*7.1. First year: philosophical theory of thought and method.*
*Higher Institute for Pedagogy, VII-the olympiadelaan, 25 2020 Antwerp*
*Introduction to Philosophy (1987/1988).*

*7.1.1. Part I, p. 1 to 200*
**Contents: see p. 401**

*Preface.*
**(i)** *The intent of this course is propaedeutic*.-
In Antique Greek, 'pro.paideia' or, still, 'pro.paideuma' mean something like 'introductory (= elementary) instruction'. Thus e.g. with *Platon, Politeia* 536d.

*In particular: this course provides:*
**(1)** *information*,--not in a dilettante (= superficial - enthusiast) sense,--not even in a specialist sense; but as a general education; he means

**(2)** *method*, i.e. reasoned approach,--this, without yielding to "fashion" (even in philosophical midst, there are fashions, which come and go) or to "ideology" life alien, but convinced thought construction).

**(ii)** *The purpose of this course is philosophical* (philosophical).

**(a)** *ontology.*
The essential core of all true philosophy is reality theory (= ontology),--also called metaphysics. "All that is even slightly 'real'" -- nature, culture, deity, etc. - is object of ontology.

**(b)** *Professional Studies*.
It is not the natural sciences or humanities as such, as a separate activity, which belong to philosophy -- but their presuppositions (axioms, points of departure, hypotheses, "lemmata" (the Platonic term), "abductions" (C.S.S. Peirce)). This is called, in the philosophical context, research into foundations: "On what foundations do the notorious human sciences (such as Freudian psychoanalysis) rest?". -- this is the question posed by the ontologist.

In Platonic language one would speak, here, of "backward dialectic" (i.e., the reasoning, in dialogue form, of the assumptions of e.g., psychoanalysis). Kant would say: the analysis of the conditions of possibility ("Under what conditions is psychoanalysis possible?").

**(c)** *Theology and rhetoric.*
Since the Ancient Greeks, philosophical foundations research has invariably been applied, also, to theology (= 'theo.logia' since Platon) and to persuasion (= 'rhètorike' -- since the Protosophists).-- The whole culture, in a word, is object of research.

WDM 2.
**(iii)** *The plan (schedule) of this course*.
This plan includes three parts.

### a.-- Ontology

It is the so-called Eleatic School, with Parmenides of Elea (-540/...), the founder of logic (= theory of thought, dialectics) and, even more, his pupil, Zenon of Elea (-500/...), the eristician (i.e. specialist in the science of reasoning), who situated logical thought in the theory of being (theory of reality, ontology). This view was preserved, also, by the elaborator of the first formal logic, namely Aristotle of Stageira (-384/-322).

We engage in this ancient tradition. In particular: logical reasoning always talks about reality, even if it was a purely imagined one (as e.g. the sign language of logistics) After all: what is imagined is non-nothing, therefore something (and, immediately, a kind of reality).

*Applicative model* (= example).
*I.M. Bochenski, Philosophical methods in modern science*, Utr./Antw.,1961, 94, gives us the 'formula' (= sign language) of J. Lukasiewicz (1878/1956), concerning 'deduction' and 'reduction'.

**(i)** *Deduction:*
*"If A (= prephrase), then B (= postphrase).- Well, A.-- So B".*
(In 'semantic language, in which the abstract 'signs' ('symbols' say the logicians and mathematicians) contain circumscribed content: 'If all the pieces of phosphorus below 60° C. ignite, then among other things, so do these pieces; well, all the pieces of phosphorus below 60° C. ignite (= law); so also do these pieces').

**(ii)** *Redemption:*
*"If A, then B.-- Well B.-- So A".*
(Semantic model of this abstract rule : "If all the pieces of phosphorus below 60° C. ignite, then these pieces of phosphorus too; well, these pieces of phosphorus below 60° C. ignite; so all the pieces of phosphorus below 60° C. ignite").
In reductive reasoning one discovers the generalization, which plays such a leading role in the experiential sciences (and which is also called "amplificative induction").

### Conclusion.

Although most logisticians will claim that, beyond any ontology, they 'reason' ('semiotic method: in the language of Father Bochenski), yet it is clear that the senses 'A' (pre-sentence), 'B' (post-sentence) are 'something' (realities) and, then again, logically-strange 'something'. Even the logistician (with his 'formalism') does not reason in the 'rarefied'.

WDM 3.

In which those, who deny that logic as a condition of possibility (WDM 1) has ontology, do get it right, is the fact that only the most general laws of 'all that is real (= something) also apply to the abstract sign language of mathematics and/or logistics. Thus e.g. the ontological law of identity "What (so) is, that is (so); In formalized language : "if a, then a" (or : a a$\rightarrow$).

### b.-- *Harmology (theory of order).*

The classical - since introduced especially by Aristotle (WDM 2) - analogy theory makes up the essential core of any theory of order.

Analogous' (also 'corresponding' in Dutch) is, all that is partly identical, partly non-identical. One can also say 'part-identical' (part-identical).

After all, something is totally identical only with itself (it coincides totally or overall with itself (reflexively, loopily). 'Part.identical' it is with 'all the rest. ' This 'all the rest' amounts to 'the rest of total reality.' How so? Because, in the identitive (identities, partial or general, meaning) language of traditional ontology, that which the language of intercourse (and, in part, also the language of the sciences) calls 'relation' is based on part.identity. So that wherever a relation (whether similarity or coherence) shows itself, there is in its ground an ontologically understood partial identity.

#### *Applicable model.*

One takes tropology (doctrine concerning the tropics).

Metaphorical language e.g. (the metaphor or metaphorical mode of speech) is identitive (ontological) language. Don't we say that "Johnny is the rooster - ahead of the gang"? We see a partial identity between the role of the rooster in the group of chickens and the one played by Johnny in the gang of boys on the playground.

Precisely this partial identity is betrayed by the similarity (partial identity or analogy) between Johnny's relationship (=relationship) to the other children and the relationship (=relationship) of the rooster to the chickens.

In other words, the tropes (metaphor, metonymy, synecdoche) have preserved the identity of language inherent in traditional ontology.

#### *Comparative Method.*

The ordering of data ('ings') is invariably based on comparison. To compare is to see partial identities.

WDM 4.

*'Sapientis est ordinare'.*

(The 'wise' (understand also the sage): is the own orderly to work, resp. to order). Thus spoke none other than the top figure of Catholic Scholasticism, St. Thomas Aquinas (1225/1274).

When he spoke in this way, he was following in the footsteps of his illustrious predecessor, in ecclesiastical thought, *St. Augustine* of Tagaste (354/397), the greatest among the Western Fathers of the Church (Patristics), who is known as the first thinker to have published a *De ordine* (On Order). Thus harmology or the doctrine of order is fundamental to both ontology and logic, respectively methodology.

### Applicable model.

Reread, WDM 3, the logical as well as logistic 'law' 'a a→! Only by comparing ('a and a', the first a before the implication sign, the second after) does one see that the second a is implied by the first. Or quantitatively (mathematically): the first a is 'as large' as the second (and is interchangeable with it, in the mathematical formulas).

Not that the second a (logistic, resp. logical and/or mathematical) is totally identical to the first. Not at all! It's about two a's. But, as far as logical value (meaning, sense) or mathematical value is concerned, they are identical. This is the basis of the partial identity of the two axes, i.e. their analogy.

*Note.--* In the Platonic Schools (the Academy), the doctrine of order (concerning the identic and the non-identic (the other)) was the preeminent premise of the whole Platonic philosophy.

The Peripatetics (the School of Aristotle) conceived of the "Organon" (literally: (thinking) instrument), i.e. the set of booklets of the teacher on logic, as the indispensable introduction to the whole of Peripatetic philosophy.

This dual harmological tradition has passed into Church thought (in evidence: the Platonism of Augustine, the Aristotelianism of Thomas).

### c. -- Thinking and Methodology

Ontology and harmology are the foundations of a philosophically justifiable logic and methodology.

Logic amounts to the ordered study of
**(a)** concepts (conceived as Platonic ideas, if necessary),
**(b)1.** judgments (propositions, assertions, statements) and
**(b)2**. reasoning (syllogisms).

WDM 5.

"The identities, of which traditional logic speaks, are situated between 'subject-free-objective' (understand: free from any subjective influence, purely objectively given) - or, at least, so intended - powers." (*G. Jacoby, Die Ansprüche der Logistiker auf die Logik und ihre Geschichtschreibung*, (Logisticians' claims on logic and its historiography) Stuttgart, 1962, 10).

Whether one says "tokens," "data," "being" (in the Parmenidean language): it is always the same object of "eternal" logic.

One reads Parmenides' teaching poem 8: 29, and one will learn: "(It (being) 'keitai kath'heauto' (is there in itself)". In other words: already the founder of ontological logic and method theory (the latter was elaborated, earlier, by Zenon, his student), emphasizes the 'subjectless', existing in itself or given in itself.

The inflictions -- imagined or existing outside of ourselves (mental and extramental) -- are, in our thinking, expressed in concepts.-- We have, in our Western tradition at least, two types of concept theory.

## a.-- *The so-called classical concept theory*
He defines the idea of 'understanding' (the 'essence' of understanding) as follows. It is a representation, in our mind (i.e. intellect and reason), in which a set of 'actions' (data, being) is summarized, according to its attributes, belonging to each separately and, thus, to all collectively, which, in the more recent theory of sets, bear the name 'general properties' 'common properties'.

Thus Husserl, the founder of intentional phenomenology (Edmund Husserl 1859/1938)), says somewhere, that the idea 'red' 'spectated' (seen) by him means "das identische Allgemeine" (that which, being identical in all the separate cases of 'red things', is common to all those cases (applicative models)) (*W. Biemel, Hrsg./Einl., Edmund Husserl, Die Idee der Phänomenologie* (*Fünf Vorlesungen*), (The Idea of Phenomenology (Five Lectures)), Haag, 1950, 57).

## b -- *The so-called "Romantic" theory of understanding,*
This one, however, concerned with the singular-concrete, defines 'concept', - besides 'formal' (i.e. general, as above) - also idiographic. Meaning: there are concepts (ideas) which represent actions, not insofar as they are identically present in a multitude (collection) of data, but insofar as they represent unique (sole, 'one-off') and concrete (merged with the actual context) actions.

WDM 6.

One thinks of the conceptual content of proper names, in the strictly singular (one-time) sense. To cite just one applicative model: Ornella Muti, the movie star.

Once a proper name enters the logic, it becomes rein as a concept an "individual" concept, then, reflecting the unique (and, in this sense, being idiographic) -- treated.

"Since Romanticism understands the essence of something, in a new way, as the irreducible core, of **(i)** a personality, **(ii)** a cultural work or event, (...) the individual understanding occurs, such that historiography -- and we may add: geography -- (...) acquires the rank of science,-- this time without losing its individualizing character." (*M. Milller/ A. Halder, Herders kleines philosophische Wörterbuch*, Basel/ Freiburg/ Wien, 1959-2, 28).

### *Summary.*
Concepts, as representations of states (= being, if necessary the signs of mathematics and/or logistics), constitute the first object of traditional logic.

But these concepts, as seen by WDM 3, are seen 'harmologically', i.e. orderly, and thus identitively: in judgment and in reasoning (capstone = syllogism) the knowing and thinking subject pronounces on the proper, justifiable relations (partial identities) between said concepts.

### *Applicable model.*
"Ornella Muti is a beautiful movie star" expresses from the individual (= single person) Ornella Muti that she is *a.* a movie star and **b.** thereby beautiful movie star. The notions of "movie star" and/ or "beautiful," which, of course, can be said of many sentence subjects, are considered to go together with the notion of "Ornella Muti.

Expressed in model-theoretic language: 'beautiful' and 'movie star' are valid 'models' (representations) of Ornella Muti. Every phrase is, incidentally, a 'model', which makes the phrase subject 'more familiar': it provides, information-theoretically speaking, 'information' concerning the subject. - This, because there is partial identity between subject and proverb.

### *Methodology.*
The second part of this course is a theory concerning the responsible treatment of data. In the process, logic is applied. In this sense, methodology is applied logic. We first explain this briefly.

WDM 7.

**A. *'Arche', principium, principle.***

Curious: the oldest pure philosophical text, in which the eminently philosophical mind Anaximandros of Miletos (= Anaximander of Miletus (-610/-547), the "hetairos" (fellow-student) of the first Western philosopher Thales of Miletos (-624/-545), expresses his main idea, uses the terminus technicus (= a word belonging to the own vocabulary of philosophy): "archè" -- in Latin: principium.

Besides by 'principle' we translate, also, Latinizing, by 'principle'. See here that sentence:

"The 'archè', the principle, of the being is the 'a.peiron', infinitum, the smite (*op.:* that which, flowing, sails through all the being). This 'archè' is such that in that from which things originate, they also perish,-- this, in a necessary manner. For: they make reparation to one another for their iniquity,--this, according to the legal order, peculiar to the time" (*Fr. B 1*).

There has, of course, been enormous debate about the correct interpretation of that first famous philosophical phrase. What, however, is certain is that the term "archè" which we henceforth render as "principle" has become the philosophical concept par excellence of the entire history of Western philosophy.

***The question arises: what precisely does "principle" mean in this philosophical context?***

The answer appears both from the Greek meaning (i.e., that which controls something) of that word and from the philosophical use of language (as here, with Anaximandros).

Concerning the latter: Anaximander perceives the 'being' (all that surrounds him, concerning realities); -- the question - already begun by his predecessor Thales - reads:

***"By what are the being controlled?".***

His answer, which bears witness to archaic theology on the subject, reads:

**(i)** the 'being' (apparently he thinks: 'the people') commit 'iniquities '(what that was precisely, only mere historical research can determine);

**(ii)** precisely because of this (or, psychologically-logically: precisely because of this), they are governed by a necessity, i.e., gratification (reparation), among themselves;

**(iii)** and, again, because of this/ therefore, they are doomed, from their origin (origins), to perish in that same origin;

**(iv)** this, according to a kind of "court; which he gives the name "time.

## B. *The principle of sufficient ground.*

"The principle of sufficient ground means nothing more than that everything has a ground." (*C. Schoonbrood, The principle of sufficient ground*, in: *Tijdschr. v. Fil.*, 1956: 4, 577).

C.S.S. Peirce (1839/1914), perhaps the greatest thinker of the USA, explains this as follows:

(**1**) the astonishing fact F is established (observation phase);

(**2**) yet, if the supposition were true then the fact F would no longer be surprising (i.e. raise questions), but would be 'natural', 'understandable'. This indicates the probability of V. (*W.B. Gallie, Peirce and Pragmatism*, New York, 1966, 93).

As mentioned - WDM 1 - Peirce V is called 'abduction' (= hypothesis).

Peirce's reasoning, which entails that an observed fact F a.k.a. calls for an "explanation"-V -presupposes the general nature of the fact that everything has a necessary and/or sufficient reason or ground somewhere.

**a.** In this sense, this principle of abduction is an ontological, because concerning all being, axiom, but it governs -- literally -- also all logical thinking. 'Logical' is, after all, a judgment or a reasoning only in so far as they have a sufficient reason.

**b.** But all sciences, natural and human, are only "scientific," i.e., justified knowing, in so far as they "substantiate", demonstrate, prove, "make true") their claims on sufficient grounds. Real knowing, scientific or not, knows, in whole or in part, that which governs the object of that knowing, -- the principle, the principles, of it.-- That is the lesson of Thales, of Anaximandros.

## C. *Methodology.*

Now we can situate 'method' i.e. appropriate approach to something -- the reality (the 'being'), -- the partial realities (nature, man,-- language, child, education, culture etc.).

"Although everything (has a sufficient reason and, therefore) is perfectly intelligible, yet not everything is understood in the same way. Every thing is understood according to its own nature (*op.:* being(s)) and, thus, according to its own ground.

**a**. A mathematical conclusion has other grounds

**b.** than a natural process (...);

**c.** from both intelligibility is to be distinguished the way in which one understands an act of free will.

WDM 9.

**'Comprehensibility'** (*op.:* intelligibility, meaningfulness) is not a unified property (...), -- nor is being or the sufficient ground of things (...). Such distinction in identity is the characteristic of an analogous property". (C. Schoonbrood, a.c., 534).

**1.** As an aside: *Wilhelm Dilthey* (1833/ 1911, -- e.g. in his *Einleitung in die Geisteswissenschaften* (Introduction to the Humanities), (1883), has vindicated Schoonbrood's thesis, by distinguishing between Naturwissenschaft ('erklärende Methode;-- better 'causal-explanatory' method) and Geisteswissenschaft ('verstehende Methode' -- comprehension or understanding method). After all : a natural process (take the heating of water) differs - essentially - from a free will act (e.g. getting engaged permanently).

**2.** - The application of the deductive or reductive method (WDM 2) rests on the same grounds: logics, mathematics -- at least in so far as they proceed axiomatically-deductively -- commit 'deductions'; natural sciences and humanities proceed reductively, -- even though they reason, both (deductives and reductives), with prefaces and postfaces. Or, as Platon says: with lemmata (presuppositions), which, by analysis, are tested (i.e. verified or falsified) (which is called lemmatic-analytic method).

*Conclusion.*

Ontology (theory of reality),-- harmology (theory of order),-- such are the two presuppositions of logic and methodology, which are thus applied ontology and theory of order.

**I.-- *Ontology.***

To understand ontology, one must know what precisely "philosophy" is.

**I.A.-- *Philosophy.***
**(1) *The archaic-antique idea of wisdom.***

'Philo-sophia; Lat.: 'philosophia', wisdom-philosophy, comes from 'filos', desire, and 'sophia', sapientia, wisdom. So that 'philosophia' ultimately meant something like 'wise living', at least for the Ancient Greek.

Wisdom as a general Archaic-Antique pattern of behavior.

Hellas was only one type - and a latecomer at that, compared to the Near Eastern types of "wisdom.

-- *W.I. Irwin, Wisdom Literature*, in: *Encyclopaedia Britannica*, Chicago, 1967, 23: 601, tells us that the Ancient Near East (this includes: Mesopotamia (approximate: present-day Iraq and Iran); Egypt and Ethiopia;-- Asia Minor (= Mikrasia, Anatolia), Armenia and Syria;-- Arabia) had a richly varied wisdom literature,-- this, from the Sumerians (in Mesopotamia (= Two-Streams Country) and, later, the Egyptians.

WDM 10.

The wisdom books of the Old and New Testaments (in Israel, since -1200) are a late part of this.

-- *M.J. Suggs, Book of Wisdom*, in: *Enc, Brit*., Chicago, 1967, 23: 600f., says : "Greek philosophy was the heiress and, to some extent, the disciple of the ancient contemplation of the East." (A.c., 600).

### *'Ex oriente lux'*

Literally translated: 'From the East the light (of higher education)' is an old saying, fiercely contested by the German National Socialists. It expresses--unfortunately for Nazi ideology--a verifiable historical fact,--which, by the way, the best informed among the Ancient Greeks were deeply convinced of.

### *Semasiology*

(= meaning theory) of the term 'wise',

**(a)** 'Wise', in the Antique language, means, to begin with:

**(a)1.** knowledgeable, because experienced and intellectual - acting reasonably (i.e. with "mind"); also called "developed" (i.e. culturally higher standing);

**(a)2**. normative,-and therefore conscientious and socially sensitive.

**(b)** 'Wisdom' means, therefore, 'general development; This lay in the idea now somewhat ejected by the new educational ideology 'humaniora' i.e., 'all that makes man more human.

A typically Greek term would be "paideia," a concept, to which *Werner Jaeger, Paideia* (*Die Formung des griechischen Menschen*), (Paideia (The Formation of Greek Man), 3 Bde, Berlin, 1934/1936-1; 1936/1947-2, devoted immortal pages.

### *Note-- The agogic moment.*

A "moment" - in Hegelian philosophy, at least - is, understood in the mechanical-dynamic sense, a confluence of forces, which act in a moving way.

Well, such a moment of agogic was present throughout the Antique-Middle Ages "wisdom literature," which was much more than abstract-life "theory.

Agogic' is everything that **(1)** promotes emancipation (leading to independent thinking and living), and **(2)** saves (leading to self-sufficiency). Paideia', in the wake of Eastern 'wisdom', is essentially emancipatory and, along that emancipation, salvific.

WDM 11.

Such, at least, was the great intention of the best among the 'formed' (paideia), reps. 'wise' (philo-sophia).

***Bibliographic sample on the subject:***
*-- W. Bieder, Wisdom literature*, in: *B. Reicke/ L. Rost, Biblical-historical dictionary*, Utr./Antw., 1970, 6: 65/70 (review);
*-- C.P. Keller, ibid*., 63/65;70v..

*Note* -- Today there are two rival ideas, regarding formation, that supplant, rep. the Antique-Middle Ages humanities idea:

**(1)** the idea of "anti-authoritarian education" peculiar to the student revolt of May 68 (Paris) and, more recently
**(2)** the idea of "mathematical-technological specialization" inherent in today's cutting-edge technologies.

From both ideas one is, apparently, receding. As a sign of that be the evolution on the subject at Harvard University (USA), lately.

*-- V. Grousset, Un rêve pour les Français: un fils à Harvard*, (A dream for the French: a son at Harvard,), in: *Le Figaro magazine* (Paris), 13.09.1986,124/126.
In it, writer says:
"The student ("junior"), in the third year, thoroughly studies both literature (classically understood) and physics or Middle Eastern economics.

Behold the "principle of Harvard" (WDM 7): the students come there, first of all, to acquire a solid "culture generale" (general culture),-- something, which will open to them, in any case, the gates of any enterprise.
Only then do they specialize (...) in one of the ten faculties". Which proves that the Antique-Eastern Greek idea of "wisdom," resp. paideia, is far from extinct.

**(2) *The antique Greek idea "philo-sophia".***
*C.J. De Vogel, Greek Philosophy,* I (*Thales to Plato*), Leiden, 1950, 2, says that the term 'philo.sophia', philosophy, wisdom (= the best rendering), has, essentially, two meanings.

**a.-- *General Development.***
This is, of course, the Antique-Eastern meaning described above.
In this sense the following writers use the term.-- Herodotos of Halikarnassos (-484/-424: the founder, in the language of W. Jaeger, of land and ethnology (the "father of historiography" is usually said), in *Hist. 1:30.--*

WDM 12.

It should be noted that the title of *Herodotos'* work '*Historiai*', inquisitiones, inquiries, involves a typical Early Greek philosophical idea. A 'histor', inquisitor, investigator, is either an eyewitness or a rebuttal of eyewitness testimony.

Too bad that, during a short time, Church history gave the word "inquisitio," judicial inquiry, then, a very regrettable pejorative connotation.

Which need not prevent us from reestablishing the same word, in the healthy - humane (or, rather, humaniora-) sense, namely, research. And namely research into the principle, the archè, that which governs a given object of research.

Thoekudides of Athens (= Lat.: Thucydides (-460/-399; the founder of the still perfectly valid idea of 'professional historiography').

Isokrates of Athens (= Lat.: Isocrates; -436/-338; the great "rhetor" (wisdom teacher;-- later, narrowed to "eloquence teacher").

It should be noted that Isokrates, who, by birth, thought rather Protosophistically (Protosofistics is a cultural movement, with far-reaching liberal ideas, between -450 and -350), favored the idea of 'general education' as the basis of his 'rhetoric' (WDM 1) or eloquence or persuasion theory. In this he was opposed to a Platon of Athens e.g., who conceived of 'philosophia' as thorough specialization.

### b.-- *Philosophy specialization.*
**(1)** The first, rather scientific, specialization can be found with the already mentioned Thales of Miletos (WDM 7; together with his 'hetairoi', friends-thinkers, namely the also already mentioned Anaximandros (WDM 7) and the later thanksgiving Anaximenes of Miletos (-588/-524)).

As mentioned above, they deepened the idea of 'wisdom' in a physical, natural-philosophical sense : the 'fusis' (= Lat.: natura, nature), i.e. the whole (totality) of the visible and the invisible things (being), was, according to the Milesian 'physical' principle, passing through the same primordial substance (tenuous, fine, fluidic matter).

That very thing, as we saw (WDM 7), was the smidgen that which, as through everything, in a flowing way, also governs everything), a principle, which "determined" all nature. -- Such is, true specialization, natural.

WDM 13.

**(2)** The second, this time 'musical', specialization is found with Puthagoras of Samos (Lat.: Pythagoras; -580/-500) and the Paleopythagoreans (-550/-300). The 'fusis', nature, understood as the whole of reality, remains central, as with the Milesians, but it is approached 'musically'.

**a. *The 'choreia', the trinity*** of dance, instrumental music and song (= poetry), dominates the Pythagorean's view of life and the world. Dance, sound and text are, in doing so, governed (WDM 7) by:

**(i) *number***, expressible in number (the number of steps, the number of dances, the number of stanzas, etc.),

**(ii) *geometric form*** (the forms of the dance steps, 'rhuthmos', the geometrically determined 'flowing' (smug) aspect), into which the dance is cast e.g.),

**(iii) *harmony***, i.e., the pleasing fitting together of dance, musical sound, and word. the word for this summarizing these three aspects was 'arithmos', numerus, 'number' (understood in the sense of number.form.harmony, of course; -- which is usually forgotten). Also called 'metron', mensura, measure (i.e. norm). Or 'nomos' law.

**b. *The choreia was attuned to the cosmos***, understood as 'number.form.harmony'. So that the choreia was nothing but tuning in to what, in the immense and, for the Pythagorean, divine universe, in its 'cosmic' way, was choreia, -- dance, sound (think of the 'harmony of the spheres') and harmony --. Man and cosmos were one, one-sound.

**c. *The choreia was*** meant ***agogically***, in the mentality of the Pythagorean, to edify well-being (WDM 10). Well, all well-being was situated in what was called, in Archaic cultures, 'psuche', anima, soul. Dancing, singing and making music were mobilizing, activating and re-establishing the soul, in particular by tuning it to the 'soul' of the cosmos (universe soul, world soul).

'Soul' meant, then, first of all, the tenuous, i.e., the cosmic ('physical') rarefied, primal, 'subtle' or fluidic substance. Only after that did one understand 'soul' in the sense, familiar to us, of life principle,--which, in the mentality of the time, was fine- or rarefied material. As, accurately, *J. Zafiropulo, Empedocle d' Agrigente*, Paris, 1953, especially o.c., 35/44 (*Le milieu, l' appartenance*), expounds.

WDM    14.

-- *A. Volten, Der Begriff der Maat in den Aegyptischen Weisheitstexten*, (The Concept of Maat in the Egyptian Wisdom Texts,), in: *F. Wendel et al, Les sagesses du Proche-Orient ancien*, (Wisdoms of the Ancient Near East), Paris, 1963, 73/101, confirms Zafiropulo's thesis, from especially Ancient Egyptian lore of a sapiential (wisdom) nature.

*Note.-- Insofar* as the coarse substance (which we all experience directly) was also conceived as 'fluidly' underpinned, 'flowing through', such opinion is called 'hylozoism' (hulè = materia, substance; zoë = vita, life). Even the - for the Enlightened-rational Westerner dead-grove substance was understood as - somehow - either alive (animatism) or animated (animism).

Thus, one understands that, over time, the Pythagorean middles, especially the more progressive ones, developed a philosophy, which elaborated music,-- arithmetic, geometry and, also, astronomy (celestial science), into real professional sciences.

But then always in such a way that the soul (especially the soul of the human being, who was considered susceptible to reincarnation (i.e. more than one earthly life) remained central. Paleopythagoreism remained fundamentally a psuch.agogia, a soul education, although it became a specialized philosophy.

### Fallibilism.

'Fallibilism' (fallibility consciousness) is a term, which was foregrounded by Ch. S. Peirce (WDM 8), among others. But the term 'philosophia', at least in Paleopythagorean parlance, means, literally, 'fallibilism-in-substance'.

For Pythagoras, wisdom was an exclusively divine attribute. If earthly people, then, did possess "wisdom," it was due to participation in the deity.

By himself, man was only capable of 'philo-sophia': of 'desire' (as our Dutch-speaking ancestors translated so well) for wisdom. Unfortunately, even experts no longer know the former meanings of some technical terms of philosophy.

**(3)** The third Archaic philosophical specialization was the eleates, about which WDM 2. No mere physical (Milesian); nor a predominantly muscular psychagogy(c) (Pythagorean);--although predominantly logical-ontological specialization was characteristic.

WDM    15.
**(3)** *What the current philosophy is not.*
Philosophy, present, is the unbroken continuation of the Thaletic onset in Miletos, the great port city in small Asiatic Ionia.

Yes, indeed, in Paris, in 1900, the International Congresses of Philosophy, which take place every four years, were founded. And on 13.09. 1948, the foundation of the International Federation of Philosophical Societies took place in Amsterdam. This, after the International Institute of Philosophy - founded in 1937 with a view to the bibliography - got off the ground.

What is striking, in all of this, is that the eleven international societies and the numerous national ones - e.g., in 1948 - exhibit a tripartite nature:
**a.** Continental - mainly Western Europe - Europe,
**b.** Soviet Russia (along with the Sovietized countries also present in all major parts of the world),
**c.** the Anglo-Saxon countries (England, USA),-- each has a predominant philosophy.

### *Definition of philosophy.*
Do we say, rather, what philosophy is not (the disabling or eliminating method).

### **a.--** *World - and life studies.*
Every somewhat elaborate philosophy contains, of course, a view of the universe (world) and of life (human existence). But the reverse is not true: a world- and life view - one also likes to use the German term 'Weltanschauung' - does not, per se (necessarily), have the degree of justification (method; WDM 8), proper to strictly philosophical thinking.

### *Note--*
**(a)** The 'common sense' -- Not to be confused with -- what happens several times -- the 'common' sense! 'Common sense' (i.e. insight) is called 'common; insofar as it is peculiar to large groups and, therefore, not too specialized (WDM 12).

**(a)1.--** *Claude Buffier, S. J., Traité des premières vérités*; (Treaty of the first truths;), Paris, 1717, is a first Modern attempt to express the basic truths present in all human beings.

**(a)2**. *Thomas Reid* (1710/1796), *An Inquiry* (WDM 12: inquisitio) *into the Human Mind on the Principles of Common Sense* (1764), continues, in Anglo-Saxon countries, Buffier's analysis of the basic truths in common sense.

Buffier wanted to extend Cartesian philosophy to the "plain and clear" representations of common sense; Reid wanted to extend Hume's idea of "direct judgment" (something like "intuitive grasp") concerning morality to the basic certainties - intuitively sensed - inherent in "the Common Sense.

Thus, both trailblazers became the pioneers of - what is called - Common-Sense philosophy, which in its Anglo-Saxon wing is also called "Scottish School. This type of philosophizing continues to this day to have an effect in almost all countries. If only because, necessarily, every scientific-specialized idea is - to begin with, in the mind of the scientist himself - pre-scientific.

### 1. *Appl. model.*
When S. Freud (1856/1939), the founder of psychoanalysis, first introduces the term '(consciously) suppressing' and/or '(unconsciously) repressing' unpleasant or socially unacceptable emotional states, then it is clear, e.g., that the working-class man - the pre-eminent bearer of Common Sense - also knows such a thing, when he says: "Anneke wouldn't have known such a thing".

*Conclusion.--* The common mind possesses, apparently, something like a pre-philosophy, a pre-science.

### 2. *Appl. model.*
The Existential philosophy whose forerunner was Sören Kierkegaard (1813/1855), by that he launched the idea of 'existing' (as a finite human being, on this earth, facing the Biblical God, existing;- Note: it is not about the traditional idea of 'existence' (in the sense of actual existence, peculiar to every being)), as a counterpart of every, especially the theoretical, 'world and life flight' - put common sense so to say central, by assuming, with the Phenomenologists (Edm. Husserl: WDM 5), that the view of universe and 'existence'('exist') is the general background of every philosophy and, even, every professional science; -- indeed, that this same view, which is the fruit of Common Sense, continues to be its background.

### (b) *The artwork.*
Take e.g. the *Divina Commedia*, by *Dante Alighieri* (1265/1321),--a work that poetically depicts an imagined journey through the Underworld (Hell, Purgatory) and Heaven. Or consider *JW Goethe* (1749/1832), On *German Architecture*, a work, in which he describes the Gothic Cathedral, in a praise analysis.

WDM 17.

What is called "the artistic oeuvre" (in plain English: the work of art), if a little more than some banal craftsmanship (and even then), carries within it a world and life view.

**(c)** *The religion.*

**1.** The Latin term 'religio', religion, seems to come from 'religere' (analogous to 'respicere', to respect), the counterpart of 'negligere' (to neglect). Religion has, indeed, always been the observance of all that is external and/or supernatural. Since all that is extra-, resp. supernatural, is at the same time in and above (outside) nature (fusis natura) - at least according to all that is religion, all religions contain a world- and life-view.

**2.** *- M.D. Despland, Religion*, in: *P. Poupard, dir. Dictionnaire des religions*, Paris, 1984, 1421, gives as a definition of religion:

"A religion is a cohesive system of beliefs and practices, relating to 'des choses sacrees', to 'sacred' things." (Definition, taken from E. Durkheim (1858/ 1917), the famous French sociologist). -

In the traditional Church language, however, of the West, "the sacred" (aka: "the sacred") is divided into "the extra-natural (all that is called "miracle" (paranormal)) and the "strictly supernatural," which is strictly limited to the Biblical religions (Judaism, Christianity).

One sees, by the way, that the idea of 'nature' (touched on briefly WDM 12), peculiar to the first specialized philosophy of the Milesians, underlay this dual concept. With this difference, however, that, for the Milesians, 'nature' also included the exterior and - in principle, at least - the supernatural, whereas, in Church language, nature, exterior and supernatural represent three strictly distinct domains.

And the Milesian and the Church use language to mean the totality (i.e. 'what is') of reality. And so, again, there is a certain world-view and philosophy of life in it,-- which, incidentally, differs greatly from religion to religion, although everything, in those religions, revolves around one and the same core: 'the sacred' (the extra- and supernatural).

WDM 18.
**b.-- *Ideology,***
Already touched upon, WDM 1, the idea of "ideology" must now be delineated a bit more precisely.

**(A)** It is the Sensualist (reducing all knowledge to 'sensus', senses,) philosopher Destutt de Tracy (1754/1836), who, first, used the term 'ideology', in the sense of 'analysis of ideas, (using the term 'ideas', of course, not in the Platonic sense (pre-given structures), but in the Cartesian-Lockian sense (mere representations situated in our consciousness)).

**(B)** Briefly, an "ideology" is, at least in our parlance (peculiar to this course) - for the term varies, according to meaning, sometimes from writer to writer,
**(1)** a thought construction, thought out by one or more people,-- hence the reality alien element, which, is to be found again virtually in every definition,
**(2)** employed by some "cause" (interest).

By this second definitional element we join the opinion of *Karl Mannheim* (1893/1947; Hungarian Marxist; founder of the sociology of knowledge), in his *Ideologie und Utopie* (1919).

The "cause" in question is, usually, that of a social group (a lobby (behind-the-scenes pressure group), a class) or also of a strong individual (Stalin, Hitler).

Certainly an ideology, if sufficiently elaborated, is a kind of worldview and philosophy of life. Certainly, also, a number of philosophies have a sometimes hidden or very clear ideological slant. Which does not imply that, philosophically speaking, they are totally worthless, far from it. In that case they serve as a mere lemma (working hypothesis),

**c.-- *Professional Studies.***
**1.** "The Empiricists (*note:* philosophers, who, like Destutt de Tracy (above), rely purely on sensory experience) completely separate philosophy from theology (cfr. WDM 1). (...)

'But at once their philosophy had fallen into an intrinsically (= inwardly) even more dangerous dependence on the natural sciences' (*R. Eukken* (1846/1926), *Die Lebensanschauungen der groszen Denker* (The views of life of the great thinkers), (1890), 323)" (*O. Willmann, Die wichtigsten philosophischen Fachausdrücke* (*in historischer Anordnung*), (The most important philosophical terms (in historical order)), Kempten/ Munich, 1909,85).

**2.** Willmann, o.c.,102, notes that, in the last century, ontology (metaphysics), by a number of Western thinkers, was replaced by subject sciences (e.g. the Psychologists, who thought, e.g. in the wake of a J.Nikolaus Tetens (1736/1805), to be able to handle the theory of reality purely psychologically).

*Appl. model.*

Auguste Comte (1798/1857), the 'father' of Positivism or philosophy, which builds purely on the 'stellar' or 'positive' or subject sciences. He believed, even, to see a kind of history-science 'law' at work, which he christened 'La loi des trois états' ('The law of the three states of humanity').

Mankind, culturally speaking, is going through, first, a theological (wdm 17: religion),-- then, a metaphysical (Comte understands by that: world- and life-altering constructions of thought), -- finally, a 'positive' (understand: professional science) stage. He was convinced that, already in his time, Modern-Western culture was evolving into an industrial society, planetary in scale, in which labor would be organized scientifically, prosperity would increase dramatically, and the laboring masses would come to the fore.

*Appl. model.*

Around the 1880s, partly under Comte's influence, scientism emerged, "heritage étroit et caricatural du Positivisme" (a narrow-minded and caricature heritage, springing from Positivism). (*A. Noiray, dir., La philosophie*, Paris, 1972-2, 71).

In Latin, 'scientia', Fr: science, means science. 'Scientism' means, therefore, like e.g. Psychologism, an exaggerated streak concerning the relationship 'philosophy/ professional science'.

*Value Judgment.*

As already mentioned (WDM 12), Greek philosophy was, from the beginning, inseparable from professional science (see also WDM 14). But, as already indicated in WDM 1, philosophy remains, first of all, a study of the foundations of professional science, even though it can continually learn from the angle of the professional scientists.

*General Conclusion.*

Although philosophers, always, represent some "Weltbild" (M. Heidegger), philosophy is not, without more, a world and life view.

Although philosophers invariably become ideologues somewhere, easily, philosophy is not an ideology.

Although philosophers range from people who have virtually no interest in the sciences to figures who are rabidly dedicated to one specialization or another, in a positive field, philosophy is not a discipline or the "synthesis" (as a Comte advocated) of the joint disciplines.

WDM 20.

### Which the current philosophy is.

Philosophy is, since Thales of Miletos,

**A.1.** a set of insights

**A.2** preferably developed into a system (coherent whole),

**A.3.** testable (in a professional or nonprofessional manner),

**B**. insights, which concern the totality, the overall reality as such, or, at least, analyze a part of it, but situated in that same totality.

### I.B. *Ontology.*

We have already described, sketchily, ʻontologyʼ". WDM 2v.: theory concerning (total) reality.

### *Bibl. sample.*

-- *O. Willmann, Abriss der Philosophie* (*Philosophische Propädeutik*), (Outline of Philosophy (Philosophical Propaeutics)), Wien, 1959-5, 329/460 (*Historische Einführung in die Metaphysik*);

-- *Désire Mercier* (1851/1926), *Métaphysique générale ou Ontologie*, Louvain/ Paris, 1923-7.

*Note.--* There are, of course, countless treatises, good and bad, on ontology. But the above works are sound, -- if only, because they are not the work of one thinker, but the result of what Parmenides (WDM 2) initiated and was further specified by countless others. Nothing is so doubtful as a thinker, who thinks that he can, in a (pseudo)genius throw, design a (radically) new ontology!

### The term "ontology".

As an explicit term, ʻontologyʼ was introduced by *Joh. Clauberg* (+1665). In his *Metaphysica* (1646) he says that ʻontologiaʼ is "a type of science, which dwells on being as being,-- i.e. in so far as being is."

This is literally written down from Aristotle (WDM 2)! All that is real, viewed insofar as it is ʻrealʼ,---such is what that peculiar formula means to say.

Clauberg continues, "Being(de) is a ʻnaturaʼ (*op.:* something), peculiar to all (*op.:* communal) and to all separate (singular) being: such a science he calls ʻcatholicaʼ, ʻuniversalisʼ (general).

By this Clauberg means to say that outside of being (= reality) - there is absolute (= utter) nothing. - It is also said that, outside 'being', only 'the absolute or utter nothingness' exists. But do not be deceived : 'the absolute nothing' is absolute nothing.

Another name for "general" is "transcendental": it is said, therefore, that the concept of being is transcendental (all-encompassing, transcending every limitation as to reality).

### *Types of ontology.*

In view of the ambiguity (= susceptibility to more than one interpretation or interpretation) of the total reality, it is not surprising that e.g. *G. Thinès/ A. Lempereur, Dictionnaire général des sciences humaines*, Paris, 1975, 673, speaks of the so-called 'metaphysical' (= traditional) ontology, opposed to e.g. the 'formal' ontology of Edm. Husserl (1859/1938; founder of intentional phenomenology) or the "fundamental" ontology of his student Martin Heidegger (1889/1976; the "existential" interpretation of traditional ontology: WDM 16).

All of these are either variants on the great tradition (sometimes only by saying the same thing in different words!) or simply deviations, - to such an extent that one can question whether it is still true ontology (e.g., Heidegger's "fundamental" ontology is, rather, a humanity (and then his own), but involved in and formulated in terms of "ontology").

### *A. Fouillée 's ontology.*

Alfred Fouillée (1838/1912), well known in idealist psychology for his "idée-force" (power idea), conceived, in the pure Platonic tradition, metaphysics (ontology) analogous to the subject sciences. One pays attention to the title of his main work "*L' avenir de la métaphysique fondee sur l' experience*" (The future of metaphysics based on experience), (Paris, 1889).

