is made to the nahual, during which it shows itself ('theophany' or 'hierophany') to the initiate as the totem object, as the totem plant, especially as the totem animal (lion, tiger, caiman, crocodile, snake).

b2. Before baptism and after baptism thus the ritual.-- But as soon as possible after baptism the magician(s) washes off the parts of the body (especially the head) of the newly baptized,--where the baptismal water and the wine oils have touched it.

Thus, through rituals, the life-similarity is established.-- Whereby it should not be forgotten that those involved are subjected to a "catechesis" by the 'saceed' man or 'sacred' woman. The main content is: "The nahual has given you life. He will protect you from now on. Condition: you will carry his name from now on and behave like a true worshipper of your nahual".

Note -- In our regions of Western Europe it used to be customary for the parents to go into an inn immediately after the baptism and as quickly as possible pour the baby a little gin and, of course, drink a good glass themselves. This custom is less innocent than one might think: as in Mexico, it was intended as a means to "wash away" (the undesirable influence of) Christianity -- to remain a good pagan!

One could, with some rationalist thinkers among others, label such a use of gin after ecclesiastical baptism (we do say "ecclesiastical" because the purely Trinitarian effect of the sacrament is beyond the reach of pagan magic) as "folklore". In which is then laid the shade of "innocent- meaningless". Such a thing is possible in principle. However, one who carefully examines some folklore customs discovers that more often than not a - sometimes ancient - clear and ready knowledge about hidden - 'occult' - processes is hidden. It is then about an 'occult' knowing which lives on in hiding as "mere tradition".

Conclusion.-- A Levi-Strauss induces like all other scientists, of course. But by introducing a -- formalizing -- permutation table, he orders, in virtue of comparative method, the empirical data,--often a.k.a., in advance. Yet it is the direct, unedited reports that provide the breeding ground for the actual understanding -- e.g., in totemic praxis -- and the "formalizing" is a kind of carcass in which the data are housed.

5.-- The similarity or analogical induction.
Bibl. sample : Ch. Lahr, S.J, *Logique*, Paris, 1933-27, 608/611 (L' analogy).-- Note that "analogy" is not simply "resemblance" (as a non-precise use of language sometimes presupposes) but rather "resemblance-and-difference.

A. The rein inductive analogical reasoning. (107/109).
A multitude of data, viewed by the comparative method, at some point betrays one or more common properties. The analogical induction summarizes them under one or more terms for those properties. -- In this sense, analogical induction is very close to summative induction.

A series of examples.

1.-- Means-purpose relationship (including: organ-function relationship).
Someone goes deeper into the fossil limbs of a vanished biological species. That's the original. Suddenly something becomes clear to him: the fin of our known fish or the wing of our birds, at home in water or air, are similar. Those are the models.
Organ/environmental - relationship at models and original appear similar.

Hypothesis: the disappeared species, like our fish or birds, lived in the water or in the air. Does one see the common trait showing up?

Note.-- Geoffroy Saint-Hilaire (1772/1844; a.o. founder of embryology) was the first to point out the resemblance (= common feature) regarding function or role of the arm of man, the leg of the quadruped, the wing of the bird, the fin of the fish.

This became the premise of Georges Cuvier (1769/1832): he founded comparative anatomy.-- Note: arm/ roll = leg/ roll = wing/ roll = fin/ roll.

2.-- Cause-effect relationship.
See supra E.O. 100 (Causal ind.).-- J.Priestley (1733/1804; chemist) saw the similarity (common feature) between what rust works out and what other forms of 'combustion' work out: combustion/ perish = rust/ perish. Generalization: all that is oxidation is only a slow form of combustion.

Second case.-- B. Franklin (1706/1790) saw between the effects of an electric spark (model) and those of lightning a similarity (= common property). He generalized: spark/ effect = lightning/ effect. Premise if lightning, like the spark below, is also electrical phenomenon, then the similarity becomes understandable.

3.-- Essence/legality.
Light, heat, sound have as a common characteristic or resemblance: vibration. They can be summarized - inducible - as three types of vibration.-- Which immediately implies that they are governed by one and the same law, all vibrations inherent.

Conclusion.-- From established resemblance(s) one concludes, in summary, to the same general concept that establishes that resemblance as a common property. Which is purely socratic: in virtue of induction he aimed to work out general notions (which are invariably common properties). They summarize a multiplicity.

4.-- The socratic a-fortiori induction.
Bibl. sample : E. De Strycker, *Concise history*., 74v. (Argumentum a minore ad maius).
Socrates often employed the induction of the "if already, then all the more" type. -

Appl. model.
a. The argumentum minus.
Already on agriculture, shipping, health we rely on experts.
b. The argumentum maius.-

How much more shall we entrust the education of our children and the government of the state, to experts!

Prepositions:
a. parable: "What is important, one entrusts to experts".
b. difference (gradation) within the similarity: "What is more important one entrusts all the more to experts". The comparative reinforces the similarity a.k.a.
One sees the generalization or general property: "if important, then experts."

B. The hypothetical analogical reasoning.
Lahr: "This kind of analogical induction concludes
a. from at least one established similarity (common characteristic) between model and original
b. to the possible ascertainable further similarity.

Appl. model.
Mercury, Venus, Earth Mars etc. are planets around the sun: orbit around the sun,-- round shape, axis rotation, atmosphere are common features that have been established.

Based on these established similarities, assuming that the Earth has an atmosphere and is therefore inhabited, can we conclude to the possible fact that other planets are inhabited?

Here is a hypothesis at work,--although based on analogical (summary) induction, but going beyond what is certain. It is an amplifying induction and is thus true subject to (restrictive) further research, which either confirms ('verifies' says K. Popper) or denies, refutes ('falsifies' says K. Popper).

Conclusion.-- Always the comparative method! But now wrestling with the question, "How far does the similarity go and where does the difference begin?" So here is amplification or knowledge expansion at work. More than pure summary.

6.-- The cumulative or convergence induction. (109/113).
To the many forms of induction one knows the fruitfulness of Socrates' finding concerning generalization.