What does Fouillée, with this, mean?
"Speculation (la spéculation, i.e., designing something with one's mind (intellect/ reason)) is a method which is characteristic both of metaphysics and of the slow progress of professional science. Far from being merely typical of metaphysics, speculation is indispensable to the discipline of science which, as a 'view from a distance' (i.e. as a design, hypothesis), links it to perception, as a 'tact immédiat' (i.e. as direct contact with reality).

WDM 22.

Have demonstrated this splendidly *Claude Bernard* (1813/1878; he set up the rules of the experimental (= trial by experiment) method in his *Introduction A l' Etude de la médecine expérimentale* (Introduction to the Study of Experimental Medicine), 1865)), *Hermann L.F. von Helmholtz* (1821/1894; German natural scientist, known for his formulation of the principle of conservation of energy (he is, at once, one of the founders of current energetics (energy theory)), Louis Pasteur (1822/1895; founder of microbiology)

**a.** Already Aristotle of Stageira (the 'Stagirite', the founder both of formal logic, in its elaborated form, and of ontology, also in its elaborated form (WDM 2); -384/-322) had said that "to know is to design" (*note :* poiein, design) and that, e.g., to know something - take a geometrical figure - one must first design it in thought or on paper.

**b.** - In the same spirit (= mentality), one could say that -- in order to know real things, -- e.g., the orbits of the planet Neptune -- one must "construct them in one's mind (= intellect/ reason)."

In other words, the forces inherent in nature must be understood as ideas, which, once verified after the fact, become forces in their turn.

*Conclusion:* the idealistic construction is, therefore, the most fruitful principle of the scientific method." (o.c., 96).

### The lemmatic-analytic method.
We said, just now, that Fouilée, with that view, is "in the pure Platonic tradition."

Indeed: Diogenes Laërtios (between +200 and +300), 3:24, reports, "Platon, as the first, gave the research by analysis to the Thasian Leodamas.

**(1)** The impetus, the starting point, of the typical Platonic inquiry is, thus, a lemma, a design,--a representation in our mind (mind/ reason), which is believed to be correct (cf. C.S.S. Peirce's abduction: WDM 8).

**(2)** The investigation itself is called by Platon 'analusis' literally: dissection, analysis. One dissects, indeed, the relations in which the lemma is engaged, until one obtains either verification or falsification (the two main forms of verification) of the lemma.

As O. Willmann, somewhere, says: the full name of this method is not 'analytical method', but 'lemmatic-analytical' method.

WDM    23.

See here what Fouillée writes:

"The experimental method, peculiar to the natural sciences - says Claude Bernard - needs an 'idea directrice' (a guiding idea). This guiding idea is e.g. an imagined (*Note:* designed) law, but which, as yet, has not been verified.

"Empiricism (*note*: the tendency which believes that professional science needs only 'facts' and no guiding ideas) may be useful for accumulating 'facts', but, for building science, it is incapable of doing so: a true experimenter, who does not know what he seeks, does not even understand what he finds." (Quotation from Bernard's work).

Fouillée, in Platonic style (Platon held up the geometrical science of his day as a model), continues, in the same context, immediately:

"An experiment is first designed ('construite') in thought, constructed (in Fouillée's language). Then it is subjected to testing ('vérification').

This is not without analogy with the method of geometrists:
**(i)** they assume that the issue is already solved (*op.:* lemma);
**(ii)** they reason out the inferences from that hypothesis (*note:* analysis)" (o.c.,79/80).

Immediately afterwards, Fouillée concludes by saying that, in addition to ontology (metaphysics), the experimental and mathematical sciences, too, first make an assumption (lemma) in order to conclude, only afterwards, thanks to the consequences drawn from this hypothesis and tested according to the specific maxims of each science (analysis).

It is that method, which we, in this course, advocate.

### *Two types of Platonic method.*
*W.N.A. Klever, Dialectical Thinking*, (*On Plato, Mathematics and the Death Penalty*), Bussum, 1981, 44/48, points to two models of application of the lemmatic-analytic method,

**(1)** There is the type of 'science' achieved by the discursive (reasoning) mind, as - pre-eminently - in the mathematics of his day. 'The soul' (with Platon, as with the Pythagoreans, always central; (WD 13) proceeds from assumptions (the axiomata, - the preconceived notions, judgments (propositions)), in order to build up, from them, by analysis, the whole subject science (axiomatic-deductive method).

WDM    24.

*Platon* explains: "I think thou knowest that those who practice geometry and arithmetic - and other similar sciences - presuppose such things as 'the even and the odd' (*note:* a systechy or pair of opposites), 'the figures' three kinds of angles' - and similar things - according to each one's method of working -, and as if they knew all this, use it as suppositions.

In other words: they do not consider it necessary - neither for themselves nor for others - to justify them, as if they were, for everyone, obvious.

*Consequence:* they start from those presuppositions and go through the rest (*note:* of their scientific work) in such a way that they achieve, in the end, what, from the beginning, was the set goal." (*The State* 510 c/d).

Platon reflects, here, the modus operandi of the contemporary mathematician. But a David Hilbert (1862/1943), in 1898 (in his *Grundlagen der Geometrie*), attempts, not without falling into disputable opinions himself (at least according to a number of mathematicians), to literally reestablish Euclidean geometry: he states:

**(1)** a list of twenty-seven axiomata (i.e., unproven, but simply postulated assertions) and

**(2)** a set of logical operations (which are only allowed, to the exclusion of all others), from which, thanks to introduced new concepts and notions, the whole geometry is deduced.

What Hilbert is doing is merely the refined form of what Platon, in his day, saw mathematicians doing. He calls this the work of "dianoia," the discursive mind or "reason"("ratio" in Latin).

This method Klever calls "the forward thinking method."

**(2)** There is, however, a type of "science"-that Platon called "dialectics"-that Klever designates with the excellent name "backward method.

One can, in that type of dialectic, e.g. start with the working hypotheses of mathematics (numbers, spatial figures),--now not to 'reason forward' from them, but to answer the question, "How is the universe (being) put together that such things as numbers and geometric bodies are possible in it?" (WDM 1).

This is the work of the 'nous', spirit, in the strictly Platonic sense. This is, now, exactly, what the ontologist does.

WDM   25,

*Note--* W. Klever, *An epistemological mistake*?, in: J. *van Rijen e.a., Aristoteles* (*Zijn betekenis voor de wereld van nu*), (Aristotle (His significance for the world today),), Baarn, 1979, 36/47, points out that Aristotle too, concerning the practice of science this time, assumes that scientific work is not the starting point of (predetermined) principles, but (precisely) the search for the right premises,--this, in order to be able to explain the observed facts. In other words, Platonic: from the phenomena (the visible and tangible data) to the backgrounds ('principles'; WDM 8).

*Note.--* WDM 2 and 9 taught us the logical scheme (de- and reduction), which J. Lukasiewicz put forward. It is the 'formalization' (reducing to short formula) of the lemmatic-analytic method in its dual application (the logical-mathematical and the experiential).

### The concept of being,
We know, now, what "ontology" (WDM 20) means: to ask oneself "how the universe (everything) is constituted in such a way that the phenomena, the visible and tangible data, which impose themselves on our consciousness are, as immediately evident, possible (conceivable, understandable)?

The answer to this, at least in the great traditional ontology, concentrates in the idea of being. -- hence this brief analysis.

### a.-- *an initial conceptualization, the reflective one.*
*M. Heidegger* (cfr WDM 21), *Sein und Zeit*, (Being and Time),  I, Tubingen, 1949-6 (1927-1), 17, says: "To be human ('Dasein') is **(i)** to be **(ii)** in a certain way.

In particular: **(i)** while being himself, **(ii)** man understands, immediately, "such a thing as being.

In the language of common sense (WDM 15), this reads:
**(i)** because we ourselves are (actually exist,--and this in our, human way)
**(ii)** we know somewhat what 'being' generally is.

In other words: by examining ourselves (introspectively), while we 'are there', we situate ourselves, with the mind (mind/speech), in the whole of being. have, therefore, a first power idea, (WDM 21), viz. that
**(1)** one-sided human (and then purely individual) concept of being
**(2)** as a vague impetus to think about being in general (transcendental: WDM 21).

Put Platonically, that vague idea of being is our initial lemma, which, therefore, is open to further analysis.

WDM 26.

It should be noted that Heidegger expects more from this reflective method than from the traditional-conceptual method.

**1.** However, *Aristotle* had already warned: 'Einai', being, is not a characteristic of any given thing. Consequently, every time one says 'on' (being), this is, again and again, a 'psilon', an empty word, because it says nothing (*note:* concerning a singular data). Only in connection with another term with meaning does the word 'being' acquire meaning". (*Peri herm.* (*Doctrine of Judgment*) 3, in fine).

What does Aristotle, with this, want to say? Simply the following: to characterize something, which differs from 'being', never use 'being', because 'being' fits everything. And, therefore, to nothing concrete, which differs from 'being'.

But also the other way round: e.g. doing like Heidegger and thinking that, by describing man's being, endlessly unravelling it, as he is able to do, yields as good as nothing as far as one wants to get to know being in general (transcendental being) better with that! We hardly see through our own 'being': what would this all too imperfect knowledge give us in terms of getting to know being-in-general?

*Conclusion:* the reflective (loop) method hardly gets us anywhere.

**b.-- *The classical conceptual method.***

*Heidegger* himself sets us on our way.-- In his *Einführung in die Metaphysik*, (Introduction to Metaphysics,), Tubingen, 1953,138, he says: "(In Platon's language) 'ousia' can mean two things:

**(1)** the present-ness ("Anwesen") of something that is present and

(2) this present in the 'what' of his being view ('im Was seines Aussehens')".

*P. Fürstenau, Heidegger* (*Das Gefüge seines Denkens)*, (Heidegger (The Structure of His Thought)), Frankf.a.M., 1958, 118, adds to this Heidegger citation, "Here lies the origin of the distinction between 'existentia' (*op.:* actual existence) and 'essentia' (*op.:* the mode of being). -'Daszsein' und 'Wassein' (Idea).

It should be noted that the opposition pair or systechy 'existentia/ essentia' (WDM 16) was handed down to us by the Middle Ages.

*A reminder.*

Such highly abstract concepts become memorable when tied to salient examples.

Take the heroes from the Late Antique adventure novel of Heliodoros of Ephesus (= Ephesus; between +300 and +400), entitled Aithiopika (literally, Ethiopian histories).

WDM 27.

Woven into this adventure novel is a very beautiful and Platonically moving love story, whose actors (= involved) are Theagenes and Charikleia. Ontologically, one can ask a twofold question:

(a) the what-question : "What are Theagenes and Charikleia?" (to which the answer is e.g. "They are Hellenes (= Greeks) lost in Egypt");

(b) the or-question, "Do those heroes actually exist in Heliodoros' novel story?" (= the question of whether they exist in it, occur, is answered with the that-answer-, "Indeed, they occur in that novel" (which is to say that they are effectively (actually) found in it).

### A Romantic Tribute.

(1) WDM 19 introduced us to a first XIXth century philosophy, in which the that (answer to the or-question) plays the prime role: the Positivism (or "Philosophie positive") of Auguste Comte.

(2) The same XIXth century has, however, a Romantic counterpart, namely the Positive philosophy of Fr. W.J.Schelling (1775/1854), a true Romantic and at the same time a first-rate thinker (e.g. highly regarded by Ch. S. Peirce (WDM 8; 1422)).

Not only - what Schelling calls - the 'negative' (i.e. purely abstract-rational) philosophy of the Enlightened Rationalists, who were concerned with the 'what' (beingness), but also the 'positive' philosophy, characteristic of Romanticism, which keeps both the 'what' ('essentia', beingness) and the 'that' ('existentia', actual existence) in view, are, together, the true, full philosophy.

### Bibl. sample;

-- *H. Arvon, La philosophie allemande*, (German philosophy), Paris, 1970, 19/23 (Joseph Schelling).

### The six transcendentalities.

The typically Platonic pairing of "essence/existence" (so called in Scholastic philosophy) is the essential core of the six transcendental (WDM 21) concepts.

*O. Willmann, Die wichtigsten Phil. Fachausdrücke*, 61f., names them: that which possesses both essence (manner of being) and existence (factuality), can be grasped and interpreted as independent because existing in itself (which Parmenides already recognized (WDM 5)) (in that case the Scholastics call it 'res', thing -- think of the French 'réel' and our 'reality'); the same can be grasped as distinguishable ('discriminate' one also says), viz. as different from the rest of being(de) -- which is dichotomy (complementation) -- and, then, it bears, in the Middle Ages Scholastics, two names.

WDM    28.

**1.** The first term is called "aliquid" (something).

**2.** The second is called 'forma', essence form (to be strictly distinguished from e.g. the purely geometrical (space mathematical) 'form' (which one opposes to the so-called 'content' or 'matter', which are 'cast' in that ''form').

*Note.--* That the 'morpheme', forma, creature form, is something other than the merely material-geometric 'form' (configuration), is evident from what the Scholasticians say of that creature form: he is the principle (WDM 7v.) - i.e. that which governs - and is, at once,

**a.1.** being (but as a distinctiveness reason or ground),

**a.2.** the law(maturity), 'lex', i.e. the cybernetic or steering principle (which governs the teleology or purposiveness of something, aliquid),

**a.**3. the mensura (Greek: metron), "measure," or, also, "mode," measure, i.e., the norm (what governs the behavior of something);

**b.** the 'ratio', the ground of being, i.e. that from which the aspect that is determinable for us (because phenomenal or visible and tangible) draws its origin (i.e. the idea in the Platonic sense, about which more later).

*Note --* one can also characterize the second 'transcendental' in another way.

Being "something" (and not nothing) is

**a.** be something different from the rest (complement) and

**b.** still 'be there', i.e. occupy a well-defined place in being (something, in which one recognizes both the essence (being something else) and the existence (being there, in the midst of the rest).

So much for the two first transcendentalities, which are the basis of an ontological theory of information.

### The four following are:

**1.--** 'Ens' (Greek: 'on'), being, that simply names essence and existence at once;

**2.a**. 'Unum',the one, i.e. being insofar as it is indivisible, 'one', in itself (even though it has many aspects or parts; cf. the ideas 'collection' and 'system' (the latter is usually called 'system'));--as seen, WDM 3v., this transcendental is the basis of harmology (order doctrine);

**2.b.** 'Verum', 'true' (in the sense of susceptible by 'mind' (= reason and reason); which appears, when one looks up 'the sufficient ground', (WDM 8), i.e. the meaningfulness (non-absurdity), of something: - the basis of epistemology (= knowledge theory;-- also called 'gnoseology' ('gnosis'= knowledge));

**2.c.** 'Bonum', 'good' (= valuable , in the sense of amenable to value judgments (value judgments), -- the basis of axiology (value theory).

WDM    29.

*Summary.*

Ens, being, i.e. essentia and existentia, mode of being and fact of being, -- res, being in itself, independent of any merely subjective whim ('kath'heauto', something according to that something itself,-- according to Parmenides), aliquid (something) or forma (form of being), by which information concerning that being, ens, becomes possible (basis of the theory of information),-- unum, unity in that same being, basis of every theory of collection or systems ('harmology') -- verum, knowability, insightfulness, intelligibility, basis of every theory of knowledge and science, bonum, valuability, basis of every axiology or theory of value.

Behold what, in Platonic line, the Scholastics understood by the idea 'real'; All that does not correspond to it is falsifiable, i.e. is experienced as unreal.

*Note.-- O. Willmann, Geschichte des Idealismus* III (*Der Idealismus der Neuzeit*), (History of Idealism III (The Idealism of the Modern Era),), Braunschweig, 1907-2, 1036, says that the transcendentalia arose from the summary of:

**(1)** the Paleopythagorean principles (WDM 7v.) unity (= numberform harmony; WDM 13) and thinkability (= truth, insightfulness)

**(2)** the Platonic principles (id.) being and "the good" (the "sun" of all that is,-- i.e., the luminous origin of all that is).

It should be noted that the small-Socratic Eukleides (= Euclid) of Megara (-450/-380), one of the rare ones who assisted his teacher Socrates of Athens (-469/-399), in the prison of Athens, at the last, as an intimate friend-thinker (WDM 12), conceived of the transcendental, unity and value, as central to his very strongly Eleatic philosophy (WDM 2).

### The being judgments.

They are also called "laws of being.

Already Parmenides' teaching poem (= didactic poetry), 8:16, mentions -- admittedly in a debatable sense, about which more later -- the di.lemma (logical fork in the road) "(It) is or it is not". One has, later, interpreted this as the contradiction or contradiction principle.-- What, in it, is certainly at work is the idea that reality obeys (is governed; WDM 7v.) laws. This has already been purely sensed by an archaic thinker like the Eleate Parmenides (and his pupil Zenon at least as much). Which puts an absolute brake on all thinking.

WDM 30.
**a.-- *The Identity Act.***

"What is, that is" or even better: "What (so) is, is (so)"; In this last formulation both the fact and the being are explicitly mentioned. One can also say : "Being(s) is(are)".

With that, reality - as if it were a person, claiming something - addresses each of us, in his conscience: all those,
(**1**) once faced with "being" (reality),
(**2**) in addition, honestly and respectfully wanting to know the truth about that reality (cf. WDM 16), must, in all respect for the inviolable which somewhere in that reality as such (= as such, i.e. as reality) is both present and at work (cf. WDM 22: forces), acknowledge that it is (so), as it is.

*Note.--* This implies that truth-telling (which is more than mere 'theoretical' insight), necessarily, underlies an ethics, i.e., a moral philosophy, i.e., a philosophy of conscientious behavior. Of which more later.

**b.-- *The law of incongruity or contradiction.***

"What (so) is, cannot, at the same time be (so) and not be (so)".
Or "Being and non-being cannot be estimated at the same time". This is the primal dilemma, i.e. the possibility condition (WDM 1;3) of all other applicative models of dilemma (so e.g. in mathematics).

*Reason:* 'being' (all that is real) is absolute, i.e. outside of being there is only 'nothingness '(i.e. nothingness, absolute nothingness; WDM 21).

*Note.--* There is, however, a figure of speech (a mode of utterance), which, seemingly, contradicts our thesis. For example, what follows. One stands before a "white" wall. The question is, "To what extent is that wall, now, really white?" (e.g., after it has endured years of rain and thunderstorms).

A possible answer: "Yes, actually, that wall is white at the moment and not white". This is not an application of the law of contradiction, -- but of a degree indication of the whiteness of a polluted wall, which is 'white' insofar as it still reminds one of the treatment with white lime (years ago), and is not 'white' insofar as it is polluted. That's all it means.

WDM    31.

***Note-- The harmony of opposites.***

"God (*note:* in Herakleitos's parlance, the name for fusis, nature (WDM 12), the overall, somewhere deified reality) is day and night, winter and summer, war and peace, abundance and hunger at the same time.

He changes, however, like fire, when it is mixed with perfume: once mixed with one perfume, it acquires the name of that perfume, which it effuses instantaneously." (*H. Diels, Die Fragmente der Vorsokratiker (Griechisch und deutsch)*), (The Fragments of the Presocratics (Greek and German)), I, Berlin, 1922-4, 90f.; *Fr. 67*; cf. Fr. 58/62).

'Harmonia' (WDM 13), in Greek, means 'union' (eventual : pleasant union). For an archaic thinker like Herakleitos of Ephesus (= Heraclitus of Ephesus (-535/-465) such a manner of speaking is more than a mere figure of speech. He means with it the fact that e.g. a natural landscape can exhibit or necessarily exhibits opposite, yes, contradictory (contradictory) properties. For example, the same natural landscape is, in the summer, extremely hot, in the winter, freezing cold.

This is not an application of the law of contradiction of being. On the contrary: precisely because icy hot and icy cold do not go together, they come, in time, after one. not at the same time!

But Herakleitos, who loved to play with words, expressed this in figures of speech,--in order to present riddles to his contemporaries, whom he despised, and, thus, to his idiosyncratic philosophy.

Indeed: we translated "day and night (...) at the same time". In the untranslatable Greek it says, literally, "God day night, winter summer, war peace, abundance hunger"

If one takes this to its logical conclusion, it will seem like stammering -- This does not prevent even Hegel (1770/1831), the founder of the idealistic dialectic (i.e. philosophy which works with harmonies of opposites), the teacher of K. Marx (1818/1663), who followed him in this "dialectic" thinking, from literally going up in such language -- This not without extending the term "contradiction" to the concept of "opposition". Which gives rise at least to misunderstandings, if not to paralogisms (unconscious errors of thought) or even sophisms (deliberately applied errors of thought),-- That is why we avoid the term 'dialectic' (WDM 24) and say 'harmony of opposites'.

WDM 32.
**c.-- *The law of excluded third party.***
This 'lex' (law) is -- ontologically -- just another saying for the second or contradiction law. -- "Either something is (so) or it is not (so): there is no third (possibility)". This encloses an absolute disjunction (dilemma) between the 'model' being(s) and its (apparent) 'counter-model' non-being(s).

*Remark --* It is known, perhaps, that mathematics - especially geometry (in its Euclidean form) - was, until the middle of the XIXth century, the model (= paragon) of logical rigor and 'absolute' certainty. We saw, even, that with a Platon, somewhat, the geometry of the time, with its initial axiomatic-deductive allure, stood as a model for one type of lemmatic-analytic method (WDM 23).

The emergence of non-Euclidean geometries (e.g., in 1829, Nikolai Lobachefsky (aka Janos Bolyai (1832) and Carl Fr. Gauss (+/- 1820)) formulated the 'hyperbolic' geometry ("Through a point one constructs -- not a single line (Euclid's axiom), but -- infinitely many lines, which are concurrent (parallel) with the first line"),-- as well as the emergence of an 'analysis' (to be understood here as the infinitesimal calculus with its numerous extensions) which presupposed more than the traditional 'intuition' which, until then, had founded geometry,-- these two 'fundamental crises' (WDM 8) brought about that in 1908, in the *Tijdschrift voor Wijsbegeerte*, *Luitzen Egbertus Jan Brouwer* (then 27 years old), published an article, entitled "*The unreliability of logical principles*."

Jan Brouwer's thesis was: in order to get out of the quagmire of the fundamental crisis of mathematics, let us - on intuitive-mathematical type of thinking - reject a formulation of the 'law of excluded thirds'. Immediately all proofs from the absurd, which - in non-Brouwerian constructed mathematics - regularly occur, were deprived of their basis.

According to Brouwer's criterion (a-priori axiom), therefore, the proof from the absurd (as an application of his, idiosyncratic-constructivist, "logic" (understand: method of thinking)) was nonsensical. Of course it was nonsensical, since Brewer, by construction of theory, axiomatically, ruled out its validity.

But his constructivism (the name of his mathematics), does reason, well, according to the principle of excluded third.

WDM 33.

Brouwer is, concerning number theory, an intuitionist: the whole natural numbers are given to us, thanks to a fundamental (WDM 7v.) intuition. His "constructivism" consists in "constructing" the rest of mathematics, starting from that basic intuition. He regarded it as "a solid foundation" (*Ph. Davis/R. Hersh, L'univers mathématique*, (The mathematical universe,), Paris, 1985, 328).

**1**. The fact, e.g., that Brewer - in that contemplation of the whole natural numbers - considers the one distinguishable from the other (WDM 28: discriminating), proves that he senses, yes, realizes that the one number is not the other, yes, all the others are not. And this with absolute certainty (otherwise he himself would not speak of 'firm ground'). The principle of excluded third (another formulation for the principle of contradiction) is, merely, the safeguarding outward of the identity (= singularity; WDM 3: total identity) of something.

**2**. The fact that Brouwer sets his, own, theory, as a whole, against e.g. the theories of Frege and Russell or those of Hilbert, proves -- black on white -- that he considers it distinct from all other theories. What it presupposes is its own identity,--even though Brewer does not want to see it formulated in the form of a mathematizing formula of the law of excluded thirds.

### *Conclusion.*

**(1)** Who distinguishes one number - thanks to direct intuition or not - from all others,

**(2)** Whoever distinguishes his own theory from all others, that person reasons from the principle of excluded third parties, even if he claims -- purely theoretically, with words -- the opposite. If this principle did not hold (govern reality), the whole of being would be one indistinguishable disorder or tangle. Well, who, as a mathematician, could, indeed, dare to assert such a thing?

### *General conclusion.*

The three laws of being are, in fact, one and the same law, threefold formulated. They are identitive (the total or partial identity concerning) laws.

Thus the formalized ('symbolic') formulations are merely applications of the ontological law. Now see WDM 3 : 'If a, then a' means: 'If I see the sign 'a', then I see nothing else (i.e. I see it to the exclusion of all other signs)'. In other words, 'a' is distinguishable 'discriminable').

WDM 34.

***The identitive misunderstandings concerning the pure ontological concept of being.***

There are (cf. WDM 7v.) many misunderstandings concerning the concept of being.

**1.** To begin with, with the founder (of ontology) himself, Parmenides. Just listen: "Ei gar eger(e)t, ouk esti" ("After all, if it came into being (*op.:* genesis, becoming), then it 'is' not.) Nor is it, if it should ever (in the future) come into being". (8: 20).

In other words: becoming (arising) is the same as 'non-being'! As if what becomes is 'nothing'!

**2.** *A. Gödeckemeyer, Platon*, Munich, 1922, 123ff, mentions, briefly, how Platon, of whom one, superficially, thinks that he banished becoming ('genesis'), or decaying ('phthora') -- the main problem of all 'demonistic' modes of thought (about which more later) -- from the very concept of the (Platonic) 'idea' (form of being; WDM 28) banished, -- how Platon, thus, not only pronounced the 'stasis' (immutability; the Eleates were, well, labeled 'stasiotai'; adherents of the immutable (being)), but also the 'genesis' (arising) and the 'fthora' (perishing) -- each of the members of this pair of opposites (systechy) in his own way, of course -- from the ideas.

Thanks to the readiness of the contents of ideas (a major component of the Platonic 'dialectic' (WDM 24)), Platon was able to assign and immutability (Eleatism) and mutability (Herakliteism; WDM 31: arising and passing away, simultaneously, 'present' in the same reality) - each - its own place in his ontology of ideas. Cfr especially o.c., 126 ("Sie zeigt dasz sich, von den Ideen, nicht nur (eleatisch) die Ruhe, sondern auch (herakliteisch) die Bewegung aussagen läszt (...)", (It shows that, from the ideas, not only (eleatic) the rest, but also (heraclitean) the movement can be stated (...)").

But even Zenon, the actual founder of eristics (the art and science of reasoning), commits ontological errors of thought.

**1-** He is the founder of the indirect proof (from the falsification of his own proposition, Zenon of Elea, the pupil of Parmenides (WDM 2), derives contradictory (contradictory; WDM 30) inferences such that these contradictions point to an untrue preposition (WDM 2) and, immediately, in virtue of the law of the excluded third (WDM 32), insinuates his own proposition as true (indirectly, of course).--which indicates a keen logical ability.

**2.** And yet: Zenon remains convinced that - as Parmenides, his teacher, put it to him - 'being' and **(a)** unchanging 'being; **(b)** as well as any 'being' are totally identical.

Zenon, in his arguments, started from the axiomata that - according to his opponents - 'being' and a multiplicity of 'being' and a mutability in these 'being' went together. But - and this runs into his indirect proof - whoever defends this dual proposition "says contradictory (= contradictory) things" ('ta enantia').

### Bibl. sample:

-- *W. Röd, Geschichte der Philosophie*, I (*Die Philosophie der Antike* 1 (*Von Thales bis Demokrit*)), Munich, 1976, 126ff..

*Note --* It may be noted that, like his teacher, Zenon too conceives of 'being' and 'being somewhere spatial' as totally identical. - Although Parmenides already distinguishes between sensory and rational knowledge, he does not yet seem to have an awareness of a distinction between material and immaterial reality.

Thus he ascribes to Being (*note:* 'Being' has, with Parmenides, something divine about it) conceptual ('intelligible') features -- unity, oneness,-- yes, eternity, unchanging eternity -- .

Yet he describes 'Being' as "similar to the mass of a, nicely rounded sphere, equal in weight in all directions" (Fr. 8: 43/ 44).

### Bibl. stitch pr:

-- *E. De Strycker, Concise History of Antique Philosophy*, Antwerp, 1967, 38).-- This objection further strengthens our Eleatism critique: 'being' and 'being spherical etc.' is, somewhere, still totally identical!

This is, at once, the third misconception concerning the ontological concept of being, inherent to the founders of ontology. It is, therefore, not surprising that, as indicated above, Platon again and again insists on the correct distinction of concepts.

The misconceptions are not yet over! The Elean-Eretrian School - a kind of Small-Socratics (Micro-socratics) - claimed, in the person of Menedèmos of Eretria (-330/-265), that only, in the Elean sense, by the way, so-called identity judgments (in which subject and saying are identical) can be true. But saying e.g., "That wall is white" is - fundamentally - false. Why? The linking word 'is' ('are') applies only to totally identical data.

WDM 36.

The "reasoning" (understand: pseudo-reasoning,-- paralogism, sophistry; WDM 31) boils down to this:

**a.** one defines, first, what is "wall" and "white.

**b.** from the fact that they are not totally identical, one concludes that there is no 'tautology' (sentence in which subject and predicate are identical; cfr. WDM 3;30) and, thus, that the sentence is invalidly pronounced (is false).

*Note.--* Here one sees how fundamental the analogy doctrine (WDM 3v.) is, when reasoning about 'being': 'is' (as a linking word) applies to partial identity as well: "That wall is (one applicative model of) white

Another Micro-Socratic, the Kunische (= cynical) school, commits the same confusion of concepts.

**1.** Thus, e.g., phrases like "Man is man"; "The good is good" et al. are "true" (because tautological). But a proposition like "Man is good" is untrue - not because not all men are good, only, but - among other things - because subject and predicate differ - always in Eleatic spirit. Always that penchant for tautologies!

**2.** More to the point, "Socrates is human" is an untrue statement. Because of what? Because subject and predicate differ! In other words: the partial identity (analogy) is not captured. Indeed, the sentence means "Socrates is (one applicative model of) human".

As we shall see, further, Antisthenes of Athens (-440/-365; founder of the Kunish School, known for its cultural criticism), with such grammatical statements, runs the risk of becoming nominalist. Is 'nominalist' among others all those who do not see the individual (the singular case, the individual) as a single element of one and the same set (WDM 5: what is identical in all separate (understand: singular) cases).

### Ontologically expressed:
'Being' and mere 'singularity' (enfolded, individual) are, without possibility of summary, according to essence (WDM 28), in a single real concept (idea), -- 'being' and 'enfolded being' are confused.

*Note.--* It is, immediately, clear why such "thinkers" cannot even taste the tropes (metaphor, metonymy,-- synecdoche; WDM 3).

### Conclusion.
A first - Antique - set of misconceptions, concerning content and scope of the concept of being, is typically Eleatic: 'becoming' is not one applicative model of 'being' (i.e. becoming reality or 'being') but is simply 'nothing'!

WDM   37.

Same fallacy (confusion of concepts) with 'perish': what perishes ('perishing being'), is 'nothing'!

Behind this rejection of origination and decay is the confusion between "divine being" and "being-without" between "single being" and "multiplicity concerning being" prevails, then, the relationship "being"/"nothing," as "eternal" and "unchanging" being is "everything," while "time-bound" and "subject to change" being is "nothing.

*Note.--* Here, briefly, one can speak of "onto-theo-logic" (term of M. Heidegger): the Eleates reason "logically" ("logic") about "being" ("onto- ... -logic"), as if this being were "divine" (...-theo-...). To summarize: onto.theo.-logic.

But it is clear that for those who use the purified and elevated (something the ancient Greeks called 'catharsis', 'purification') concept of being, these conceptual confusions are understandable, but for a long time logically intolerable: 'being' and 'divine being' is part-identical, but not total-identical.

Or to put it differently: God's reality is part (applicative model) of transcendental reality (i.e. reality without more), but it does not coincide with it. God's existence and way of being are situated within the unity of being, even if deity is conceived as the Creator of all reality outside of it. Cfr. WDM 17.

Particularly erroneous is the lack of distinction between total-identical and partial-identical "being": something is only total-identical with itself (loop identity) yet still partial-identical with the rest (analogous identity). The ontology, in other words, reasons about reality in being or identitarian terms. Hence its close ties to tropology (WDM 3).

*Note.--* *M. Heidegger, Was ist Metaphysik*?, Frankfurt a.M., 1949-5,7, criticizes, rightly so, the numerous confusions of concepts, throughout Western metaphysics history: "How also 'being' is explicable - either as 'spirit' (in the sense of spiritualism), or as 'substance' and 'force' (in the sense of materialism), or as 'becoming' and 'life' (*note:* in the sense of the actualists and the vitalists (philosophers of life), or as 'will' (*note:* in the sense of the voluntarists), or as 'substance'

WDM 38.

(*note:* B. Spinoza (1632/1677; Cartesian and Neoplatonist; he believed that being was only a single 'substance' (divine in nature)), or as a 'subject' (*note:* Joh. Gottl. Fichte (1762/1814; German Idealist, who assumed that the 'subject' ('Ich') 'sets' (brings into being) itself and also the 'Nicht-Ich' (non-Ich), or as 'energeia' (*op.:* Aristotle a.o. holds a conception of being, which realizes, resp. brings about ('actualized'; 'energeia' means 'act: 'actualized state' of something that potentially exists), or as 'eternal return' (*Note:* Fr. Nietzsche (1844/1900; in his third period of thought, Nietzsche believes that the will to power ('Wille zur Macht'), peculiar to the 'Uebermensch' ('supreme man', a higher type of human being), overcomes 'slavishness',-- this, in a cultural history, repeating itself)),-- each time being shows itself only in the light of being. Wherever metaphysics forms some kind of representation of being, there the light of being has emerged. 'Being' has, then, time and again, appeared on the scene in some unconcealed way -- in the Antique Greek 'a.letheia' --."

**1.** It should be noted that, with Heidegger, something like an Eastern-style 'mystical' (in the sense of 'dark-religious') atmosphere hangs around (the light of) being. WDM 26 taught us, however, that Aristotle warned against too great expectations concerning that 'light' of being. This comes through - so far - best in a transcendentalist theory (WDM 27). Without all that mystical atmosphere around it. Logical!

**2**. But it is again correct what Heidegger says : one nevertheless so easily confuses apriorically (i.e. purely lemmatically; WDM 22/25) 'being' with e.g. 'spiritual being; 'material being', 'becoming being', 'living being', 'wanting being', 'substantial being', 'subject being', 'energeia being', 'eternally recurring being' etc.m.,-- without analysis, i.e. without testing.

All of these misconceptions revolve around the distinction of being "total or partial" (identitarian misconceptions).

WDM 39.
***The misunderstandings of modal nature, concerning 'being'.***
We begin with semasiology (theory of meaning) concerning the idea of "modality

**a.-- *The conversational use of words.***
'Parts' and 'aspects' of something are called, well, 'modalities;-- So -- in the legal sense -- all that is 'stipulation' (ancillary agreement) with respect to a legal act (e.g., a contract).

*Note.--* 'Modalities' (modes of being) is a term, amenable to more than one variant of meaning. Thus *G.S. Overdiep, Modern Dutch Grammar*, Zwolle, 1928, 13v., defines 'modalities' intentionally (to borrow the term from Edm. Husserl)

**a.** There is, on the one hand, the subjective attitude of the person who utters a sentence,--such -as, e.g., the sentence : "One denies, today, even the actual existence of the Nazi concentration camps."- Overdiep calls "subjective stances" (i.e. value judgments) "feeling modalities" (wonder, -- hostility and annoyance, friendliness, excitement and excitement etc., with which a sentence is uttered).
**b.** There is, on the other hand, the circumstance represented in a statement ('sentence'). The speaker can represent something from the real to the unreal (with all the changes in between). Overdiep calls these modalities 'reality modalities'!

"There's a girl falling from that tree" is the simplest modality: one shares - simply - as real.
The 'potentialis' (possibility expressing modality) would read, e.g., "Probably,-- possibly, a girl will fall from that tree."
The 'optativus' (wish-granting modality) then reads, e.g., "If only a girl fell out of that tree."
The 'dubitativus' (doubt-expressing modality) is expressed, e.g., as follows: "Would there be, really, a girl falling from that tree".
The 'conditionalis' reads, "In that case (= condition) a girl falls from that tree".
The 'concessivus' (conceding modality) reads : "Even though a girl falls/fell out of that tree".
Or, finally, the 'interrogativus': "Is that a girl falling from that tree?" (the lowest degree of dubitativus,-- informative).

*Note.--* That modalities of feeling do constitute one aspect of human communication would become apparent if, instead of the phrase: "A girl falls from that tree", one varied the phrase: "There were already concentration camps".

Other speech therapists talk about
**(1)** verbs like 'must' 'can' (in the sense of physically necessary or - achievable events or actions);
**(2)** verbs such as 'must', 'may'(in the sense of ethically (= morally, morally) obligatory, resp. permitted actions).

WDM 40.

That such "modalities" make sense is demonstrated by the theory of freedom.

**(a)** There is freedom of 'can'. E.g. "You are free to restrict me in my self-development".

**(b)** But there is also - and at the same time - freedom of 'may': "You may not, however, in conscience, unnecessarily restrict my self-development. You are not free to do so - ethically speaking.'-- We will not dwell too long on the 'alethical' (physical) and the 'ethical' modalities.

### b.-- *The ontological language.*

The ontological treatment of "physical" ("alethic") and "ethical" ("moral") modalities ties in with everyday speech, but confronts it with the idea of being, as described above (content/scope).

### b.1.-- *The 'alethic' (better : 'physical') modalities.*
**1.** *Bibliogr. stitch pr.:*

*M.J. White, Agency and Integrality* (*Philosophical Themes in the Ancient Discussion of Determinism and Responsibility*), Dordrecht, 1985 (the work deals with thinkers from Aristotle (-384/-322) to Plotinos of Lukopolis (+203/+269), the main figure of Neoplatonism, regarding human action within the universe (= being); chap. 8 talks about the 'alethic' modalities: necessary (must), possible (can), probable (may)).

**2.** *Logistics* (WDM 2),

The 'computational' logic' is subdivided into:

**(i)** *classical logic* (understand: logics), which, with respect to judgments (statements, propositions;-- propositional logics), allows only two 'values', viz. true and untrue (false) judgments (hence: bivalent logistics); -the Antique Stoics (= Stoics, Stoics), from their founder Zenon (= Zeno) of Kition (= Citium) (-336/-264) onwards worked with the validity values 'true'/'false' (e.g. "The city of Rome exists" (true sentence); "The city of Rome does not exist"(untrue statement));

**(ii)** *modal logistic*, which, in addition to the values 'true/false', also introduces the values possible/necessary'.

*As an aside*, already Aristotle worked with the values "possible" and "necessary.

*Note.--* Logic is, herein, merely, the mathematization (preferably axiomatic - deductive; WDM 9) of concepts already traditionally traded by ontology.

WDM 41.
### The "ontotheological" run-up.
"The older logic had three modality pairs:

**1.** 'possible/impossible' as problematic,

2. 'real/unreal' as assertive (= simply and without question expressing itself,-- while 'problematic' means something like undecided, uncertain, guessing.),

**3.** 'necessary/accidental' as apodictic (= presenting as inescapable).

**a.** Of these six concepts, only three are strictly logical (*note:* in the traditional sense) necessary, possible, impossible (*note:* necessary not).

'Actual', 'unreal' and 'accidental (non-necessary)' are ontological concepts.

Yet one mixed them all six together. One held them, after all, for one's stairs (*op.:* gauges of actual existence):

**1.** Ideas (note: this is where Platonism comes through, about which later) were referred to as possibilities, - the weakest degree of 'being';

**2**. The universe (world) was labeled as reality, - the stronger degree of "being.

**3.** God was conceived as necessary, - the strongest degree of 'being'. (...).

**b.** Moreover, the pairs of opposites (systechies) were ill-considered. For example, "impossible" is the same as "necessarily not"). Yet such a thing is immediately apodictic and not merely problematic.

**Note.--** 'Accidental' is called all that is without necessary and sufficient reason or ground ('realgrundlos'; WDM 8). That which is ontological and not logical. In (traditional) logic, something that is 'logically coincidental' is non-existent". (*G. Jacoby, Die Ansprüche der Logistiker auf die Logik und ihre Geschichtschreibung*), (The claims of logisticians to logic and its historiography), Stuttgart, 1962, 61).

One senses that Jacoby is a rabid adherent of the logic handed down, -- in which he is, in a sense, correct.

Jacoby reduces, categorically (as he is by temperament), the modalities to the one 'necessity' and its two negates (negating forms). What a differential gives :

> *Necessary and non-necessary, necessary not.*

This is -- he says -- an identity and its two denials. Or, better, tokens (and denials of tokens,-- the token here is "necessary") are the object of the logic handed down. Which yields only assertory statements, at least in traditional logic. So much for Jacoby's thesis.

WDM    42.

**a.** Why do we call them 'ontotheological preliminaries'? Because, as with the Archaic thinker Parmenides (WDM 37), the deity, thought (here: the thinking of (divine) ideas) and 'being' run into each other. Something against which Jacoby rightly protests, if the concepts are to be made completely clear.

**b.** The fact that Jacoby labels only three modalities as strictly logical is due to his conception of the term 'logical'. In German, this sounds 'folgerichtig', i.e., what derives from prepositional phrases (WDM 2; 34), in a 'richtige' (correct, justifiable) way, 'Folgen' (inferences, post-sentences). About which, later, more.

Some applicative models of fallacy concerning 'being', modally speaking.

**A.** We begin with Scheler's "encounter with being" as a background to further analysis.

*Bibl. sample : L. De Raeymaker, De filosofie van Scheler*, (Scheler's Philosophy,), Mechelen, 1934, 73.-- Max Scheler (1874/1928) is, together with Edmund Husserl (the actual founder), one of the most important phenomenologists (literally: specialists in describing phenomena, i.e. immediately given realities).

**1.** The acquaintance, called 'encounter', with 'being' elicits from us - according to Scheler - the statement "dasz ueberhaupt etwas sei" (that there is, without more, something). Essence ('etwas') and existence ('dasz (etwas) sei') belong together (WDM 26vv.). The term 'ueberhaupt' points to the utter or absolute (WDM 27: res, thing, understood as independent).

**2.** This fact is, without question, surprising, i.e., not obvious or natural (WDM 8).
For there must be a necessary and sufficient "reason" for it: why or by what, for example, would there not be absolute nothingness, i.e., absolute nothingness? (WDM 30). Philosophical wonder - a Platonic given: all that is 'beautiful', understand: 'wondrous', elicits wonder, yes, admiration - arises, according to Scheler, from that encounter,-- the basic encounter, with 'being', reality as actually there before us.

**3.** This fact -- that there is 'being' without question -- is in itself self-evident. It needs no strict proof, -- in the sense of indirect reasoning about that 'being'. It is there, without fail.

WDM 43.

**B.** *Comparison with the subjective-reflective "encounter".*

A first subjective-reflective approach we saw, higher WDM 25v., in Heidegger's humanistic (anthropological) method.

Scheler is reacting against another equally famous, if not more famous, Cartesian,-- René Descartes (Latinized: Cartesius; 1596/1650; the founder of modern, Enlightened rational philosophy) is famous for his highly subjective-reflective way out of skepticism (= skepticism).

*Logically speaking, Descartes' reasoning is an indirect proof* (WDM 34).

**1.** *"My doubt is a fact.*

In due course, at the universities especially, a skeptical tendency prevailed. One was - so one imagined - only absolutely sure of the phenomena, i.e. that which, immediately or directly, was given, within our consciousness (introspective method). What was "out there" ("in the outer world"), that was uncertain, if not non-existent.

What does, now, Descartes do? Well he goes along with his opponents, the Skeptics: "Let us, then, thoroughly, absolutely, doubt, even the phenomena, i.e. that which, directly, is evident in our innermost being! What then, undoubtedly, all-immediately given, without need of any kind of 'proof', is exposed? The fact, the absolutely certain fact, that I am a doubting myself".

**2.** *There are certainties though*

The fact that from the prepositions (premises) of the opponent, the Skeptic, a (contradictory postphrase inference) is deducible, proves, indirectly, that my, the contrary, thesis, namely, that there are certainties, within or outside our consciousness, must be true.-

Descartes' summary 'cogito; ergo sum' ("I am consciously engaged (among other things and especially, in this anti-Skeptic situation, in doubting); therefore I am (exist)"). 'Cogitare', penser, thinking, means, here, 'conscious activity'.

**3.** *Scheler's critique.*

Whoever does not - in advance - accept, as a starting point, that "without more something exists" (WDM 42), cannot, at once, also speak - as Descartes does - of e.g. 'doubt of something', 'existence of something', 'truth of a statement'. In other words: without accounting for an ontological language, (which was his pretense), Descartes already presupposes ontological concepts.

This is reminiscent of the pretension of Descartes and all Modern Enlightenment rationals, namely, that they can 'foundation' (= justify, 'prove') everything,--also and especially their premises (presuppositions (WDM 23vv.).

What Max Scheler, who sees through this 'fundation(al)ism' (the urge to justify absolutely everything), points out is that, among other things in the initial use of language by the first great Enlightenment-rational mind, Descartes, a gap (i.e. in evidential power) is at work: Descartes presupposes, without proving it, an ontology. After all: in order to be able to speak meaningfully and 'responsibly' about his subjective-reflective (introspective) basic certainty, he needs, among other things, the (not yet responsible) term 'being' (in the sense 'I am').

### 4. *Remark*.

What, of course, is and remains, fundamental, is the piece of phenomenological description ('avant la lettre') that Descartes offers us, here: he describes how, without any indirect form of knowing, he - and with him every one of us - is confronted with one type of basic certainty, namely, that we, with absolute certainty, directly experience (= direct, instantaneous perception) our own consciousness, as activity (here: active in doubting).

This is - three centuries around for Husserl's phenomenological method - really a phenomenon encounter i.e. being directly -personally confronted with an act (WDM 5: "something is there, in itself"; 27: 'res'), in its immediate givenness.

### 5. *Reflective philosophy.*

*P. Ricoeur* (1913/2005), *Le conflit des interprétations* (*Essais d' hermeneutique*), (The conflict of interpretations (Essays in hermeneutics) ), Paris, 1969, 233 (also: 238; 322), talks about what he calls 'la philosophie réflexive' (= the loop thinking or reflective philosophy). Central to this is the cogito ('I am conscious (of my inner activities)'). One could, in psychological terms, also speak of 'introspective' philosophy.

Ricoeur, who himself holds strongly to that way of thinking, claims that there is a whole lore in that spirit.

**(1)** The Socratic "think of your soul

**(2)** the Augustinian cogito (the inner man at the intersection of, on the one hand, the external world ("external things") and, on the other, the ideal (WDM 41: ideas) or "higher" truths),

WDM 45.

**(3)** *Cogito*

the Enlightenment rational, (modern cogito of R. Descartes ("Je pense"), Immanuel Kant (1724/1804; top figure of Enlightenment rational thought in Germany, who put forward as a starting point his 'Ich denke'), Joh. Gottlieb Fichte (WDM 38: 'Ich denke'), -- Jean Nabert (1881/1960; Nabert upholds a cogito, but which puts forward one conscious activity, viz. "I am below the ethical level, which I ought to bring about" or "I am, somewhere, guilty",--which amounts to a reflective philosophy of consciousness of guilt), Edmund Husserl (1859/1938; the founder of intentional phenomenology, about which more later).

*Note.--* *St. Augustine* of Tagaste (354/430), top figure of Ecclesiastical Antique philosophy ("Patristics" or Church Fathers Philosophy (33/800)), who exerted very great influence on medieval philosophy ( called "Scholasticism"), gives us a piece of phenomenological description "avant la lettre" in his *Soliloquia 2:1*.

-- Ye who strive for self-knowledge, do ye realize (=are ye aware) that ye exist?"
-- "Yes, I realize that."
-- "How do you come to that realization?"
-- "I don't know about that."
-- "Do you perceive yourself as singular (singular) or plural?"
-- "I don't know about that!"
-- "Do you realize that you are moving, out of your own strength and ability?"
-- "I don't know about that!"
-- "Do you realize that you are, at this moment, thinking?"
-- "Yes I realize that.

Or listen to the following extract (*De vera religione* 73). -- "To all, who, of themselves, recognize that they are doubting, it is true that they recognize something that represents truth and, at once, that they, therefore, possess certainty. Corollary: for all, who doubt that truth exists, it is true that they, at once, possess something that is true, about which they do not doubt.

But (*note*: here comes the religious God belief of S. Augustine, who assumes that God, in our inner being, by the light of his promptings, enlightens (= provides insight) us even by) something that is true cannot be true otherwise than by the truth itself (*note:* S. Augustine means God, as the source of all truth)."

The radical difference with the Antique Skeptics and with figures such as Descartes or Kant (typical Enlightenment rationals) is evident from the following excerpt:
"We exist. We know our existence ('being'). We love ('love') our existence and knowing.

WDM 46.

Established as we are in this trinity (*note:* existence (being), knowing, 'loving'), no untrue insight - even if it has the appearance of truth - can make us uncertain. The reason for this certainty is: we do not grasp this triad as we grasp things outside of us (i.e., through the senses of our body).

As *O. Willmann, Gesch. d. Idealismus, II (Der Idealismus der Kirchenväter und der Realismus der Scholastiker)*, (History of Idealism, II (The Idealism of the Church Fathers and the Realism of the Scholastics).), Braunschweig, 1907-2, 252, says, this extract from *De civitate Dei* 11:26 (*Augustine*'s main work) provides the basic intuition of Augustine's philosophy. The ternarium (= triplet) 'esse, nosse, velle' (to be, to know, to want (to desire, to love)) comprises, besides the actual 'being' of ourselves, with the consciousness of it, also the whole feeling of value (with, included in it, the striving which springs from it).

**1.** With the Enlightenment Rationalists, the emphasis is one-sidedly on the first two, -- with underestimation of the "axiological" (value-teaching) aspect. This is a first difference.

**2.** A second thoroughgoing distinction lies in the fact that the "being" of the thinking subject, which is also appreciative subject, is in itself objectively given (while Enlightened rationalism doubts even this).

**3.** A third difference, already given in the second, is that knowing as well as "wanting" (value-feeling striving) are aimed at something objective, existing independently of the knowing and appreciating subject (= intentionality),--whereas this is not, unless very hesitantly, the case with modern Rationalists.

**4.** A fourth distinction lies in the fact that, with S. Augustinuu this subjective-reflective method is an integral part of his diepreligious life, -whereas the same - or corresponding - especially with the Moderns is either alienated from God or alienated from God.

### C. Conclusion.
Scheler, who certainly does not underestimate the subjective-reflective aspect of our thinking, sees the need to situate this in an ontology. And this in the main modality, the 'reality', and this in a direct encounter. So that our inner life, core of the subjective-reflective method, is only one part of the transcendental (all-encompassing) 'being'.

WDM 47.

### The traditional six-lead.

See supra WDM 41v..-- We revisit the classic six "modalities.

**(1)** real/unreal,

**(2)a.** possible/impossible and

**(2)b.** necessary/non-necessary (accidental - contingent;.

The traditional ontotheological (WDM 37; 42) ranking (problematic/ assertoric/ apodictic) betrays, clearly, that one was not proceeding purely ontologically.

After all: only what is unreal is radically opposed to 'real' (= being). The possible,-- the necessary, the non-necessary,-- they are forms (applicative models) of 'reality' or 'being'. They are, after all, not nothing (WDM 28: something).

Even what is relatively impossible (i.e. notabsolutely -impossible), is still 'something' and therefore somewhere 'real' ('being'). But more about that later.

### First paralogism: 'Appearance and reality'.

In ordinary colloquial language, which is not ontological language, one contrasts "appearance" with "reality. For example, S. Augustine (WDM 46: 'the appearance of truth') about the opposition of 'appearance of truth' and '(actual) truth'.

In other words, in the non-ontological use of language, one can radically contrast 'seeming' and 'being'. In ontological language use, however, even the appearance of something is 'non-nothing', thus something (and immediately being).

*Conclusion:* beware, then; do not confuse the ontological modality "appearance" with the com-monsensical modality (WDM 15).

### Second paralogism: 'Lust principle and reality principle'

After S. Freud (1856/1939).-- In Psychoanalysis, this systechy (pair of opposites) is considered fundamental.

**1.** Our whole "psychic apparatus" (in commonsense language: our soul life) - according to Freud - has, among other things, one main purpose: "to give ourselves pleasure (experiences of lust) and to avoid unpleasant experiences" (*Dina Dreyfus, Freud* (*Psychoanalyse: Textes choisis*), (Freud (Psychoanalysis: Selected Texts),), Paris, 1963, 172/175 (*Principe de plaisir et principe de réalité*), (Principle of pleasure and principle of reality).

The fact that our behavior exhibits this seeking of lust and shunning of unlove proves - says, always, Freud - that it is governed (WDM 7) by the lust principle.

**2.** This basic theme is clearly expressed in *Freud's Die Zukunft einer Illusion*, (The future of an illusion,), London, 1948: "We spoke, just now, of the hostility to civilization caused by the pressure it exerts,--by the mortifications it demands of the instincts.

WDM 48.

Supposedly all prohibitions have been lifted! Under this assumption, one could take possession of any woman in one's taste; one could, without any hesitation, kill one's rival or whoever stands in one's way; one could deprive one's fellow man, without his consent, of any property.

How beautiful such a thing would be, and what satisfaction series would, in that case, provide us with life!" (*M. Bonaparte, trad., S. Freud, L'avenir d' une illusion*, Paris, 1976-4, 21).

In other words, Freud espouses the working hypothesis that our "psychic apparatus" is governed by some Hedonistic philosophy ("hedonism" is "lust philosophy"). He even writes about it lyrically. Which, perhaps, betrays something about his, personal, unconscious.

But ... "under the pressure of the great educator that necessity is, it does not take long before the tendencies of the I replace the principle of lust with a modification: the task of avoiding what gives discomfort is as emphatic as that which favors lust. The I learns that it is necessary to abandon immediate gratification (...), to learn to bear some painful things (...)" (D. Dreyfus, o.c.,173).

What *Die Zukunft einer Illusion* confirms: "But the first difficulty (*note:* in order to realize this Lyrical dream) can - in truth - be quickly discovered: my neighbor has (*note:* in this hypothesis) precisely the same desires as I do and he will not, therefore, treat me with more reverence than I pay him. In short: if the obstacles due to civilization were removed, only one man could enjoy unlimited happiness,--a tyrant, a dictator, who has monopolized all means of coercion (...)". (M. Bonaparte, o.c.,21).

This aspect is called "reality principle. It is clear: Freud is not using ontological language here.

'(Hedonistic) dream or lust principle' he contrasts with 'reality principle'. For the ontological language, the dream or lust principle is one type of reality and the necessity which is 'reality' is a second type.

WDM 49.
***Third paralogism.-- 'Imagination (fantasy) and reality, especially.***

### 1. *'Fantasms'*
Already the Psychoanalysis just mentioned attaches great importance to what it calls "phantasms" (imaginations).

**a.--** The products of imagination -- daydreaming, nightdreams -- are contrasted with "reality" (especially when "phantasms" equals neurotic imagination).

**b.--** In the Psychoanalytic language, however, 'phantasms' can - generally speaking - be equated with any imaginative activity, which undergirds all thinking, all value sensing, all behavior. Immediately both the healthy and the neurotic meaning are present here.

### *Bib. stitch pr.:*
*Ch. Rycroft, Dictionnaire de la psychanalyse*, Verviers, 1972, 100s. (*Fantasm, Phantasm* (*fantasy, phantasy*)).

### 2. *'Hallucination'*
The term "hallucination" (false perception) comes in handy here. From the Latin 'hallucinari' (to wander, dream), this (medical and other) term denotes 'perceptions' (e.g., one hears words or one sees 'images', 'apparitions'; one senses 'odors', etc.), which - ostensibly - do not have any ordinary, everyday 'cause' ('stimulus').

Thus, medicinally, feverishness, poisoning (drug use), insanity (especially psychosis or soul disease) can be designated as 'causes'. But there are plenty of cases where none of these 'causes' can be at work. In that case they are phenomena, peculiar to healthy people.

Anyway: even "morbid" (pathological) hallucinations
**(1)** are medicinally non-negligible "realities" (they often come across as much more "real," to the hallucinating, than what we, usually, call "reality") and
**(2)** ontologically, they are one type of 'reality'.

### 3. *The term "surreal.*
Surrealism is a primarily literary-artistic movement, whose main ideas were set out in the three Manifestos of Andre Breton (1896/1966) - in 1924, 1930 and 1942. It wants to be "Modern" in the sense that - following Freud and his Psychoanalysis, among others - it blots out "domains of reality" that have not been entered, such as the unconscious (with its dreams, seizures, automatisms, free associations), and translates them into literature or other art forms.

WDM 50.

For example, *Paul Eluard* (1895/1952), under the title '*Poesie involontaire*' (Involuntary Poetry), published a series of texts, penned by a woman, who heard 'inner voices '('hallucinations') as an inspirational force.

*J. Rajchman, Michel Foucault* (*La liberté de savoir*), (The freedom to know), Paris, 1987, 30/32, mentions that the structural psychoanalyst Jacques Lacan 1901/1981), already in the thirties, proposed a thesis concerning this 'clinical' case.

*Note --* When one, a-priori (out of bias), dismisses this woman as a clinical case, one forgets, perhaps, that such 'medial' writing (i.e. the writing down, as a 'medium' (here: mediator between earthly mankind and her 'inner' voices), of inspired texts) has been known since ancient times. But, in the Archaic-sacred context, this was ascribed either to e.g. muses (female nature spirits as transmitters of cultural ideas) or to the Holy Spirit (think of the inspiration in the Bible).

*Conclusion.--* One can write off "phantasms," "hallucinations," and "surreal" data as "unreal. But, then, one is speaking a non-ontological language. Strictly ontological, such imposts are as 'real' as what 'one' calls 'real', but in a creaturely way (WDM 28 taught us the idea 'forma' (impost, creature-form)). For the true ontologist these are 'lemmata' (WDM 22), idealistic designs, which one should further specify according to their true nature.

### Fourth paralogism.-- 'Ideal and reality'.
How often does one hear, especially today, in so-called "critical" (socially critical, culturally critical) circles, every ideal, as such (i.e., insofar as it is ideal) dismissed as "unreal" or unreal.

Again: ideals guide even the ideal abolitionists or abolitionists,--especially in unconscious ways.

In other words, they show themselves to be 'real' already because they work out a purport in every behavior. Ontologically, the ideal is one type of reality and the reality opposite to it is another type.

*Note.--* In a special use of language one prefers the term "sense image" (symbol) instead of ideal. Thus e.g. *Gertrud von Le Fort, Die ewige Frau* (*Die Frau in der Zeit / Die zeitlose Frau)*, (The Eternal Woman (The Woman in Time / The Timeless Woman)), Munich, 1934, 5ff.. Averted from Enlightenment-rational 'comprehensible - abstract' thinking

WDM 51.

(WDM 5: Classical Theory of Understanding), "Symbolists" (of the Platonizing type, at least) like to use the term "symbol" to:

**(1)** the abstract concept

**(2)** insofar as it denotes a higher ideal, reflect.

"Symbols are signs (WDM 2: sign language) or 'images' ('Bilder'), in which last metaphysical (*note:* understand: transcendental) realities are not known in an 'abstract' (*note:* understand: life-foreign) way, but, as in a parable (parable) are pictorially presented.

Symbols are, at once, the language of the invisible spoken in the realm of the visible. At its basis one finds the conviction that there is a sensible (WDM 9) order(s) in all beings and things, which is able - through those same beings and things themselves - to come through as a divine order(s). It is precisely here that one learns the language of symbols". (o.c.,5).

### *Application.*

The so-called 'eternal' or 'symbolic' (ideal) woman e.g. (in commons language: the ideal woman or the ideal of women) is such a divinely founded, transcendental given (or - better, ontologically - reality-- with its own form of being or status of reality (WDM 28 (forma); 41 (ideas)). The so-called real, in the sense of 'empirically determinable' women incarnate (embody, 'realize') - at least partially - that 'symbol' (ideal), which, thus, is both in her and above her. Or rather: is at the same time active, operative, active, in and above her. Just like the power idea of A. Fouillée (WDM 21).

*Note:* this problem of the 'symbols' postulated by G. von Le fort we shall discuss further, when we shall speak of the Platonic ideas.

### *Fifth paralogism.-- 'Sign (sense, symbol) and reality'*

*J.H. Walgrave, Around the problem of symbolism*, in: *Tijdschr.v. Philos*. 1959: 2, 298/316, brings up, among other things in response to *Suzanne K. Langer, Philosophy in a New Key*, Harvard Univ. Press, 1957-3 (work dealing with the renewed interest in signifiers, in the broadest sense of that word, in philosophy), the most general definition of sign (= symbol): "A concrete representation, which, by its being known (*note:* model (WDM 6)), carries consciousness over to the knowledge of something else'(...)" (A.c., 299).

WDM    52.

**(1)** We have already brought up the sign language (WDM 2). This, to say that the imagined signs of logisticians are non-natives (WDM 28). So that they - even they, sometimes to the great displeasure of logicians themselves (insofar as they misunderstand 'ontology') - belong to the transcendental domain of ontology.

**(2)** *Wilhelm Kaulbach, Philosophische Grundlegung zu einer wissenschaftlichen Symbolik*, (Philosophische Grundlegung zu einer wissenschaftlichen Symbolik, Philosophical Groundwork for a Scientific Symbolism), Meisenheim/ Glan, 1954, points out the profound distinction between the mathematical-logical language of signs, on the one hand, and, on the other, the use of abbreviation symbols in traditional logic.

*Appl. mod:*

In every sentence, at least in its full formulation, there is a subject (O) and a predicate (G),--in Latin terminology subject (S) and predicate (P). When, in traditional textbooks of logic, the structure of the sentence (statement) is rendered as follows: "S entails (implies) P (the subject entails the predicate)", -- for reasons of partial identity (WDM 4 (the first a implies the second a); WDM 6 (model)), then the signs (symbols) S and P (or O and G) are merely abbreviations of the natural language, in which every classical-traditional logic expresses itself,-- and not mathematical-logical "signs". "Contentless signs" logic does not know.

In contrast, the use of symbols in logistic modern mathematics: it is limited to meaningless language signs,-- deals, in particular, with the rules, peculiar to the interconnection (*op.:* combination) of symbols (...)" (*G. Jacoby, Die Ansprüche der Logistiker auf die Logik* (...), 41).

In other words, logistics, like mathematics, for the reason of clear exactness (absolute accuracy) in speaking or writing itself, puts the applicative models (the "contents") out of action, to deal only with regulative models ("forms" or "signs, standing for all possible contents" (which are thus not specified)).

In the language of semiotics (one of the theories of signs) one also says: "One abandons semantics (meaning, 'content') and even pragmatics (use of meaning), to be left only with syntactics (combining purely 'abstract' signs).

WDM   53.1.
### *Conclusion.*

It is often said that "signs are not realities, but they indicate realities". For the umpteenth time, this is correct in the vernacular; ontologically it is nonsense: signs, mathematical-logical or simply logical, are one kind of reality (they stand for all possible corresponding 'contents' or 'applicative models' (applications)) and the so-called 'realities' which correspond to them are - in their own way - 'real'. Nothing more.

### *Bibliogr. stitch pr.:*

-- *P.A. Schilpp, Hrsg., Ernst Cassirer*, Stuttgart, 1949 (including *S.K. Langer, Cassirer's Philosophie der Sprache und des Mythus*, (Cassirer's Philosophy of Language and Myth,), in: o.c., 263/280); *G. Durand, L'imagination symbolique*, (The symbolic imagination,), Paris, 1964 (contains interesting reflections on the theories of symbol:

**(a)** Freud, G. Dumézil (1898/1986; known for his religion-historical working hypothesis on the "three functions," i.e., kingship, bodily strength, and procreative power, respectively, and wealth),

Claude Levi-Strauss (1908/...; known for his structural anthropology),-- the "reductive sign hermeneuticists" (sign interpreters),

**(b)** Ernst Cassirer (1874/1945; known for his Philosophy of Symbolic Forms (1923-1), Gaston Bachelard (1884/1962; epistemologist (science theorist) of 'dialectical' (WDM 31) signature (nature of being),-- the 'instaurative sign hermeneutics' (who see in the sign more than earthly, 'empirical' realities),--

**(c)** Paul Ricoeur (1913/2005; 'hermeneuticist' without more) who seeks to reconcile and, immediately, transcend both previous significations);-- *L.C. Knights/ B. Cottle, ed., Metaphor and Symbol* (*Proceedings of the Twelfth Symposion of the Colston Research Society held in the University of Bristol* (March 28th / March 31st, 1960)), London, 1960.

### *Sixth paralogism .-- J. Schelling*

J. Schelling (WDM 27) - according to *H. Arvon, La philosophie allemande*, Paris, 1970, 22 - said, at the time, as a critic of Hegel (WDM 31), in whom he thought he had to denounce a purely "logical-life" thinker: "What began in pure thinking can only continue within that pure thinking itself and can never get beyond the 'idea' (*note:* in the Hegelian sense).

What ever must penetrate to reality, that must, at once, depart from reality". In other words: the opposition 'idea (thinking, thought) / reality' is, with this, expressed in omnipresent or, at least, non-ontological terms.

WDM 53.2.

It is too clear: thoughts (ideas,-- whether Platonic or not (WDM 41)) are one type of 'realities' and what the positive thinker Schelling calls 'reality' is only his, very idiosyncratic interpretation of the classical-traditional term 'being'. It is true that Schelling nuances (softens) his position, among other things, by reproaching a Hegel and others, who represent analogous styles of thought, that their thoughts are only 'possibilities' (WDM 47), i.e. ontologically speaking one type of realities.

The paralogisms related to the categories (basic concepts) 'possible / impossible', -- one distinguishes, classically, two submodalities, namely 'internal possibility' and 'external possibility'.

**1.** It is called 'inner' (internal) possible, all that is considered possible on the basis of the pure own being (WDM 28: forma) of something, whereas 'external' is possible all that is considered possible on the basis of data (effects), situated outside the own form of being.

**2. *Appl. models.***
(A). -- "As far as I know this young woman, it is quite possible ('not excluded' is the mitigating expression) that, when she will learn that her intimate friend has, at last (!), found the 'true Jacob' (in colloquial language, in some regions: the ideal partner), she will react very enviously."

Whoever speaks in this way takes into account, first of all, the young woman's own nature ('forma'). That form of being, her own, is sensitive to 'successes' of her intimates, with whom, in a certain sense, she always 'measures up' a little (comparison complex).

Not that this makes up the integral (overall) judgment of being, per se! Well on the contrary. Her own 'forma' or being is only exposed in response to an event situated outside her 'being'. In other words: the inner possibility presupposes (here at least) the external possibility. Only when her intimate friend falls for the real fiancé does her comparison complex come to light (WDM 44: phenomenon, i.e. what shows itself immediately). So that the distinction between inner and outer possibility is very relative. Fundamentally, all being is part-identical (WDM 3;6) and contained in a network of relations.

WDM 54.
"A round square is impossible (= necessarily 'not possible')".

**a.** One can think - simultaneously - and the partial idea 'round' and the partial idea 'square(ig)'.

**b.** but one cannot think of them, geometrically, as being joined together (making up a single geometrical 'forma', being form, reality, being (sic) (WDM 28)). Such a thing is 'unthinkable', 'impossible' (= necessarily non-existent), because absurd, incongruous.

*Note.--* The ontologically pure idea 'reality' does include the idea 'absurd' (incongruous etc., terms), as a counter-model of all that is sensible (WDM 30). The idea of being includes, as radically nonsensical, the contradictory counter-model.

Note: Since the idea (concept) constitutes the essence ('forma') of all applicative models, it is, at once, impossible that one should ever stumble upon an idea 'round square' drawn on the board or implemented in any way. Such a thing is also unthinkable, unless as unthinkable or incongruous.

**(C).--** *"Two plus two is, necessarily, four and not other than four".*
**a --** One can think 'twice two' and 'not-four' at the same time, as partial ideas in themselves, as above.
**b.--** Yet to think of 'twice two' as equal, 'equal', to 'not-four' is impossible (absurd, nonsensical, unthinkable). Unless as absurd. i.e. as a counter-model of the only sensible 'four'. The idea of being includes the absurd, but as absurd.

In Paleopythagorean terms (WDM 13): both the round square and twice two and non-four are non-integer (do not form number (shape) harmony. They do not exist in unison, but they do exist apart).

*Conclusion.*
**a.** In both of the latter cases, we are dealing with inner (im)possibility: the being-form (idea) itself contains the (im)possibility.

**b.** Note that radically impossible things, such as both of the last examples, are "radically unreal," "nothing" (in the absolute sense),--though the idea of them--as radically unreal" or "nothing"--is "real," because conceivable as "being(s).

*The idea "probably".*
This is a submodality of "possible.

WDM    55.
*Appl. model.*

"It is possible that 'naked Cicciolina' (nickname of the Italian porno- celebrity, member of the Radical Party, since mid-June 1987 popularly elected Ilona Staller,--who, casually said, claims, in front of the TV, that she is Catholic;--although not always attending Sunday Mass, nevertheless confesses weekly), for the reason of her nude performance, at Viareggio, in the vicinity of Pisa, on 19.06.1987, faces a trial "for assault on public morals".

The possibility has its "reason" (WDM 8) both in the person of Ilona Staller herself (inner possibility: she is convinced that the "prohibitions" on sex are "hypocrisy" (hypocrisy), and outside of it (outer possibility: article 528 of the Italian Criminal Code prohibits "immoral displays").

"It is (very, really,-- little, not at all) likely that Ilona Staller will face a lawsuit.

The "reason" is, among other things, that an Italian pressure group "for the defense of moral values" communicated that he will do "everything possible" to prevent "naked Cicciolina" from sitting, effectively, in parliament.

On the other hand, however, the performance in Viareggio was marked by a flood of reserved seats (including journalists), so that the show organizers had to look for a venue that was significantly larger than I1 Gabbiano (The Seagull), where the porn star regularly performed.

The local politicians voted both for (a Socialist councillor) and against (Communists and Christian Democrats).

*Conclusion.--* The idea 'probability' is something like 'a stronger degree of possibility'. It has, likewise, its 'reason' in and outside the object considered,-- here the personality of Ilona Staller.

*Digression.-- The proof from the incongruous.*
First, re-read WDM 30 (primal dilemma); 32.

*Appl. model.--* Platon, in *The State* 1, cites such a proof from the incongruous (a form of indirect proof; WDM 34; 43).

"(...). On 'justice' (righteousness),
-- What is justice?
-- 'Speaking the truth and paying your debts'.
-- 'Is justice nothing more than that? And (if it is nothing more) are there no exceptions to it?
-- Suppose a friend, well in his right mind, gives his weapons to me for safekeeping, but, later, when he is no longer in his right mind, asks for them back.

WDM 56.

Is it my duty (*note:* an ethical modality) to return these weapons? Surely there is no one who will argue that I am always obliged to speak the truth,-- e.g., to someone like that friend in that condition.

-- 'Thou art right' said Kefalos.

-- "But, on that assumption" I said ""speaking the truth and paying your debts" is not a proper definition of justice.

**1.** The essence (forma: WDM 28) of 'righteousness' (= morally good action (WDM 30: ethics)) is laid down in its definition (essence clause). A good definition does not tolerate exceptions (otherwise it is merely a 'rule-with-exceptions', approximation).

**2.** The structure (scheme of being) of the proof is what follows:
**(A)** premise : the primal dilemma;

**(B)1.** either the definition is good or it is not good;

**(B)2.** to prove: she is not good (telling the truth and paying your debts is not without more (= not always) morally good (righteous);

**(B)3**. proof from the incongruent: posited that definition is well (lemma);

**(B)4.** Deduction (= analysis; WDM 22): it follows (deductively) from the correctness of that definition that, if I tell the truth to a man, who is not in his right mind, when he reclaims weapons, I am acting morally well (being righteous),--which is absurd, in that I am co-responsible for the misconduct committed with those weapons (which is not morally right);

**(B)5.** *conclusion:* from the definition there follows at least one deduction (WDM 2), which conflicts (contradicts) with the preposition (lemma); such a definition is only an approximation (rule with exceptions), but not a true definition, which does not tolerate exceptions.

The scheme is presented by *W.C. Salmon, Logic, Englewood* Cliffs, N.J., 1953, 30 (reductio ad absurdum) as follows:

**(a)** Theorem (= to be proved): s;
**(b)** counter model: non-s (opposing proposition),
deduction: either s or s' and non-s' (contradiction) (either some judgment (proposition, proposition) o, which is false).

*Conclusion:* non-s is false; therefore, s.

*Ontological conclusion.*
The absurd is conceivable (WDM 25; 54) and thus 'its(the); reality, but as a counter-model to it. This is the basis of the proof from the absurd.

WDM 57.
*Remark.*

*R. Regvald, Heidegger et le problème du néant*, (Heidegger and the problem of nothingness,), Dordrecht 1987, discusses a problem to which we, here, ought to devote some more time. Here are the essentials.

**(a)** Traditional ontology has pronounced over - what the Latins call - 'nihil' (nothing) more than an interpretation. In Latin it speaks of 'nihil negativum' (literally: negating nothing), 'nihil privativum '(robbing nothing).

The basic idea was, always, more or less clearly formulated, that the 'nothing' is either the absolute non-being(s) cf. WDM 30 - or the relative (relative) non-being(s).

1. Thus e.g. all that is evil (the physical evil as e.g. a natural disaster and/or the Ethical evil as e.g. sin (the guilty behavior; WDM 30 (Ethics); 45 (Nabert)) is not (note the denial), the good that should have been. In common-sense language: evil is absence (omission) of good (value) and, in that denying, let us almost say : disappointing (frustrating) sense, 'nothing' (understood: concerning good). That is the 'relative' nothing. Which therefore, purely ontologically, is something and, sometimes, can be very oppressive.

**2.** Thus e.g. when someone is looking for 'something' in a room (and finds 'nothing'), he says: "In that room there is nothing" (to be found)". It is clear that the ordinary, non-ontological term is being used here: 'nothing of what I expected to find there'! Again: the unmet expectation. Nothing more.

Ontologically there is something, namely the room, with its eventual contents. Even if it were only the air, which one breathes there.

**3.** The catechisms say several times that "God creates everything out of nothing." Here "nothing" means "nothing-outside-God! In other words, God creates everything out of Himself and nothing outside of Him. That is all the expression means (He is, after all, in the manner of the creator, the whole 'being').

**(b)** One can, however, also speak - ostensibly in the language of traditional ontology, but, in fact - in metaphorical (tropological; WDM 3), metaphorical, manner.

**(i)** One can say, e.g., "The past (being) is no more; the future (being) is not yet.-- The now (present) is the zero boundary (the 'nothing') between the two.-

'Being' is those three dimensions (not-more, not-yet, zero boundary) in one, or at least together".

WDM 58.

*In summary,* the three temporal extensions (dimensions or dimensions of time,-- past, present (now) future) can be expressed, in negative terms. But that is no more than a figure of speech, to begin with. However, there may be a 'negative' philosophical statement behind it (again: expressing frustration).

*Bibl. stitchpr.: B. Kuznetzov/ C. Fawcett/ R.S. Cohen, ed., Reason and Being*, Dordrecht, 1986.

**(ii)** One can, however, also, with Heidegger et al, not without reason called 'differenti(ali)sten (difference or difference philosophers), claim that 'das Nichts' (the 'nothing', but then exclusively as a Heidegger conceives it) is "das ganz andere zum Seienden" (the totally other in relation to being). That 'otherness' is, this time, not the absolute 'nothingness' (which is absolute nothingness; WDM 30), as traditional ontology conceived it.

No: according to Heidegger et al. there is an 'ontological primal fact' (= all-embracing fact), namely that within 'reality' (apparently, this time, in the traditional sense) - i.e. within 'being' itself - in one way or another, a negation works, i.e. is active.

To elaborate on this now would take us away from our present purpose. Just this tip: Heidegger's whole initial train of thought revolved around a kind of 'nihilism' (a philosophy emphasizing the nullity of all that is), such that e.g. human 'existence' (WDM 16; 21) is, from the outset, 'sein zum tode' (being doomed).

*Note.-- Bibl. stitchpr.* : *Fr. Laruelle, Les philosophies de la différence* (*Introduction critique*), (Philosophies of difference (Critical introduction)), Paris, 196,-- 60ss. (*La différence de Heidegger par rapport à l' idéalisme*), ((The difference of Heidegger in relation to idealism)), 93 ss. (*Hegel et Heidegger*), 121ss. (*Derrida entre Nietzsche et Heidegger*), (Derrida between Nietzsche and Heidegger).

According to Laruelle, there are, broadly speaking, four "great" differentists: Fr. Nietzsche (1844/1900; the genius, but ...since 1889 incurably mentally ill philologist; WDM 38), M. Heidegger, Gilles Deleuze (1925/1995) and Jacques Derrida (1930/2004; the 'grammatologist', who emphasizes everywhere 'deconstruction' (the dismantling of what is built up beforehand)).

*Note.--* From another angle, mainly the Psychoanalytic (WDM 47), thinkers emphasize the fact that 'life' (including eros (eroticism, sex)), essentially and from the outset, is marked by 'destruction', mainly in two forms:

WDM 59.

**1.** The desire to kill (at least maim, hurt) others (attack urge, aggression),

**2.** the 'death drive' (Todestrieb, i.e. the desire to kill (maim, hurt) oneself).

*Bibl. sample : Ch. Rycroft, Dictionnaire de psychanalyse*, Paris, 1972, 132.

*Note.--* *Rob Devos, The tears of Eros* (*An introduction to Georges Bataille*), in: *Streven* 1987 (July), 933/935, notes that -- in the last novel of *G. Bataille* (1897/1962), namely *Les larmes d' Eros* (vert.: *The tears of Eros*, Nijmegen,1986) -- this Nietzsche follower (he read Nietzsche as early as 1923) tries to make true the thesis that eros (eroticism) and thantos (death) exist in one (WDM 13; 31; 54) and, thus, are confusable. Paleopythagorean expressed: pleasure and sorrow (confusion) form a 'harmonia' (are interchangeable).

Expressed in pseudo-ontological terms : "In eroticism, that which is (so-called 'life') only gets its 'meaning' (WDM 9) because this 'being' crosses the border into what is not (so-called 'death'). Again the frustration comes through: 'life' (strongly erotically reinterpreted, of course) is something unbearable, because it ends in 'death'. According to Bataille - who has a very large following among the intelligentsia (intellectuals, among others) - one can verify this proposition among other things and above all through art (history), from the prehistory up to and including the Surrealists (WDM 49).

Anyone who is familiar with the works of *le marquis de Sade* (1740/1814) writer whose life and works are characterized by 'excesses' (sex and aggression), in the style of a good portion of the notorious Libertines), realizes the fact that this nihilist was a paragon in Bataille's eyes. By 'nihilist' we mean, here, someone who 'denies', 'deconstructs', 'annuls' all higher values, i.e. reduces them to nothing,-- whereby 'nothing' has an axiological meaning (WDM 29), namely, one starts from the fact that such higher values - one can also, with a Gertrud von Le Forth (WDM 50) speak of 'symbols' (ideals) - are in fact, 'nothing' (not necessarily valid). But that is, ontologically at least, a paralogism.

The own 'being' (reality) of 'values' lies in its being valid (i.e., the fact that they are power ideas (WDM 21)).

WDM 60.
**b.2.-- *The moral (ethical, moral) modalities.***
**1.** WDM 39 spoke to us of "ought" (duty), "may" (permission),--this, o.k. the fact that man, with respect to the reality to which he himself belongs, at least in principle (WDM 7), possesses freedom.

**2.** But WDM 30 was talking about the ethical necessity (duty) of calling 'his(de)' 'his(de)' (principle of identity). Man can refuse this (freedom of physical ability), but, in conscience, one may not refuse this (unfreedom of may). The reason (WDM 8) for this is the inviolable character (= mode of being) of 'all that (so) is'. At least in principle.

G. Jacoby, WDM 41, distinguished three purely logical modalities (necessary/not necessary/not necessary). Analogously, we can construct a differential (about which later) of ethical modalities:

> obligatory, non-mandatory and mandatory not (prohibited).

In doing so, of course, an important ethical category (fundamental concept) is skipped: ideal (WDM 50v.; 59). An ideal seems, at first glance, not obligatory. And yet: it is obligatory (duty), insofar as favorable circumstances (what the Middle Ages thinker John of Salisbury (1110/1180) called 'hypo-thesis' (i.e. the totality of actual circumstances or 'situation'), -- while he called the ideal 'thesis') allow for it. Whereby one recognizes that ethical and 'physical' (alethical) modalities can merge. - It does happen, however, that - on the one hand - duty is presented as the moral minimum and the ideal - on the other hand - as the ethical maximum.

### Opm.-- The idea of "right" ("injustice").
*A. Brunner, S.J., Die Grundfragen der Philosophie* (*Ein systematischer Aufbau*), (The Basic Questions of Philosophy (A Systematic Structure)), Freiburg, 1949-3, 271, tries to make clear to us, as simply as possible, the idea of 'law'.

"(...) With his 'being' (*op.:* form of being; WDM 28), man has been given the obligation to live up to (the moral order (WDM 51: sensible order).

But this fulfillment of duty includes - because man is dependent on his environment ('die Welt') - immediately, the availability of certain means (*note:* to his goal or destination).

*Consequence:* with its 'being' (essence form) is also given the claim to the actual disposal of said resources.

WDM 61.

(socially speaking) is, with its 'being' (essence form), also imparted the claim that no fellow human being ('no one') hinders it in this.

*Conclusion.--* Man has well-defined rights,-- i.e. he/she has a right to claim certain things in such a way that 'foreign' (*op.:* fellow human) interference is excluded."