Bibl. st.: H. Pinard de la Boullaye, S.J., *L' étude comparée des religions*, II (*Les méthodes*), (The comparative study of religions, II (Methods)), Paris, 1929-3, 509/554 (*La démonstration par convergence d' indices probables*), ((The demonstration by convergence of probable indices)).
We note that the proposer applies the cumulative method to singular phenomena: a flight of geese from the north in 1929; a volcanic eruption in late antiquity;-- a crime still unexplained;-- the unknown author of a book. General or private phenomena are frequent. Singular phenomena are unique, single, one-off.-- The induction concerning such phenomena therefore exhibits a structure all its own. Therefore we dwell on the cumulative or accumulating induction which relies on uncertain but minimally probable (EO 38) data.

A.-- Idiography or indivduology. (110/112).

Reality - being(s) - is not only a collection or system: it is also - and even first and foremost - an individual. The ontology (and especially the logic in its applications) of the unique (unique, individual, singular) comes into its own here, among other things as an object of cumulative induction.

Bibl. st.:

-- I.M, Bochenski O.P., *Philosophical Methods of Thought*, 162/171 (Historical Method);

-- C.G. Hempel, *The Function of General Laws in History*, in: Journal of Philosophy 39 (1942): 35/48;

-- G. Nuchelmans, *Survey of analytic philosophy*, Utr./Antw., 241.

Note.-- Usually, one pauses in the historical sciences when talking about the singular -- be it purely individual or collective (e.g., a single people).

But one should not forget that e.g. also the geographic sciences first of all comprise singular realities: there is just one single Antwerp, for example. Just as there is only one Stalin and only one Hitler.

General concepts or even private concepts do not suffice to represent the total - the only one that really exists - reality of history or of the natural or cultural landscape: only singular, individual concepts (EO 08; 45) suffice.

Model theoretical : for a unique original (as a subject), a general or a private concept (as a model) is not sufficient.

The exceptional or the rare.

All that is exceptional or rare is not therefore unique, for there may be more than one copy.-- One keeps this in mind.

There is singular and singular.

Take concerning toys a pair of bears. Each one is a singular specimen of 'little bear'. However, especially if they are mechanically made, they are usually so similar that they are indistinguishable and therefore interchangeable or 'the same'. Change them unnoticed, and a child will not even notice. Napoleon and Hitler, -- Antwerp, -- they are singular but not identical, because they are separable. They are radically individual and not uniquely individual.

The 'singletons' in ordinary, purely mathematical theory of collections or systems are usually purely singular singletons. The singular realities in history or geography are radically singular.

The system of the singular-concrete.

a. All that is singular is distinguishable (discriminable) from the rest of all that is (the totality of being(s)),--yes, it is to some extent (note the restriction or caveat) separated from it. A city like Antwerp or a historical figure like Hitler are radically singular.

b. All that is single is 'concrete', i.e. 'con.cretum', fused with. With what? With the same rest of the universe - with the rest of all that is - from which it is distinct and to some extent separate. That paradox includes the fact that it is fused - concrete - with that same rest.

Conclusion.-- Thus, in order to represent the singular, the radically singular o.m., one must put first what? The complementation or dichotomy that includes

a. the singular and the rest,

b. such that they are both distinct, yes, separate and yet also 'concrete'; existing in one.

Proper nomenclature.

One knows the genus name - man - and the species name - Negro woman - . But there is also the proper name - Whoopy Goldberg - So that idiography or individuology can be translated by "proper nomenclature".

Definition of the singular.

A good definition includes all the specimens or the system with all its parts and just that.-- The ancient proverb says: "individuum ineffabile", All that is singular is ineffable. Understood: with merely general or private notions.

The great tradition tends to dismiss any real science concerning the singular as unfeasible. Lahr, Logique, 537: "Non datur de individuo scientia" (There is no science concerning the individual).

Definition of the singular.

Romanticism (1790+) cut into this: it clearly distinguished as equally valid "one-off" notions from general or private ones.

But already Aristotle preferred the singular in terms of degree of reality.-- But the School of Coimbra, among others, gave an accurate formula.

Bibl. Sample : O. Willmann *Gesch. d. Idealismus* III (*Der Idealismus der Neuzeit*), Braunschweig, 1907-2, 112/115.

The conimbricenses are known for a work: In universam dialecticam aristotelis (1605).-- In it we find a very curious method of defining all that is singular.

What is a uniqueness'?

"Id cuius omnes simul proprietates alteri convenire non possunt". Literally: All that is such that its properties and all its properties together - omnes simul - cannot be said of anything else. In other words: the distinctness!

System.

Note: all characteristics but such that they are taken 'simul', at once, as one package,-- i.e. as the same coherent whole or system. All: collection. Joint: system.

The two-line verse.

"Forma (op.: creature form),-- figura (configuration, 'Gestalt', material view), locus (place), stirps (descent), nomen (name preferably: proper name), patria (homeland, region of residence, region of birth), tempus (time(dot)) unum (the singular) perpetua reddere lege solent (invariably render the singular).

Enumeration or accumulation.

Actually, this is an accumulative or cumulative enumeration,--on an inductive, i.e., sampling, basis. Apart from the proper name, which in itself means nothing to people unfamiliar with the proper name and its everyday use, all the features - notae, features which constitute the content of a concept - are in themselves, i.e. separately, insufficient. Only their accumulation to a system reaches to really define, i.e. to describe the thing to be defined and only the thing to be defined.

There must be such a formula possible for geographical things, unique then, too.

Appl. mod.

A. Forma, general form of being: woman.

B.1. Figure: view very nice.

B.2. Proper Name: Roxana.

B.3. origin: daughter of Oxuartes, satrap (governor) of basileus, the prince of Persia.

B.4. Country: Baktrianè (an area within the then Persia (= + /- Turkestan/ Iran/ Afghanistan).

B.5. Place: Central Asia.

B.6. Time(dot): -327 (marriage of Roxapa to Alexander III the Great (-356/-323; founder of a Macedonian-Eastern empire); -319 (departure for Epeiros (lat.: Epirus) to the home of Alexander's mother, Olumpias); -310 (assassinated by the same after capture by King Kassandros of Macedonia).

Behold the abstract and general scheme,--filled in. This is how one "defines" the oriental princess Roxana, one of Alexander's many wives who, through those many marriages, wanted to pave the way for a multiculture -- Greek and oriental in one.

So one sees clearly: it is an induction, i.e. a taking of samples, but by accumulation defining the singular.

B.-- The induction by convergence.

'Convergence' or 'concurrence'.

Supposedly, someone is traveling in a desolate area. The only thing he has is a good map. Supported by the signs of the map he ventures from sign to sign. Yet he has the impression that he is "striking the right path".

One sees it: sign after sign accumulates. Each individually not decisive, but collectively nevertheless somewhere, decisive ('somewhere' means "somewhat, groping in the right direction").

Vague indications.

Ancient Greek rhetoric, in its theory of argument, speaks of 'sèmeion', uncertain sign (distinguishable from 'tekmèion', certainty sign).

Those who use a map, in desolate territory, to find the right way, rely on "uncertain signs."

The rule reads:

a. more than one uncertain sign (vague indication);

b. each of that plurality of characters is independent of the others.

c. above all : they point - gradually more and more - in the same direction, (= convergence). They 'converge! Accumulating. Cumulative.

Theories.

In very many cases, in everyday life and also in scientific work, we proceed in this way: by convergence induction.

1. Those of us who are single see in it the mere accumulation (a kind of summative induction). If already one uncertain sign shows credibility, how much more than more than one uncertain task,--at least if it points in (one and) the same direction.

As an aside, compare with the argumentum a minore ad maius (EO 108).

2.a. Others see in it an inductive application of the theory of probability. That may be but the purely calculating does not play in the practical search!

2.b. The boundary value theory is advocated by still others: just as in mathematics a gradually increasing value approaches a limit (boundary value) but never reaches it, so too does the person who experiences cumulative induction: he acquires certainty gradually, but never absolute certainty. We believe that the appeal to the limit-value theory offers us a metaphor, a model, but no real explanation.

Treasure Hunt.

A textbook example of cumulative induction is the search of playing children for a hidden treasure. Each clue - indicium (lat.) - brings them closer to the goal.

7.-- The statistical inductions (114)

Bibl. sample : W. Salmon, *Logic*, 55ff. (*Induction by Enumeration. Statistics*).-- Briefly = 100% or 0% is universal induction; not 100% and not 0% is statistical induction.

First type.
sentence 1.-- These beans come from this bag (private).
sentence 2.-- Well, these beans are 63% white.
conclusion.-- So the other beans (rest, complement) are 63% white.
One generalizes a sample....

Second type.
sentence 1.-- These beans come from this bag (private).
sentence 2.-- Well, these beans are 63% white.
conclusion.-- So the next bean (singular) is 63 chances out of 100 (63%) white.
The after sentence refers either to the total, examinable remainder or to just one member from that remainder.-- That is statistical induction. It has as its saying neither 100. nor 0%.

Statistics.
Bibl. sample : I. Adler: *Probability calculus and statistics*, Utr / Antw. 1966.
The term 'statistics' comes from the state, 'status' (lat.), which takes into account an entire population. Replace 'population' with 'collection', and ye come to statistics.
An opaque multitude (material object), viewed from statistical induction (formal object) that is summarized in numbers (counting) and classification (classification).

Summative and amplificational induction.
EO 98; 99.-- The samples conducted are summarized into a percentage (summative induction). From there one concludes to the cases not examined (amplificative induction). From some one concludes to all.-- Which is restrictive reasoning,-- subject to further testing.

The prepositions.
All laws that master solid induction also master solid statistics. The basics, the summative part, may be insufficient for two types of reasons:
a. quantitative (one takes too few samples);
b. qualitative (one does not proceed haphazardly but selectively (there is no sufficient "randomization").

Opinion Polls.-- The application that the public undergoes the most is the survey. How often do so called 'forecasts' (in elections e.g.) come out wrong! The basics! Too few samples! Non-fragile samples.
Consequence: the predictions of card readers do not differ that much from such poll-based forecasts!

B.-- *The authority induction (authority argument). (115)*

Bibl. sample : W. Salomn, *Logic*, 1963, 63/67 (Argument from authority).

"Argumentum ex auctoritate" said the mid-century scholastics.

Syllogistic: X is a trustworthy authority when he makes the judgment p. Well, X asserts p. So p is reliable.-- This is actually a deductive syllogism.-- Now where is the induction?

If a. the great majority, b. a majority, c. a number of judgments p of X (concerning his specialty or field of expertise) are true, then X possesses a. very great authority, b. great authority, c. some authority. Well, insofar as p belongs to a. the great majority, b. the majority, c. some true judgments of X, p is reliable. So p is correspondingly, in fact, reliable. And X has "authority.

One sees it: formally the reasoning is deductive, but the restriction is in the inductive basis of the first preposition: only a percentage (statistical induction) of the statements p of X are true! Not all, only some statements are true. Some others are false.-- Especially outside the domain of expertise that is the restriction or caveat.

Appl. model.

Some thinkers invoke Albert Einstein (1879/1955; mathematician and physicist; Nobel Prize in physics 1921), who, in 1905, formulated Einstein's law (relationship between photons and electrons) and, in 1905/1911, introduced a cosmology (universe theory) called the "theory of relativity.

In the microphysical and macrophysical fields, non-absolute statements apply (according to that theory) in part.

From this, some deduced that, in addition to mathematical and physical phenomena, our traditional value judgments, basis of our Western culture, are also non-absolute but "relative" (relative, i.e. dependent on other elements).

Criticism.

a. Einstein never gave any evidence of the purely relative nature of our cultural values (he may never have wanted to provide it).

b. One forgets that his epistemological authority is only mathematical-naturalistic and not axiological.

In other words: one forgets one's field of expertise. In other words, the terms "relative" and "relativity" are the same in mathematics, physics and cultural theory, but they are not the same in terms of content.

Sample 15.-- Holistic ontology. (116/119).

The word 'holistic' and in Dutch 'whole' is 'in!

'Holos'; lat.: totus, whole, entire.-- So in the compound 'holo.klèros' (Platon: Faidros 250c, Timaios 44c) meaning 'whole,' (hence 'holoklèria', flawlessness, integrity).

Panta.

Rereading EO 30,-- 45, 52, 65, 94.-- 'Everything' is the object of ontology.

Rereading EO 32,-- 45, 65.-- "All that was, is, and will be" is object, diachronic, of the ontology.