*Conclusion.--* The distinction between so-called "ethics" and "doctrine of law" (social science) is the distinction between the whole of ethics and a part of it (which deals with rights). So that legal theory is, in fact, ethics: "if duty, then -- with respect to one's fellow man -- right;

*Appl. model*.-- Given: a teacher, whose duty it is to educate her pupils (the encompassing term for "education"). Insofar as that teacher has the duty to carry this out, he/she has the right to all means, necessary (or, to some extent, possible) to do so. - E.g. the elementary support of the parents as far as her authority is concerned. Parents who undermine (do not support) the teacher's authority (also that of other people's children), whether in principle (e.g. out of anarchistic considerations) or in fact (due to a lack of real insight into the need for an atmosphere of authority in the classroom), not only harm the teacher but also the pupils, who also have a right to education. This, by virtue of the fact that students, too, have duties - present or future.

*Conclusion.*
**1.** The whole class order(s) stands or falls with the ethical modality of 'duty'. Every 'misarchy' (term of the nihilistic thinker Nietzsche (WDM 38; 58) for this 'contempt') is, in fact, one applicative model of what Derrida (WDM 2 58: déconstruction) calls deconstruction.

**2.** Behind the modality "duty," however, is the inviolability of "all that is (so e.g. duty/right)" (WDM 30).

*Paralogism or, even, sophistry*
Some applicative models of fallacy (paralogism or, even, sophistry (WDM 31; 36)) regarding ethical modalities.

**1.-- *First ethical paralogism (sophistry).***
The opposition between 'sein'(being) and 'sollen' 'shall', i.e. ethical duty). - Either the purely Subjectivist (WDM 43vv.) view (for which 'value' and, at once, duty, based on that value (WDM 59: apply), is a purely 'subjective' product:

WDM 62.

Man "creates" (establishes) values (and the duties which flow from them) by his own efforts) or the neo-Kantian "theory of value" (axiology) (for which "being" is no longer the basis of values, but a kind of free-floating validity ("soling")),-- both analogous theses concerning value and duty fail to see that both the subjective 'asserting' and the objective 'asserting' of value and the ethics attached to it, apart from any ontology, represent reality, this is, speaking strictly ontologically, not being nothing, but being something (WDM 28), with an own, irreducible form of being, ... by which they belong to 'being' (and thus to the object of a well-understood ontology).

As the axiologist Max Scheler (WDM 42vv.; 46: S. Augustine) puts it, "enacting ('Sollen') of a duty is, always already, an appeal to a 'being', addressed to a being that possesses will and has insights." (Brunner, o.c., 78).

*Conclusion:* 'being' (reality) and 'applying' (happening as a duty) stand - ontologically - to each other as the whole of reality and a part (the applying reality) of it, or, as will be seen later, an aspect of it.

### 2.a.-- *Second ethical paralogism (sophistry).*
The opposition between thesis (thesis, positio) and situation (hypothesis, causa, context),

*Note.--* As just mentioned, it is essentially John of Solisbury (WDM 60), who pushed through this oppositional pair.

*Roland Barthes* (1915/1980; linguist), in his *L'aventure sémiologique*, Paris,1985, 143s., points out the rhetorical importance (WDM 1;12) - e.g., for lawyers, politicians, orators, publicity agents, etc. - of this basic distinction.

Actually, with Salisbury, this distinction springs from the two subjects, dialectics (not to be confused simply with DDM 31; 53.1) or abstract theory (think Platon's "dialectics" (WDM 24), on the one hand, and rhetoric, on the other.

The dialectic, in Salisbury's style, is concerned with the thesis (abstract-universal side of reality; WDM 5), while the rhetoric, again in Salisbury's sense, is concerned with the hypothesis (singular-concrete side of the same reality; WDM 5v.). Cfr Barthes, o.c.,115.

WDM 63
*Applicable model.*

The abstract-general theory, for example, asks the question, "Should one marry?" (= thesis question). To this one answers e.g. by saying, "It is value- and meaningful to marry."

The concrete-singular praxis (= practical application) then reads e.g. "Should Ilona marry?" (whereby the circumstances (= context, situation) play a decisive role, such as the fact that Ilona no longer has a womb). To this one answers e.g.: "With a view to possible childbearing, it is of no value or use that Ilona marries".

The synthesis (synthesis, summary) of the two positions - thesis (theory) and hypothesis (praxis) - then reads, e.g., as follows: "in principle (WDM 7) it is valuable and worthwhile to marry, but in fact (understand: practically) it can be, at least in view of certain intentions (aims), meaningless and worthless to marry".

***The ontological formulation can be, relevantly, paralogical (sophismatic).***

For example, one does hear, "Theory is unreal. Praxis,--that is real". -- Or, with a variation on a proverb: "La structure propose, l' histoire dispose" (Jacques Le Goff, the spokesman of the so-called "new historiography" ("L'histoire nouvelle") (1924/2014)), who makes an allusion to "Man chooses, but God disposes" ("structure" stands, here, for "theoretical approach" and "history" for the concrete-singular situation).

This pairing 'thesis/hypothesis' is similar to e.g. the Freudian 'Lust Principle/ Reality Principle' (WDM 47), which is, apparently, one application of it:
    "The lusts wick, but the actual circumstances dispose."

It is clear that the opposition 'Ideal/ Reality' responds to it (WDM 47 (Freud) and 50 (ideal/ reality)).

***Conclusion.***

In strict ontological language: the thesis (theory) is one type of reality, while what one wants to put as 'reality' (hypothesis) in opposition to it is also 'real' (non-nothing; WDM 28),--with its own form of being, but otherwise 'real'.

***First use: The idea 'design' (Entwurf, projet) in Existential philosophies.***

Man is essentially seen as 'thrown' into a situation, which he/she does not choose (WDM 16; 21; 58). but, insistently, it is argued, in contrast, that this same man is 'design'. Here 'design' means the fact that, in a minimal way (WDM 60: in principle free) man can and may choose freely.

WDM 64

In this context, one can hear an ontologically irresponsible sentence: "The individual (*note:* since Kierkegaard, who confronted the individual with God, free from mass Christianity, the existentialists emphasize the singular man) does not 'is', but, to speak in the proper sense, he/she has to be. In other words: that singular person is a task, which he/she imposes on himself". (*J.Wahl, Les philosophies de l'existence*, Paris, 1954,75).

In itself, in the intention of those who speak in this way, there is much truth, of course; but, strictly ontologically, there is a misunderstanding here: the individual is in the manner of a person, whose task is to 'be' (i.e. to 'make true' his own form of being).

*Note.--* This implies that, with the Existentialists, the thesis weighs very heavily, though not in a purely theoretical sense, of course,--on the contrary. In the midst of the hypothesis (thrownness, - situation, in which one is, sometimes, stuck) one nevertheless founds, again and again, hopefully, against all discouragement, a thesis (design), even if it is a very singular, ultra-individual one.

### *Second application.-- The ideas 'moralpolitik/ realpolitik'.*
We saw, WDM 61, that legal theory is only one branch of integral ethics. Or, if one prefers to hear this, that micro-ethics (= individual ethics) and macro-ethics (= social ethics) are two aspects of one and the same ethics.

*Bibl. stabpr.: E. Faul, Der moderne Macchiavellismus*, Köln/Berlin, 1961.-- This book situates Nicolo Macchiavelli (1469/1527; the well-known politically interested Humanist) -- hence the name "Macchiavellism" or, in German, "Realpolitik" -- in his century. The morality of a Macchiavelli, which has also penetrated deeply into our current salesmanship (marketing), is called state utilism.

The thesis is: "Is good (ethical, i.e. in conscience, accountable) all that is useful to the state (*note:* in salesmanship it is called: the selling).

*Note:* in Latin, 'useful' is called 'utilis', -- one also says 'utilitarianism' instead of 'utilism'. Practically, since the days of Macchiavelli, state utilitarianism amounted to the rational total approach of:
**a.** state policy and
**b.1.** economics (state finances) and
**b.2.** military necessity (WDM 47),--not without a special emphasis on the necessary nature of the military (strategic and/or tactical) situation.

WDM 65.

We do say "situation," i.e., in Salisbury's language, hypothesis.-- However, note the German-language terms: "moral politics" and "reaal politics" (in the Dutch-language form).

As if a conscientious policy (the military side included), such as the mid-century thinkers designed it, under Church influence, of course ('bellum iustum', morally just, 'just' war War is only ethically justifiable as an emergency solution and, even then, within strict conscientious conditions),--as if a 'just' war were 'unreal' (unreal and a Macchiavilistically conceived, fundamentally (purely ecclesiastically) immoral -- because not looking after a number of moral values -- war was only really 'real' this means, it was adapted to the hypothesis, the singular concrete circumstances (situation, context).

Again: the Moralpolitik is also a politics adapted to reality, but a reality, which includes higher standards (WDM 51: sensible order; 60), while a Realpolitik, for the reason of the end to be achieved ("The end legitimizes (in appearance) the means"), reduces the total reality with the higher ideals.

*Note.--* In an analogous "realist" sense, a *J. Kruithof, Ethics*, Antwerp, 3, 1961/1962, argues -- e.g. 127.

Steller contrasts Marxist morality with religious morality (as he, as a Marxist, reinterprets them).

The so-called 'moral-metaphysical-religious' rule (understand: rule of conduct)
**(1)** applies not to an individual, but to a group of people (sic),--which a Kierkegaard, as an authentic Christian, would certainly reject;
**(2)** rejects the exceptional ('exceptional'), because is oriented toward the mediocre (which is true of the mass-religious type attacked by Kierkegaard, among others (but not only));
**(3)** rejects the new (i.e., is essentially conservationist, yes, regressive).

*Conclusion:* such an ethics is unreal, because not one-sidedly economic-social and revolutionary.-- Which we leave for the "ontology" of Kruithof, of course.

One does not forget: Marxism and Macchiavellism harbor very close ties, as *A. Glucksman, Le discours de la guerre*, (The discourse of war), Paris, 1979, 93s.

WDM    66.

### The "intentional" ontology.

Man, called by Heidegger 'Dasein', i.e. 'das Sein in seinem da' (being 'there-ness' (= presence)), exhibits two aspects, when he engages with reality.

**(1)** Thus e.g. M. Scheler gave us an object-oriented view (WDM 42: encounter with 'being'): "It is there, without more" This is how the conclusion sounded.

**(2)** But WDM 43/46 gave us the looping (reflective) view: the subject, concerned with 'being', itself situated in the midst of that same 'being': "Yes, I realize that I exist" (Augustine).

But the latter is -- in its way -- a subject-object relation: "I (subject,-- reflective-introspective) realize (= consciousness) that I am there (object)."

*Conclusion.--* Whether it concerns extramental (situated in the outer world) or intramental (situated in our inner life) 'realities', there is always a subject-object relation. Now, it is this subject-object relation that constitutes the essence of intentional ontology.-- We explain this, now, briefly historically.

### 1. The noble ("clean") yoke. (66/68)

'Kalon zugon' (the beautiful yoke), similar to a 'xu.zeuxis' (a pair of horses),--see how Platon calls the relationship 'subject/object' (= intentionality).

**(a)** Pindaros of Kunoskefalai (-518/-438), the famous Greek lyre poet, labels "the all-seeing sunbeam" as "the measure, ('metron'), the standard, of our eyes, while they are seeing" (Isthm., 5: 67).

*O. Willmann, Gesch. d. Id.,* 246, says, in this connection, what follows : "Pindaros anticipates, with this, a thought of Platon, who says that light attributes both to the eye the image (representation) of things and to things themselves their visibility,--which is the theoretical interpretation of the (*op.* :everywhere spread, Archaic) doctrine that 'similia similibus' (the like by the like; mean: the object is known by means of the model appropriate to it.

**b. - "**The (Paleo)Pythagoreans (WDM 13) teach that the mind, insofar as it is schooled concerning 'number form harmonies' ('mathemata'), is the criterion (= measure) of things. In particular, as Philolaos of Kroton (-469/-399; a Pythagorean) said: the mind, insofar as it possesses theoretical insight into the essence (WDM 28: forma) or 'nature' of the universe, exhibits a well-defined kinship with that 'nature' of the universe.

WDM 67.

This, because - of course - the like (= original) is known by means of the like (= model, representation) (Gr.: 'hupo tou homoiou, to homoion')". (Thus the Skeptic *Sextos Empeirikos* (= Sextus Empiricus; +190/+150), in his *Against the Mathèmatikoi*).

Expressed differently - more understandably -: because, in our mind (reason), a 'model' (representation) of the nature of things, in the universe (= 'being'), is somehow present (what is later called e.g. the 'image of knowledge'), because of that our 'theoretical' mind knows that nature of things.

**(c) -- "**To the old (= handed down) proposition (lemma), viz. that what is 'equal' is known by what is 'equal', *Platon* of Athens (-427/-347), in his *Politeia*, connects his doctrine concerning the unity of 'being' and 'knowing' in ideas (WDM 28; 34; 51; 53.2).

For example, the eye is capable of knowing the sun, because - expressed in Platonic terms - among all the senses, it carries within it the same form of being as the sun - in the highest degree. In other words: visibility and vision (*op.:* object and subject) are, through the great Demiourgos (Worker, who in Platon's eyes founded the order of the universe), attuned to each other. They are a pair of horses, 'xu.zeuxis', held together by a noble yoke. That 'noble yoke' is, here, the light". (*O. Willmann, Gesch. d. Id., I,* 439).

It may be that the language of a Platon appears to us Moderates as bound to his time and culture. Yet the immutably valid essence, expressed in it, is still in force.

**(d)** "Aristotle of Stageira (-384/-322), Platon's pupil but who developed his own philosophical system (the so-called Peripatetic School), makes - like Platon - his own thesis that the 'equal' (= original) is known by means of the 'equal' (= model). The faculty of knowing establishes in itself a likeness of the state of things, (...), but then a likeness of - not the whole being but of - its 'eidos' (form of being), the things themselves.

Thus, not the stone is in the soul (*op.*: subject) but only the form (forma) of the stone (*De an.* 3: 8,2).

Or still, "The sense of sight takes in color, but without the matter (in which it is situated). (*De an.* 3: 2,3). (O. Willmann, ibid.,549).-- With such texts, it becomes, gradually, clearer what a creature form is.

WDM 68.

*Conclusion.*

The noble yoke (the unity of original and model (representation)) constitutes an ancient idea, which we find in the great figures and tendencies of ancient Greek philosophy, again and again, but in variants.

That this also applies to ontology is shown by what *Fr. Krafft, Geschichte der Naturwissenschaft,* I (*Die Begründung einer Wissenschaft von der Natur* (History of Natural Science, I (The Foundation of a Science of Nature), (WDM 12) *durch die Griechen*), (by the Greeks),), Freiburg, 1971,237, says in this regard. Krafft refers to *Fr. 5* (*H. Diels, Die Fragm.d. Vors*., I (1922 edition) 152): "For (being) thinking and being are the same thing." "Mind and 'being' belong to each other, -- just as the eye and visible things.

According to an ancient intuition, knowing and grasping something -- in whatever form -- comes about only because what is like, what is like, knows (...).-- Thus, also for Parmenides of Elea (WDM 2), mind and being are identical."

**2. *The intentio (focus).***

With this philosophical term, we are in the full Middle Ages (800/1450), with the Scholasticism.

*P. Foulquié, R.Saint-Jean, Dictionnaire de la langue philosophique*, Paris, 1969-2, 376, summarizes the teachings of the Scholasticians, concerning "orientation," as follows.

**(a)** There is the cognitive (knowledge-based) 'intentio' or orientation. E.g., when our consciousness is or becomes directed toward a sense ("I see a person walking there"). This directedness the Scholastics call 'intentio formalis' (directedness in the proper or 'formal' sense).

*Note.--* By metonymy (WDM 3) or transfer of meaning -- here: from the act of directedness to the object, on which that directedness is 'directed' -- the Middle Ages thinkers also call the object of the 'intentio', 'intentio' (but 'intentio obiectiva' or 'object-indicating directedness',). Thus, e.g., 'the walking of a human being' is the intentio of my seeing (i.e., of my consciousness insofar as it sees something). In short: 'intent of consciousness'.

**(b)** There is also the - better known to us - volitive volitional) 'intentio', directedness, resp. direction (think e.g. of purposefulness).

In this sense we use, still, the term "intention" (intent); "She acted with good intentions" is also pronounceable as "She acted with good intentions.

WDM    69.
*Conclusion.*
What the Antiques - with Platon - called the noble yoke, the Scholastics, apparently more psychologically minded, called 'intentio'; consciousness orientation).

By metonymy, they are also called that to which our consciousness is directed, 'intentio' (what is intended or meant).

*After-effects.*
**(1) -- *The Austrian School.***
*H. Arvon, La philosophie allemande*, Paris, 1970, 133ss., talks about what he calls "the Austrian School.

**(a)** Distant predecessor was Bernhardt Bolzano (1781/1848; known for his mathematical and logical works).

**(b)** *Franz Brentano* (1838/1917), the leader, introduced the term "intentio" into his psychology (*psychologie vom empirischen Standpunkt* (1874));

**a.** As the task of such an empirical psychology Brentano sees -not the causal (causal) explanation, but -the description of psychic phenomena. By 'phenomena' Brentano understood 'acts'. E.g. the representation of a human being, who is walking. Hearing, feeling, remembering, judging, experiencing (of joy e.g.) are 'acts'. On the other hand he puts 'physical phenomena', such as e.g. colors, people, landscapes that are objects of those acts.

**b.** Well, in Scholastic mind, every act is "intentional," i.e. directed toward a given (object).

**Bibl. st:** *H. Duijker/ P. Vroon, Codex psychologicus*, Amsterdam/ Brussels, 1981, 16v.

**c.** Consciousness Brentano essentially defines "as" directedness (of the subject) to an object (= intentionality).

*Note.--* With this idea of 'intentionality' Brentano does not yet claim that the object also exists outside the subject's interiority, extramental thus. No: it is sufficient that the 'object' is present somewhere in my mind (consciousness). At least that is how the younger Brentano thinks. (*Note*: compare WDM 43: introspective method).

Others, such as, e.g., Alexius Meinong (1853/1927), Carl Stumpf (1848/1936), and, above all, the most famous among them, Edmund Husserl (1859/1938; WDM 45), further developed Franz Brentano's basic ideas.

WDM 70.

**(2) -- *The phenomenological school.***

"The new philosophy initiated by the Austrian School will be given the name 'phenomenology'. After it reached its peak in the years, which immediately follow World War II (1940/1945), it culminates, finally, - as a method - in the existential (WDM 16; 21; 63) ontology and philosophy, which they want to continue" (H. Arvon, o.c.,133).

**(a) --** As a term, the word "phenomenology" first appears with Johann Heinrich Lambert (1728/1777).

**(b).** *G.Fr.W. Hegel* (WDM 31; 53.1), the dialectical-Idealist, had his *Phänomenologie des Geistes* (a kind of cultural history) published in 1806;

Father Teilhard de Chardin, S.J. (1881/1955) wants - he says - to work out "phenomenology," but, with him, it is to be understood in a natural science-biological and evolutionary sense.

To characterize, then, Husserl's phenomenology we label it as intenional phenomenology. "Human consciousness - and, more broadly, human existence (WDM 16: to exist) - must be defined by intentionality. By this one understands the thesis that radically identifies this 'existence' with being directed toward the other. (...) Man (...) is directed toward, reference to the other,-- the world, the others (...)" (*A. de Waelhens, What is phenomenology*, in: *Our Alma Mater* 15 (1961): 1,3).

*Conclusion.*

Both noble yoke (the mutual attunement of subject and object) and intentionality (the subject's orientation toward the object) form the basis of an intentional ontology.

At its core is the sixfoldness of the transcendental concepts of 'being', something, (creature) form,-- unity, truth, value). (WDM 28v.).

**a.** The first three were, above, treated at greater length: insofar as -- as M. Scheler briefly ended this (WDM 42; encounter with being,-- as being, something and being-form) -- we confronted ourselves with these three concepts, this was already intentional ontology (for intentio is to confront oneself with something). The three following transcendentalities -- one, true, good (valuable) -- we now treat briefly.

WM 71.
**1.-- *The transcendental theory of truth (epistemology).***
'Truth' ('a.letheia'; WDM 38) has, in philosophy, more than one meaning.

**(a)** Metaphysical (ontological) truth is that property of all that is (= reality), insofar as, confronted (= intentio) with a being gifted with mind (intellect/ reason), it is knowable and conceivable, intelligible or 'meaningful' (WDM 8; 42;--53.2 /56 (possible)).

Were "being" (reality) such that it was radically incomprehensible, unknowable and unthinkable, then, metaphysically, "truth"(= sense) would be non-existent.

One can also express this, in a not too desirable language, in another way: if reality were completely 'irrational' (in the sense of 'incomprehensible to any mind/ reason'), then there could be no 'rationality' of reality. 'Rationality' ('reasonableness') means, in this context, the same as 'truth'` in the ontological sense.

If one will: the truth concerning all reality is knowable and thinkable only insofar as there is in that reality 'objective truth',-- where 'truth' then means 'susceptibility to knowledge and thought'.

**(b).1. *Logical truth*** (WDM 40)
is that property of our knowledge, expressed in judgments, insofar as they correspond to reality,--"to what is, as it is." The counterfactual (opposite) is the falsehood or falsity.

**(b).2. *Ethical (moral, moral) truth*** (WDM 30; 56; 60/65)
is that characteristic of our inner and outer behavior, insofar as it is in accordance with our moral principles (principles).-- One can also express this by "moral genuine behavior."

***Heideggerian "aletheiology***
As *J.A. Aertsen, Turns in truth* (Anselm of Ccnterbury (1033/ 1109), Thomas Aquinas (1224/ 1274), Gianbatista Vico (1668/1744)), in: *Tijdschr. v. Phil.* 49 (1987): 2 (July, 187/229, says, philosophy is, for Heidegger, aletheiology (truth theory). "Die Wahrheit ist die Sache des Denkens" (Truth (unconcealedness of being) is the preeminent matter of thought). Die Wahrheit bleibt das allererst zu Denkende" (Truth remains that which, by priority, thinking must face).

WDM 72.
*Bibl. st.: M. Heidegger, Hegel und die Griechen*, in: *Wegmarken*, Frankfurt a. M., 1967, 272.

According to Heidegger, metaphysics (ontology) -- "von Platon bis Nietzsche" -- did talk about the truths cited above, but "thinking 'being' itself," -- it "forgot" that (= "Seinsvergessenheit").

Such a thing, taken in its vague generality, is, of course, always 'true' somewhere. But whether Heidegger, with his 'nihilistic' idea of truth, is that much further along, that is another question.

Listen e.g. to the following Heidegger statement: "The 'essence' of 'truth' is the 'truth' of 'being'"; By this he means that the actual essence of the much discussed truth (in the traditional sense) is to be found (or, at least, sought) in the (Heideggerian understood) 'being' (i.e. practically, the culture-historically developing and current nihilism-crisis (WDM 59), with all its 'frustrations' (WDM 58; 59), the event of the universe and humanity),--i.e. the being of the 'real' (understood in Heideggerian terms) 'truth' or the gradual awakening of humanity, ending in frustrating experiences.

It should be noted that Heidegger, with this, does grasp truth - and not an insignificant one at that - but fixes himself in one well-defined idea of truth that he exaggerates.

### Nietzschean Truth Criticism.
*Ger. Groot, The truth is a false concept* (*Nietzsche according to others and according to himself*), in: *Streven* 49 (1982): 5 (Febr.), 395/405, points out the ever-increasing Nietzscheizations, one already more "ingenious" than the next.

"*With R. Duhamel, Kerngedachten van Friedrich Nietzsche*, (Key Thoughts of Friedrich Nietzsche), Antwerpen/ Amsterdam, 1979, we (= Groot) believe that the significance of Nietzsche's thought, for the present time, must be sought above all in his critique of the traditional concept of truth (A.c., 399).

**a.--** Duhamel finds the essential core of Nietzsche's thought in the following statement (rather: presupposition or axiom; a.c., 400): reality is "the pure and therefore meaningless becoming."
The second proposition, fundamentally the same, is: "Human thinking and speaking about being betrays, because it mortifies (to non-becoming 'being') that meaningless becoming". After all - says Nietzsche - our thinking creates a purely imaginary, 'illusory' (= deluded) world of knowledge and thought content, -- a product which tradition, then, holds up as the 'true' world (true 'being').

WDM 73.

This malady of losing oneself in imaginary worlds (so that one takes them for the real reality) is so deep that it affects the structures of our speech (language as a record of what is in itself unstable, because 'becoming senseless; is), the structures of our logic (logic as reasoning about and from fixed facts (which, meanwhile, as 'becoming meaningless', are again changed and, thus, unstable), yes, even the structures of our sciences (which want to expose the immutable fixed in a reality which in itself is becoming and, thus, unstable) serve as a basis.

In Nietzsche's language, such an ailment is called "metaphysics" (understood as reality-averse thinking).

The way out of this "flight" from the hard, meaningless reality that is the ontology, Nietzsche calls "fröhliche Wissenschaft" (cheerful science, i.e. something like "Since it is all meaningless anyway (frustration: WDM 59), let us pull through it while laughing, depriving it of any unchanging seriousness,--with the courage of despair!").

**b.(1)** *First critique.*

Ger. Groot, who does not hide his admiration for Nietzsche, says, a.c., 400, word for word that Nietzsche, like any true thinker, harbors an original (understand: idiosyncratic) insight "like a sudden illumination of truth." Yes, indeed : it says so! In other words: Nietzsche advocates a new, original idea of truth, namely the nihilistic concept of truth, which shatters the meaninglessness of all possible reality. It goes without saying that this time 'truth' is not 'false'!

**b.(2)** *second critique.*

As, above, Heidegger ("von Platon bis Nietzsche"), so too, but in his, own way, does Nietzsche: Platonism is mistaken for cynical, world- and life-less philosophy (WDM 36; 38; -- 51).

We refer to paralogism, which, more or less clearly, is at work in all such critiques of the fixed, which would be peculiar to metaphysics: WDM 34 (already Parmenides (with Platon's critique of it); 36) taught us that 'becoming' is becoming 'being'.

WDM 74.

**2.-- *The transcendental theory of value*** (axiology).

As already briefly indicated, WDM 29, ontological "goodness"(all that is good) is the same as "susceptibility to value judgments;--just as ontological "truth" is the same as "susceptibility to true judgments.

**1.** The 'intentio' or approach (mode of confronting oneself) is, now, volitive, i.e. (as WDM 68 taught) willful (where 'will', voluntas is taken very broadly, i.e. as a value sense).

**2.** As S. Augustine taught us (WDM 45), our "intentio," our encounter (acquaintance) with reality, is threefold: directed to being as being (essence and existence (WDM 26v.)), to truth as knowable, and, also and not least, to "goodness" (the appreciable) as the object of feeling and will.

**a.-- *Ontological value.***

As for ontological truth, here too: 'value' here means 'all that, no matter what, can elicit value judgments'. - Thus e.g. all that is mere 'fantasy' (WDM 49) is also 'value'. Read e.g. *Franz Rottensteiner, The Fantasy Book* (*An Illustrated History from Dracula to Tolkien*), New York, 1978: thou wilt see how the pure fantastic literature and art is meaningful, i.e., valuable, ...to man as a mind, feeling, -- decision-making being. By what means? Because even the imagined non-nothing (WDM 28), is something, forma (form of being, -- distinguishable from all the rest).

A fortiori (all the more) all that is non-fantastic, in and around us realized possibility, is valuable,--however.

*Note.--* The sensible (all that is non-songy; WDM 32) is both logically sensible and axiologically sensible. Do we not say of life, insofar as it loses its value for us, that it is meaningless?

**b.1.-- *Logical value.***

Reread WDM 40: do we not see how the more recent logicians, faithful to the great ontological tradition (perhaps without realizing it), speak of "divalent," "multivalent" logics? Which are, there, e.g. the values? 'true', resp. the counter model 'false', or: necessary, non-necessary, necessarily not. The truth of judgement (correspondence of our insights with the facts) is one type of (ontological) value. With significance also for the mind e.g..

WDM 75.
**b.2.-- *Ethical value.***

**1.** The first ethical value is the ethical truth (WDM 30 (ontological basis); 71 (form of being)) in so far as each one of us lives in accordance with the ethical values ('principles' express values,-- are value judgments), which he / she 'honors' (esteems highly), to that extent he / she, in one's own eyes (in conscience) and in the eyes of others, commands respect. The counter model only arouses disdain or, at least, pity: "The flag does not cover the load"!

**2.** There are, of course, besides cognitive or truth values, other ethical values: M. Scheler (WDM 42; 62) has tried to draw up a kind of typology (typology, classification) of inheritance:

**a.** pleasant (unvalue: unpleasant; WDM 47: pleasure principle) things, persons, processes,-- they have 'value' (hedonic values ;

**b.** all that promotes health, biologically speaking, is valuable (false the disease, hurt, in Scheler's terminology: vital values; i.e.: biological values);

**c.** all that promotes culture of the mind (= mind/ reason, spirit, character) is valuable: aesthetic values (beautiful, counter-model: ugly), legal or law-values (all that establishes law is valuable; injustice (e.g., violence) is unvalue), epistemological values (professional sciences, philosophy, theology, rhetoric,-- they establish valuable situations; unvalue: ignorance, error),-- see, in Scheler's view, cultural values.

**a.** *Note*.-- The most exalted value, at least for the Catholic Scheler (in later life he fell into a crisis of faith), is the sacred (cf. WDM 30: the inviolable is the manifestation of the sacred, in the stricter sense), -- something to do with philosophy of religion (in the Augustinian sense among others). (sacred values).

**b.** *Remark* -- Where exactly, in Scheler's view, are ethical values situated? They are outside the above-described scale of values and yet they are present in it: as soon as man realizes a value (realization, effectuation, realization) - ordo exsecutionis, the order of realization,-- so said the Scholastics, he establishes ethical value, in the strict sense. Every value "applies" (Sollen; WDM 61v.), i.e. makes itself felt, no matter what: "Thou shalt not kill" e.g.. But he who "lives" this validity in his praxis (WDM 63), i.e. brings it about, takes the step from feeling value to realizing value.

WDM    76.

If one, therefore, either through e.g. nuclear cessation or abortion prevention (we are, with this, not judging the actually committed abortions), honors life (biological value) not only in "theory" but also practically asserts it, takes the step from pure value feeling to moral praxis.

*Bibl. sample : L. De Raeymaeker, The Philosophy of Scheler*, Mechelen, 1934, 46vv.. "Es gibt ursprüngliches, intentionales Fühlen", (There is original, intentional feelin).

The whole Schelerian theory of value stands or falls with this main proposition: there is an 'original' (i.e. irreducible to something else and, therefore, given in some direct experience (encounter, 'intentio')) feeling,-- viz. of values.

**(a)** Feeling of value is not the same as e.g. a state of mind.

*Appl. model.*
I rise, this morning, sad (downcast, 'depressed').-- Such sadness only makes sense if, in one way or another, there is value and the sensing of value. Sadness is being confronted (= intentionality) with un.value. In other words: the possibility condition (WDM 8: sufficient reason) of such a state of mind is, among other things, that something wrong is at work (unvalue).

**(b)** Feeling of value is, also, not the same as will reactions.

*Appl. model.*
I can react to the sad mood of this morning in different ways: I can surrender to it (bad mood, sad mood); I can react against it by, for example, scattering myself.

In those reactions, a sense of value is at work: to surrender to it is to assume that this sad mood has "meaning" (value) somewhere; to resist it, willfully, means that I see in that sadness an unvalue and consider overcoming it meaningful and valuable.

Again: one of the necessary and perhaps sufficient reasons of those reactions is value feeling.

**(c)** Feeling of value is, likewise, not the same as goal pursuit.

*Appl. model.*
Aversions, one of the basic phenomena, e.g. strongly (and rightly) emphasized by Psychoanalysis (WDM 47), are stretches (WDM 21: idea-force) of our volitive 'intentio'; they have a destination : e.g. the craving for lust, assumed by Freud to be the first basic fact of our 'depth' (unconscious mind). In this sense, the natural desire for lust is purposeful.

WDM    77.

If I, now, as an Epikoeraean (Epikouros of Samos (-341/-271) held a hedonism or philosophy of lust), consciously put forward as the main purpose of my life as many lustful experiences as possible, then this is purposefulness in the second degree (consciously continuing what the unconscious already indicates as the purpose).

Both, unconscious and conscious pursuit of goals, only "make sense" if one sees value in pleasure experiences or at least vaguely imagines them.

### Conclusion.

The comparative method (value-feeling compared to states of mind, will, goal pursuits) shows that, as the "reason" (possibility condition) of the three volitional phenomena compared, there is something like value-feeling present.

The term "good" ("goods") means that certain actual acts (e.g., economic goods) represent "value": in a given embodiment, value establishes a good.

### Bibl. stitch pr:

As in all previous cases of books etc. so here too: there is a mass of literature; so among others:

-- *L. Lavelle, Traité des valeurs*, I (*Théorie générale de la valeur*), Paris, 1951 (fascinating is o.c., 33/181: *La valeur dans l'histoire*);

-- *P. Schotsmans, The doctrine of value as a way out of our crisis of civilization*, in: *Our Alma Mater* 1986: 2, 106/120 (showing that axiology is in full bloom).

### 'Gott ist tot! (Fr. Nietzsche).

Nietzsche (WDM 72) wrote down, first, this slogan in his *Fröhliche Wissenschaft* (Drittes Buch), No. 125 (*Der tolle mensch* (The Mad Man)), 1882.

We reproduce, in short, the text.-- "Have you not heard of that mad man, who, in full morning, lit a lantern, walked into the marketplace, and shouted without ceasing, 'I seek God! I seek God!

There, now, just many of those who did not believe in God were gathered, he aroused great laughter: 'Is God, then, lost?' said one. 'Is He, like a child, lost?' said another. (...).

The madman leaped in the midst of them and pierced them with his gazes: "Where is God?" he cried.

WDM 78.
'I want to tell you: we killed him,--you and I!, All of us are his murderers.

But how did we manage to do such a thing? How did we manage to drink from the sea? (...) What right did we do when we separated the earth from its sun? In which direction is it moving now? In what direction are we moving? Perhaps away from all the suns? Are we not constantly sinking? (...) Do we not wander as if through an endless nothing (WDM 58: Heidegger's nothingness is, with this, comparable; 72: the pure and, thus, meaningless becoming)? (...)

Has it not become colder? Doesn't night come, all the time, and more night? Shouldn't lanterns be lit in the morning? (...) God is dead! God remains dead! And we have killed Him! -- How shall we console ourselves,-- we the murderers among murderers? The holiest (WDM 75) and the most powerful, that the world, hitherto, possessed, -- it has, under our knives, bled to death. who knew this blood from us? With what kind of water could we cleanse ourselves? (...)

Never was there a greater act also: whoever is born after us belongs, for the reason of that act, to a higher history (WDM 38: Übermens-period),-- higher than, hitherto, all history was.

Here the madman was silent. He looked, again, at his hearers: they, too, were silent and looked, with estranged eyes, at him.

Finally, he threw his lantern to the ground so that it flew to pieces and swooned: 'I come too early' he said. I am not yet at the right time. This unheard-of event is still on its way and traveling: it has not yet reached the ears of men. Lightning and thunder need time; (...) deeds need time' - even after they have been made, they, at least, want to be seen and heard. This deed is - for them - even further than the farthest stars: and yet they have set it.

It is still told that, during the same day, the insane man entered several churches to sing his Requiem aeternam deo ("Give eternal rest to God"). He was led outside. Questioned, he kept repeating this, "What are these churches but tombs and crypts of God?" -- So much for this parable.

WDM 79 .
*Heidegger's comment.*
*M. Heidegger, Holzwege*, Frankfurt a.M., 1950, discusses Nietzsche's parable.

**(a)** In 1886 *Nietzsche* added a fifth volume to his *Fröhliche Wissenschaft,* in which, in *Aphorismus* 343, he says : "The greatest newer event - that 'God is dead', that belief in the Christian God has become implausible - is already beginning to cast its first shadows over Europe."

From this, Heidegger concludes that "God," in Nietzsche's slogan, means the God of Christianity.

*Note.*-- Indeed, under Enlightenment-rational influence (the Cartesians and the Libertines), a crisis of faith has been going on, in the Western world, especially since +/- 1680, -- crisis, the atheistic nature of which Nietzsche sees through: in the marketplace there were "many" who did not believe in God). WDM 1 already pointed out that theology is an integral part of philosophy: here we have it already! European culture was, originally, like all cultures, deeply religious. But in the XVth century a decline sets in. This is laicization and secularization.

**(b)** -- But - correctly - Heidegger argues that Nietzsche, by that term "god," means more.
**1.** He means the transcendental world of ideas and ideals and values. He is, mercilessly, aiming at
**a.** Platonism, with its theory of ideas (WDM 50: ideal) and the so-called ontotheologica (WDM 37) and on
**b.** Christianity, especially insofar as it founded, since Patristic times (33/800; WDM 45), a Christian Platonism. Both of these cultural factors Nietzsche, not without confusing them with cynism (WDM 73), denotes as life- and world-less, indeed, as lived out.

**2.** "The expression 'God is dead' means: the transcendental world is without working power; it does not radiate life. 'Metaphysics' (WDM 73), i.e. (for Nietzsche) Western philosophy, understood as Platonism, is at its end. Nietzsche sees his own philosophy as the counter-movement against 'metaphysics', i.e. (in his view) against Platonism (o.c., 200). Thus, literally, Heidegger.

*Note.--* This implies that "God is dead" has -- in addition to a theological, also -- an axiological scope:

**(i)** we saw, with Scheler, that the sacred (WDM 75) is the highest, indeed, in a sense, the basic value (which Nietzsche affirms: "The holiest and the most powerful, which the world, hitherto, possessed,--it has, under our knives, bled to death");

WDM 80.

**(ii)** *Nietzsche* himself, in his *Der Wille zur Macht* (1887/1888), wrote: "What does 'nihilism' mean? -- that the higher values undergo a devaluation". Nietzsche sees nihilism and "God is dead" as happening, in the minds and praxis of Modern Europe (WDM 58; 59).

### *Bibl. stitch pr:*
-- *D. Arendt, Nihilismus* (*Die Anfäge von Jacobi bis Nietzsche*), (Nihilism (The Beginnings from Jacobi to Nietzsche),), Köln,1970 (esp. o.c., 341/390:
    -- *Fr. Nietzsche, Der Wille zur Macht*;
    -- *M. Heidegger, Der europäische Nihilismus*, Pfullingen, 1967;
    -- Ernst Jünger, Ueber die Linie, in: *Anteile* (*Martin Heidegger zum 60. Geburtstag*), Frankf. a. M., 1950;
    -- *J. Goudsblom, Nihilism and culture*, Amsterdam, 1960.

*Note.--* *M. Scheler, Die Stellung des Menschen im Kosmos*, (The position of man in the cosmos,), Darmstadt, 1930, 83, notes a variant of nihilism: the demonic. He describes it, there, as "the blind urge" that pervades the whole of reality (as he interprets it, after his crisis of faith),-- blind to what? blind to all spiritual ideas and values.--

*J. Grooten/ G.J. Steenbergen, ed., Philosophical lexicon*, Antwerp/ Amsterdam, 1958, 250, defines "Satanism" as "the view that elevates the denial of all values to the sole 'value'.

It should be noted that "Satanism"-especially since the rise, in the sixties, of occultism (the interest in the supernatural (WDM 17)) - also means "to place oneself, in a supernatural way, in the service of Satan." -- Which does not necessarily include axiological "Satanism.

### *The relationship between theology and axiology.*
**(1)** Thinkers disagree on this: *J. Delesalle, Liberté et valeur*, (Freedom and value, ), Louvain, 1950, e.g. defends the thesis that man, although reaching beyond the cosmos (in the material sense), does not create values, but receives them from God's hand, while P. Schotsmans, a.c. (WDM 77), insinuates that the disappearance of God, as the main factor of our present culture, precisely causes a return to a theory of values, as a kind of 'Ersatz' (substitute).

**(2)a.** Jesus, in *Luke 18: 1/8* recounts a parable "The unjust judge and the troublesome widow," which sheds a stark light on the relationship between God's faith and values (especially ethical ones).

WDM 81.

"In a city there was a judge, who did not fear God and did not bother people. But there was, in that city, also a widow, who sought him out and said, 'Provide me with justice (WDM 60) against my adversary.'

For a long time, the judge did not address this. But afterwards he said to himself: "I have nothing to fear from God and nothing to disturb me with people! I will give justice to this widow who is making my life difficult, otherwise she will bore me to death.

Apart from the fact that this parable reminds us of *Psalm 58* (*57*) - about the unjust judges (rulers) - it clearly links Godliness to "not bothering your fellow man". In other words: the fellow human being loses the high value (validity), which he, in the belief in God, does have. It is an illustration of the Freudian pairing "pleasure principle/actuality principle" (WDM 47; 63; 75;-- 58): in a Godless world, if one does not do it out of a sense of justice, one can be obliged by the unpleasant (WDM 75) to provide justice to one's fellow man! A certain hedonism seems to go hand in hand with atheism.

**(2)b.** *Ludwig Feuerbach* (1804/1872), in his *Das Wesen des Christentums* (1841), noted, already, the connection between (living) God belief and higher values: "The true atheist is not the one who denies God. It is the one who denotes the attributes (= essence traits) of the deity - love, wisdom, righteousness - as nothing".