EO 98/115 (Types of inductive method) taught us that we can only grasp the 'all' (the universe) through sampling,--even though the idea of 'all' (possibly in the form of "All that was, is, will be") lights up before us. Brokenly but with an eye on totalities (collections/systems) we explore the totality of All That Is.

More than one way.

What we grasp immediately - the phenomena or the manifesting things - is the firm basis

1. Rereading EO 94: Herodotos, Anaxagoras. they start from what is given. To not dwell on that immediately given. To go beyond it. To what we call "the mediately given", because accessible through the immediately given.

Thus the inductivist : he reaches, through samples immediately given, by knowledge extension - amplificatively - the indirectly given (the totality), namely the collection and/or the system.

2. Rereading EO 73/80: the hypothetical method begins with the phenomenon. But examines it - probes it - backwards, via 'analusis', reductive method (the presuppositions,-- the pre-signs) or forwards, via 'sunthesis', deductive method (the inferences).

Thus we get a view of the totality of e.g. stealing as far as immediately given and as corpse given.

3. Let us reread EO 81/92: an immediately given thing, i.e. a 'phenomenon', shows indirect data, i.e. when one classifies it within a scheme which summarizes a set of data. The categories (universal/private and singular data), the categories (some system), situate the immediate data within a totality which also includes the non-exceptional data which have some connection with the phenomenon.

The ontological method.

Ontology, like every science, has its own method.-- What could be such a method that means total reality'? Platon called them - in Pythagoras' wake 'theoria'.

1.-- Theories.

O. Willmann, *Die wichtigsten philosphischen Fachausrdrücke in historischer Anordnung*, (The most important philosphical professional expressions in historical arrangement), Kempten / Munich, 1909, 20, says what follows.

'Theorein' was translated by the ancient Romans by 'speculari'. This verb means: to enter very closely into, to keep thoroughly, -- so that that which one enters into, that which one keeps, is revealed and brought into the truth - a.letheia, apokalupsis.

Thus, e.g., an observer (spy) is a 'speculator'. Thus 'specula' is the place from which one spies,--where one "keeps an eye", --where one observes sharply to know what it is about.-- Thus 'speculatio' is the correct translation of 'theoria'.

Note.-- Isaias 21:6/10.-- The Old Testament seers - "prophets" - knew perfectly that meaning in Hebrew.-- "Thus spoke the Lord to me.-- Well! Put the observer on the lookout. What he 'sees', that he reports it.-- He will 'see' a migration: riders twain, men seated on donkeys, men on the backs of camels.-- That the observer watch sharply, with great attention.

And the observer exclaimed: "Look, on my watch, Lord, I am all day long. On my watch I am all night long. (...)".

Alfred Bertholet, *Die Religion des alten Testaments*, (The religion of the Old Testament), Tubingen, 1932, 110, n. b, says: the observer is "des zweite Ich des Visionärs," the second I of the seer.

Here 'perceive' and 'observer' still have the very archaic meaning that we find e.g. with Homèros and Hèsiodos (EO 32: Mnèmosune, Remembering; 52: Anamnesis, comprehensive and ordered consciousness). In particular: the paranormal -- and thus in archaic-primitive worldview 'divine' -- ability to see at a distance if need be -- mantic.

'Speculation'.

One "speculates" on the stock markets! That is, on rational grounds, gambling! From immediately given financial (and many other) data one 'expands' (= amplificatio) the knowledge thus acquired to indirectly attainable data (here: the intended profit).-- The mystic Ruusbroec (Jan - (1293/1381)) is called "someone who lives and thinks 'speculatively'": from immediately given data he penetrates to indirectly given data (here: God's working in the depths of the soul situated in the universe). This is another 'amplificatio', knowledge expansion. A paranormal,--comparable to that of the Old Testament prophets.

2.-- *He theorike tou ontos.*

Ontology is "theoria directed to all that is ('panta'),-- diachronically : to all that was, is, will be". O. Willmann: "We call 'speculation' the actually philosophical way of going into something. 'Speculative interest' amounts, in that case, to:

A. perceive - that is the empirical interest,

B. such that - following that observation - correlations are exposed".

In other words, philosophizing is

a. sharp perception

b. of the immediately given - the phenomena - and through that immediately given that which shows itself indirectly.

Homèros and Hèsiodos (as mantic poets),-- Thales of Miletos and his contemporaries, in whose wake a Herodotos ('historia', lat. inquisitio, investigation), -- Pythagoras and the paleopythagoreans ('theoria', e.g. at the olympic games: seeing more than the superficial observer),-- Parmenides ('alètheia'), -- they were all 'philosophers', 'speculatores', observers who penetrated to -- what Willmann calls -- the cohesions or connections (the encompassing units,-- object of stoicheiosis): each time aiming at two aspects (the immediately given/ the mediately given).

O. Willmann, o.c., 20.-- Platon calls 'science' "theorètikè tou ontos," the thorough examination of all that is. Which is actually the ontological definition of "science.

Note.-- Ch. S. Peirce (1839/1914), the pragmatist, distinguished the following types therein.

a1. The wayward looks at all that is, from individual presuppositions,

a2. The upright looks at all that is, with the eyes (predictions) of others (authority figures,-- including dictators, traditions of all kinds).

lc. The preferred person views all that is, from his personal or social presuppositions that he prefers.-

b. The science man, however, views all that is, from the given itself. With this he approaches the platonic definition.

Note.-- Aristotle.-- Aristotle called the ontology "wisdom"-in the ancient sense of "the knowing for human and divine things.

We know that the concept of wisdom pretty much coincides with our concept of "general education." Philosophy, in Aristotle, was thus a (higher, more elaborate) form of "general developedness."

Aristotle also called ontology "philo.sophia. In the paleopythagorean sense, this term implies that he knows himself to be "on the way to wisdom," because for Pythagoras, only the deities - as for many; very many thinkers in ancient Hellas - were the possessors of wisdom. And so the search for wisdom was the lot of mortals. A healthy phallibilism or sense of fallibility was what the palepythagoreans definitively laid down in the term 'filo.sophia' or, as our forefathers translated, 'wisdom.desire' or - better - 'wisdom-mindedness'. To be eager to learn! To approach the ideal of deities (and thus to 'deify' oneself).