The term "nothing" speaks plainly: the "nihil" (nothing), which those high virtues (= ethical properties), for the consistent Godloochener, constitute, insinuates the nihilism, which is peculiar to such an atheism.

This is confirmed in Atheistic Existentialism (WDM 16) by *J.-P. Sartre* (1905/1980) is confirmed. In his *L'existentialisme est un humanisme*, Paris, 1946,36, Sartre assumes "humanism" (atheism): "Dostoefsky (F.M. - (1821/1881; deeply religious Russian novelist) had written :'If God did not exist, then everything would be permissible (WDM 60: not -obligatory): Such is the point of departure of (*note*: atheistic-humanistic) Existentialism. Indeed: everything is permitted, if God does not exist". (J.-P. Sartre, o.c. ibid.). Sartre means that everything is fundamentally permissible, of course.

WDM 82.
### 3.-- *The transcendental unity theory (harmology).*

As already indicated (WDM 28), harmology (WDM 3) or theory of order is the account of the identitive nature of reality.

**(a)** *Metaphysical unity:*

**1.** as soon as there is something (WDM 28) or 'forma' (essence form), there is distinguishability (see also WDM 33), discriminability, vis-à-vis the whole rest (principle of division). As the Scholasticians said, "Forma dat esse et distingui" (thanks to the 'form of being' (essence + existence) something exists and is distinguishable).

**2.** This is the reason why a theory of reality (ontology) can make use of the auxiliary verb 'to be'. Reread e.g. WDM 35v. (identity judgments).

We repeat briefly again.

**2a.** -- Something (being-form) is only totally identical (reflexively, loopily identifiable) with itself.

**2.b.** -- Well something is part-identical (partial, partially identifiable) with the whole rest.

Those who work with these two basic concepts (categories) "total and partial identity" speak an identitarian language.

**3.** This is why the analogy (partial identity or relationship) is so central.

**3a.--** Basis is, of course, full or total identity (what the Antiques called 'ousia' (essences but essence in the sense of volitional essence) or, still, 'hupostasis' (substance,-- again in the very particular sense of full identity)). But this one gets stuck, as it were, in tautologies (WDM 35v.).

**3b.--** The great mass of judgments (creature insights) expresses relations, partial identities, i.e.: analogies.

### *Appl. Model.*

It is because Ornella Muti is, Ornella Muti (first tautology) and because beautiful is beautiful (second tautology), that one can say, "Ornella Muti is beautiful" (partial identity, or analogy judgment).

*Note --* The more recent logistics (WDM 2), in addition to the already touched upon modal (after dichotomous) logistics (WDM 40), also has the relational logistics, founded in the first place by C.S.S. Peirce (WDM 8; 22;--14; 27).

As rightly stated *by G. Jacoby, Die Ansprüche der Logistiker*, 53/55 (*Relationslogik*), the possibility condition of relationslogistics is the partial identity theory, as elaborated by ontology.

WDM    83.

*Note --* All but strictly all judgments -- whether they express predicates, relations, classes or whatever (logistically speaking) -- are either tautologies or analogy judgments.

*Appl. model.*

**(a)** "Ornella Muti is a beautiful woman"-to stick with the same model now-is the uttering of a predicate of a subject (subject).

**(b)** "Ornella Muti is a more beautiful woman than most women" is - logistically speaking - a relational judgment.

This is because logicians (like mathematicians) stick to the symbols (arithmetic and/or reasoning signs; WDM 2; 52) (which is their right); this, while the ontologist sticks to the creature form (the matter), which is among other things but not always an arithmetic and/or reasoning sign. As a result, both "Ornella Muti is a beautiful woman" and "Ornella Muti is a more beautiful woman than most women" are relational judgments.

Just that, in the first case, 'Ornella Muti' without explicitly comparing them, under point of view of beautiful appearance, is seen in relation, with 'beautiful woman,' while, in the second case, and 'Ornella Mutil and 'most women' (together the subject, in the ontological sense), are compared, under point of view of 'beautiful woman,' - i.e.: are seen in relation.

*Note.--* O. Willmann, Abriss der Philosophie, Wien,1959-5, 394/400. (*Die Kategorieën*), lists the Aristotelian ten categories (modes of pronunciation: kat.ègoria) or predikamenten (note: this word taken in the Antique-Middle Ages sense).

**(a).--** Ousia, 'substance' (selfhood, i.e. all that is subject (subject) in a sentence.

**(b).-All** that is proverbial (predicate), the Scholastics call inheritances (all that is as proverbial, inherent in a subject).

Basic inherence is (what Aristotle calls) "pros ti" (also : "schèsis"), relation. Aristotle says, even, somewhere that the relation "knowing subject - known object" (WDM 67) is the relation par excellence. She is what, since S. Augustine, the Scholastics call 'intentio' (WDM 68).

The other inheritances (also called "accidentals") are: quality/quantity (a Systechy (pair), which in classical ontology is never thought one without the other: quality is, always somewhere quantitative, --

WDM 84.

but also the other way round : quantity is only the quantity (quantification) of a property (= quality));-- further inheritance system : place ('where?')/time(dot) ('when?'),-- which are not without connection with 'or-question' (WDM 27); indeed: whether something exists, can be answered by answering 'where' and 'when' something is situated;-- one can also express it more modernly and speak of 'temporal-spatiality';-- next system: industriousness (action, activity, idleness (passivity, undergoing),-- which, in fact, always, somewhere, go together: one is active towards something, which then undergoes that 'activity';

Last systechy sometimes enumerated by Aristotle: 'keisthai', situs (being situated)/ 'echein', habitus (holding oneself in relation to something),--which, somewhat, recalls the Existentialist pair 'thrownness/design' (WDM 63).

### *Applicable models.*
### **(1)** *Relationship.*

As already mentioned, Aristotle comes back several times to the fact that knowing (knowing) is a relation: the 'relata' (singular: 'relatum', relation term) are the knowing (= subject) and the knowledge content (= object) (WDM 67). In his chapter on the relation ('pros ti'), the knowledge relation appears as the main (though far from the only) application of that category (= fundamental concept). Cfr Kat. 7 (see also: *Top. 1: 17; 4:4; Metaph. 5:15:3 and 14; De anima 2:2*).

### *Conclusion.*

So one never says again that Aristotle did not even, in his logical notions, mention the relation.

### **(2).1.** *Feature/measure* (quality/quantity).

In his Nikomachean Ethics (1:4), Aristotle states that virtue (invariably ethically good quality or 'virtue') is a quality, insofar as, precisely in that quality, one knows measure (measures quantitatively).-- Think of someone who wants absolute - 'matureless' - democracy (and allows everything): such a person honors a quality (and a good one at that), but exaggerates (does not grasp the proper, 'virtuous' measure).

### **(2).2.** *Time spatiality* (when/where).

One can mean, by this, the naked situating in time and space (which is obvious to everyone. But it can also be ethically decisive ('essential'): sexual relations are, in themselves, a 'value' ('good'); but, when they are 'played' on a scene, for a sex and violence film, they are situated both at the wrong time and, above all, in the wrong place.

WDM 85.

**(2).3.** *Activity/ passivity.*

When a filmmaker 'films' (active) the couple quoted above, both acting are 'filmed'(passive). When I look at a beautiful flower (active), she is a viewed (passive) object.-- One. sees it: 'action/passion' is a counter-position pair that is extremely frequent.

**(2).4.** *Being situated/ being situated.*

This may be meant locally and/ or temporally: "Aristotle situates himself (-384/-322) in the fourth century BC (time), first at the Macedonian court and, later, at Athens (place)."

It can also be existentially rephrased (i.e., as experiential aspects): "He lay there, prostrate (situs), though decked out with his whole aggressive armor (habitus)," -- where one sees that this pair of opposites intertwines with "passion/action.

*Purely Modern:* "Situated in a general crisis of values (WDM 79), Nietzsche saw only one attitude as meaningful and responsible: integral nihilism.

*Conclusion.*

**l.** The all too lightly condemned Aristotelian categories (predicaments) cover **(1)** the relation as a central piece and **(2)** pairs of opposites (i.e. relations between opposites) as applicative models of relation. This involves an entire logic of relation, the examples cited above proving that it remains totally current.

**2**. One who, like Aristotle --, by the way: in the tradition of the Paleopythagoreans and the Platonism of his teacher sees relations,-- everywhere and always, such a person sees, at the same time, wholes, totalities. And well: structured, because of relations provided totalities.-- Which is a no less topical theme.

*The name "unity doctrine.*

The ancient Greek thinkers, from Thales onwards (WDM 7;12) and his contemporaries, spoke, mostly, of the many (the terms) and the one (the relation): the 'fusis', nature, understood as the multiplicity (seemingly without coherence) of the 'being', is, in their opinion, a unity (viz. a coherent whole or totality) -- so e.g. because the many data of nature are traversed by one and the same 'archè' principle (principium), - e.g. the tainted water (Thales) or the tainted without more (Anaximandros' 'apeiron') or still, with Anaximenes (the omnipresent, tainted air/breath).

WDM 86.

Although, at that Archaic stage of thought" unfamiliar with such a thing as 'transcendental extent' (WDM 26: "Being fits everything"; 27), in the explicit (express) sense, yet the first Natural Philosophers already saw the unity (similarity/coherence) in the multiplicity (elements).-- They founded, unknowingly, the first theory of order.

**(b)** *Non-metaphysical unity.*

**1.** We were speaking, like the Milesians, of transcendental or "metaphysic" unity.-- But, along the way, e.g., in our exposition of the categories, we touched on non-transcendental models of unity-in-the-quantity (order): think, e.g., of the measure in every ethically good property, by which that, in itself excellent property, is situated, i.e., seen in its relations or unity, with the rest.

**2.** The topical ideas 'collection', 'system (system):-- 'structure' (set of relations, preferably unchanging), they are outright applications (applicative models) of the metaphysical 'unity' (= similarity, coherence,-- analogy).-- For example, *D. Nauta, Logic and Model*, Bussum, 1970, 175vv., defines as follows.--

**a.--** The structure is the total (whole) or the whole network of relations between the elements (either of a mere collection or, sometimes distinguished, sometimes not distinguished, 'class' (= set) or of a system (system).

b.-- The collection (set) is the number (always expressible in some number) of elements, brought to unity in some structure (network of relations). -- Unity, then, that mutual similarity to unity (interchangeability) of the elements, in question, is

Think of all the marbles in a schoolboy's pocket, among themselves, insofar as they are marbles, interchangeable (alike), they belong to the (finite) class of marbles in the boy's pocket.

WDM    87.

Consider the famous Antique example.

*Eukleides of Alexandreia* (= Euclid of Alexandria (-323/-283), the founder of the famous School of Alexandria (professional sciences), in his *Elements of geometry* (thirteen books), treats, in books 7 to 9, Arithmetic (number mathematics). As in the other books, Eukleides begins here too, with definitions.

**a.** The first reads, "Unity ('monas', hence 'monad') is that according to which every being is called 'one' ('any')." What we, now, in set theory, would call 'element'.

**b.** The second definition reads, "Number (form), ('arithmos' (WDM 13) or 'collection') is the 'multitude' ('plethos') - understand: set - that arises by the aggregation of the 'units' (monads)."

In other words: 'number (form)' - in Euklidian mathematics - is, invariably, collection of at least two elements. For the Ancient Greeks, this is so true that they never conceived of the unit (= element) as 'number', but, essentially, as 'element' of a set.

*Bibl. stitch pr:*
*Fr. Krafft, Gesch. d. Naturwissenschaft*, I (*Die Begründung einer Wiss. v. d. Natur*), (History of Natural Science, I (The Foundation of a Science of Nature)), 319.

*Note.--* For clarity, one should, here, speak of "micro-unit" (element) or constituent and of "macro-unit" (collection, class).

**c.--** The system (system) is the set, the elements of which are not the same (interchangeable).

*Appl. model.*
One goes after the Paleopythagorean number form, as the so-called square numbers (quadrats) were drawn by the thinkers of the time. In themselves - -and independently of the FORM (here: in the geometrical sense) -- the dots are identical (collectively). But within the form, they are by no means uniform (arbitrarily movable): they are governed (WDM 7) by a 'principle', namely the demonstration to the pupils, thanks to correct arrangement (placement), how a square number is generated, constructed.



| 1 | 1 + 3 = 4 | 4 + 5 = 9 | 9 + 7 = 16 | 16 + 11 = 25 |
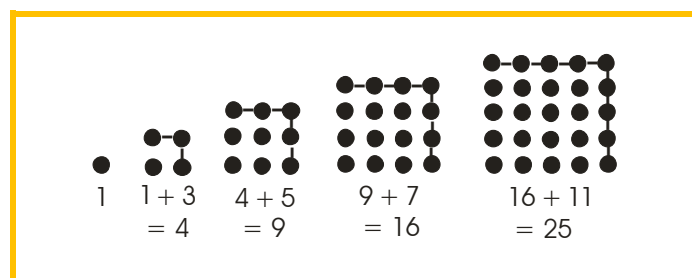
WDM    88.
*Bibl. Sample : Nauta, Logic and Model*, 26.

*Appl. model.--* One looks, attentively, at the biological body of e.g. a gold fly: every part or organ

**(i)** is an element of the 'collection' of parts (organs), which 'compose' the golden fly (and, in that very limited sense, 'any'),

**(ii)** is an essential constituent of the totality ('system'), which the goldfly, too, is (in this sense, each element is non-everything). The latter is seen in the fact that the wing, for example, cannot replace the function (operation) or role - in that same totality - of the legs. As soon as an element of a set cannot replace the role of another element, it is non-exchangeable (in terms of function). Thus that collection is a system.

### The idea "common characteristic.

All that has at least one property in common(s) is 'collectible'. In the case of the system stricto sensu (in the narrower sense, as we mean it here), the only common property of the elements is, usually, the fact that they belong to one and the same whole.

### Distributive and collective structure.

As soon as there is a relation, there is (minimal) structure. But beware : the (especially scientific) language concerning 'structure' very often means, with this term, the fixed, unchangeable ('invariant') relations. The context decides.

### (1).-- Distributive structure.
'Distributive' is, in Dutch terms, distributive.

### Appl. model.

In mathematics, one can replace the expression 'ax + ay + az' with 'a (x + y + z)'. This is a crystal clear example of distribution (spread, distribution) of one and the same element, namely 'a'. All that consists of singular (interchangeable) elements exhibits that distributive property 'any' part resembles the 'a' from the mathematical example. Thus, with Husserl (WDM 5), all that is 'red', spread (distributed) over all possible 'red' things, insofar as it is red, can be interchanged. That 'red' is al-general (common to all cases).

### (2).-- Collective structure.
'Collective' is 'communal' ('solidarity').

### Appl. model.

The fact that all the parts of the golden fly together collectively, 'collectively', 'in solidarity', make up the one fly, shows that, however different, among themselves, they also (i.e., not one and the same), exhibit a collective structure.

WDM 89.

*Note.--* Of course one can, with e.g. D. Nauta, o.c., 175, define the idea 'system' as "a collection with a structure". In that case, the collection of unary elements is "a system with a distributive structure". Matter of agreement!

### The antique Greek term 'su.stema'.

One should not think that systems theory (systematology, systems theory) is so new.-- The word (not the idea as we defined it above) 'sum.stema' (literally: 'assembly') - sometimes mere collection, sometimes strictly system - was used among other things as follows.

**1.--** *Physical.*

A bag of gems is what the Ancient Greek called 'sustèma'. The fact that the gemstones, gathered in a bag, show a coherence, justified the word 'sustèma'.

**2.--** *Biological.*

The body of plant, animal, man was 'sustèma': thus Aristotle ventures "to holon sustème tou somatos" (the whole system of the body).

**3.--** *Culturological.*

**3.a.1.--** Doctrinal 'doctrinal': a philosophical set of assertions (propositions) or, simply, a coherent exposition of ideas was called 'sustèma'. Still we speak, in that tradition of 'philosophical / scientific system'.

**3.a.2**.-- Aesthetically (artfully : a rhyme stanza, a musical chord (WDM 13) was called 'sustèma'.

**3.b.1.--** Sociologically: any group (grouping) of people (the crowd (mass),-- the association: guild, college, league (= covenant)) was "sustema".

**3.b.2.--** Legal : A constitution - the summary and arrangement of institutions - was called 'sustèma'.

*Conclusion: -* The practical and theoretical language of a term like "sustèma" points to a commonsense (WDM 15) systemic theory.

### Current system theory.

Not without particular influence was -- in 1954 -- the founding of the Society for General Systems Research, by Ludwig von Bertalanffy (1901/...), Kenneth Boulding (economist-sociologist), Rapoport,-- foundation, which resulted from years of awareness on the subject.

### Bibl. sample :

-- F.*E. Emery, ed., Systems Thinking* (Selected Readings), Harmondsworth/ Baltimore, 1969-1;

WDM 90.

-- *P. Delattre, Système, structure, -fonction, evolution* (*Essai d'analyse épistemologigue*), Paris, 1971;

-- *D.O. Ellis/ Fr.J. Ludwig, Systems Philosophy*, Englewood Cliffs, N.J., 1962.

Particularly inspiring, ontologically speaking, is *Leo Apostel et al, De eenheid van de cultuur* (*Naar een algemene systementheorie als instrument van de eenheid van ons kennen en handelen*), (The Unity of Culture (Toward a general systems theory as an instrument of the unity of our knowing and acting)), Meppel, 1972 (the activity of the mathematician, communication, artistry,--all this, by L. Apostel, situated in a systems theory).

*Note.--* According to *L.v.Bertalanffy, Robots, men and minds* (*Psychology in the Modern World*), New York, 1967, 61, the question of a general theory of systems sprang from a triple root:

**(a)** von Bertalanffy's attention, since the thirties,

**(b)** cybernetics or control science, which culminated in *Norbert Wiener, Cybernetics or Control and Communication in the Animal and the Machine*, New York, 1948-1,1961-2,

**(c)** the organizational needs in complex production processes (including man - machine systems, armament research etc.).

### *Current typology of systems.*

*D. Nauta, Logic and Mode1*,173v., distinguishes - fundamentally - three levels of system.

### 1.-- *Concrete (i.e., physical, biological, culturological) systems.*

A crystal (physical), an organism (biological), a factory (cultural) are 'systems', but different in level. Compare with the ancient Greek 'sustèma': the resemblance is striking.-- The relations (structure) are 'concrete': e.g. the binding energy in an atom (physical).

### 2.-- *Conceptual(i.e., comprehensible) systems.*

Examples: a mathematical point set, a (logical) number system;-- further: a diagram of something, an atomic model. Compare with the doctrinal or artistic "sustèma" of the Ancient Greeks.-- In these systems, relations are "conceptual" (o.c., 175). They exist "in a theory, on paper, as abstractions, constructions of the human mind."

### 3.-- *'Formal' or language systems.*

Examples: logistics (= logical calculus; WDM 2; 52; -- 40; 82), -- e.g., the logistics of judgments;-- a programming language for computers.-- Any language (sign system), in which:

**(i)** of concrete realities

**(ii)**a. a conceptual (conceptual reconstruction theory)

**(ii)b.** described symbolically (i.e., in a coherent sign system) is called a "formal" or "linguistic" system.--

WDM 91.

In such a system, the relations (structures) are "formal" (or, as Nauta describes, "syntactic") relations.

*Note.--* Semiotics (sign theory), originated by Charles Morris (1901/1970; philosopher of language), distinguishes, in a sign, three aspects:
**(1)** syntax (the analysis of the interrelationships of characters),
**(2)** semantics (WDM 2: application) (the analysis of the signifying (significative) value of signs, i.e. their relation to what they denote),
**(3)** the pragmatics (the analysis of the usefulness of signs,-- their use value).-- ....

A purely 'formal' (linguistic) system abstracts, therefore, both from the use value and from the meaning, in order, solely, to examine the interrelationships between the signs.

### Conclusion.

A survey of the main non-metaphysical unit types-think physical, biological, culturological, among which the "formal" are the most abstract-shows that, behind and in those nonontological unit types, a transcendental (omnipresent) unity (similarity, coherence) is at work.

Identifiers (analogy),-- concordists (= assimilists: similarity, coherence), differentists (difference thinkers: difference, incoherence; WDM 58).

It was to be expected: the thinkers split into those who emphasize analogy (ánd difference ánd resemblance; ánd coherence ánd disjunction among themselves) -- the identitivists, -- those who emphasize resemblance and coherence, with omission or underestimation of difference and disjointedness -- the assimilists, concordists,-- those who place the opposite emphasis -- the differentists.

### Appl. model.

*L. Vax, L'empirisme logique* (*De Bertrand Russel à Nelson Goodman*), (Logical empiricism (From Bertrand Russel to Nelson Goodman),), Paris, 1970, 10s.g leads us in.

"Atomism (*note:* one type of differentism) is opposite to Monism (*note:* one type of assimilism).

**1. *Monism*** holds that the universe is an indivisible reality. Spinozism (WDM 38) and Hegelianism (WDM 31) are samples of this Monism (...)" (o.c., 10).

WDM 92.

In the spirit of a mocking Russell, Vax characterizes Monism as follows. "An initial sentence, so e.g. 'I am an uncle' refers, of course, to the complementary (complementary) sentence have a cousin or a niece. But I can have neither nephew nor niece, if I did not also have a brother or sister and a sister-in-law or brother-in-law.-- But neither my brother (sister) nor I would be there, if we had no parents. Thus it goes on.-- No being, which inhabits this world, would, without the others, exist: every being refers to other beings,-- just as every piece of puzzle presupposes other pieces of puzzle.-- Thus no human being -- unless thanks to abstraction -- can think himself separate from the whole human world,-- human world, which, in turn, situates itself in the world of living beings. So on and so forth.

*Conclusion:* the individual individual is an abstraction. Only the totality is "concrete.

**2.** *Atomism*, on the other hand, holds that the universe is an aggregate of individual individuals, -- just like a pile of sand, with its individual grains of sand.-- Each grain of sand is a concrete reality. Precisely the collection of them, the sand heap, is an abstraction". Such an Atomism Bertrand Russell defended, at least to some extent (a physical Atomism, in the sense of e.g. Epikouros (WDM 77)).

*Note.--* When one recognizes the partial (and one-sided) value of both tendencies, one still cannot help but decide on the identitarian view (which, thanks to the idea of "analogy," values both aspects of reality).

### *Appl. model.*
*A. Akoun et al, La philosophie*, Paris, 1972-2, 112s. (Différence), distinguishes - what he calls - classical thinking, which, in and behind all differences (= minimal difference thinking or differentism), sees a profound similarity (similarity) (= strong assimilist aspect) on the one hand, and, on the other hand, current differentism which - as Akoun puts it - for the first time, attributed a real philosophical status (own nature of being) to difference. This thinking on difference dares to speak of difference (thus, among other things, of relations), but without resemblance (or without terms of relation).

WDM 93.

Akoun refers to Ferdinand de Saussure (1857/1913; founder of semiology (= sign theory; cf. WDM 91)).

In a language, which he sees as a system of signs, there are only differences without positive terms. In other words, every word, every word form, is, to a certain extent, incomparable with all others.

### *Criticism.*

Akoun, as differentist, exaggerates the scope of Saussure's difference thinking.

**(a)** It is true that he emphasizes the distinction in the language elements.

**(b)** But Akoun's interpretation is, among other things, inconsistent with the great role of analogy, which de Saussure ascribes to language formation: for example, a French-speaking child - by analogy with 'peindre' (painting) - will speak of 'viendre' (false analogy for 'venir' ('il vient' analogous to 'il peint').

The emphasis on the difference of cultures - emphasized as "incomparable" - is also found in other human sciences : Claude Levi-Strauss (1908/2009, Structuralist anthropologist) attributes an "own logic" (*note:* understood as a number of propositions with their conclusions) to the Primitive cultures (and emphasizes the difference with our, Western culture).

### *Bibl. sample :*
*Cl. Lévi-Strauss, Anthropologie structurale*, Paris, 1958.

Second Structural difference thinker is the Psychoanalyst (WDM 47; 58) Jacques Lacan (1901/1981; founded, in 1964, the Ecole freudienne de Paris,--on a highly individual basis): this time the difference (understand: the gap) is situated within the human subject (WDM 43) or being itself; as conscious beings, viz, we believe, easily, that we are not also determined by the unconscious in us (gap between I and unconscious),--which manifests itself in the language of men (consciously we want to say something, but, in that conscious language, the other (the other, the unconscious side) speaks in us.

Third Structural difference thinker: Louis Althusser (1918/1990; Marxist): (economic) history is determined - not by crystal clear similarities and correlations, but - by contradictions in the structure itself.

Furthermore, Akoun also refers to J. Derrida, G. Deleuze (and, of course, to Nietzsche; WDM 58).

WDM 94.

*Criticism.*

A relation without at least two terms which, through that relation, are connected, is literally a mental product (an "abstraction"): when "he" is smitten and "she" clings to him for his money, then there are two (and indeed two different) terms. We can, however, think of this mutual infatuation or love of money in isolation. But only as separated. Not as being present in full reality. Compare this with WDM 54 (impossible things we can think as impossible).

*Variational thought systems.*

*Hempel, Variabilität und Disziplinierung des Denkens*, Munich/Basel, 1967, 82/104 (*Variologische Denksysteme*), talks about that view, which, instead of biting into the unchangeable, emphasizes - unilaterally or methodically - change in reality.

He speaks first of all of the dialectic (WDM 34v.;-- 30v. (harmony of opposites)). He could, just as well, have been talking about the philosopher of genesis Nietzsche (WDM 72).

A variant is the new (which is different from the previous (the old)).

**a.** In this regard, *G. Deleuze, Différence et répétition*, Paris, 1972, may be quoted. "To repeat something is to behave, - and to do so in relation to something that is singular (unique) or 'singular' (exceptional) and possesses neither its equal nor anything like it." (O.c., 8). Steller means, apparently, the creative, i.e., founding something new, or creative repetition. In this sense, repetition is something other than the general, in its unchanging sameness, taking over, of course.

**b.** Also, *William James, Introduction à la philosophie* (*Essai sur quelques problèmes de métaphysique*), (Introduction to philosophy (Essay on some problems of metaphysics)), Paris, 1926, 179/187 (*Le problème de la nouveauté*); (The problem of novelty); 189/232 (*La nouveauté et l'infini*); (The novelty and the infinite); 233/271 (*La nouveauté et la causalité*), ((Novelty and causality), here, may be cited.

*Incidentally:* W. James is strongly a plurality thinker: L' un et le multiple (o.c.,139/163) deals with the tension between pluralism and monism (similar to Russel's pairing 'atomism and monism'; WDM 91v.).

*Conclusion:*

An 'intentio' (attitude), peculiar to man, is to order, i.e. to distinguish the unity in the many (the different) and, conversely" to distinguish the multiplicity in the one (the undifferentiated). This is best done in analogy (identitative thinking).

WDM  95.
Ethico-political (= humanities) corollaries.

**(a)** A corollary is, here, a proposition (sentence, judgment), which follows, immediately, from a preceding one (here: the soundly conceived differentism).

**(b)** 'Ethical' we have interpreted, WDM 30; -- 56v.:60v., as 'all that pertains to conscientious conduct'.

'Political' is the Antique Greek word for all that has to do with the social side of ethics (something, which we, under the name 'law' (WDM 60v.), have discussed).

"'Humanities' ('sciences humaines') is a term, which, in education (*note:* the proposer is talking about French education), emerged, around 1950, and was situated in the department 'Letters'.

It has been postulated that the human sciences cover the field (=area) of what, beforehand, were called 'moral and political sciences'" (*G. Legrand, Vocabulaire Bordas de la philosophie,* Paris, 1972-1,1986-2, 306).

The pure human sciences differ, however, from the time-honored ethical-political sciences in that they attempt to be "value-free" (i.e., beyond any ethical-political concern), i.e., "positive" (WDM 19) (which they do not always succeed in doing).

**(1)** *Corollary 1.*
*J. Ulmann, La pensée éducative contemporaine*, (Contemporary educational thinking,), Paris, 1982, 101/103 (La non-directivité (Rogers)), relying a.o. on *Freedom to Learn* (1969), explains how for Carl Rogers (1902/1986), non-directive action (do not confuse with 'non-intervention') is one of the main ingredients so that each member of the group (encounter group) can 'be himself'. This 'being oneself' is, apparently, being different from the other (which, in this case, is the client or the pupil(s)), seen from the teacher's perspective ('benefactor; 'affirmer').

Differentism - if conceived soundly (analogically) - is, here, presupposition of the Rogersian method.

**(2)** *Corollary 2.*
*A.C. Zijderveld, Institutionalization* (*A study of the methodological dilemma of the social sciences*), Hilversum/ Antwerp, 1966, explains how, since Emile Durkheim (1858/19174) and Max Weber (1864/1920), sociology (one of the human sciences) has been divided into two methods.

WDM 96.

**1.** The first object of sociology is, for Durkheim, the totality of the structure of society, in which the acting individual, embedded in the institutions (institutional aspect), can develop himself. Sociology should, therefore, above all not be a psychology.

This position, which emphasizes the structure of institutions, was further developed by the Functionalist human scientists (the cultural anthropologists Bronislaw Malinowski (1884/1941; founder of social anthropology), Alfred R. Radcliffe-Brown (1881/1955; one of the founders of Structuralist (WDM 93) anthropology),-- further the American sociologists Talcott Parsons and Robert Merton).

**2.** The first object of sociology, for Weber, is the individual human being and his actions in a social context (within the so-called structures). - The institutions are forms (WDM 28: essence form,-- here interpreted socially) of action in society, but they are not first-rate, as with Durkheim and the Functionalists.-- Weber, incidentally, started from Phenomenology (WDM 44; 70).

*Note.---* This, for the positive or purely professional sociology.-- Zijderveld, o.c.,15, adds, to this, that an analogous dichotomy is found in philosophical (and thus axiological) sociology:

**(a)** Arnold Gehlen (1904/1976) argues that an individual human being can unfold his creative and free personality, only in a comprehensive 'structure' of institutions (he is, therefore, against (what he calls) 'Existentialist subjectivism' (WDM 16; 63));

**(b)** Karl Marx (1818/1883) -- especially, then, the young and revolutionary Marx -- is, of this, the antithesis: man freed from the grip of institutional structures is first-rate; for, these structures alienate man from himself to a "thing," indeed, to a commodity (within the established economic structures).-- Which need not yet become "Existentialist subjectivism.

*Note.--*"Sociological organicism," in which the whole takes precedence over the parts, is another name for totality or functionalist thinking (from Durkheim,-- Gehlen).

*Note.--* The contradictions, briefly outlined above, also occur in social ideologies (WDM 18): there is liberalism (individualism,-- Libertarianism) and collectivism (socialism,- anarchism). With Christian solidarism as the identitarian ideology.

WDM 97,
**II.-- *Harmology.***

***Introduction.***
**(1)** We know, now, **a.** what philosophy and **b.** what ontology is. The sense of totality (unity in multiplicity), expressed in two terms - 'reality' (i.e., all that is substantial, no matter how) and 'being' (i.e., all that is, resp. is, no matter how) - governs, after all, logical behavior.

**(2)** Especially harmology (i.e. the elaborate unified theory) is, for logical behavior, essential. *Josiah Royce* (1855/1916; Idealist thinker), in his *Principles of Logic*, New York, 1912-1 (1961), 9, says that logic is a normative (rules working out) science, but that he, in his little work, will make every effort to show that traditional, so-called 'formal' (i.e. concerning the form of beings) logic is a part of '*The Science of Order*'.

For this very reason we dwelt more extensively (WDM 82/96) on the fundamental insights of every order and order theory (the so-called transcendental unity theory).

**1.** With *R.A. Koch, Die Uraxiome in ihrer Bedeutung für die philosophischen Grunddisziplinen*, (The uraxioms in their significance for the basic philosophical disciplines), in: *Tijdschr.v.Filos*. 31 (1969): 4, 749/766, we express this - once more in summary - as follows.

**(a)** There is a universe (*op.:* total reality) with all its parts. All that is called 'being(de)' is either a part of the universe or that universe itself.

**(b)** There is a universe with all its parts. All that is called 'being(de)' has validity ('applies') either as part of the universe or as that universe itself.

It should be noted that the second formulation is the axiological one (WDM 74/81): validity doctrine is value doctrine.

**2.** With the dialecticians (from Herakleitos of Ephesos to the current "scientific" dialecticians, such as Ferdinand Gonseth (1890/1975; mathematician and dialectical thinker)) one can speak of
**(a)** a universe called "totality," and
**(b)** are "moments" (i.e., parts wrapped in a process of becoming).
Every dialectic (WDM 31) is a doctrine of order and arrangement,--and this in an essential way.

***Bibliogr. stitch pr.***
-- *Descamps, La science de l'ordre* (*Essai d'harmologie*), in: Revue Néoscolastique, 1898, 30ss.,
-- *Franz Schmidt, Ordnungslehre*, Munich/Basel, 1956.

WDM 98.

-- Schmidt, o.c., 11, says: "The entire metaphysics (ontology) of the West -- from Platon of Athens (-427/ -347) to Friedrich Nietzsche (1844/1900) -- can be seen as order or ordering science

*Consequently,* every metaphysical system occurs as one of the many ways in which one can imagine order(s)."

-- *Jean-Pierre Dupuy, Ordres et désordres* (*Enquête sur un nouveau paradigme*), Paris, 1982 (in which, on the basis of figures such as Francesco Varela, Henri Atlan, René Girard, Cornelius Castoriadis, Heinz von Förster, Ivan Illich, basic insights such as 'ordering coincidence', 'order in virtue of noise (= disorder), 'self-ordering' (auto-organization) are brought up for discussion).

**a.** *Note* -- According to the Schmidt mentioned above, *S. Augustine* of Tagaste (354/430; greatest Western Church father) was the first, who wrote a deliberate and distinct order(s) doctrine, entitled *De ordine* (On the Order(s)). The great saint was, then, in 386/387, a baptismal student, preparing for his Christian baptism.

*As an aside,* in his historiological (philosophy of history) work *De civitate Dei* (On the State of God) he defines as follows : "Order is that configuration (*op.:* insertion of places, placement, situating), which, to the - by comparison - identical ('parium') and non-identical ('dis.parium') data, designates their due place".

Here S. Augustine was inspired by the great orator Cicero (-106/-43), who, himself, was still in the great Antique Paleopythagorean-Platonic tradition (WDM 13: geometric form), in which situating (WDM 85; appl. mod. 87) is central. Yet the terms 'identical/non-identical' show that analogy (WDM 3) was the basis.

**b.** *Note* -- Yet Schmidt must be corrected: *Aristotle*, in his *Katègoriai* (Lat.: Liber de praedicamentis (WDM 83/85), i.e. fundamental concepts, sets out, first, how we denote in terms (well-defined words) the being; then he talks about the ten categories;

Finally, he develops his hypothesis, i.e. doctrine about the main constituents (Platonic: partial ideas) of categories:
**(i)** Opposite pair,
**(ii)** Sequence/simultaneity,
**(iii)** movement (= change).
Which involves a harmology, of course.

WDM 99.

This is evident, abundantly so, in *Aristotle's Metaphysics*, *Book Delta*, where the Stagirite (= Aristotle) lays out a kind of lexicon of basic harmological ideas: one/ many, same/ not-same, difference/ equality/ inequality, opposite, earlier/ later, quantity/ quality, relation, completeness, boundary, configuration, whole/ part, etc.

**c.- *Note.--*** Even much earlier than Aristotle, the ancient Greek thinkers were harmologists.-- A single tip that lifts that veil:

"If someone was able to resolve (note: 'collections') all thoughts into one and the same principle ('archa' (= archaic Greek); WDM 7) (*note: to* trace back to it: 'analusai') and, starting from that one principle, to compose again ('sun.theinai kai sun.arthmèsasasthai'), then - so it seems to me - such a one is the wisest (WDM 4), - equal to the one who possesses all truth as a share,-- equal, also, to the one who takes a standpoint, from which he can know God and, at once, all things, as God has joined them together (WDM 13: harmony),-- this, according to (the model of) the pair of opposites ('en tai su.stoichiai') and the order(s) ('kai taxei')". (Thus the Paleo-pythagorean Archutas of Taras (= Archytas of Tarentum; -400/-365).

Although older contemporary of Aristotle, Archutas belonged to the Pythagorean (i.e. older) tradition of thought.

**d. *Conclusion.***
Reread, now, WDM 7, and thou hast the oldest (known) order(s) idea, viz. the idea 'principle'-- Incidentally: Archutas uses the term explicitly --.

**1. *'Principle'*** is, in that ancient language, that which governs a thing (and, therefore, that which must be taken into account, if one
  **(i)** wants to understand correctly and
  **(ii)** to treat correctly (i.e., theoretically and practically)).-

This is one application of what Aristotelian calls "action" (activity) (WDM 85): to control is active, to be controlled is passive.

One can, also, express this purely logically: "if one knows (and, as the case may be, controls) the controlling (principle), then one knows (and, as the case may be, controls) the controlled.

**2. *'Principle',*** is, praxeological (= action theoretic), the (proposed) goal set by someone acting.

**a.-- *Teleological (finalistic) order.***
Kard. Désiré Mercier (1851/1926), the great Neoscholastic, in his *Metaphysique générale* (*Ontology*), Louvain/ Paris, 1923-7, 536, says:

WDM 100.

"To order is to take data one after another and place them (= situate (wdm 98)) according to the same unifying principle (...). the order(s) is the unity in the multiplicity or, still, the unity in the diversity.

One sees the most general order(s) idea! -- But see how Mercier applies this teleologically: "Order is the placing (*op.:* arrangement) so that different data are, each in its place and correspond to their respective (= each one their own) purpose. Shorter: order is the precise arrangement of data according to the relations which their purpose imposes on them". (o.c., 539).

This functional view, on order theory, emphasizes purposefulness.

### b.-- *Organic (organismic) order.*

What is called 'the German school of history' (with names like F.K. von Savigny (1779/ 1861; jurist), its founder, *K.F. Becker* (with his *Organismus der Sprache* (1827-10841-2), Jakob Grimm (1785/1863; with his brother Wilhelm, the founder of Germanic philology), Leopold von Ranke (1795/1886; the leading figure in German XIX-th century historiography, e.a.), -- school, which, instead of the unhistorical (untraditional) thinking Enlightened Rationalism, in the spirit of German Romanticism, the idea 'life' (a.o. This school, therefore, defines 'organic' (now also 'organismic', WDM 96) as follows: the collection which controls the singular element, indeed the system which controls the individual parts and aspects, is the goal which defines, i.e. 'determines' (controls in its reality), an 'organic' reality, whether this organic reality be a legal system, a people, a culture, a language, a fairy tale, a historical movement or whatever it may be.

### *Conclusion.*

The "organic" of the German Historical School is one applicative model of what Mercier conceived of as teleological order(s).

A clear application, literatological (literary): "Unity, though clearly delineable against diversity, is, without it, inconceivable,--this, both in artistic and philosophical fields" (*J. Loise, Les secrets de l'analyse et de la synthèse dans la composition littéraire*, (The secrets of analysis and synthesis in literary composition,), Mons, 1880, 3).

Or still: "The unity is only the complete condensation ('condensation') of several elements into a harmonious whole." (Ibid.; incidentally: o.c. 11/22, is entitled "Le principe de l' unité dans la variété"), (The principle of unity in variety").

WDM 101.

It should be noted that 'unity', here, is indeed and general and teleological (praxeological) to be understood: a writer of a literary work (lyrical, epic, dramatic,--didactic) has a goal, into which he 'condenses' all the elements of his work.

### *Note -- Taxeology.*

Sometimes one hears, well, the name 'taxeology' for orderliness. Did (WDM 99) Archutas not speak of the model 'cabs' (arrangement or ordering).

Just read the traditional grammars: they talk about the 'independent sentence' and the 'dependent sentence'. -The principle (that which governs) is both the arrangement of words (at least one subject and one proverb ('nominal and verbal component; Chomskyan) and the arrangement of sentences, resp. full sentences.

In both cases there is juxtaposition (parataxis) and subordination (hypotaxis). Which is directly an application of the distributive and collective structures (WDM 88). Together, the para- and hypotaxic structures form the thinking framework of syntax (cfr WDM 91).

***Note.--*** *Ludwig von Bertalanffy, Robots, Men and Minds* (WDM 90), 53/ 115 (*Toward a New 'Natural Philosophy'* , *The Open System of Science*), like the German Historical (and Romantic) School, opposes the mechanical model, springing from Enlightened rationalism. The world (understand: the universe) "as organization" (as organized, or ordered; o.c.,57) is the new, professional scientific viewpoint. But the new is "organized complexity" (ordered complexity; o.c., 58) on "all levels of reality and science" (using as examples: the atom (physical), the living being (biological), "psychosocial mass phenomena" peculiar to our present culture (culturological), the recent technologies (technological; o.c.,58f.)).

Only way out: a general systems theory (o.c., esp. 61ff.). On p. 64, von Bertalanffy very clearly distinguishes two levels (levels) of system: the mechanistic (cybernetics) and the 'organismic' (v. Bertalanffy's style).

WDM 102.

Again, just in Dupuy's *Ordres et désordres* (WDM 98), that subject-science conceived order(s) concept.

It is so topical that la Radio romande Espace 2 (Switzerland) has brought together the two world-renowned figures, the semiologist (text theorist*) Umberto Eco* (1932/2016), author of the novel The Name of the Rose, which has been translated into more than twenty languages so far (and, by now, *The Name of the Rose*, on the one hand, and, on the other, the Nobel Prize winner *Ilya Prigogine* (1917/2003) with *Isabelle Stengers*, author of *La Nouvelle Alliance*, Paris, 1977 (a "new alliance" between man and nature is intended, in virtue of the latest natural scientific insights), united around the theme of 'chance and renewal'

### *Bibl. st.:*
-- *H. Jans, Order out of disorder* (*Ilya Prigogine, Belgian Nobel Prize winner in chemistry 1977*), in: *Streven* 1978:March, 527v..

-- *Fr. Boenders, Prigogine and Wildiers on Teilhard de Chardin* (1881/1966; paleontologist; evolutionary thinker), in: *Streven* 49 (1982): 10 (July), 930/941, writes among other things:

Ilya Prigogine: "(...) Our time is indeed characterized - and this will become even more evident at the end of this century - by a search for unity in diversity. One of those who best understood the necessity of this search for unity, which goes beyond the realm of science, was precisely Teilhard: he saw, in the concept (= concept) of 'time' (the concept of 'evolution'), the element that would make this unity possible. Thanks to, viz., time and evolution, things, which, at first sight, seem very different, can be joined together." (A.c., 930).

### *Our psyché and ordering.*
**1**. *R. Declerck, Dr. Olga Quadens*, "*This is how you should be able to work*", in: *Eos* (Techn. for Man), 12 (1984: Nov.), 119, explains that human consciousness and sleep (especially then some, very similar to waking states (rem sleep)) go together. "(...) There is a certain relationship between the higher and the lower rem frequencies (*note:* rem = Rapid Eyes Movement).

This ratio should be viewed as a ratio of order to noise. ("noise," WDM 98). This indicates that our brain is a self-organizing system, which creates order from noise. This relationship is peculiar to the human species. Our brain is a self-organizing system, creating order out of the chaos of our perceptions. This happens, especially, at night, during rem sleep.

WDM 103.

One important observation of our experiment is the strong increase in brake activity in our subject Ulf Merbold, during the first two sleep periods of his stay in space,--at a state of zero-gravity, that is." (Thus O. Quadens in the interview; a.c.,119).

Dr. O. Quadens goes on to say, "Biochemists see the workings of the brain too much as a biochemical whole.-- Admittedly, we see the brain as a biochemical structure, within which information circulates. But there is much more: the observations, which man acquires during the day, are, during the brake sleep in this skeleton arranged and ordered" (Ibid.).

It should be mentioned that Dr. Olga Quadens has often worked with astronauts, in the preparation phase.-- This gives a thoroughly different picture regarding the dreams e.g., seen from Freudian dream explanations. Or from the dream analyses (paranormal).

**2**. *Liesbet Van Doorne, Schizophrenia can be cured in many cases*, in: *De Nieuwe Gids* (Ghent) of 07.12. 1984.

Following a study day, at Kortenberg, held among domestic and foreign experts, was:

**(1)** established that schizophrenia (split personality) -- someone who thinks he is Napoleon, for example, is a very small example -- in its diagnosis and treatment, still depends too much on unknown factors,

**(2)** was further defined as "the disease in which one isolates oneself from reality". "It is a psychosis (note: the disease of the soul, distinguished from the ordinary neurosis ("nervous disease") and from psychopathy), which arises, because one, in the disorder of his life, wants to create order. One can no longer run along with the order of the life in which one finds oneself, and one adapts one's own order.

Perhaps this explains the fact that schizophrenia occurs, in the main, in young people from the age of sixteen: it is then that many demands are made on the person. One has to build relationships, designate a career. The relationship with the familiar family starts to change. All this gives rise to confusion and tension.

The disease manifests itself (...) because the young person isolates himself and, for example, can no longer keep up at school.-- Or: who is already at work, can no longer meet the demands there.

WDM 104.

In the attempt to create order in one's own life - which, therefore, no longer conforms to the order of life around it - thinking is disturbed and one enters psychosis.

Expressions of schizophrenia include delusions ("I get irradiated when the radio plays"), hallucinations ("One hears voices"; WDM 49), and stress (*note:* nuisance feeling).

One loses contact with the environment. The emotional life becomes blunted. There is a loss of initiative. One withdraws into one's own 'inner world'. This results in mutism (not speaking) and a deviant body-motor (i.e. either a total lack of movement or an exaggerated and frequent repetition of a certain movement).

Here is an excerpt from the article in question. It proves that we, with our harmology, are addressing much more than one basic chapter of logic. Ordering is a vital or existential (WDM 16;63 (the schizophrenic 'designs' his/her own order, not (quite) in accordance with the order, into which he/she is 'thrown') 85 (the schizophrenic/ schizophrenic 'situates himself/herself' in such a way that his/her own 'situatedness' is not (quite) done justice)).

### II.A.-- *Harmology: the comparative (comparative) method.*
*Friedrich Max Müller* (1823/1900; religious scholar), *Address at the International Congress of Orientalists* (14/21.09.1874), in: *Chips,* iv: 343, said:

"The comparative spirit is the truly scientific spirit of our age, nay of all ages" (The comparative approach is the truly scientific approach of our age, - what am I saying? Of all ages).

### *Bibl. stitch pr:*
-- *L. Davillé, La comparaison et la méthode comparative* (*en particulier, dans les études historiques*), (Comparison and comparative method (especially in historical studies)), in: *Revue de synthese historique* xxvii (1913): 4/33, 217/257; ibid. xxviii (1914): 201/229;
-- *H. Pinard de la Boullaye, S.J., L' étude comparée des religions* (*Essai critique*), (The comparative study of religions (Critical essay),), II (*Ses méthodes*), Paris, 1929-3, 40/87 (*La méthode comparative*);
-- *M. Foucault, Les mots et les choses* (*Une archéologie des sciences humaines)*, (Words and Things (An Archaeology of the Humanities), Paris, 1966, 66ss. (*Descartes' theory of order*);
-- *I. M. Bochenski, O.P., Philosophical methods in modern science*, Utrecht / Antwerp, 1961, 149/155 (*The methods of Mill*);
-- *H. van Praag, Measuring and comparing*, Hilversum, 1968 (quantity/quality; addition, topological arrangement and sequence; counting, weighing and measuring; gradation, interval measurement and time measurement).

WDM 105.)
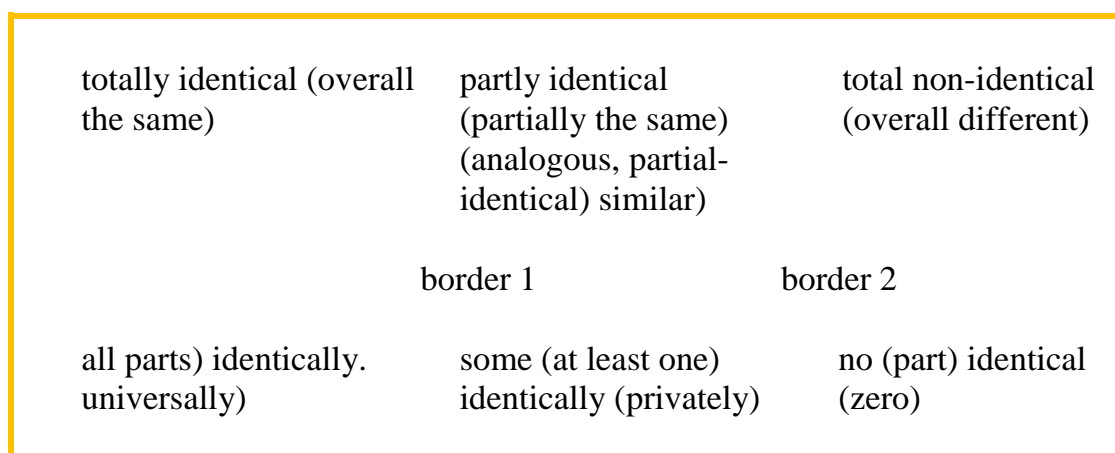### The ground insight: the comparison differential.
**(1)** What the Ancient Greeks called 'dia.stèma', intervallum, interval (interval), is in a sense, the ground plan of all comparison:

| outside | between (= inside) | outside |
|---|---|---|
| border 1 | | border 2 |
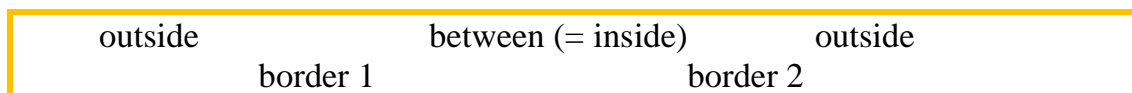
Expressed in terms of 'arrangement', this is an in-between arrangement : all elements within boundary 1 and boundary 2 have a common property of being situated between (within) them (WDM 85).

*As an aside,* this scheme is one of the components of topological structure : think of a coherent ball of clay, which one deforms (it stays within, between, its extreme kneading and deformation limits).

**(2)** The equation differential is an application of the interval scheme;

| totally identical (overall the same) | partly identical (partially the same) (analogous, partial-identical) similar) | total non-identical (overall different) |
|---|---|---|
| | border 1 | border 2 |
| all parts) identically. universally) | some (at least one) identically (privately) | no (part) identical (zero) |

*Note.--* A differential is, in passing, a set of, "values" that is positive on the right, e.g., and negative on the left. Clearly, a differential of that type is an identitive (WDM 82) data.

A brief historical review shows that the duality (systechy) 'identical/non-identical' is ancient.

**(i).-- *Antiquity.***
The Paleopythagoreans (-550/-300) worked with the 'su.stoichia' (opposition pair) 'tautotès/ heterotès' (identitas (identity)/ alteritas (difference).

*Bibl. sample : O.Willmann, Gesch.d.Id., I, 273.*

Platon of Athens (-427/-347),-- his pupil Aristotle of Stageira (-384/-322)--in the Paleopythagorean tradition--also worked with this pair of opposites.

WDM 106. 1,
**(ii).-- *Scholastic*** (800/1450).

Mid-century Church philosophy continues the Antique, pagan ideas of "identity/non-identity.

**(III).-- *Modern and contemporary philosophy***.

**(1)** *R. Descartes* (1596/1650; founder of typically Modern thought) was convinced that "most knowledge is achieved by comparing at least two 'things' ('choses') (in his *Regulae ad directionem ingenii, xiv*); he goes on to say that one must analyze in terms of identity and difference ('en termes d' identite et de différence), of measure and order(s)." (*M. Foucault, Les mots et les choses*, 66). So much for the pre-eminent representative of pure rationalism.

**(2)** David Hume (1711/1776; top figure of empirical rationalism), associationist thinker, where it is about comparison, thinks that it is possible for us to associate (i.e. experience as connected) 'elements' (from internal or external experience ('empiricism'), thanks to similarity and adjacency (= apposition; contiguity; connexity; contact), as well as thanks to the order 'cause/effect'.

Although typically French in spirit (mentality), Auguste Comte, (1796/1657; founder of professional scientific Positivism) also thinks that - what he calls - the facts, "elements" alike, are associated (// Hume) according to their similarity (synchronical) and their succession (diachronic).

Bertrand Russell (1872/1970; the champion of human rights) also thinks in the same tradition.

**(3)** *Edmund Husserl* (1859/1938; founder of intentional Phenomenology) - in his *Philosophie der Arithmetik*, (Philosophy of Arithmetic,), The Hague, 1970 (1891-1) - begins with the ideas multiplicity and unity, as well as number.

**(4)** Now to quote a professional scholar: *Arnout Ceulemans, On symmetry*, in: *Our Alma Mater* 1987: 2, 107/116, starts by citing Platon's thinking and says that "the elements of the concept of symmetry are identity and differentiation, that "in a regularity, there is always something that is preserved (*op.*: identical), alongside something that changes (non-identical)." A.c., 106)

***Conclusion.--*** Some celebrities show that comparing was always topical.

WDM 106.2.

### *The universals as an applicative model.*

In traditional logic, general concepts (WDM 5) are called 'universalia' (universals). But, in a narrower sense, that term means (what e.g. Aristotle designates as) 'katègoroumena' (categoremen, Lat.: praedicabilia, predicabilia).

These are not to be confused with the categories (WDM 83/85), which are sayings, in a sentence. 'quinque voces' (five predicabilities). -- The universals, strictiori sensu, are:

**(1)** genus (genos; Lat.: genus, -- similar to our current 'universal collection' think 'human');

**(2)** species (eidos, Lat.: species,-- similar to our private or subset, think 'negro woman' (as a kind of 'man'));

**(3)** specific or specific difference (diaphora eidopoios; Lat.: differentia specifica;-- think of 'black-skinned', as that difference relative to 'human,' by which a 'negro woman' constitutes one kind of 'human.' 'Black-skinned' is a common characteristic of all that is 'Negroid', and by which 'Negroid' is distinguished from the much more general 'human'.

*Note.--* The two other predicabilities -- 'property' (proprium; characteristic) and 'coincidence' (accidens; accidental property) -- are, here, of more subordinate importance : one thinks of 'black-skinned' as the 'essence characteristic' (WDM 28: forma) of 'negro woman', while 'beautiful and lovely' applies only to some individual 'negro woman' (accidental property).

Or with a life-narrower example: the principal has as a 'property' (essence characteristic, e.g. 'school leadership', while the fact that he has a beard is an 'accidens' (an unessential trait).

But, for which the accidental is essential, that is for idiography (WDM 5) : 'school management' is essential for 'principal; wearing a beard' is essential for this (individual, singular) principal, here and now (the 'hic et nunc').

*Conclusion.--* Note that the distinction between the five predicabilities rests on the comparative method.

**(1)** The term "specific distinction" in itself, already, proves comparison (the universal with the private collection).

**(2)** The terms "property" and "accidental property" (as a pair) point to the difference "universal/ individual

WDM    107.

***The comparative method, in more detail.***

**a.** *R. Descartes,* in his *Regulae ad directionem ingenii*, xiv, says:

**(1)** "If one disregards the contemplation ('intuition') of a separate reality,

**(2)** then - it can be said - through the comparison of at least two realities among themselves, one obtains all knowledge." (*M. Foucault, Les mots et les choses*, 66).

In doing so, Descartes notes that there is comparison by order and comparison by measure (about which later).

**b.** *L. Devillé, La comparaison*, in: *Revue, xxvii* (1913), 23, says:

**(1)** "Instead of dealing with individual cases, when it comes to dealing with phenomena or objects,

**(2)** the comparative method seeks to highlight collections ('ensembles') that are either **(i)** similar **(ii)** or complementary."

In other words: as was shown in the brief analysis of the predicabilia, so here too: the idea of collection is a 'proprium' (essence trait) of comparison: those who compare do so within collected data.

***Typology (species description) of comparison.***
There are, of course types of comparison.

**a.-- *The internal and external equation.***
L. Devine notes that. A given fact - e.g. an ant - can be compared internally: in that case the comparator analyses e.g. the parts of the ant's body. But the same ant can be compared externally : then one situates it within the ant's nest e.g..

***Augustinian Social Criticism.***
S. Augstinus of Tagaste (354/ 430; the greatest church father of the West) had enormous regard for the fact that Rome, as a world empire, had founded a kind of legal order and "pax romana" (the Roman peace). To his critical eye of Platonic Christian, who sharply distinguished the ideal (WDM 50v.) from the factual data, made him write:

"The order and justice, which the Roman state founded, amount, in the end, to a laughable imitation ('caricature'), to a degenerate form - unholy in nature - of a natural and Christian (WDM 17) order." (*Fr. Ferrier, S. Augustin*, in: *D. Huisman, dir., Dict. d. philosophes*, Paris, 1984, 141).

WDM 108.

Behind the mask of Roman rule of law and peace are forms of injustice and violence:

(1) in an outward comparison, S. Augustine notes that the Roman state (community) revels in the war profits, result of the imperialist wars to the outside;

(2) in an internal comparison, he notes that, within the Roman empire, a possessing class accumulates more and more wealth,--basis of a life of enjoyment (a kind of Antique "Dolce vita").

Both comparisons go hand in hand, by the way: there is a connection between imperialism and the capitalism of the Roman ruling class. All those who do not accept such conditions, labelled as 'happiness', are branded enemies of the state:

a. the possessing class must plug their ears to those who denounce the abuses, - as advocates of the absolute - free right of ownership ("Ius utendi et abutendi", the right to use and abuse);

b. all those who do not accept such a state of affairs (and say so aloud) must, as exiles, weeds alike, be exterminated and banished from the community (De civitate Dei 2/20).

### Conclusion.

Platonic idealism (better: theory of ideas), Christianized by Patristics (Church Father philosophy), always compares facts ( called "phenomena") with ideas (what we call "ideals"). The comparative method is, really, built into Christian Platonism.

### The Grossian Principle.

A second applicative model of internal and external comparison (analysis) is 'des Grosse'sche Prinzip'. Notably: *E. Grosse*, in his *Die Anfänge der Kunst*, Freiburg i. Br., 1894, and, more so, in his *Die Formen der Familie und die Formen der Wirt(h)schaft*, (The forms of the family and the forms of the economy), Fr.i.Br., 1896, defends - in a non-Marxist way - the following heuristic principle (= working hypothesis, finding model):

"Economic activity (a) is the life center of every cultural whole, (b) is - in the most profound and irresistible way - the main factor (antecedent, cause or, at least, partial cause) of all other cultural factors."

Grosse explains, somewhere, his thesis with a famous phrase from Ludwig Feuerbach (1804/1872; radical-left Hegelian).

*Jakob Moleschott* (1822/1893; mechanistic materialist), *Lehre der Nahrungsmittel für das Volk* (Teaching of food for the people), (1850), after being read by Feuerbach, in his Natural Sciences and Revolution (1850), summarizes:

WDM 109,

"If thou wilt improve the people, give them better food, instead of going out against sin: 'der Mensch ist was er isst' (man is what he eats)" (*H. Arvon, La phil. allemande*,188).

Grosse indicates this as follows: "Wenn man weiss was ein Volk isst, so weiss man auch was es ist". (If one knows what a people eats, then one knows, immediately, what it is).-

### *Conclusion.*

It is clear that within the system (WDM 87vv.) of total culture, internally compared (analyzed), the factor ('principle'; WDM 7) economy (production and consumption of vital goods especially) is a main factor, which can control total culture.

One can express this even differently: culture is the "hypersystem" (supersystem), of which the economy, as a part, is the "hyposystem" (subsystem).

### *A culturological model.*

*W.Koppers, S.V.D., Die materiell-wirtschaftliche Seite der Kulturentwicklung*, in: *Settimana Internazionale di Etnologia Religiosa* (The material-economic side of cultural development), (IVa Sessione (Milano: 17/25. 09. 1925)), Paris,1926, 109, gives - in the spirit of Fr. W. Schmidt, S.V.D. (1868/1954; known for his idea of "primal or primitive monotheism"), whom Grosse, in his religion historical research, joined - following applicative model.

### (a).-- *Internal equation*

**1.** In general, we see how, in modern Europe, the legal position of women is undergoing a serious change: for example, today (1925), women often have the right to vote, the right to university studies, the right to a free choice of career (...), -- things which, decades ago, were non-existent for them.

**2.** "Who would, now, misunderstand or, even, deny that the Modern - in particular : capitalist - development of the economy is, in the first place, to be blamed for that attribution?". In other words: woman and economy are two hyposystems, within the hypersystem 'culture'. Comparison reveals that both subsystems are interrelated.

### (b).-- *External equation.*

Many data indicate that once upon a time, in Archaic cultures, maternal law (matriarchy), emerged in substantially similar ways (i.e., on the basis of well-defined economic states).

WDM 110.

*Note -- We are* dealing here with the mother law (matriarchy), i.e. a legal system in which the authority rests, in the main, with the woman,--especially with the mother of the family and the family. This must have been the case in certain Archaic-early civilizations, in which the first-class role of women in the economy immediately established their first-class role in the whole culture.

**b.-- *The measuring equation (the measurement model).***
L. Davillé, a.c., xxvii (1913), 20, says:

"The comparison can be either direct or indirect.

**a.--** One can, namely, confront at least two data directly (without detour) with each other, without a third data.

**b.--** Should one, however, in order to compare them, introduce at least a third data, one is dealing with indirect comparison. That is precisely the case whenever a common measure is used.

***Geometric applicative model.***
The first axiom set forth by *Eukleides of Alexandreia'* (-323/-283), in his *Stoicheia* (Elements) is one application:

"Data that are identical with the same third data are identical with each other. This axiom, which is valid not only geometrically but also numerically, can be expressed in characters: "If A and B are equal to C, then A and B are equal to each other". (Cfr l. brunschvicg, *les étapes de la philosophie mathématique*, (the stages of mathematical philosophy), Paris, 1912-1, 1947-3, 88, -- where the correct interpretation (spatial or purely logical) is discussed).

***Conclusion:***
One can call C the "mate" (common model) of A and B.

*R. Descartes* (1596/1550), *Regulae* xiv, talks about the comparative nature of Eukleides' axiom:

"By means of comparison we find the figure (*note:* external form of a body), the expanse, the movement and the like more - in other words: the singular natures - in all the data, in which they can be present.

On the other hand : given a derivation of the type "Every A is B; every B is C; so every A is C".

It is clear that our mind compares the given and the sought term, namely A and C, among themselves, yet under the point of view that both are B." (*M. Foucault, Les mots et les choses,* 66).

WDM 111.

### The and subjective and objective nature of the measure.

*H. van Praag, Measuring and comparing*, 7, writes:

"As demonstrated by the French mathematician Henri Poincaré (1854/1912),

**(a)** The choice of measure a subjective,

**(b)** the use of the once chosen measure an objective.

### Appl. model.

**(a)** It depends on my free choice whether I measure a traveled way in meters, yards (three feet = 0.9144 m., this, since 01.07.1959) or vadems (une toise, i.e. six feet or 1.95).

**(b)** But, although chosen by the 'I', the measure has to do with an objective length (travelled road, for instance): the result - in meters, yards or fathoms each time different - will be - as far as the road is concerned - exactly the same. The result of the measurement, in itself, will be identical,--which any other human being will be able to duplicate.

### The transsubjective and objective nature of the idea (= regulatory model).

Recall (WDM 107) the idea "ideal" (e.g., the ideal state, as S. Augustine interprets it). The idea (in the Platonic sense) or regulative model is not simply a subjectively selectable measure.

'Measure' in the sense of model of measurement (geometric, numerical) is very elastic subjective. But the 'measure' or ideal (idea) of the 'true' state,--that is something else: everyone feels that the ideal can be realized in many ways (WDM 50v.)

**1.** One thinks of the ideal teacher: one can imagine this ideal differently, but that difference is subject to limits (objective, trans-subjective limits). The Christian teacher, for example, is another ideal than the Humanist teacher: yet both ideals have one and the same essence (e.g. teaching well).

Yet the ideal is an indirect comparison, seen from and the Christian as well as the Humanist point of view. Both are "measured" (normalized) by a common essence.

**2.** One rereads e.g. WDM 108v.: the Grossian principle is the regulative model (idea, Platonically expressed); capitalist-Modern and matriarchal-Archaic societies are, of these, realizations (applicative models). These are indirectly comparable from the Grossian principle (the 'measure').

WDM 112.
### The measuring equation according to R. Descartes.
*M. Foucault, Les mots et les choses*, 67ss., tells us that Descartes dwells on the fact that one can measure both continuous (uninterrupted) and discontinuous (interrupted) data.

**a.** *In both cases*
**(i)** one first considers the totality (collection, system),
**(ii)** but divides them into parts (elements) called 'units'. Continuous data are with units, which are agreed (conventional) (think meters, yards, vadems).

Discontinuous data is measured with "units," which represent the units of number mathematics. Think of a series of cubes that one wants to measure.

**b**. *Descartes concludes:*
**(a)** "Comparing two quantities (quantities; continuous data) or comparing two discontinuous data requires, in any case, that one applies, in the analysis of both types, a common unit (op.: measurement model)." (o.c.,67).

**(b)** "Thus the measuring equation, in any case, amounts to the arithmetical relations of equality and inequality. The measure allows us to analyze the similar ('le semblable') according to the calculable form of identity and of difference." (Ibid.).

### Put more simply:
The measuring equation is, in Descartes' view, an analysis in terms of "units" to make out (draw ready) equality (identity) and inequality (difference). This is typically Cartesian. The Thaletic model of measurement.

*Gaius Plinius* (Caecilius) *Secundus* (62/ 114), *Historia naturalis* ('Natural history,--i.e. investigation (historia, inquisitio) into nature), 36: 82, reports that Thales of Miletos (WDM 7; 12) would have found a method of measuring the height of the Egyptian pyramids. It is probably the oldest known example of measurement method, based on comparison, of course.

### 1.-- The idea "model",
A measurement model is, only, one case of the general notion of model: a model is a known (G) data that to describe an unknown (O) data. One speaks, therefore, in terms of B (known data), of O (the data to be described).

### 2.-- The idea 'measurement model:
Given: an unknown thing (here: the height of the pyramid). Requested: a number that indicates the height, with as its means, a measurement model. One speaks, therefore, in terms of numbers and measurement model (measure), of the height of a pyramid.

WDM 113.

One can also say that one depicts O in B: the height of the pyramid (O) is depicted (displayed) and in the measurement model and in the number collection (the number of times of measurement model) (B). One could also say 'projecting' (representing, depicting).

### The "arche" (the principle).

WDM 7 taught us, with the Paleomilesians (among whom was probably Thales), that the 'archè', principium, the principle, is that which governs something (here measurement). This is the work of what the Antique Greeks called 'theoria' (transparency, insight into principle).

We translate Thales' principle of measurement in Modern terms: "For all vertical objects, in the 'fusis', natura, nature, it holds that, just as the position of the sun (tz), for all measured models (so e.g. the shadow staff used by Thales), is such that the shadow cast by it (lh = horizontal length) is as long (1h = 1v) as its height (1v = vertical length) to be measured (the length,-- in common language, of the measurement model), just then (t = moment of time, peculiar to the sun's position) the sun's position, for all objects to be measured (e.g. the height of an Egyptian statue), is as long as the sun's position (t = height of an Egyptian statue) is.v. the height of an Egyptian pyramid) also, it is such that the shadow cast by it (lh = horizontal length) is as long (1h = lv) as its height (1v = vertical length) to be measured." Behold, Platonically expressed, the idea (principle).

### The application (appl. model).

Now - Platonically expressed - the phenomenon. Practical: when the position of the sun (actually: any light source) is such that lh (horizontal length = shadow) = lv (vertical height), then one needs, only, to measure the shadow cast on the ground (lh), to know the height (lv) sought.

In other words: the cast shadow is the model (B = known fact) of the original (O = the unknown, sought, fact).

*Fr. Krafft, Geschichte der Naturwissenschaft*, I (*Die Begründung*), (History of Natural Science, I (The Justification),), 89, says that Thales simply "applied the method known in Egypt, since long." Cfr WDM 10 (Ex Oriente lux).

**Note.--** The principle of the Egyptians and of Thales is that of isomorphism (model identity), applied to uniform bodies:
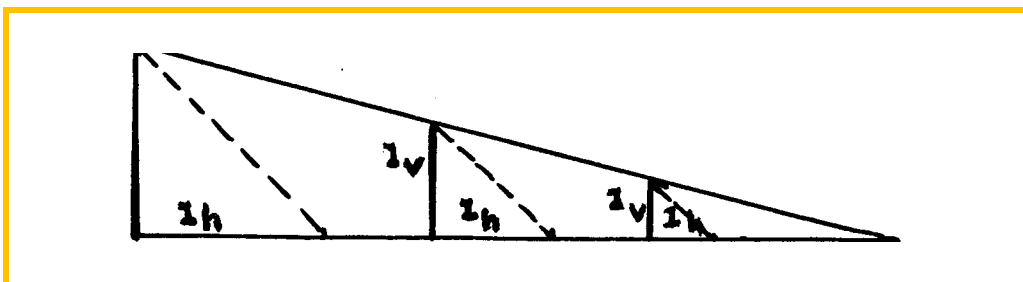
WDM 114.
**c.-- *The combinatorial equation.***
*O. Willmann, Abriss der Philosophie* (*Philosophische Propadeutik*), Wien, 1959-5, 46, says that "combine, in the proper sense, descending from the Latin 'bini' (each time two, pairwise), has as its object all that is similarly ordered."

Consequence: "To combine means to 'mate'. We call the gift of combining the gift, which consists, e.g., in comparing two thoughts or concepts, in generating (producing, 'begetting; bringing forth) new thoughts or concepts." (O.c.,26).

*Applicative mode1.*
**1.** "Discoveries are prepared, often, by combining analogies": Benjamin Franklin (1706/1790), starting from the analogy, inherent in the pair 'operation of the electrifying machine/ operation of lightning; discovered that lightning is an electrical phenomenon. Cfr O. Willmann, o.c., 46.
This is the "one-another" type.

**2.** In addition to the physical-chemical phenomenon, above, there are biological examples: E. Geoffrey Saint-Hilaire (1772/1844) paired the analogy of
**(i)** on the one hand, the arm of man and **(ii)** on the other, the leg of the quadruped, the wing of the bird and the fin of the fish.

In which we are dealing with a mating of the type 'one/many' (one-many).

We have, here, by the way, in the biological field, an example of verstehende method (Saint-Hilaire, by empathy, starting from his own, inner experience, grasped that the function (role) of the leg (quadruped), the wing (bird), the fin (fish) are analogous to his, the human one).

*Note.--* This combinatorial-analogy method set G. Cuvier (1769/1832) on the way to designing comparative anatomy (of which he is the founder).

*Combinatorial analysis* (also 'combinatoire' in French).
*Bibl. st.*
*-- C. Berge, Principes de combinatoire*, Paris, 1968;
*-- J. Lagasse/ M. Courvoisier/ J.-P. Richard, Logique combinatoire*, Paris, 1976.

C. Berge, o.c., 1s., defines as follows: whenever one wants to place (situate, WDM 85) given objects, so that certain presuppositions (= demands, conditions) are respected, one looks for a configuration (= placement of data within a previously given framework).

The harmony of the Pythagoreans, at the 'choreia', is an example.

WDM 115.

Berge gives an amusing example: try - he says - to place a bunch (= collection 1) of suits (of various sizes) in a cabinet (= collection 2), which is too small. Such a thing - he says - is configuring.

### *Combinatorics.*

This professional science builds on combinatorial analysis: it analyzes the combinatorial (configurational) properties of all structures (WDM 86),-- this, especially in 'operational research'. This gives rise to a new definition of 'configuration' (configure):

**(1)** a collection of objects (more generally even: data) is depicted, WDM 113) or "projected" (2) into an abstract and finite set provided with a known structure (prepositional set).

### *Applicable model.*

Proverbs 16:33 gives us an Old Testament example of "configuring" : "In the fold of the garment one casts the lot: of Yahweh the judgment depends. (The Canisius translation reads, "Well is the lot cast into the fold, but what it casts out is from Yahweh").

*Acts 1:26* gives, of this, a New Testament application: because of the removal of Judas, the traitor, the college of the apostles had to be replenished; two candidates come forward, Joseph (Barsabbas) and Matthias. Thereupon they "uttered this prayer: "Thou, Lord, seest through the hearts of all men. Show us therefore which of the two Thou hast chosen ...'. Then they drew lots. The lot was cast for Matthias, who was thus admitted to the college of the Twelve Apostles.

The configurational problem was, in short, the following:
**(1)** on the one hand, a collection of two candidates;
**(2)** on the other hand, a 'collection' of precisely one element. Through a mantic (i.e. based on paranormal insights), 'procedure' (method) one of the candidates was eliminated so that the premises of the configuration (set 2) were met.

### *Applicable model.*

Perhaps one has ever heard of the bizarre West Flemish priest Van Haecke. One day he 'combined', starting from the name of a colleague: 'Faict (the name) ficta facit!

**(1)** The sets 'ficta' and 'facit' **(2)** meet the requirements (= structure of the set 'Faict'; insofar as it consists of five movable ('combinable') letters.

WDM 116.

*Note.--* Apart from this typically combinatorial (configuring) aspect, there is -perhaps- the situational aspect: e.g., it is quite possible that Faict, in his pastoral care, tried to work out "imagined" (WDM 49) ideas. If this was the case, the translation reads "Faict works out imagined things (Lat.: 'ficta') (Lat.: 'facitt')".

*Note.--* Van Haecke limited himself, in this spell, to the possible in actual Latin distortions of 'Faict'. One could also extend the configurative activity, in this regard, to all possible deformations.

Immediately one sees how, in the comparative activities, among others the combinatorial, the modalities (WDM 38vv.) play a major role, namely with respect to both the feasibility and, above all, the correct number. The counting and approximate counting of configurations is, indeed, one of the branches of combinatorics (combinatorial analysis).

*As an aside,* WDM 115 gave us the attempt to fit as many (again a modality) suits as possible into a too small storage space. This is called "optimizing," also one of the combinatorial problems.

Finally, C. Berge, o.c., 6, mentions that *Gottfried Wilhelm Leibniz* (1646/1716. Modern-rationalist Cartesian), in 1660, at the age of twenty, published the first tract on combinatorics: *Dissertatio de arte combinatoria*!

*General conclusion.*
Whether comparing internally and externally, by measurement or combinatorially, any comparison involves the two first categories (basic concepts) of C.S.S. Peirce (1839/1914; Pragmaticist), namely 'First' ('First' or 'Quality' (property, as far as taken in isolation)) and 'Second' ('Second' or 'Relation', i.e. more than one property, but then as far as compared with each other).

*Bibl. st.: W.B. Gallie, Peirce and Pragmatism*, New York, 1966, 181/203 (*The Universal Categories*).

WDM 117.

**II.B.-- *Harmology: the tropological equation.***

'Tropos', trope, means, originally, 'turn', but within a text it means 'say' (turn of phrase).

***Bibl. st.:***

-- *A. Mussche, Dutch poetics*, Brussels, 1948, 34/75 (*The image*);

-- *H. Morier, Dict. de poétique et de rhétorique*, Paris, 19812,-- 670/742 (*Métaphore*), 743/793 (*Metonymie*), 1102/119 (*Synecdoque*);

-- *Nicolas Ruwet, trad., Roman Jakobson, Essais de linguistique générale*, Paris, 1963 (this work contains a thorough analysis of metaphor and metonymy;

-- Roman Jakobson (1896/1982: American linguist (of Russian descent)) founded, in 1915, the famous Moscow Linguistic Circle (where Russian formalism (concerning linguistics) got off the ground);

-- *Groupe Mu* ('mu' is a Greek letter) (= J. Dubois et al.), *Rhétorique générale*, Paris, 1982-2,-- especially o.c., 91/122 (*Les métasèmes*), including **1**. the synecdoche (o.c.,102/ 106), **2.** the metaphor (o.c.,106/117) and the metonymy (o.c.,117/120).

Note that 'metaseem' (Fr.: 'métasème') means "a stylistic device (mode of saying), which replaces one semeem (linguistic expression) with another semeem."

Trope plays an important role not only in linguistics in the narrow sense, but also in all humanities and related philosophical subjects.

For example, Jacques Lacan (1901/1981; French psychoanalyst) adopted Roman Jakobson's definitions.

**a.-- *The idea of being as a tropological tool.***

The great mathematician Gottlob Frege (1848/1925) and the Logician or Languagepositivist Bertrand Russell (1872/1970) claimed, once, that the terms "being" and "being" suffer from multiplicity. In other words: an affliction. Consequence: they are, in an exact language, radically useless (think of the formalized languages). Now 'being' means 'complete identity', then again 'existence' (predicative, as a verb) or, also, 'class inclusion' (i.e. 'belonging to') (as in "John is a boy", i.e. "John, as a specimen, belongs to the class of boys").

This Fregian-Russellian thesis concerning his(de) has, since then, been generally adopted in certain circles all too unfamiliar with classical ontology.

*Dr. Simo Knuutila / Prof. Jaakko Hintikka, ed., The Logic of Being* (*Historical Studies)*, Dordrecht, 1985, refutes, thanks to historical research, from the Antique Greeks (a.o. Aristotle's theory of categories; WDM 83vv.), over the Scholastics (the Middle Ages predication or saying theories; St. Thomas' analogy), to Immanuel Kant's assertion that "actual existence is not a predicate (saying)" (Frege's (and Russell's) sources are with that Kant), said thesis.

WDM 118.

*Note -- neoretorics.*

Chaim Perelman (1912/1984) - with his "nouvelle rhétorique" - encompasses another thorough critique of the Fregian-Russellian fallacy.

**(1)** Language- or Logic-Positivists such as Russell postulate that concerning language (use) only the mathematical-naturalistic language uses are valid, in the strict sense of unambiguousness.

To which Perelman, professor of logic, ethics and metaphysics at the Univ. Libre de Bruxelles (until 1978), replies: the mathematical-natural scientific languages (however formalized) are rooted in the natural languages, product of reason, natural or everyday reason', embedded (note how, whether in written or oral exposition, even the most formalized texts are introduced and explained in everyday, 'natural' languages).

**(2)** Language- or Logical-Positivists claim that value judgments (the axiological language; WDM 74/81), since "non-logical"(understand: in the Logical-Positivist sense), are "irrational. And thus fall outside of exact language use.

To which Perelman replies: apart from mathematical-naturalistic reason, there is also - and equally valid, though in a different way - rhetorical reason, with its own 'akribeia' (accuracy).

*Conclusion.*

**(1)** Reason (basis of rational behavior) is more than mere mathematical-naturalistic reason;

**(2)** axiological ("practical") reason, with its value judgments, is one type of true rationality.

This implies that natural language use is also subject to real logical rules. This will become clear from the tropological use of language, in which both the comparison and the idea of being play a leading role (which points to the identitive nature of being).

**b.1.--** *The metaphor.*

*C. Stutterheim, jr., The concept of metaphor*, Amsterdam, 1941 (cited by Aa. mussche, o.c., 40), gives a beautiful scheme of the method, which is hidden in metaphor, by which a 'colorless' saying is replaced - shortened - by a 'more colorful' saying.

WDM 119.
**a.** Colonel A. fought, in Aceh, as bravely as a lion.
Colonel A., in Aceh, was so brave, like a lion.

*Note.--* One sees the combinatorial equation : Colonel A. and a lion. Thus the analogy stands out.

**b.** Colonel A., in Aceh, fought like a lion.
Colonel A., in Aceh, was like a lion.

*Note.--* One sees the shortening method getting underway.

**c.** Colonel A., in Aceh, was a lion.

*Note.--* One sees the identitive power of the verb 'to be', something, which even a non-linguist understands very correctly ('akribeia', logical accuracy). This is a partial identity (analogy).

**d.** Colonel A., the lion of Aceh. Colonel A., this lion. Or still: colonel a., the lion.

*Note.--* After all these transformations (transformations), suddenly, the metaphor, clear and logically one hundred percent sound, appears.

*Note -- Model-theoretic interpretation*.
Herald, even, WDM 112. Speaker,-- proposer, speaks, in terms of "lion" (known object), the model, about "Colonel A., in Aceh" (unacknowledged object), the original, which, by the representation of facts, is made known(er).

*Applicable model.*
*G. Fricke, Volksbuch deutscher Dichtung*, Berlin 1938, 372, cites a well-known poem by *Fr. Nietzsche* (WDM 72,77), *Ecce homo* (the words, in Latin, with which, according to the Gospels, Pilate shows the tortured Jesus to the Jews).

Ja, Ich weisz woher ich stamme!
Yes, I know from whence I come!
Ungesatigt, gleich der Flamme,
Unsaturated, like the flame,
Gluhe und verzehr' ich mich.
Glow and digest I me(self).

**2**. Licht wird alles, was ich fasse,
Light becomes all that I approach,
Kohle, alles was ich lasse
(Wood) Coal, all that I leave behind:
flame bin ich sicherlich!
Flame I am for sure!

One sees that even the differentist (WDM 93), the difference thinker, Fr. Nietzsche uses the verb 'to be' so ridiculed by him to characterize himself metaphorically. He expresses, with this, his -- what Heidegger calls -- 'Destruktion' (dismantling,-- in Derrida's terms) of the classical, Platonizing ontology.

WDM 120.
**b.2.-- *The metonymy.***
Nothing like an Aristotelian applicative model.

**a.** Eating apples causes, in part, health.
  Apples cause, in part, health.

*Note.--* Here a combinatorial equation is at work, which pays attention to the (causal) connection (coherence) -- not the similarity, as in the metaphor. (Eating) apples and health are 'combined': one sees the connection.

**b.** Eating apples,--that is health (or yet: is healthy).
  Apples are health (healthy).


*Note.--* Again, as in the metaphor, and the shortening ánd the identitive work of the verb 'to be', let it be, as Frege and Russell, rightly, observed, that the verb 'to be' expresses - metaphorically - resemblance and - metonymically - coherence (causal connection), no one, not even the popular man, without 'culture', misunderstands this sentence: from the context (situation) it is obvious (and logically justified) the conscious use of the word. Perelman is right.

**c.** The healthy eating (of apples).  The healthy apples.

*Note.--* Again: after all these transformations -- it reminds one of Chomsky -- the metonymy rises, clear and logically justifiable.