Ontology was, for Aristotle, "the doctrine concerning being as being". This is : to go deeper into all that is, as far as it is,--into being as being or into being as such. The little terms 'as' and 'as (such)' express the point of view or, as the scholastics said, "the formal object".

Compare with "studying the child as a child" or "studying the child as such": taking what the child is as far as the child is. Looking at all that makes it a child. Blotting out the 'ousia' or being form of the child.

Ontology was, for Aristotle, at last also "first philosophy." -- By what? Because it further examines "the presuppositions of all that is" as well as "the inferences" from them.

We now call that "transcendental ontology." -- what he called "second philosophies" we call "categorical ontologies". Thus, in his view, mathematics (as a subject science and also as a categorical ontology) was only "second, derived philosophy." Thus, the "physical" ("hè fusikè"), i.e. the subject science and categorical ontology concerning nature ("fusis", lat.: natura, nature), which, in his view included what we now call "psychology", was only "second philosophy".

This is: like mathematics, as far as the most general propositions and inferences are concerned, dependent on the general ontology.-- This prevented what we today -- with MacLuhan -- call "specialist idiocy. By situating one's own limited specialistism within the "first philosophy" as a frame of thought, the scientist put himself in perspective.

Sample 16.-- Holistic ontology: phenomenology (120/125)

The term "phenomeno.logy" is used in more than one sense, Father Teilhard de Chardin (1881/1955; scientist and also ... devil's advocate; thinker in evolutionary terms) refers to his 'phenomenology' as a representation of the phenomena of evolution,-- scientific, philosophical and even theological.

G. Fr. W. Hegel (1770/1831; German-idealist thinker) spoke of his "*Phänomenologie des Geistes*" (1806): all the manifestations of what he labels "Geist," spirit, are the object of his phenomenology (which, in fact, encompasses the entire history of culture).

Edmund Husserl (1859/1938) uses the term in its meaning. He wanted an unassailable foundation for all (possible) sciences, philosophy first and foremost.

Four main theorems.

Bibl. Sample : R. Kuhn, *Intentionale und materiale Phänomenologie*, (Intentional and material phenomenology,), in: Tijdschr. v. Philos. 54 (1992): 4 (Dec.), 693/714.-- The author attempts to summarize.

A.-- Phenomenology.
1.1.-- "Zu den Sachen selbst". -- To the data itself! To the matter of which we are speaking, itself. This is the great, encompassing motive that underpins Husserl and husserlians.

To which the opponent raises the question, "What is there is there by itself." The little term "zu" (towards) is too much! We are faced with the data itself from the beginning. Something is given by itself: our step in its direction is superfluous.

1.2.-- Observation! "Das Prinzip aller Prinzipien"! In other words: insofar as something is directly perceived (1.1.), it is "a given". This is: "being!

2.1.-- "Wieviel Schein jegdoch soviel Sein".
This is how Heidegger articulates Husserl's position. This is: insofar as something shows itself (for that is the correct meaning of 'Schein': showing itself), there is something, i.e. being. Reality.

Opponents: "However, there is also semblance and actual being. Both show themselves. But how to distinguish them without going beyond the merely observational and thus phenomenological standpoint?" More on that later.

2.2.-- "The more 'reduction'...
(reduction, reduction to what is actually intended, elimination of what is not intended), the more something is given." The reduction refers to more than one point in what is directly perceived.-- About which a little more later.

Explanation. -- "reduction".
Or still 'Einklammerung' (bracketing) -- What exactly is methodically (not really without more) "bracketed" by Husserl?

a. The eidetic reduction.
This is: All that which is not the "eidos" or "being(s)! of the given is put in brackets (Husserl pretends it is not there). He limits attention, in perceiving (direct perceiving then), to the pure 'eidos' or being(heid) of the given.

Appl. model.-- I see a girl playing on the beach there.-- The essence of the girl playing on the beach (as far as I see it, i.e. perceive it directly): that is intended.

Meanwhile, I pay no attention whatsoever:
1. the deeds of mine (my seeing myself as an experience act e.g.),
2. my own self as the seat of those acts,
3. the fact that that girl playing on the beach is something that exists independently of me, of my seeing

The latter requires a brief explanation: Husserl considers the objects "as objects" (of his or the general (human) consciousness, i.e. precisely insofar as they are objects of his) conscious seeing (in this case)). Insofar as I am aware that I see (directly perceive) that girl playing on the beach, so far, as a phenomenologist, I am concerned with it: the rest does not interest me. This is called in learned terms 'Gegenstandstheorie' (object theory), where 'Gegenstand' (object) is all that is directly perceived.

b. The phenomenological reduction.
This is already present in #3 above: I am 'phenomeno.loog' and so I am only interested in the phenomenon (here : the girl playing on the beach) as a phenomenon,-- insofar as it shows itself (to my consciousness),-- in the phenomenon as such.-- Whereby the first-rate role of "my/the (general) consciousness" comes strongly to the fore, of course. It is a philosophy of consciousness ("conscientialism").

Explanation.-- Appear/ be.
Already Joh. H. Lambert (1728/1777; *Neues Organon* (1764)) spoke of the distinction between "the true" and "error or pretence."

Appl. model.-- Tina Turner (actually : Anna Mae Bullock (1940)) is, 1993: 53, still "the wild Tina" (as she calls herself) and still current. In 1990 she did a tour of Europe: three and a half million pop fans jubilated!-- But Tina herself, privately, is a Buddhist or rather Baptist Buddhist.

The Ten Commandments, core of Old and New Testament ethics, is her life foundation. So she says. But the Buddhist religion instilled in her the perception of "soul regions" of which she had no suspicion beforehand. Immediately she developed "a spiritual consciousness."

In this sense she sings - every morning and every evening - a mantra (magical-religious song, among other things, characteristic of the Soka-Gakkai dispensation). Her high sense for her fellow man, which manifests itself in her performances, she owes to Buddhism. So she says herself. But look: whoever observes her directly - during her performances -, never risks to experience her inner conviction!

"Many believe I am an unleashed savage. Or a sex-obsessed open rider. That's all nonsense! I'm a real "My stage image (op-ed: image impression) has no relation to my private life. In reality I am rather "old-fashioned". Also in my morals. I mirror the real noble ladies: Thus Tina herself.