*Note -- **Model-theoretic interpretation***.
One speaks, in terms of "healthy" ("health") of "apples" ("eating"). The apples (eating them) is the original, which is unknown. 'Healthy(heath)' is the model, which is known.

There is partial identity between 'apples (eating)' and 'health (being)' : they belong to an identic relation, because one causes the other (we saw that 'partial identity' (analogy) was the ontological term for what is usually called relation (WDM 82)). The metonymy expresses, concisely, a relation.

*** Applicable model.***
*G. Fricke, Volksbuch deutscher Dichtung*, Berlin, 1938, 408, gives us from *Heribert Menzel* (1906/...), *Die Fahne der Kameradschaft*.

Not that this poem is all that thunderous. To it makes one feel the metonymic connection, in existential (i.e., reflecting the subjective experience) words.

| | |
|---|---|
| In dieser Fahne, Kamerad, | In this banner, comrade, |
| Sind du und ich verbunden. | Are thou and I bound together. |
| Wo sie uns leuchtet, | Where this (banner) spreads its light in |
| Comrade, | our eyes, comrade, |
| Ist Deutschland auch verbunden. | Is Germany also connected. |
| Wo, immer, die Fahne weht, | Wherever, too, the banner flies, |
| Kamerad trifft Kameraden. | Does one comrade strike the other. |
| Wer treu und froh zur Fahne steht, | Who is faithful and happy around the waist, |
| Ist in den Kreis geladen. | Is welcome in our circle. |
| So ist nicht einer heimatlos | Thus, no one is without a home |
| Und ohne ziel und streben. | Nor without purpose and aspiration. |
| Wer schwor, | The one who took (the oath of allegiance) |
| der sucht die Fahne blosz | swore, he's just looking for the banner |
| Und tritt ins helle leben. | And he enters the bright life. |

*Note.--* Here the flag (the banner) is not so much metaphor as metonymy: the connection -- not the resemblance -- is in the foreground.

But -- and here is the difference with the Aristotelian "healthy apples" -- the connection (the relation, the partial identity) is not viewed from a distance. It is lived through,-- Romantic-Existential.

**1.** Did Nietzsche 'identify' - metaphorically - with the flame, here the young Nazi (Menzel is known as a National Socialist) 'identifies' with the banner on the grounds of cohesion, connection, affiliation. This even grows into that of his comrades, yes, that of the entire German people.

**2. *Symbolism.***
WDM 50v. taught us the strictly Platonic concept of "sense" In Gertrud von Le Fort's poetry, the "sense" was the Platonic idea (ideal, high value).

Here - both in Nietzsche's poem and Menzel's - an analogous symbolism is at work : metaphorical (in Nietzsche's case: he is the flame),

Metonymically in Menzel's case: the "Kamerad," "the 'Kameraden:' all of Germany: -- they are connected to the flag (the banner)). Note the identitive his-language: Nietzsche is the flame; the Nazi (kamerad);-- Nazi-speaking Germany),-- they are connected (via the flag).

WDM 122.

*Note.--* We have already mentioned Nazism, perhaps the main type of fascism, WDM 10. Here we come back to it, via a fascist poem: the reason, is the fact that fascisms, renewed, more aggressive than ever, are re-emerging. The best way to get to know this anti-democratic tendency is to go deeper into it. We will return to it on occasion.

### c.1/2.-- *The synecdoche.*

Literally, 'sun.ek.doche', means 'co-meaning'. What is meant - by what - 'mede.bete'? The applicative models will clarify.

**1--** *K.A. Krüger, Deutsche Literaturkunde* (*in Charakterbildern und Abrissen*), Danzig, 1910, 115, teaches us a first approach.

Either the element ('das Einzelne', literally: the singular) is exchanged with the collection; or the part (subsystem, hypostasis) is exchanged with the whole (system,-- occasionally: super- or hypersystem).

### 1. *Applicable models:*

"Crossing the threshold" (meant the whole house, but as far as the threshold, by the clientele, is crossed. In other words: a rational exchange).

The priest says: "I know myself, somewhere, responsible,--co-responsible, for a few thousand souls" (meant: people, seen under the point of view of pastoral care, employed by Christ, who said to heal the soul, whenever he 'healed' someone or freed them from demons (= exorcism),-- this because the soul determines the whole person). Again: a rational justification).-- Both examples are metonymic synecdochs or co-authorships. They are supported by coherence (collective structure).

### 2. *Applicable models.*

"Apples are healthy" can, equally well, be interpreted by "An apple is healthy." Why? Because - in the latter expression - "an apple" stands for "apples". In other words: one pronounces the element (singular), but means the collection (universal).

The inspector says, "A teacher is, in the morning, on time at the school door."  He means, of course, through this one case (element), the universal collection of teachers!

One can also turn around at the sight of a specimen (element), the inspector says : "Yes, those are teachers now". He says the universal, but means the individual.

These are metaphorical synecdochs (similarity, - distributive structure).

WDM 123.

*By the way:* also concerning metonymic synecdochs there is inversion: when the previous owner of a textile firm can say to his successor(s) who admire the success, visible on the threshold, "Yes, that was once the house, for you, and it is now, the house too,-- I see", he is practicing an inverted (metonymic) synecdoche. He says the whole, while he means, in the first place, the part.

### 2.-- *The quantitative or range equation*.

Put in model-theoretic terms: one speaks, in terms of either the element or the part (subsystem), of either the set or the whole ((supe4system). Or vice versa.

### *The combinatorial equation.*

Here, concerns, on the one hand, the element or part (subsystem) and, on the other hand, the collection or whole ((super)system). By seeing the part identity (analogy, 'relation'), either of similarity or of coherence (distributive or collective), one can speak alternately.

Or more correctly: the translation faithful ('co-significance'), one can say: while one says the element/ the part, one means also, (one thinks also, one means also) the collection/ the system. So that one can be a model for the other.

The shortening method is, at once, clear: without all the unnecessary ('redundant' or 'redundant') explanations, one says e.g. "The house" for "The threshold" or "A teacher" for "All ('the') teachers"

Again: Perelman, who claims that "rhetorical" (understand: daily arguing, arguing) reason also has its own akribeia, logical accuracy, gets, on analysis, right.

The identitive power of the verb "to be" can be clarified as follows.

**a.--** "The threshold,-- that is the house" (The part, - that is (part-identically, analogously) the whole),-- for it is, in fact, included in it (and, in the synecdoche, co-meaning).

**b.--** "A teacher,-- that is all teachers" (The member, any one,-- that is (part-identical, analogous) the whole, total set,-- which, in the member, is, as a member, co- included, synecdochically, co-meaning (meant laterally)).

**II.C.--** *Harmology : the summative induction*.

*Bibl. stitch pr*:

-- *A. Lalande, Vocabulaire technique et critique de la philosophie*, Paris, 1968-10, 506/509 (*Induction formelle, - entière, - complète*);

-- *P. Foulquié/ R. Saint-Jean, Dictionnaire de la langue philosophique*, Paris, 1969-2, 357s. (*Induction: 'dénombrement entier' 'énumération'* ((Induction: 'whole count' 'enumeration')), (*Descartes*); *induction formelle*);

-- *I.M. Bochenski, O.P., Philosophical methods in modern science*, Utr./ Antw., 1961, 146;

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

### The foundation : the logical square (the range square).

We tie to the comparison differential (WDM 105) :

| | | | |
|---|---|---|---|
| some do | some do | some not | all not (none). |

The name "square" comes from a configuration (WDM 114) :

| | |
|---|---|
| all are | some do not |
| some do | all not (none) |

### The mathematical application.

**a.** *A.N. Whitehead, Mathematics, basis of exact thought*, Utr./ Antw., 1965, 11, says:

"Mathematics - as a science - began, when someone - probably a Greek - tried for the first time, to prove theorems (*op.:* judgments, propositions)

  **a.** over all and over some data,

  **b.** without specification (*note:* singular description) of certain, 'separate' (*note:* singular, individual) things".

**b. -** *Francois Viète* (Lat.: Vieta; 1540/1603), including in his *Isalloge in artem analyticam* (1591) - literally: Introduction to Analysis -, introduced the use of letters - instead of numbers - in mathematics. He called this 'logistica speciosa' (calculating with beings forms or ideas; WDM 28; 'species' means, here, 'form of beings').

**c.** A.N. Whitehead, ibid., says that the ideas 'all' and 'some', in algebra, are introduced by using, instead of numbers, letters.

### Appl. Model.

Instead of saying "2 + 3 = 3 + 2", we generalize in algebra, saying, "For all numbers x and y (= range), it holds that x + y = y + x".

### Conclusion.

The letter calculus, since Viète, works in terms of sets and with the order structure (all, some,--just one, none).

*Note*.-- One can depict the same order(s) structure - quantitative in nature, since it is about all, some (at least one) or no elements of a set - differently as well :

| all | not all | all |
| --- | --- | --- |

*Note.--* There is an old scheme, in number mathematics, based on that structure, namely the rule of three.

**(a)** One hundred percent (= universal set or all) is e.g. equal to 25.
**(b)** One percent is equal to 25/100 (= right one).
**(c)** Fifty percent (= some) equals 25/100 x 50.

### The idea of "totalization" (summative induction).

The idea of "total" (totality, whole, collection (universally intended)) is sometimes vague.

In evidence, the following narrative.

A visitor enters a small Flemish congregation. Entering the church, he marvels that it is so small.

"Surely the whole congregation doesn't go in there!" he says to the co-pastor.

"Now, yes, if the whole congregation went in, then, of course, they would not go in.

But, since the whole congregation never goes in, the whole congregation goes in without question."

Thus the co-pastor. Note also the many-sided term "going in"!

### The idea 'inventory'

The estate description - e.g., the (complete) list of all the pieces of a file - is one applicative model of summering (totalization). Or think of a teacher : diligently correcting a pile of homework. When he gets to the end, he wants to know if he has corrected them all. He checks all copies one by one (verification). Only then does he say to himself: "I have corrected them all". Instead of speaking of "one by one" he summarizes them and says "all". He summarizes (totalizes). He has implemented a summative induction ('generalization'). The summative induction first goes through each element of a collection (system) separately and, then, summarizes them all together.

### The regulatory model (= definition).

Father Bocherski, o.c., 146, formulates, as follows, summative induction:

If g1, g2,...gn, are elements of a class (set) and they are all its elements,

if, further, by separate verification the trait (common property) k belongs to each, then k belongs to all (together, summarized).

WDM 126.

In other words, the 'Gestalt' (totality) emerges, from the verification of each element individually. The name 'formal' or 'formative' induction, given to summative induction, reflects that 'Gestalt' (forma' as essence form).

### A type of reductive reasoning.
Reread, briefly, WDM 2.-- Applied here gives this:

"If k (characteristic, common property) for all data (g1, g2,... gn) is verified (found to be true, checked) separately, then k is, immediately, verified for the 'summa' (Lat. for 'sum') (totality) of all g.
Well k is, for all g separately verified.
So k is, immediately, verified for the sum (all jointly).

### The comparative nature of summering.
Do we portray the method in mathematical form:
$5.10 + 5.3 + 5.2 + 5.1 = 5 (10 + 3 + 2 + 1)$
(numerical calculation); $a.x + a.y + a.z + a.r = a (x + y + z + r)$.

One can clearly see the distributive structure (WDM 88). She makes comparison - seeing similarities (identities) and differences (non-identities) - appear ready.

### Summative and amplificational induction.
Summative induction is limited to all that has been effectively verified.
The amplificative induction - in some ways the most fruitful
**(1)** verifies, first of all, some (subset) of elements,
**(2)** but exceeds all that has been verified to the verifiable. This, due to the fact that the verifiable elements will exhibit the same property (kentrek k), if they are effectively verified.

Here is another type of "generalization": one generalizes from the verified subset (samples) to the unverified but verifiable subset.

This type of generalization is also called "extrapolation" (going beyond the limits of what is tested).

### Appl. model.
If I have seen water boiling at 100° C. several times (finite set), I conclude that this is true for all times (infinite set).

WDM 127.

***Appl. Model. -- The trial-and-error method.***

Although we will return to this method in the actual methodology, we will give an example.

**(A)** *Observation.*

**a**. ***Given***.-- On the one hand, a dose of guano, i.e., a testimonial residue from the skeletons and excrement and of fish and of seabirds, living on cliffs and, preferably, uninhabited islands,--especially in Peru,--testimonial residue, from which one extracts phosphorus (P, a reactive element (a solid nonmetal) from the group V of the periodic table of chemical-physical elements).

On the other hand, the appropriate equipment and 'know how' (= sophisticated knowledge) to produce, from guano, phosphorus.

**b.** *Requested.*

The structure of the reductive evidence that all guano releases phosphorus.

**(B)** *Answer.*

The well-known scheme of J. Lukasiewicz (1878/1956), applied here, gives:

*Maior* (general preface).

If all quantities of guano give off P then also these quantities h1, h2....hn here and now (haphazard sampling).

*Minor* (private, singular preposition).

well, these quantities of h1, h2....hn, here and now give off, actually, i.e. experimentally verified, P.

*Conclusio* (postphrase).-- thus, generalized (the type of amplificatory induction), all quantities (in principle an infinite set) yield P.

***Bibl. sample :*** *I.M. Bochenski, Philosophical Methods*, 94v., 126.-- Behold the syllogistic formulation. One can see that the relation 'universal/non-universal' (the range) is decisive.

One can express this, model-theoretically (WDM 112), as follows : in terms of verified applicative models (h1, h2....hn) - the summative core -, which are known, one speaks, in the amplificative induction, of the unverified originals (which, together, constitute the regulative model, as far as not examined).

In simpler language: from the known (= model) applications one decides on the unknown (= original) rule.

WDM 128.

**II.C.1.-- *The summative induction.-- definitions*.**

Here is a brief historical overview.

**a.-- *Antiquity.***

A small example, cited by *Fr. Ch. Lahr, S.J., Logique*, 591, under the name "induction aristotelicienne" (Aristotelian induction).

It consists in - according to Lahr

**(i)** what one ought to say about each element of a set (= general trait),

**(ii)** from saying the whole set (in summary fashion). He cites, in the process, *Aristotle's* little example (*Analyt. 2: 23*) :

*maior.--* Man, horse and mule live long (= characteristic).

*minor*.-- Well, these three species are the only animals (= complete collection) without gall (= characteristic).

*conclusio*.--So all animals without bile live long.

In doing so, Lahr notes that the full enumeration (which he, wrongly, disparages by failing to recognize that summative induction is the verified (and summarized) essence of amplificative induction) is the foundation ("énumeration complète").

**b.-- *Middle Ages*** (scholasticism).

In medieval Church Latin, summative induction is called 'inductio per enumerationem simplicem' (generalization,-- better: summary, o.g. simple enumeration, aggregation).

**c.-- *Modern and present times.***

**(1)** R. Descartes (Cartesius; 1596/1650; the founder of typically Modern philosophy) - very traditional - assumes that a type of induction occurs "par dénombrements entiers" (in virtue of complete enumerations, additions).

**(2)** *Antoine II Arnauld* (1612/1694)/ *Pierre Nicole* (1625/1695), *logique de Port-Royal* (1662), 3:19, 4:6, talk about 'induction entière' (general induction,-- understand: enumerative induction).

These Cartesians describe what they also call "complete induction" as follows:

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

**(2)** returns summarized in the conclusio.

Or still:

**(1)** what the two syllogism prepositions teach (impart to information),

**(2)** that, in sum, runs to the afterthought (conclusio).

***As an aside,*** that is very accurately what Aristotle's little example - however paradoxical - does.

WDM 129.

**Note.--** *Georg Cantor* (1845/1918), the founder of the (formalized) 'mengenlehre' (set theory), published from 1874 to 1897, says in his *Beiträge zur Begründung der transfiniten Mengenlehre* (Contributions to the foundation of transfinite set theory), (1895),-- describing, rather than strictly mathematically defining:

"By collection we mean
**(1)** each summary into a whole
**(2)** of certain, well-defined objects either of our beholding (sense intuition) or of our thinking (objects, called 'elements' of the set)."

Compare with the essence of summative induction: one has a Menge (set, ensemble), when one:
**(1)** has well-defined elements,
**(2)** summarized into a whole ("Jede Zusammenfassung zu einem Ganzen"), (Any aggregation into a whole).

### Note -- Cultural psychology note.
**(1)** It is, generally, well known that Georg Cantor, with his far-reaching discovery ("A theory that provides a foundation for virtually all contemporary mathematics" (J.*W. Dauben, G. Cantor and the Origins of Transfinite Set Theory*, in: *Scientific American*, vol. 248 (1983): June,112), crashed into the massive misunderstanding of his contemporaries - mathematicians.

**(2)** It further appears that Cantor -- deeply disillusioned -- had to be admitted to a psychiatric clinic,-- at Halle, where he died.

Henri Poincaré (1854/1912), "un des plus grands mathématiciens de son temps" (according to *A. Dumitriu, H. Poincaré*, in: *D. Huisman, dir., Dict. d. phil.*, 2092), condemned the theory of transfinite numbers (the name introduced by Cantor) as a "disease" from which mathematicians would well, in time, be cured (J. Dauben, ibid.).-

A Leopold Kronecker, one of Cantor's teachers and a top figure of established German mathematics, at the time, went so far as to attack Cantor himself, personally: he labeled him as "a scientific quack" an "apostate ' (*note:* a typically Church term), yes, as a "youth spoiler" (J. Dauben, ibid.).

Cantor's ailment is, by now, psychiatric-neurological, controversial. According to the reports of the Halle Nervenklinik, it may well have been manic-depressive psychosis (a soul disease, with emotional highs and lows). Dauben states that - possibly (WDM 47: modality) - his malady, in the manic ('himmelhoch jauchzende') phase, favored, rather than prevented, his theoretical work'.

Which teaches us that reason (reason) mobilizes the whole psyché and vice versa.

WDM 130.
**II.C.2.-- *Psychology of summative induction.***
Localization, summering, summative induction,--that is, also a psychological act.

**a.-- *Summoning the "mantic" (paranormal).***
The Ancient Greeks called paranormal acts of an insightful nature 'mantic '('clairvoyance act).

***Verhulst et al, Mathematical Curriculum*** (a current textbook) cites the facts established by the German physician and naturalist M.H.K. Lichtenstein (1780/1857).

**1.** This one stayed, for quite some time, in Southern Africa, among others among the Xosa (Xhosa), formerly called 'Kaffirs' (in S.-Africa's Transkei and Ciskei, -- about four million in number). -- Although they have counting words, they still rarely use them.
**a.** Few of them, counting, get beyond ten.
**b.** Most cannot even name this number". Compared to these Xhosa, certain California tribes were even less advanced. -- Which gives us "Enlightened Westerners," a sampling of primitive thought forms ("la mentalite primitive").

**2.** But 'primitives' (the Archaic stage) possess a different type of 'mind' (reason/spirit).-- This is evident, among other things, in their summative induction.
Lichtenstein mentions: when herds of four to five hundred cattle are driven home, the owner - the one, who has immediate contact with his herd (in the Archaic phase, man still knows, indeed feels - much more than we do - one with all living things (plants, animals)):

**a.** whether animals are sometimes missing (WDM 27),
**b.1**. how much and
**b.2.** which right is missing (WDM 27).

In other words: there exists, at least at the primitive-Archaic level, a direct-intuitive grasp of the form of being (WDM 28), even to the mathematical degree.

**3.** This Archaic form of thinking and reasoning lives on, among other things, among our 'sensitives' (i.e. the rare ones among us, the enlightened ones, who still suddenly see ('theoria', as the Ancient Greeks used to say) if and what there is). They can, therefore, rightly be called 'seers' -- in the very narrow sense of 'immediate grasp'.

**b.-- *Summarizing "intuitively".***
H. Poincaré (mentioned above) claimed that "formal logic" (which concerns the form of being) - if it is to be creative (founding something new) - needs "intuition" (direct contemplation, but, now, intellectually intended and sensuous).

**1.** According to Poincaré, 'intuition' (contemplation) is a summarizing ('synthetic') faculty, rooted in the 'subliminal' (-unconscious or subconscious) consciousness. When a logician or mathematician consciously tackles a problem, this logical-mathematical work continues in the unconscious ('subliminal'), i.e. below the threshold ('limen') of the conscious soul life) layer of man.

### 2. *The mathematical induction.*

**a.** One of the signs ('proofs') of that subliminal, but logico-mathematical summary is the 'mathematical induction'. Poincaré sees, in it, an endless series of syllogisms, which - suddenly - reach the conclusion.

*Bibl. st.:* -- *A. Dumitriu, H. Poincaré*, in: D. Huisman, dir., Dict. d. phil., 2092s.

### b. *Appl. Model.*

**1.** In order to better grasp what Poincaré wants to say, we dwell, briefly, on an example. Giuseppe Peano (1858/1932), for forty years a professor of differential calculus in Turin, introduced to arithmetic (and, over time, to all mathematics) the "pasigraphy" (a kind of logical-mathematical drawing system), together with axiomatization (i.e., starting with propositions or axiomata).

**2.** In his *Formulario mathematico* (1894/1908), *Peano* proceeds as follows.

**(i).--** He puts forward three basic ideas ('primitive' ideas): 'No' (number), '0' (zero) and 'a+' (successor of a). - The other numbers are 'determined' ('defined') as follows

1 = 0+ (1 is the successor of 0); 2 = 1+; 3 = 2+; etc..

Pasigraphic : (No), (0) and (a+).

**(ii).--** The relations (partial identities) between numbers, viz. 'sum' and 'product' are determined (defined) as follows, viz. by following axiomata (postulates).

*Note:* € means 'belongs/ belong to'.

**(1)** If a is a number, then a+0 = a.-- Pasigraphically : a€No ). a+0 = a.

*Note:* ). means "involves" (implies).

**(2)** If a and b are numbers, then a+(the successor of b) is equal to the successor of (a+b).

Pasigraphically: a, b € No ). a+(b+) = (a+ b)+.

So much for summative axiomata.

**(3)** If a is a number, then a multiplied by 0 equals 0.

Pasigraphically: a€No ). a x 0 = 0.

WDM 132.
**(4)** If a and b are numbers, then a, multiplied by (b+ 1) equals (a x b) + a.
Pasigraphically: a, b No ). a x (b+1) = (a x b) + a.
So much for the multiplicative axiom.

In addition to the two basic ideas (which one can reduce to two axiomata) and the four axiomata, concerning the operations sum and product, Peano also posits the following axiomata.

**(1)** 'Number' (= No) is a 'class' or species name.
Pasigraphic: No € Cls (Literally: 'Number belongs to class').

**(2)** 'Zero' is a number.
Pasigraphic: 0 € No.

**(3)** If a is a number, then the successor of a (=a+) is also a number.
Pasigraphic : a€No ). a+€No.

**(4)** *The postulate of mathematical induction.*
If s is a class, of which 0 is a member ('element') and if every member of s has a successor within the class s, then every number is a member of s.
Pasigraphic: s € Cls . 0 € s: a € s ) a (ed.: curl up, not for a)      a+€ s  ).  No € s.

*Note.--* That it is, truly, a mathematical induction generalizing, summarizing, totalizing', is shown by the fact that its application allows to show that, for any property which is a characteristic of 0 and which can be extended from any number a to a+ (the successor of a), it holds that this property is the characteristic of all numbers.

**(5)** If a and b are numbers and if the successor of a is identical with the successor of b, then a is identical with b.
Pasigraphic : a, b € No a+ = b+ ).  a = b.

**(6)** Every number has a successor, which is non-identical to 0.
Pasigraphically: a No ). a+ - = 0.

*Note.--* The ideas (€) (member of), ( ). ) (involves, implies,-- involve, imply), ( )a.) (remark; curl up, not for a) (always involves) and (Cls) (class) belong, in fact, to the logi(sti)sche pedestal of Peanian mathematics. Thanks to those basic logical and logistic ideas, respectively, there are general transformation or transformation rules, which govern the mathematical proofs.

*Note.--* One can see that Peano (and his collaborators) have used the axiomata above to theorize the natural numbers starting from 0.

WDM 133.

The negative numbers can be introduced by modifying axiom (6) ("Every number has a successor, which is non-identical with 0").

One can say, e.g., (instead of the second axiom (WDM 131: 1+ = 2, etc.)) -1+ = 0; -2+ = 1; etc..

### Bibl. stitch pr:

-- *C.-I. Lewis* (1883/1964; philosopher and logi(di) cus), *La logique et la méthode mathématique*, in: *Revue de metaphysique et de morale* 29 (1922): 4 (oct/ dec.), 458s. (L'école italienne);

-- *A. Virieux-Reymond, L' épistémologie*, Paris, 1966, 48/52 (La méthode axiomatique).

### Cultural psychology observation.

**(a)** H. Poincaré (WDM 129) has greeted Peano's design (pasigraphic, axiomatic) with sarcasms. But, according to *P. Soula, Giuseppe Peano*, in: *D. Huisman, dir., Dict. d. phil.*, 2019, Poincaré has made a "lighthearted" (based on incorrect and incomplete information) judgment.

**(b)** *Gottlob Frege* (1848/1925; logistician-mathematician), known for the counterpart of the pasigraphic-axiomatic method, in his world-famous *Begriffschrift* (*Eine der arithmetischen nachgebildete Formelsprache des reinen Denkens*), (Conceptual writing (A formulaic language of pure thinking modeled on the arithmetic one)), Halle, 1974 (first edition: 1879; second: 1891), reacted quite differently from Poincaré. He, too, wanted an "ideography" (a Latinized translation of "Begriffschrift"), i.e., a system of signs, which escapes the one-multiple terms of the natural languages.

Frege, like e.g. Bertrand Russell, later, rated Peano highly.-- Cfr WDI1 2; 51vv.; 90 (formal system).

Again : thinking is embedded in the whole psyche.

### c.-- Summarizing the 'generative'.

**a.** Already the Paleopythagoreans (WDM 13; 87) applied 'generating' (literally: begetting). E.g., when they inculcated, to the children, the concept of a square number (WDM 87), they applied a constantly repeated process.

Another example: their "childlike" number forms :

   .;              ./.;              ../. .,         ../.. .         .../... etc.

**b.** Noam Chomsky (1928/...), the founder of a Cartesian-inspired transformational-generative speech, gives us a second example of summative induction, akin to mathematical induction.

"Suppose we want to describe a language, all sentences of which consist of one or more a' s followed by the same number of b' s.

WDM   134.

The phrases (pronunciations) of that language include, thus, ab, aabb, aaabbb, aaaabbbb, etc.

The description of all these sentences can be conceived as a method by which all the sequences of one or more a's and the same number of b's can be made. We have, to this end,

**(a)** require the beginning symbol (der description) 'Z',
**(b)** and two instructions or rules (*note:* prescriptions), viz. (1) Z →3 ab and (2) Z aZb→.

Those rules are "instructions" to replace what is to the left of the arrow with what is to the right of it. The symbols a and b represent the compose the elements of the sentences and form the alphabet of the language in question.

**(1)** Do we apply - starting from the initial symbol 'Z', rule (1), then - because Z must be substituted by ab - we get the sequence 'ab'.
Neither rule of grammar applies anymore to this sequence: it is a "final product" (and the shortest sentence in that language).

**(2)** Had we applied rule (2), we would have obtained the series aZb.
To this sequence, both rules apply. The first rule leads (by substituting Z for ab) to aabb, - again, a final product (and indeed, the shortest sentence in our language but one).
The second rule would have led to aaZbb,--no final product, because both rule (1) and rule (2) apply to it." (*A. Kraak/ W.G. Klooster, Syntax*, Antwerp, 1968, 17).

### *The algorithm(h)me.*
A method (process), which
**(a)** assumes an initial sign ('symbol') and
**(b)** by application of uniform monotone substitution rules, generates ('begets,') series of elements (here: linguistic elements) - here: from a collection ('alphabet') - is an algorithm. By 'algorithm' one means a set of operations, reduced to a uniform process. If, with this, one 'forms' e.g. series (words, numbers), then one speaks of 'generation'.  It is thus a construction method.

### *Conclusion. The invariant(s).*
*A. Virieux- Reymond, L' épistémologie*, 18/20 (*Les invariants*), draws our attention to what, both in mathematics and in algorithmic-generative induction forms, stands out, namely, the immutable aspect.

WDM    135.

**1.** Steller says, in doing so, that real science seeks the universal - specifically: the invariants, the invariances - in the phenomena. Thus e.g. in the form of lawfulness (WDM 126: all water boils at 100° C.; 127).

**2**. A bit further, the proposer says that "the invariant(s) (...) is unspoken ('implicitement') presupposed by the inductive method. (o.c., 20).

Indeed: the construction, respectively the generation or induction process, is invariably verifiable. It acts as a common property or 'trait' of all elements of a generated sequence. This becomes apparent, only, upon comparison of course.

### d.-- *Summarizing the "operational".*
**(1)** Archaic model.
Instead of calculating or putting signs on paper or so, "inducing" can also be done actively, praxeologically.

It is said that, in West Africa, among Negro-Africans, the chief for example gives his village heads a collection of sticks. By taking away exactly one stick (of the total number of sticks) each day from the day of departure, the chief knows, through this model (WDM 6; 51; 110 (112) 127) - i.e. through something the primitive village chiefs know - the exact date of the next day of the meeting.

**(2)** The model of *John Stuart Mill* (the son of James Mill; 1806/1873; known for his *A System of Logic, Rational and Inductive* (1843)).
**1.** *Two basic ideas* ('axiomata) are assumed.
**a.** What the ancient Greeks already called 'kuklos', cycle, circuit, can be described as a line such that all its points, once passed through one by one (WDM 114: in pairs), make the starting point coincide with the ending point. Which is an 'operative' (operational) summation.

**b.** 'Operative' ('operational') we call that to which the phrase "Do something definite, and thou shalt achieve the result" applies. Doing (= praxeological) is decisive, but, then, doing it rationally, i.e., according to a certain process.

**2.** *Appl. model.*
**(A)** *Observation*
**a.** Given: a landscape.
**b.** Asked : provide operative evidence that said natural landscape is an island.

WDM 136

**(B)** *Answer*

**(B).1.-- *Abduction*** (= regressive reduction, 'hypothesis').

If all natural landscapes, according to their form, can be explored by a loop road, are islands, and if a conscious natural landscape is an island (just one), then everyone - e.g. on the water, with a ship - can walk a loop road around it.

**(B).2.-- *Deduction*** (= progressive reduction, i.e. design of experimental verification).

Thus, if I take a boat, with which I make the intended tour, I provide the operative proof that the intended landscape is indeed an island.-- This design is a deduction (WDM 2; 9; 25; -- 22 (lemm.-anal.); 56;-- 34 (indirect bew.);-- 126 (reduct. reasoning)), supported by a general truth (premise), but applied to, e.g., precisely one case.

**(B)3.-- *Induction*** (peirastic reduction,-- full reduction, by either verification or falsification).

By the execution (= operative) of the design (deduction), it appears, e.g., that a round trip, in the strict, looping sense, was executed. Which corresponds to the deduction.

### e.-- *Childhood summoning.*

Although of a purely genetic-psychological nature, we believe that the researches of Jean Piaget (1896/1980), both epistemologist and psychologist, as well as of his school (the 'Structuralist' approach), are useful here.

*Bibl. st.:* *J. Rembert, Jean Piaget*, in: *D. Huisman, dir., Dict. d. phil.*, 2055/2058.-- Rembert says that Piaget labels logic as an axiomatics (WDM 131v.) of reason, resp. reason (of the mind, in a word). This, while his genetic psychology (developmental psychology) is the corresponding experimental (trial-and-error) subject science.

In other words: concerning reasoning (of the child) axiomatics and induction (better: reduction) go together.

We summarize what Piaget and his Structural School found.

### (1).-- *Children ages four to five.*

These order a series of sticks (i.e. they see, in that multiplicity, a unity or totality) pairwise (i.e. two at a time).

Which is a great example of combination (WDM 114). They don't get much further.

WDM    137.

*J. Piaget, Genetic psychology* (*A study of the development of thinking and knowing,* Meppel, 1976, 36, reads:

"The young children, from four to five years of age, that I, with A. Szeminska, examined,

**(1)** knew how to find their way - from home to their school and vice versa - excellently on their own;

**(2)** but they were not yet able to imagine this path, through game materials, depicting the different main landmarks (buildings, etc.)."

*Conclusion.*

Arranging a set of sticks altogether (except for putting them together, pairwise, of two equal ones), as well as representing a fact by a model (here: game material),--that was still impracticable.

**(2).-- *Children by five to six years of age.***

The same children, grown older, arrange the set of sticks' by size, but now not a pair, but the total set,--this, try as they might.

In other words, the scope of the ordering ability has been increased.

*Note:* "The transitive (*note:* 'transitivity') "If A is greater than, less than, equal to B and if - at the same time - B is greater than, less than, equal to C, then A is also greater than, less than, equal to C" (WDM 110) is - at this stage - not yet made transparent (mastered).

E.g., if the subject (child) sees two sticks together, of which s1 (stick 1) is smaller than s2 and, afterwards, two sticks, of which s2 is smaller than s3, it does not yet conclude that s1 is smaller than s3, if it does not see all at once." (o.c., 45v.).

**(3).-- *Children ages six to seven.***

With what is traditionally called "the years of discretion or 'reason' ", methodical ordering begins. In other words: posed for the problem always the same sticks (of the previous phases), by size, to order, these children choose, now,

**(1)** first, among all the sticks (the totality), the smallest (which they apparently distinguish from the rest (dichotomy or complement));

**(2)** then, within that remainder (complement), they again choose the smallest; etc..--

*J. Piaget, Psychology and Theory of Knowledge*, Utr./Antwerp, 1973, 38v., says what follows.

**a.-- *The fact.***

Take, as an example, the conservation (i.e., the invariance (WDM 134)) of a collection of objects. -- e.g., ten to twenty beads in a small glass. Cf. WDM 114: a configuration, i.e., placement of a set of data within a predetermined framework.

WDM 138.

We ask, then, the child, himself, to salvage an equal number (identity, invariant) of blue beads in glass A and red beads in glass B of the same shape and size.

When two similar sets have thus been formed, the child is asked to transfer (= transformation, change) the contents of glass B into a vessel C, which is different in shape from the two preceding ones (A and B) : e.g. C is higher or lower and narrower or wider than the two preceding ones.

### b.-- *The requested (sought).*

The question is posed to the child whether there are still (= conservation, identity - through - variations, invariant) the same number of beads in A and C.

One can, of course, repeat this experiment with ever new configurations of glasses (one extends, then, the samples, which are the core of the (amplificational) induction).

### c.-- *The answer.*

The answer varies by age.

(**1**) The little ones - before the age of six - seven - deny preservation or, also, they think that preservation is not necessary.

Thus, for some, there are more beads in C than in A "because the level of beads in C (*note:* if that glass is narrower e.g.) is higher". For some others, however, there are fewer beads in C "because the glass, in which they are now, is narrower".

*Conclusion :* combining is still searching.

(**2**) The children of about six - seven years of age - according to Piaget - interpret the content (collection of beads, totality) as invariant (= preserved through the transformations), this, independent of the "perceptual" (understand: sensory perceived) geometric form (i.e.: configuration).

*Conclusion:* from six - seven years of age, the child totalizes, "induces," -- intuitively but really.

(**3**) The children around eleven-twelve years of age compare through word-by-word communicated tasks.

In other words: the child becomes detached from the materially shown and perceived data. It begins, through words, to order (through comparison).

### *Appl. model.*

(**a**) Given.-- Edith's hair is blonder than Suzanne's, but darker than Lili's.--

(**b**) Asked.-- Now who, among the three girls, has the darkest hair?

(**c**) Answer.-- The child, at that age, answers without having to see physically those three children,-- purely reasoning".

WDM 139.
*Note 1*
The Associationist idea 'from the singular to the singular' ('du particulier au particulier').

***Bibl. st.:*** *Ch.Lahr, Logique*, Paris, 1933, 229 (*Les associationnistes*).
In addition to the duality 'deduction/reduction' proposed by J. Lukasiewicz, among others, certain Empiricists (WDM 18) - J. St. Mill (WDM 135), Alexander Bain (1818/1903), an Experimentalist, and Herbert Spencer (1820/1903), an Evolutionist Naturalist - adopt a so-called third type of reasoning, which, in their eyes, is even, the origin and principle of both de- and reduction.

***Applicable model.***
**(a)** Animal 'reasoning' proceeds from the singular to the singular : e.g. when a dog has eaten a hare just once, the taste has got to him and he is 'open' for the next singular case. This, without any universal prephrase.

**(b)** The infantile (childish) reason, even, the reasoning of most people, -the intellectuals, in most cases, included,-- they proceed in the same, 'animalistic; way.-- As an example they cite the fact, ascertainable by everyone (which is typically Empiristic), that, if a child has burned itself just once, it, namely, from that moment on, avoids the singular fire e.g. again and again.

"In that case we are dealing with a real reasoning, but without a universal (all cases of burning bodies e.g. meaning) prevision. After all: the child decides that e.g. fire burns o.g. the unique (singular) fact that it has already burned itself." (Lahr, o.c.,229).

*Note 2*
We do not address this obvious misrepresentation except with two comments.

**a.** The Associationists themselves say that e.g. a child, concluding from just one case, knows that, henceforth e.g. the fire ('it' is a sign of the fact that there is unspoken but real generalization at work) burns.

**b.** The Associationists confuse - according to Lahr, ibid. - between actual reasoning (though implicit) and simple 'association' (which 'connects' ('associates') a portent with a (at least usually and in time) subsequent sequel),

WDM 140.

**f.-- *The analogical induction*** (analogical generalization).

What analogy is, will be clear after WDM 3v. e.g.: partial identity. Either, distributive (WDM 88), paratactic (WDM 101) or metaphorical (WDM 118) or collective (WDM 88), hypotactic (WDM 101) or metonymic (WDM 120), analogy is always unity in some multiplicity.

### *The typical analogical reasoning.*
**1.** Ch. Lahr, Logique, 608, defines as follows: a reasoning that
**(1)** from some verified;' parables,
**(2)** Conclusion to some unverified similarities. WDM 126 taught us that conclusions
   **(1)** from the verified case
   **(2)** to the unverified but verifiable case (and thus establish a general rule) is an amplificational (exceeding the established) induction.

**2.** Ch. Lahr, o.c., 608, provides an applicative model.
**(1)** Verified is e.g. some resemblance between the planet Earth and the planet Mars: to (spherical) shape, to orbital movement and axial rotation, to atmosphere e.g..

**(2)** This at least partial resemblance (analogy) insinuates (= allows indirect understanding) that also Mars e.g. - like Earth (verified) - is inhabited (for Mars unverified).

In other terms, one drives the (partial) similarity to unverified aspects. This, assuming the of the (known(er)) model, -- in this case the Earth (WDM 8; 112).

Or again: one thinks, for the time being, that all (or several) traits of all planets are related (collective structure) and concludes, from the established presence of some traits, in the case of one planet (the model), to their presence in the case of the rest (dichotomy), i.e. in the case of all or some other planets (the originals).

### *The distinction between induction and analogical induction.*
**(1)** Induction, generally speaking, is either to conclude from each case separately, after it has been verified, to all,--this, in summary (= summative, totalizing) fashion, or to extend ('amplify') the essential nature of the verified cases to also include all fundamentally determinable (verifiable) cases.

**(2)** Analogical induction concludes from a part of determinate features to the whole of them,-- this,-- in cases other than the model.

WW1 141.

*Note --* The notion of 'type' (typology, type theory) -- We just saw that, starting from the Earth as a (known) model, another planet can be compared. As soon as, comparatively, at least some of the characteristics of the model are found in another specimen, the question arises : "Would not the whole (coherence) be present in the other specimens as well?

### *Appl. model 1.*
*Ch. Lahr, Logique*, 604ss., notes that, especially as soon as one enters the biological and, even more so, the human order of things, the professional scientist has to deal not only with (physico-chemical) facts (in the purely natural scientific sense), but also with (biological, resp. culturological) beings ('des êtres').

Indeed: a portion of sulfuric acid differs, as a system (WDM 87; 89v.), from e.g. a tree or a Negro African! A plant, an animal, a human being,---these are 'beings' (i.e. facts, but embodied in living organisms).

### *Appl. model 2.*
Lahr, ibid., notes, in doing so, that
**(1)** natural scientific facts are ordered in the form of laws (WDM 126; 135) or, more briefly, laws "laws of nature") and

**(2)** biological and culturological 'beings' are also ordered, but in the form of types (species) -- this word taken in the Antique-logical sense of 'subsets').
Instead of discovering - starting from purely scientific facts - laws, one starts from the individual (the single person), which has a changeable and sometimes transient character, to construct a type, which is invariant and constant.
In other words: the type brings, by comparative method, unity in the changeable and transient multiplicity of biological-culturological phenomena.

**3.** What is, now, a natural (in "nature," biologically and culturologically understood, detectable) type? Lahr defines as follows.

### (a) *Appl. model.*
The type of 'recooperator' (among animals) always (all individuals) exhibits a cleft hoof, a compound stomach, molars with plain crown; it never exhibits claws, a single stomach, canines, and molars with knobbed crown,--which is typical (specific, 'peculiar') to the predators.

### (b) *Regulatory model.*
The (natural) type is a constant and necessary system of traits, such that one trait cannot exist without the other (= collective structure),-- this, while some other traits ('typical' for another 'type') are radically excluded. In other words: the inclusion and the exclusion are characteristic of the types.