The mere description of phenomena, as sketched above, is indeed "a real basis", also of science, but then within the methods sketched above especially the inductive ones. Whoever sees Tina Turner only in her public performances, sees only a single sample in the totality of what she really - and not only in appearance - is.

Ontology is "holistics," i.e., the development of the sense of the whole.-- Thus, those who see Tina Turner as a pop star may derive from it an impression that is accurate but restrictive, i.e., subject to further and closer examination of the whole of Tina Turner.

In phenomenology language: there are more than one perspectives on her. In the old induction language: there are more than one samples of her reality.

Bibl. Sample : Christiane Rebmann, *Interview (Einfach die Beste),* in: Cosmopolitan (Für die Frau) 1993: 8 (August), 36/42.

Such "unmasking" of the sham realities is legion.

Thus e.g. G. Steiner, *In the Castle of Bluebeard (Some notes for a redefinition of the concept of 'culture'),* Amsterdam, Bakker, 1991-2.-- "A high degree of culture and barbarism seem to go together perfectly. This is how one of Steiner's main theses could be put. He tries, in said work, to find an explanation for this barbarism.

The foundations (123/125) We saw it: already the oldest thinkers of Hellas were 'phenomenon-minded'. Herodotos (Hist. 2:33): "From the known I conclude to the unknown This is: from the immediately given to the indirectly given.

Anaxagoras of Klazomenai: "The seeing of the invisible things (is to be situated in) the showing things." Cfr. EO 94.

The Greek rhetors
those who study eloquence as the act of getting a message accepted - knew an analogous distinction.-- When someone tries to convince the fellow man with "proofs or indications", his first source is 'atechnos', i.e. proofs that without ('a-') reasoning ('-technos') convince immediately. Consider a girl who is pregnant: anyone who knows a little about life will immediately see that she had sexual intercourse or allowed herself to be impregnated. The result is symptom and a clear symptom at that.
But there is a step further: the second source is "entechnos," i.e., proofs that act convincingly only through a sometimes complicated evidentiary process.

Conclusion.-- The human mind "founds" its propositions first of all by direct contact with reality. Not merely by chaining together judgments, one after the other, as mathematics, logic and logistics do. However difficult direct perception, in its purity (provided with the reductions or eliminations), may be, it is nevertheless the basis.-- In this Husserl is radically right.

Logically expressed.
There are prepositional phrases that articulate direct contact with realities, if need be not merely merely passively located but actively tested or at least testable. From these, one may logically derive strict post-phrases.

The fundamentals of proceeding logically.
Bibl. Sample .: H.J. Hampel, *Variabilität und Disziplinierung des Denkens*, (Variability and discipline of thought), Munich/ Basel, 1967, 17/19 (*Die klassische Logik als engeres Untersuchungsfeld*), ((Classical logic as a narrower field of investigation)).

The author summarizes the main premises or axiomata of traditional logic.

A.-- The laws of identity, contradiction and excluded third party (EO 23/28).
B.-- The premise of necessary and sufficient reason or ground (EO 63; 68).
We have set them out higher clearly.
But Hampel dwells on the justification of those axiomata.

For - says Hampel - the axiomata in question are "not descriptive laws" but normative laws. I.e., they impose rules on our behavior, if it is to be logically rigorous! How do the classical thinkers prove these laws or axiomata?

He cites.

H. Dingler, *Das Prinzip der logischen Unabhängigkeit in der Mathematik, zugleich als Einführung in die Axiomatik*, (The principle of logical independence in mathematics, at the same time as an introduction to axiomatics,), Munich, 1915.

Says Dingier: "Indeed, I myself cannot logically prove these foundations in their turn. In other words: whoever wants to prove, is forced to the unproven preemption of the highest premises of logically strict proof.

From where, then, do the classics derive the certainty that these axiomata are the correct ones? Not from "the innate conceptions" (as some moderns advocate, -- for, if one wishes to prove this way, one must first prove that the innate conceptions are there and that they are the correct ones (circulus vitiosus)).

But from one's own experience which, however pre-scientific and pre-logical, blots out a light that enlightens us (even if we cannot deduce that light and its enlightenment from pre-given prepositions). That is light metaphysics, At least since Platon.

Thinkers like Wilhelm Dilthey (1833/1911; *Einleitung in die Geisteswissenschaft* (Introduction to the humanities), (1883)) or Wilhelm Wundt (1832/1920; psychologist (*Logik* (1880/1883)) try to derive validity from "immediate experience." In more than one way, for that matter.

In this direction E. May, *Am Abgründ des Relativismus*, (At the abyss of relativism,), Berlin, 1941. -- "When, for example, I perceive ('erlebe') 'red' in an experience and at the same time understand the meaning of 'red', while living through 'red', then I also understand in a lived way that 'red' is simply (as a meaning known through experience) 'red' and that this 'red' is just that.

Thus I intuitively grasp the principle of identity (the identity law) in its imperative validity, even when my instantaneous empirical living through of "red" owes its origin to a sense deception. For the law of identity means nothing more than that "something coincides with itself" (Driesch), it being immaterial whether that something is lived through within a deception or within reality concerning living through.--

What matters, in other words, is that the coincidence with oneself - in its imperative, completely arbitrary validity - following and in unison with the original given, i.e. "I live through something" is also lived through.

In simpler terms, the decisive element is the fact that when someone lives through "something," some given, it is always accompanied by "what that something, that reality, is, that is that something" (the identity law).

Whereupon the proposer concludes, "The first proposition or axiom of logic is thus neither posited 'with consciousness' nor constructively 'thought' anywhere, but unadulteratedly 'contemplated' (note: intuitively grasped). The latter meaning that it is so and even must be so, is grasped by living (...)"

The author thus excludes any conscientialism (human or non-human consciousness creates the identity law) and any constructivism (human or non-human mind constructs the identity law from pre-existing materials). To be left only: each of us, as soon as he/she grasps something, grasps that something as an application of the comprehensive or transcendental identity law.

May rightly adds: whether one brings in the law of identity or the axiom of the excluded third or the principle of contradiction (the primal dilemma), these three principles of logic are but three articulations of one and the same primal experience, namely, we grasp the identity of something. That grasping lies before every (theoretically developed) logic. It is therefore 'pre-logical'. The logic puts that primal perception and primal intuition first,-- in order to be able to start.

Note.-The same can be said of the principle of necessary and sufficient reason or ground.

If A, then B (in the scheme of Jevons-Lukasiewicz). If A, i.e., the sufficient reason, then B, i.e., that which finds in A its sufficient reason and, precisely because of that, becomes intelligible, sensible, non-absurd, "rhymed" (non-ongrammed).

It is not our creative consciousness that creates that principle. Our constructive mind does not create this principle proceeding on pre-given grounds. Our mind, our consciousness establishes this principle as soon as we consciously perceive any 'thing'.

This is at once the (pre)logical basis of any phenomenology or representation of immediately grasped data.

Sample 17.-- Holistic ontology: phenomenal/ transphenomenal. (126/131).

So it is certain: first "foundation" or "premise" or ''reason" or "ground" of our speaking and living is the immediately given.

As the ancients said, the visible (where "seeing" stands for all forms of perception). Phenomenology or phenomenological representation stands or falls on that principle.

But there is the transphenomenal.

That which is only indirectly attainable. Or, at least, not simply immediately given. Do we dwell on that.

Bibl. sample :

-- I.M. Bochenski, O.P., *Philosophical methods in modern science*, Utr./Antw., 77v. (What does "verifiable" mean?);

-- K. Oehler, Uebers., Ch. S. Peirce, *Ueber die Klarheit unserer Gedanken*, (On the clarity of our thoughts), Frankf.a.M., 1968, esp.105ff.;

-- E. Walther, Hrsg., Ch. S. Peirce, *Die Festigung der Ueberzeugung und andere Schriften*, (The consolidation of conviction and other writings,), Baden - Baden, s.d., esp.49ff..

A position on the subject.

We turn to someone who - more than a century ago - already clearly understood our problem. Ant.-Augustin Cournot (1801/1377, in his Matérialisme, vitalisme, rationalisme (Etudes sur l'emploi des données de la science en philosophie), 1875.

Cournot is a typical XIX - d'century thinker, for whom reason, la raison, is central, as since the beginning of modern times Western rationalism held out. Yet his "rationalism" is restrictive. The reservation lies, on the one hand, in the vital, which is to be situated before reason (in other words, reason does not fall from the sky; there is a pre- or pre-rational grasp in man thanks to his vitality), and on the other hand, in the transrational, which surpasses reason (this transrational is situated in the domain of religions, -- in everything that is called "sacred" or "divine").

The vital grasping of things and the transrational grasping of things is, by a Cournot, situated "rationally. In the land of Descartes, the rationalist par excellence, this is not surprising: the mere intellectual grasping by reason is central to this form of rationalism (EO 13). Strongly a-priority minded.

A second view. (126/129)
Bibl. sample. Chr. Roche, *Hans Reichenbach*, in: D. Huisman, dir., *Dictionaire des philosophes*, Paris, 1984, 2206/2208.

H. Reichenbach is one of the best known figures of neo-positivism (= language positivism, logical positivism) or logical empiricism.

This last title situates him in empiricist rationalism which, in contrast to the "intellectualist" or "a-priori" rationalists (Descartes), emphasizes tem "empiricism" or sense perception. In other words: reason, central to any rationalism, is reliable only insofar as it relies on sense impressions.

Reichenbach therefore finds that "the philosophers" - Descartes, Spinoza, Kant (three rather a-prior or intellectualist rationalists) - are already too far removed from the experimentalist method. Compare with EO 13, where already Fr. Bacon conceives "the close connection of experience and reason" experimentalist.

Reichenbach's life partly explains his experimentalism.

1910/1911 he studies at the Technische Hochschule in Stuttgart. 1917/1920 he heads a laboratory for radio technology. 1920/1926 he is Privatdozent at a higher technical school.-- In 1933 he gives way to the Nazis and goes to Istanbul. Later he leaves for Los Angeles (becoming a university professor there).

Reichenbach's review methods.
The list of methods reflects his empiricism.

Al.-- Technical Review.
As an experimentalist, Reichenbach has difficulty being convinced. Yet when a technical method emerges to expose reality -- alètheia, truth --, he does allow himself to be convinced.-- But in many cases this method is impracticable. For example, in his time, the solar temperature: as for any star of the type the sun represents, the solar temperature is very high (especially in its core). Measuring them directly with an instrument - technical method - is unfeasible for the time being.

A2.-- Physical (physics) review.
As a purebred positivist who swears by the professional sciences, headed by physics, Reichenbach allows himself to be convinced when it can be proven that something is true with "the rock-hard laws of physics."

Anyone who takes a sun bath will (physicistically sure) get warm. The physical theory of heat, built inductively (he was an inductivist: samples provide probability), teaches that if one is in the vicinity of a heat source, heat develops around and inside the body. A sunbath is a sample of this.

Sampling - induction - according to Reichenbach, yields only probabilities.

Such reflects his professorship at the University of Berlin (1926/1933) in "scientific philosophy." In which philosophy is called "scientific" insofar as it takes the data and the presuppositions of mathematical natural science as its starting point. This type of science dates mainly from G. Galilei (1564/1642) with his concept of "exact, i.e. experiment and mathematics connecting, science".

A3.-- *Logic Review.*

Notwithstanding his highly empirical, yes, experimental-mathematical disposition, Reichenbach nevertheless does not scorn rigorous, contradiction-free reasoning. Besides the "material-tangible" proofs, the logical-positivist also accepts logic, especially in its logistic (understand: mathematical model following) or computational logic.

This, too, reflects his life: 1928 he founds the *Gesellschaft für empirische Philosophie* (Society for Empirical Philosophy), (Berlin),--a group that merges 1929 with the Ernst Mach Verein (since 1923 in Vienna). Immediately Erkenntnis, a well-known philosophical journal, emerges, headed by Reichenbach and Rudolf Carnap (1891/1970; *Der logische Aufbau der Welt* (The logical structure of the world); (1928)).

This revue works on an international scale on a "scientific philosophy" and involves, among others, the Polish school of logic (Warsaw/ Lwow), with Alfred Tarski (1902/...), a logistician, among others, in its publications.

B.-- *Transempirical review.*

Father Bochenski says that Reichenbach gives the following example, namely the statement of a follower of a religious sect who claims "Cats are divine beings."

As an aside, in ancient Egypt, among others, such a belief is found. More so: 'holy' or 'divine' animals appear several times in the imaginary world of religions. Cfr. H. Bouma, *The animal in the world religions*, Kampen, Kok, s.d.. Cfr EO 104 (Nahualism).

For a Reichenbach it is abundantly clear: to make such a thing true requires a proof sui generis, a proof of one's own nature of being. The phenomenon, if it exists at all outside the mind of those who believe in it, is transempirical,--goes beyond ordinary, earthly, highly material proofs (cfr Cournot's transrational).

Note: (129/130). Do we go into that for a moment.-- People who e.g. believe in divine beings - animals e.g. - a. experience something and b. reason too. But in their/their way.

a. Experienced.

Reread what we wrote about Nahuhalism: one cannot escape it! There are facts! More than that: there is a convergence induction. Independently of each other, spread over the whole planet, people experience a structure that is pretty much the same everywhere.

b. Reasoning.

Citing one theorist: Stephen Toulmin, *The Uses of Arguments*, Cambridge University Press, 1958.

Apart from the rigorous scientific-logistic and/or experimental-reasoning, there are the everyday ones. The majority of our reasoning never reaches the rigor of exact thinking (mathematics/experiment).

Yet we, including scientists in their daily lives, believe in its validity. One expects something (a good marriage between a mathematician and a biologist, for example); one concludes something because the same phenomenon has already occurred more than once (the biologist has already been angry several times;-- an induction); one moralizes about the abuses of capitalism (our boss abuses us,-- says the mathematician, back from the school where he teaches).

In all such cases, absolute certainty is unattainable (a limit approached but never reached). There is "a jump" between the pre-sentence and the post-sentence!--Is that "rational"? No, not in the strict sense of professional science! Is it "irrational"? No, not in the absolute sense. The doctor who guesses as to the cause of the malady; the art critic who rejects a work,-- with arguments; the judges who condemn someone,-- with arguments. They are all in the sphere of ordinary argumentation.

Well, so also those who believe in sacred things cats like sacred animals e.g. - a. experience and b. reason.

This is how Reichenbach must have sensed when he briefly touched on the transempirical review. From his extremely strict point of view.

One now rereads EO 101, which speaks of operational induction. Reichenbach is not so far from a P.W. Bridgman (The Logic of Modern Physics). One may find the one-sided-exact position too severe. But one thing is certain: Reichenbach, Bridgman demand rock-hard science, "hard science," and rightly so.

Some - extremely 'critical' - scientists and thinkers grasp very well what Reichenbach kept open, as it were, regarding "unexplained phenomena."

G. Le Rouge, *La mandragore magique*, (The magic mandrake), Paris, Magerie, 1991,10, cites (Pierre Simon, marquis de) Laplace (1749/1827; mathematician /astronomer). Laplace was perhaps the most cold-hearted materialist of his time. But listen to what he says.

"We are so far removed from knowing the factors of nature and their various modes of action that it would be little philosophical to deny such phenomena merely because, in the present state of our understanding, we cannot explain them. But what is appropriate is that we should examine them with an attention that is all the more scrupulous the more difficult it is to accept such phenomena as real."
In other words, Laplace is well aware of the limits of exact science.

Expressed in our language: both the presuppositions - only everything that is exactly verifiable is real, e.g. - and the observations and reasonings in the wake of these presuppositions are merely inductive samples. Which demonstrates their restrictive nature: they apply with reservations. Namely: other, equally valid propositions may be possible. Those who do not accept these alternate propositions, due to the absolutization of their own propositions, are downright dogmatic and lapse into ideology instead of science.

E.g., if the materialist assumptions fail to adequately explain paranormal and sacred phenomena, why in the name of those (absolutist) assumptions deny or obfuscate the phenomena - which happens regularly - instead of questioning one's own assumptions?

Francois Arago (1786/1853), astronomer and physicist, associate of A.M. Ampère (1775/1836; physicist), once uttered a phrase "The one who, outside the domain of mathematics, pronounces the word 'impossible' lacks prudence."

I.e.: within some axiomatic-deductive mathematical system, one can write off something - a sentence, for example - as "impossible" (ED 41). But, once out there, in the all-encompassing system of "all that is - however it is - real," deeming something impossible - even if it were so bizarre - is very risky.

General Conclusion.
Even supporters of "rock-hard science"
a. admit that their praxis has limits and
b. that there are phenomena which, if not temporarily then definitively, exceed the explanatory capacity of that limited science.

To the object expressed: a. there are phenomena; b.1. beyond those phenomena one does get to a certain extent, while experimenting and calculating; b2. beyond those phenomena one gets, however, also through very own experiences and reasonings, which one designates with terms like 'magic' ('occultism'), 'mysticism' and, even generally, with 'sacred' ('religion').

Experimenting and calculating, one remains 'rational'; magical-mystical and sacred-religious one enters the territory of - what many call - 'the irrational'. A Cournot said "transrational" and a Reichenbach said "transempirical.

In any case: transphenomenal. Insofar as namely 'phenomenon' means: All that a very large number of people, with or without scientific training, can observe and process while experimenting-calculating.

As soon as the average perception and the exact (or as exact as possible) processing of that experience is insufficient, it becomes "transphenomenal" in a second degree. Let us say paranormal-transphenomenal.

Reality as findability and testability.
The three domains exhibit 'alètheia', truth, i.e. the revealing or blotting out of what is.

a. The phenomenal in that it suffices to perceive directly, at least in normal cases (for an insane person or even just a neurotic may already have difficulties with phenomenal data).

b.1 The transphenomenal as far as still accessible to all who work experimentally - calculating ('exactly'), shows itself - which is alètheia - to the great scientific community. Even if it makes rock-hard demands (Bridgman), it 'sees' the transphenomenal through the phenomena.

b.2 The transphenomenal as far as accessible only to a very limited number of perceivers and reasoners - let them call us 'gifted' (psychics then) - also shows itself. But on a much more limited scale. Hence initiation mindsets and such.
In the three cases, there is:
A. findability: the phenomena and what extends beyond them are 'found';
B. testability: the same realities are 'tested'.
No matter how different!