WDM 142.
*Conclusion.*
**1**. *The typological induction.*
**a**. Lahr, ibid., concludes: the proper task of a science of "beings" (i.e. life forms) is to detect such typical (typological) systems of traits (common properties).

**b.** He adds, to this: the method suitable for this is one type of induction, which he names with his own French term 'généralisation', -literally: starting from the singularities (individuals) found time and again in (biological or culturological) nature, ordering them in general terms in 'types'. We translate, more appropriately as a term, by 'typological' induction.

What stands out in that type of induction, says Lahr - is
  **(a)** observation (not experiment (WDM 127)) and
  **(b)** equation.

**2. - *The trial-and-error method.***
This is - says Lahr - not capable of experimentally testing the system of common traits, inherent in living organisms, except in a limited number of cases. After all, artificially isolating one or more traits - think of the split hoof or the conjoined stomach, for example - from one type of 'animal' (understood as a living organism), in order, for example, to see whether other traits can be substituted, is not usually feasible.

*Consequence:* only accurate observation, without experimentation, is the appropriate method.

Its typical inductiveness is expressed by Lahr as follows: the typological induction (generalization) consists in

**(1)** which was verified in a number of samples, i.e., a limited (finite) number of (collection) individuals,

**(2)** extend (amplify) to the whole (in principle infinite) set.

WDM 143.

**II.C.3.-- *Typology of summative induction.***

**1-.** Totalization, in virtue of comparison, is structured. And it is as we have summarized WDM 140:

**(a)** distributive (= paratactic, metaphorical) and

**(b)** collective (= hypotactic, metonymic).

We are now going to clarify this to a few applicative models. However, first, a signpost: *E. Bouqué, De algebra der verzamelingen*,( The algebra of sets), Ghent, 1967, 13, says that - in order to know whether something (WDM 28: forma, essence) belongs to a set - one has two ways of verifying it:

**(1) *The enumeration of all the elements***

(which is part of the summative induction) and the indication of a 'trait' (characteristic or characteristic property). The latter some mathematicians call 'principle of abstraction', because - as WDM 5 taught us, with Edmund Husserl, among others - a set of attributions ('things') are summarized in an abstract idea.-

*Note:* -- As the theory of concepts will - further - clarify, the trait (abstract property) represents the conceptual content and the enumeration the conceptual extent, as, for centuries and centuries, logicians have taught us. For - according to e.g. Lahr, Logique, 492 - the scope of an idea (understood as a mere concept) is the set of elements which, thanks to abstractness, are indicated, 'meant', pointed out by that idea.

**2. *Totalization, summering or induction occurs, however, twofold.***

Lahr, ibid., distinguishes between distributive idea which -- to the extent -- refers to each element separately ('alike'),--in Latin e.g. 'omnis homo' (every man,-- standing for 'all men', of course), on the one hand, and, on the other, collective idea, which -- to the extent -- refers to each element separately, but only insofar as each (= all) element together with all others, constitutes one and the same 'being' (something),-- so e.g. 'totus homo' (the whole man).

Both 'all people' (every human being) and 'the whole human being' totalize, but in very different ways. 'All human beings' totalizes distributively (paratactically every human being beside all others, on an equal footing; metaphorically). 'The whole human being' totalizes collectively (hypotactically : one human being, but in its totality; metonymically).

Cfr. WDM 86/88 : structure,-- collection, system.

WDM 144.

*Note.--* Also Kard, *Desiré Mercier* (1851/1926; founder of the Higher Institute of Philosophy, at Leuven), in his *Métaphysique générale ou Ontologie*, Louvain/ Paris, 1923-7, 156ss., speaks, like the Scholasticians (800/1450), of two modes of 'compositio' (totalization): (a whole,--also called 'compositio' (meta)physica') and 'omne' (a collection,--also called 'compositio logic').

### *Definition and classification.*
As Lahr, Logique, 499, says:
**(1)** the definition lists the sub-ideas of a total idea;
**(2)** the classification lists the classes (collections) of objects, which are depicted (represented;-- model) in the overall idea.
These are, well, two types of enumeration (and, therefore, of summative induction),-- distributive and collective.

### *Applicative model of distributive enumeration.*
**1-.** Jacques Vassal, Folksong, *(Racines et branches de la musique folk)*, (Roots and branches of folk music), Paris, 1984. These four hundred pages divide the Folk music of the United States into types ('genres');
**a.** songs and dances of the Sioux Indians,
**b.** the rural Blues (a kind of Foxtrot, melancholy and, mostly, slow) of a Lightnin Hopkins,
**c**. the rediscovery of Folk Music, in the 1940s, by Woodie Guthrie,
**d**. the Message songs of Bob Dylan and Joan Baez, in the 1960s,
**e.** the more recent Folk, which, once intertwined with Rock Music, takes the form of Country and Western, including by Joni Mitchel,
**f.** the acid-sweet Blues of Leonard Cohen, g. the Guitar tradition, including that of J.J. Cale,-- etc..--.

The intent, apparently, is to represent all types, inventoried (= summative induction) and embedded in a narrative (which is already collective totalization).

**2.-** *Ch. C. Herod, The Nation in the History of Marxian Thought* (*The Concept of Nations with History and Nations without History*), The Hague, 1976.
*K. Marx* and *Fr. Engels*, the "fathers" of Marxism, defended, in *Neue Rheinische Zeitung* (Köln; 1848/1849), the thesis that one can divide the "nations" (peoples) into two types:

### **a**. *Nations without history*
These are backward, not strongly organized, and "reactionary" (i.e., not revolutionary in mood); they mount, in 1848, counterrevolutionary "forces" (so e.g., the Slavic peoples,--except the Poles).

WDM 145.

**b.** *Peoples with history*

These possess a "historical" past with a wealth of cultural achievements and solid political structures, in which all (social) classes have their place; their development is a sign of "Progress": in the evolution of the European political system, these nations grew into "revolutionary" nations;-- examples of such history-gifted peoples were, at the time, the Germans, the Italians, the Poles and the Magyars (in Hungary).

According to the claimant, the 'Socialist' (Communist) Parties of Germany, Austria and Russia - through their spokesmen (O. Bauer, K. Kautsky, Rosa Luxemburg, V.I. Lenin, J.V. Stalin, Fr. Zwitter) - adopted this two-part division, albeit with variations. This, among other things, in connection with multinational state communities in Central and Eastern Europe.

*Conclusion.*

Both books cited are justified, at least to the extent that their classification (= summering of types and, along those types, of singular cases) is complete (i.e., truly totalizing). Applicative model of collective enumeration.

**1.** *Beginning with an overview type.*

*P. de Smet, Herbs of heaven and hell*, in: *Nature and Technology*, Year vol. 52 (1984): 9 (Sept.), 684, gives us the structural formula of nicotine (an alkaloid), the well-known stimulant. We are faced, herewith, with a configuration (WDM 114v.) within a fixed framework the partial atoms and molecules are placed.-- It is clear that the drawing, herewith, is twofold.
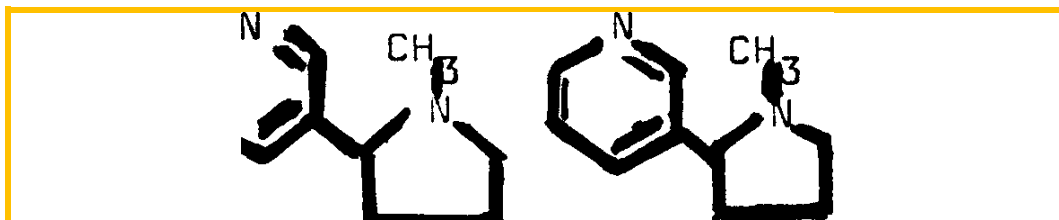


**(1)** By the insertion, (the Antique Greeks would have spoken of 'harmonia' (WDM 13; 87)) the collective induction (summering or enumeration - and - situating of all the elements) appears.

**(2)** By reproducing the structural formula twice, we commit (a beginning of) distributive induction, of course.

**2.** No better and more vividly applicable model of collective summation than *L. Apostel, ed., The Unity of Culture* (*Towards a general theory of systems as an instrument of the unity of our knowing and acting*), Meppel, 1972, 143.

WDM 146.
The total idea 'system'(= collective structure) is set out according to its partial ideas.-- A 'system' - as such, i.e. as a system - exhibits :

**a.1.** (usually) elements and

**a.2**. (usually) partial systems (sub- or hyposystems);

**b.** the interaction of the (eventual) elements and subsystems (through its relations, among themselves);

**c.1.** (a degree of) differentiation (distinctness) due to the number of elements and subsystems, thereby the variety of their properties and due to their independent changeability;

**c.2.** (a degree of) integration (unification), due to the (degree of) determination of the elements and subsystems by the total system (hyper or super system);

**d.1**. a process character ('diachrony'), in that it is eventually emerging growing and disintegrating or invariably developing;

**d.2**. purposefulness, in that it is aligned with something.

So far the internal equation, (WDM 107). Now the external equation, (WDM 107). - A system exhibits :

**a.1.** boundaries;

**b.1**. similarities: systems can be mutually either isomorphic (WDM 113) i.e. completely similar or homomorphic, i.e. partially similar;

**b.2.** closedness and openness, to the extent that it does not or does absorb elements or subsystems from the environment (forming a super- or hypersystem with it);

**b3.** interaction with the same environment, to the extent that it is 'open'.
A practical example of such a system is, e.g., the appliance (machine).

*Note.--* But beware: the term 'machine' (in some more recent theories) means, practically, the same thing as 'system' (there are mechanical, organic, human 'machines', - matter of convention).

Another - biological - example is set out in R. *Ceusters, The role of forest ants*, in: *Alumni Leuven* 9(1978): 3 (Sept.), 18v.: the ant, the ant's nest,-- they play and role (= function) in the ecosystem (forest).

WDM 147.

Indeed: the wood ant influences (= causes) the surrounding forest. In the active sense of "function" it has, as a "function" (role), living in the midst of the forest, to exert a health-giving effect; in the passive sense of "function" the forest is "function" (dependent) on the action of the wood ant, among other things.

In technical language: the forest ant is a sub- or hyposystem within the super- or hypersystem, which is the forest. This is an example of interaction, as Professor Leo Apostel puts it as one of the key features of 'system' (external comparison). In this context one also speaks of functional analysis, i.e. the examination of the (active and passive) functions (which comes down to interaction, the literal translation of 'interaction').

### Opm.-- The traits of a 'fascist system'
WDM 10; 122, taught us, already, a few aspects. How could one, in terms of systems theory, "define" (i.e. summarily, grasp as totality, as interlocking of elements) fascism?)

According to *J. Kruithof, De zingever* (*An introduction to the study of man as a signifying, appreciating and acting being*), Antwerp, 1968, 469, ad 2, collectively, i.e., taken together, the following common characteristics make up the fascist type of society.

**(1)** There is - in this similar to e.g. Soviet Communism - only one political party (i.e. the actual democratic order, with a multiplicity (pluralism) of party forms, is missing).

**(2)** The military -- in this, also, very similar to e.g. any Communist regime (WDM 65) -- possesses great power, the military;-- which is one of many forms of Macchiavelism ('Realpolitik').

**(3)** Economically speaking, any Fascism is ambiguous : both purely agrarian and highly industrial Fascist systems are possible. Or, as the Marxist Kruithof says, "The Capitalist economic order is not abolished." He adds - in terms of Colin Clark, who, economically speaking, distinguishes three types, regarding 'sectors' (agriculture (= arable and livestock farming), industry (manufacturing) and 'services') - : "In the future, Fascist service societies will, perhaps, also emerge."

One sees: summative induction, but, again, collective.

WDM 148.

*Note.-- The structuralism on language.*
The "syntagmatic" and "associative" connections, within the spoken word.

*Bibl. st.:*
-- *Ch. Bally et al, publ./coll., Ferdinand de Saussure, Cours de linguistique générale*, 1916-1; 1931-3;
-- *Roland Barthes, Eléments de semiologie* in: *Communications* (*Recherches sémiologiques*), Paris, 1964 (No. 4), 114/ 130 (*Syntagme et 'système'*).

**(a)** *The first view,*
structurally (i.e., from the standpoint of unconscious orderings), de Saussure calls "syntagma" (literally: joined something). He means, by this, the linear, diachronic order, which comprises every speaking (and, also, writing). When I want to say: 'Go away', I cannot but first (= preface) say 'go' and only then (= continuation) 'away'! We cannot - according to de Saussure - pronounce two words at the same time. He calls this 'la chaîne de la parole' (the chain (chain) of speaking).

Note: this is a first form of cohesion (collective structure). This is : belending, appurtenances.

**(b)** *The second view,*
structurally i.e. a second form of unconscious 'structuring' (ordering)), is called 'association' (literally: thought, resp. word association).

His own little example: the word 'enseignement' (education) 'fere surgir inconsciemment' (will unconsciously bring up a mass of other words (such as 'enseigner', teach), 'renseigner' (inform),-- sound related;

further: 'armement' (armament), 'changement' (change),-- sound relative;

also: 'education', 'apprentissage', sentence related).

*Note.--* Why, -- why, a man like Rol. Barthes substitutes the word 'association' for 'système' (which is, after all, now the general term), that may be known to Josse: after all, the 'association' referred to by de Saussure is merely an example of 'system'

*Note.--* A solid little book on structuralism, but in a strongly -- beyond the linguistic domain -- expanded sense, is *J. Piaget, Le structuralisme*, Paris, 1968-2.

*Opm.-- Summative induction and movements of mind*.
One does not think that only the pure (rational) mind thinks in a structured way. The human mind also orders. And it does so according to distributive and collective structure.

WDM 149

*Théodule Ribot* (1839/1916; philosopher; experimental psychologist), *La psychologie des sentiments*, Paris, 1917-10, 171/182 (*Les sentiments et l' association des idées*), teaches us that the mind, understood as a capacity for value (WDM 74), also plays a role (active 'function') both in the recall of memories and in the 'associations' of thoughts.--

Ribot continues: "One knows that the association of thoughts (thought contents and, more generally, consciousness contents) was reduced to two basic laws: the law of contiguity and the law of similarity." (O.c.,171).

Immediately it is clear that 'contiguity' (apposition, belending, adjoining) is collective and that 'similarity' betrays distributive structure.

Ribot goes on to say, that these laws are descriptive rather than explanatory. Yet they reveal - Ribot says - "quelque chose en sus" (something 'over there'). Several theorists have pointed to an "influence, souvent latente, mais efficace" (often hidden, but effective), -- which, again, points to unconscious coherence (collectively structured).

Anticipating Freud, Ribot speaks, then, of "Transfert par contiguité" (Transfer by adhesion) and "Transfert par ressemblance" (Transfer by resemblance).

### Ribot's appl. models.
**(1) Similarity transfer** (distr. str.).

"A mother may, suddenly, feel a sympathy rising within her,--this, for a young man, who resembles her son or, more simply, who is the same age.

 The explanation of many of these cases is situated in 'un état inconscient , qui ne se laisse pas facilement saisir' (an unconscious state that one does not grasp so easily). But, if that state penetrates consciousness again (the will plays, in it, but very indirectly), he illuminates the whole.

Thus there are, also, fear reactions, which are called 'instinctive', but which a perception, penetrating a little deeper, can reduce to a similar explanatory ground." (o.c., 177).

**(2) Posting transfer** (coll. str.).

"The lover in love transfers the feeling, which, originally, was caused by the very person of his 'mistress' (lover), to her clothes, her furniture, her dwelling. For a similar reason, the envy ('jealousy'), the hatred cool their anger on the inanimate objects, which belong to the 'enemy(s).

In the absolute monarchies, the cult of the sovereign is transferred to his throne, the emblems (op.: allusions) of his power,--in a word, all that, from afar or from near, goes with his person." (o.c.,176).

WDM 150.

*A psychoanalytic analogue (something similar).*

*Charles Baudoun* (1893/1963; psychoanalyst), in his very remarkable work *L'Ame et l' action* (*Prémisses d' une philosophie de la psychanalyse*), (The Soul and the action (Premises of a philosophy of the psychoanalysis)), Geneva, 1969- 2, 44; 46, recounts applicative models from his years of child psychoanalytic work in Geneva. We cite them because, in our context here, they are instructive.

**(1).-- *Appl. model 1.***
Someone whom Baudouin wrote about at greater length in his Etudes de psychanalyse, named Berthe, suffered from arm neuralgia (a kind of nerve pain) at a certain time. Psychoanalysis of tendencies (tendencies in the sense of value) revealed to Baudouin, who is not a fanatic of the typically Freudian form of depth psychology, that Berthe unconsciously imitated (= first collective link) the situation of her classmate (= basic similarity; link), who - listen carefully - bore the same first name and with whom she identified (again: the identitive link, WDM 82).

That with which Berthe identified, in her classmate "Berthe," was, for once, not her person, but her "happiness.

**a.1.** An 'ailment' of the arm, namely, had given 'Berthe' a dose of free time, which had enabled her to work herself up into a 'developed' human being (woman) . It was precisely this, in 'Berthe', that mobilized her envy (in the healthy sense): Berthe, like her 'Berthe', wanted to be a 'developed woman'. This is the value-stretching that, unconsciously (unspoken, unreasoned, unthinking), 'worked'.

**a.2**. 'On saisit, tout de suite, le raisonnement par analogie' (One grasps, immediately, the analogy reasoning. Cf. WDM 140), which had driven to identification and to pathological imitation' (o.c.,44).

**b.** Baudouin adds that:
**(i)** the memory of 'Berthe' and her arm belongs to the strictly individual sphere of Berthe, but

**(ii)** that the unconscious mechanism, by which that memory "works" (causes), by "producing" the symptom - literally -, belongs to - what Baudouin, with the depth psychologists, calls - "a primitive layer" in Berthe's un(der)conscious (as of pretty much all humans, for that matter). Thus, apparently, in Baudouin's intention, the analogy reasoning that lies at the root of the arm-neuralgia also belongs to that primitive-un(der)conscious layer.

WDM 151.

***Conclusion.--*** Not only the conscious 'mind' (mind/ reason but also somewhere an 'unconscious' ('subconscious') 'mind' (which, apparently, has its own application of general-logical principles in Berthe (in all of us), at work.

**(2)** ***Appl. model 2.***

*Ch. Baudouin, L' âme enfantine et le pschanalyse*, (The childish soul and the pschanalysis,), I (*Les complexes*), Neuchatel/ Paris, 1950-2; II (*Les cas*)/ III (*Les méthodes*), Neuchatel/ Paris, 1951, is a gold mine of psychological-psychoanalytic data and interpretations.

In II/III (*Les méthodes*), 162, Baudouin says what follows.

**(a)** The child is not a miniature adult, but a preliminary stage of adulthood, with mechanisms all its own.

**(b)** "It has been observed that - especially young - children were profoundly changed only because one or two of the parents had undergone psychoanalysis; and this, without it being necessary to treat the little subject himself. -

**1.** This is explainable
  **(a)** if, on the one hand, one assumes that the child's ailments were not yet firmly established, and
  **(b)** on the other hand, if one presupposes that the traumatizing (*op.:* ailment-producing) situations, which had begotten those ailments, depend essentially on the center of life, especially, then, on the family environment: by changing this center of life, one can change the whole coherence ('tout le tableau,')."

**2.** Baudouin thinks that also the School of C.G. Jung (1875/1961; the Individual-psychanalyticus), here, can recite a different - but perhaps valid - explanation.

*Frances Wickes, The Inner World of Childhood*, New York/ London/ Appleton, 1927, 17, says that, in early childhood, there is an identity (ontologically, of course, a partial identity) between, on the one hand, the child's unconscious and, on the other, the parents' unconscious.

As an applicative model, Fr. Wickes gives a child who, in his dream, lived through a conflict, which - in reality - was the conflict of his father (Fr. Wickes, o.c.,26). Another child -- according to Wickes, o.c., 28 -- lived through a feeling of insecurity (it knew, somewhere, that it was unsafe),--this, according to Wickes, because it had an "intuitive perception" (WDM 130: "one with all that lives") of the objectively insecure situation of its parents

WDM 152

Baudouin, who in the face of such 'irrational' factors', rather, cautiously distances himself, says, thereupon : "There is no doubt about it: a child somewhere understands the atmospheres in his environment." (o.c.,162).

Whether one calls this 'intuitive perception' (Fr. Wickes), 'spiritual osmosis' (i.e. mutual permeation; a term of L. Benoist-Hanappier), 'mystical participation' (with CG. Jung and the religious scientist Lucien Lévy-Bruhl (1857/1939; Lévy-Bruhl discovered the rather radical distinction between the 'Cartesian' (i.e. Enlightenment rational) and the 'primitive' mentality) is called - according to Baudouin -, "le fait, si insuffisantes qu'en soient les explications, paraît irrécusable et ne doit pas être omis (the fact itself, no matter how unsatisfactory the explanations, seems undeniable and should not be discounted)."

### *Conclusion.*

The Würzburg school, led by Oswald Külpe (1862/1915; rising "critical Realist" against Kant), with its "psychology of thought and will" (around 1900), introduced the skilled introspective method (practicable only by highly skilled psychologists) to analyze "simple acts of thought" (e.g., "the whole, of which 'door' is a part," i.e., a typically collective structure), according to their structure.

From this radically new approach regarding thinking and will, grew
**a.** the Cologne School (Fr. Lindworsky et al,)
**b**. the Mannheim school (Otto Selz et al.) and
**c**. the Amsterdam School (Philip Kohnstamm).

The joint results show that real thinking:
**(a)** the layer of singular representations (proper to the imagination/imagination) e.g. 'the row of trees in the entrance of the Normal School'.

**(b)** transcends ('transcends') the layer of the faded -- 'schematically' called -- imaginary representations,-- this, in order to enter the actual sphere of the general concepts distributive and collective (WDM 143),. This 'thinking' takes, apparently, its beginning very early.

**II.D.--** *Harmology: the antithetical equation.*

Needless to say, after WDM 82vv., every relation must be denoted as an analogy (partial identity), either collective or distributive analogy.

Before dealing with antithesis ('antithesis; oppositio), a word about the most elementary types of 'relation'.

### *Introduction.-- Elementary Relational Theory.*

We greatly simplify what one can find in the logistic of relations (WDM 82), founded in part by *Erwin Schröder,* 1841/1902; known among other things for his *Algebra der Logik* (1890/1895) and, even more clearly, by Ch. Peirce (WDM 8; 22;-- 14; 27), in mathematically-complicated form.

Assume the logistic initial symbol:

**(a)** Some state, at the beginning of their 'calculus' of relations, 'aRb' (the relation R between a and b),

**(b)** others put 'r xy' (the relation r between x and y) in front; (c) still others express a relation by 'B (x y)' (the relation B between x and y).

### 1.-- *The "reflexive" (looping) relationship.*

In logistic terms, one speaks of "the relation of a to itself (to a). This corresponds, in strictly ontological language, to the total identity of something (e.g., the sign a) with itself. The term 'relation' means, here, the same as 'inner comparison' (WDM 107). It is clear that, ontologically, the term 'relation' is, here, used metaphorically (metaphorically): one speaks, in terms of partial identity, of what is, actually, total identity.

But come: let us call that too a "relationship. But then the basic relation. It is the same as with the reciprocal verbs ('I look at myself') : in pure thought one starts from the symbol a for instance, in order to arrive, loopwise, at the same a.

### 2.a.-- *The clarity relationship.*

The core of the clarity is (what is called in technical-logical language) 'addition (one-single relation')). Thus in the phrase 'My girlfriend and I': on both sides of the relation there is precisely one term (girlfriend, I).

*In passing:* one sees, again, how combining (WDM 114: pairing) is its essence.

WDM 154.

Apart from the 'addition', there is the pairing of 'one-many' and 'many-many'. Just one teacher, on the one hand, many children, on the other hand, is a 'one-many' relationship. Many Fascists, on the one hand, precisely one leader (Duce, Führer), on the other, is a 'many-unambiguous relationship'.

The number of terms of a job can serve as a "measure" of the job.

**1**. A dyadic (dual) relation includes two terms such as "my girlfriend and I. A second (this time, a female being) term makes up, with the first (I e.g.), a unity-in-the-many.

**2.** A triadic, tetradic n-adic relation combines, thus, three, four, (...), n terms.-- So e.g. : "Thou givest me a booklet" involves a triadic (thou, I, booklet).

### 2.b.-- *Mutual and transitive relationship.*
**(a)** The reciprocal (symmetric) relation exists, where the relation of the involved terms is answered by the other involved terms.

### *Example:*
'mutual deceit in marriage' (a term, familiar); 'by mutual consent; 'emanating from both sides', 'word and word', (in natural science) 'work and rebound' (action and reaction).

The relation, starting from a first term (or group of terms), is answered by a second term (or group of terms). That 'answer is called 'reciprocal relation': one thinks of our answering New Year's wishes ("Reciprocal wishes"). It makes that, in a relation, mutuality or 'symmetry' arises.

In the philosophy of the encounter i.e. the mutual acquaintance of two or more people, on a deeper level, reciprocity is an integral or essential element. If a gesture is not reciprocated, there is a relationship, but it lacks symmetry or mutuality because the reciprocal element is lacking. One thinks, as an example, of an unrequited love. There people do not meet each other ("each other" is the reciprocal pronoun).

**(b)** The transitive or transitive relationship occurs where, between involved terms, an intermediate term (or several intermediate terms) is located.
In mathematics or logistics: a relation, which, from a, passes over b, to c. In practical life : "The friends of my friends, are also my friends". Or : "She married him for the reason of his possession (she - through him - possesses)".

### 3.-- *Sociometrics*

Jakob Levi Moreno (1889/1974), the founder of the - casually said: medically intended - psychodrama, in which the actors/actresses allow their/their psychological or social conflicts, thanks to e.g. play, let through to purge them out ('growth process'), taught us -- within the 'group' involved in his psychodrama, (the so-called growth group) -- to pay attention to the relations,-- dyadic, n-adic, -- reciprocal, transitive, -- in a communication and interaction analysis, called sociometry. Whoever, in such a growth group, learned to examine this network of relations, knows how, indeed, the at first sight arid notions of an 'elementary theory of relations' nevertheless belong to real life and make it more transparent.

A particularly elementary scheme of sociometry provided us with Ch. Peirce.

He designed, in imagination, a closed system, each member of which was either a student or a teacher, however, such that neither term could be the two at the same time.

Thus, a colleague is a relation 'teacher/teacher', further: the relation 'pupil/pupil' is a fellow pupil; -- the relation 'teacher/pupil' Peirce called 'pupil'; the relation 'pupil/teacher' was, then, a 'teacher: Replace the vernacular terms by abstract letters (WDM 124: letter calculus), and thou hast a kernel of logistics of relations. Matter of agreement, among other things.

### II.D.-- 1.-- *General theory of opposites* (antithesis).

There 'variology' is taken in the purely diachronic sense (theory of change: what changes is different from what it was before). But the same term can also be understood in a synchronic sense : it then becomes analysis of all that differs ('varia' in Latin, meaning 'different things'),-- either synchronically (simultaneous inequality) or diachronically (change).

WDM 156.

*Note.--* Aristotle uses, among other things, the term 'homoiotropos', convergens, interlocking, to denote analogous things (in this sense 'interlocking' is the same as 'analogous'). In contrast, 'divergent' data ('divergent' things). The third possibility, geometric, is the parallel (parallel) data.

In a broad sense, difference science can be called "divergence theory,".

### *The method: the differential or variational equation.*

One possible (but not the only) model of this was WDM 91 (differentism), where thinkers are discussed, who emphasize unilaterally, all that differs, in reality (being).

We think, rather, of truly scientific forms of 'difference thinking' such as 'differential' psychology, which investigates the differences between the classes of people. Or one thinks of 'differential rights' (import duties, which are not levied according to an equal rate, but differentiating (one looks at the different origin of the goods). In differential calculus one introduces (ultra)small differences.

Well, all this is only possible thanks to comparing, constantly comparing but emphasizing the difference.

### II.D.- 2.A.-- *Special contradiction theory: historicity.*

A theory of differences can already be found among the Sumerians, an ancient people (who called themselves 'Kengir'). It settled - between -4000 and -3000 - in Sumer (= Sumer), in cities like Ur, Lagash, Uruk, Eridoe (Eridu).

It invented cuneiform writing. Thus S.*N. Kramer, L' histoire commence à Sumer*, Paris, 1975, 153, mentions that this people, in what is now Iraq and Iran, already thought in systechies (oppositional pears): so e.g. the opposition 'summer/ winter' as seasons, conceived together with the Causal Deities, Summer and Winter, controlling those seasons.-- See WDM 10: Ex Oriente lux.

Later, the Ancient Greeks also thought in systechies.

Thus e.g. Anaximandros of Miletos (WDM 7),--which, recently *Gad Freudenthal, The Theory of Opposites and an Ordered Universe* (*Physics and Metaphysics in Anaximander*), in: *Phronesis* (*A Journal for Ancient Philosophy*) (Assen), ended: ordering in the form of opposites thus began early.

WDM 157

A central tenet of the Paleopythagoreans (WDM 13), who emphasized harmony (interpenetration), were the 'su.stoichiai', oppositiones, pairs of opposites or 'systechies'.

The basic dyad was "identity/non-identity" (wdm 105; -- 99 (order/opposite pair)). Further dyads were:
**(1)** Ordered / disordered,
**(2)a**. form / formlessness (smugness), firmness / unsteadiness;
**(2)b.** mathematical: straightness/curvature; physical science: light/darkness;
**(2)c**. humanities : masculinity / femininity, right-handedness / left-handedness;
**(3)** ethical goodness / anger.
It is true that many such differential equations still contain a dose of archaism; yet - from them - an antithesis grew.

*Bibl. st.: O.Willmann, Gesch.d.Idealismus*, I, 273.


*Conclusion.*
The Structuralists (WDM 93, 148, de Saussure, Lévi-Strauss, Laden, Althusser et al.) were, apparently, far from the first, to practice ordering thinking in pairs of opposites. Ex Oriente lux!

**II.D.-- 2.B.--** *Typology of opposites.*
*Bibl. sample : Kard. D. Mercier, Logique*, Louvain/ Paris, 1922-7, 107s..
The Cardinal, in Neo-scholastic terms, distinguishes a plural of "opposition" (opposition in the form of negation).

**a.--** *The contradictory contradiction.*
We have already discussed this contradiction at greater length, WDM 30/33.

*Appl. model.*
The ideas 'white/non-white', 'just/unjust', -- they are, as negates of each other, not to be reconciled together (incongruity relation).
In Latin, they are connected by 'aut' (as opposed to 'vel'). -the dilemmatic 'or', distinct from 'or/and'. Thus e.g. in the range differential 'all' and 'none' (all not). Cfr WDM 124. There is no intermediate term (excluded third). The contradiction is absolute.

**b.--** *The contraire (ordinary) contradiction.*
Kard. Mercier defines as follows.-- The contrair opposites make up the extremes of a series (set) of elements, summed up in one and the same 'kind' (set).-- Suppose, e.g., that the shades of light are put in a row (= series formation), then its two extremes are two opposites.
In other words, although reducible to the same class, they cannot exist simultaneously.

WDM 158.

*Appl. model.*

'White' and 'non-white' (the negation or negation of white) are:

**(a)** both colors (identical set)) but

**(b)** they are both each other's negate (non-identical).-- 'Conscientious' and 'unscrupulous' are both ethical (= moral, moral) categories (= fundamental concepts) - the same set, - but mutually negate each other (non-identity).

'Healthy' and 'non-healthy' (unhealthy, sick) are both medical concepts (under that point of view identical), but negatives of each other (non-identical).

*Comparison.*

'This wall is white' and 'This wall is non-white' are contradictory statements.

'This wall is white' and 'This wall is black' are contradictory statements. In other words, 'non-white' includes 'red; 'blue', 'yellow', 'green', 'lilac' and also 'black', -- this is a whole series of shades (i.e. variety of properties,-- alternations, 'nuances', shades), which are summed up in the negate 'non-white'. Only the totality of the 'non-white' shades is contradictory to 'white'. One element from that totality is only 'contrair'.

**c.--** *The (cor)relative opposition.*

Mercier, o.c., 108, says that not utter exclusion, but mutual relation (symmetry) constitutes the essence of the (cor)relative opposition. Where two elements (attributions),

**(a)** although distinguished

**(b**) yet only make sense (understand) of each other (within the mutual relation), there is (cor)relative oposition.

**1.** *Appl. model.*

The ideas 'father' and 'son' are

**(a)** oppositions ("A father is not a son" and vice versa),

**(b)** but without 'father' no 'son' and vice versa. They are situated within a mutual relation.

The ideas "double" and "half" (the double consists of two halves e.g.).

So too are the ideas 'knowledge' and 'known object' (there is simply no knowledge without being able to do something ('object') and vice versa). The latter applies to the intentional domain (WDM 66/70). And, thus, far reaching.

**2.** WDM 91 taught us how strongly the (cor)relative contradiction can dominate a whole philosophy: monism, for example, thinks, throughout, in such contexts.

**d.-- *The privative or robbery expressing opposition.***

One speaks, in speech, of 'privative suffix', so e.g. -less (unemployed, senseless). Or about a 'privative verb', such as 'to peel an apple' (to strip it of its casing).

The negate expresses, in this type of contradiction, a gap i.e. the deprivation of something that, normally/ ideally, needed to be there.

*Appl. model.--* "That lady does not see" (she is, in the exercise of the facial sense, deprived of an (active) function (capability), which, normally, should have been there).

Kard. Mercier expresses it humorously: "A stone, for example, does not see. But, unlike a human being, for example, it is not deprived of a sense of sight. It is, seen from a stone, not a void".

Of course, 'seeing' and 'not seeing' are contradictory. But 'not seeing' o.g. a gap given in nature and 'not seeing' in virtue of a gap not given in the nature of something are contradictory opposites. Seeing' in respect of a faculty of nature and 'not seeing' in respect of a mutilated (deprived of exercise) faculty of nature are privative opposites. Cf. WDM 57.

*Conclusion.*

The differential equation shows how ambiguous the negation (the negate), usually with the term 'not verbalized, is.

**II.D.-- 3.-- *Taseology*** (tension theory).

'Tasis', in ancient Greek means 'tension'. She is one type of contradiction. The elements involved are negates among themselves.

Both play and conflict are applications of it. Because both play such a gigantic role (function) in society, a word about them.

*The structure.*

Think of two children, fighting over one ball.

There are two 'camps', but only a single 'stake'. What is striking, in game and conflict, i.e. in tension, is the fact that the bodies involved (forces, players, enemies) are greater in number than what is at stake (the stakes). In short: too many contenders for too few objects.

*Mechanical model.*

In mechanics, one speaks of forces. Suppose, in a mountain of fire, an upward force acts,-- this, against the compressive force of the walls of the mountain of fire. The upward force wants the lava out; the walls want the lava in. The 'stake' is the lava (just one given); the competing (competing) forces are more than one in number. Result: tension.

WDM 160.
*Human model.*

René Girard (1923/2015) is a philosopher of culture, who - against the theories of K. Marx, Fr. Nietzsche and, for S. Freud, which he labels obsolete - claims that the fundamental desire, peculiar to man, is the desire to imitate. Such a theory is called "mimetism" ("mimesis" is, in Antique Greek, imitation, representation). All human behavior is - according to Girard - carried by the mimetic principle, which is misunderstood ('méconnaissance') by humans (and theorists) and, therefore, remains unconscious. Yet Freud, in a lucid moment, touched that principle.

He quotes Freud : "The little boy shows a great interest in his father: he would like to become and be what his father is: yes, replace him under all points of view. Softly put: he makes his father his ideal.

This attitude toward the father (or any man in general) has nothing passive about it or anything feminine: it is, essentially, masculine.-- It is very easily reconcilable with the Oedipus complex, which it helps to prepare." So much for Freud himself.

Now Girard: "There is an obvious similarity between identification (WDM 150: Bethe identifies with 'Berthe' and imitates them) -- namely, identification with the father -- and the desire to imitate: both consist in choosing a model (paragon). (...) This choice can be applied to any man ( ...) who takes the place normally accorded to the father in our society, that of the paragon.  (R. Girard, *La violence et le sacré*, Paris, 1972, 250v.).

How does the competition ('la rivalité') arise?- "The little boy realizes that the father stands in the way of his access to the mother. His identification with the father takes on, as a result, a hostile tinge and ends up coinciding with the desire to replace the father,-- even with the mother. This identification is, in other words, 'ambivalent' (*op.:* two-sided) from the beginning". To that, again, Freud himself.

Girard says, thereupon, that the desire to imitate the father is, here, clearly at work, but that this escapes Freud (o.c.,252). By wanting to supplant his father, with his mother, he creates Oedipus complex.

"It is the father who shows to the son what is desirable -- precisely because he himself desires it (i.e., the mother)" (o.c., 253).

Do we not see, here again, that the structure of tension (conflict) works? Two candidates ('desirers'), namely the father, who incites the son, and the son, but only one object (stake), the mother. By imitating the father with respect to the mother the son comes into conflict with the father.

### A structure-invariant.
Both the mechanical and the human model converge: within the same common situation (convergent aspect), mutually exclusive tendencies (value relations), -- even if they are based on imitation (divergent aspect),-- are tendencies, which concern the same object (stake) (convergent aspect).

*Bibl. st.:* H. Robinson, *Renascent Rationalism*, Toronto, 1975, 171, where the structure of the conflict is described.

### The distinction between play and conflict.
When two soccer teams, centered around just one ball, play, tension arises: their desire to "have" that one ball comes into conflict with the opposing team, which wants just the same ball.

Robinson tends to see conflicting tensions already in play. Yet, at a soccer match, there is a difference between (sometimes hard) play and actual conflict (where the referee should intervene). Inflicting damage, out of aggression, seems an essential element to distinguish play from combat.

### Conclusion:
(a) sports events, relaxation goals,--those are exciting actions;
(b) quarrels, fights, wars,--that is also tension, but strictly conflictual.

*Note.--* The depth psychological idea "complex," i.e., a tension, resp. conflict tension between more than one tendency (value attraction), is one type of tension: the tendency, e.g., wants a pleasure object, which prohibits the moral norms (one and the same stake, but a pleasure and a conscience concern; WDM 47v.), i.e., two desires.

### Bibl. sample :
-- *Ch. Baudouin, L'âme et l' action*, Geneva, 1969-2, 97/141 (*Esquisse d' une théorie des complexes*);
-- *J. Jakobi, Complexe, archétype, symbole*, Neuchatel, 1961 (translation of *Complex, Archetypus, Symbol*). Both game and conflict theories revolve around the idea of "tension.

WDM 162.
***Syn- and diachronic tension.***
***Bibl. st.:***
-- *Ph. Orsini et al, Les jeux de réflexion*, (Puzzle games,), in: *Science et Vie* 124 (e.g. *A. Deledicq, Comment inventer un jeu?*, a.c.,10/17 (*praxeologie*));
-- *J. Gob, Précis de littérature Française*, Bruxelles, 1947, 206s. (L'action).

**(a)** *Praxeology.*
'Praxis', actio action (eventual : action), is the subject of praxeology or theory of action. It is, at once, clear, to all who live, that an action is a thing that can be recounted. The story is the representation of the sequence of action. Place and time, -- -characters and their situations, -- such are the four great terms of the 'dramatic' structure ('drama' means, actually, action).

Dramaturgy is the analysis of dramatic art, which is only one type of action. So that dramaturgy is only partial praxeology.

*Acting structure* (diachronic tension).
Briefly review the classic sequence.
**(a)** It begins with the pre-node ('expositio', exposition of the initial situation), which 'disperses' the four major terms of the structure, into the 'play' (action) of the actors/actresses.

**(b)** The knot is the actual stake of the tension,--usually some tension-provoking 'conflict' (a man falls in love with a woman e.g.).

**(c)** Then follow the 'peripeties', (i.e. the turning points or twists in the action itself),-- e.g. (to spin on around said knot) the wife of the man fallen in love comes to know.

***In passing:*** play, in this, the leading part, practically always, the so-called passions (urges), expressions of the fundamental desires (e.g. the imitative urge to be able to tell of his amorous adventures, just like his colleague, at work, lets the man, in question, get embroiled (the knot is the beginning entanglement,-- the peripeties are, only, the following entanglements) in a love adventure).

Which brings us to WDM 160 (mimetism) and, even, to WDM 150 (identification) : half unconsciously half consciously our 'man' identifies with his colleague, who is acting emancipated.

**(d)** The denouement is the ending of the dramatic tension (here e.g.: our 'man' falls, by chance, on a woman eager for his money (WDM 155: transitive), who 'converts' him from his adventure (WDM 48: the great educator, the necessity)).

WDM 163.

**(b)** *kinetics*.

Open a book of mechanics, and thou shalt fall upon analogous stress structures.

*Appl. model.*

Return, briefly, to our fire mountain (WDM 159). The report of either a volcanologist or a watching journalist will have an identical basic structure:

**(a)** pre-node: where, when,--what mountain of fire (Vesuvius e.g.), its current state,--they are 'defeated' in a story (the protocol story of the professional scientist, the 'dramatizing' story of the newspaper writer);

**(b)** node: at a certain moment the eruption (already expected for some time, based on measurements) starts;

**(c)** peripeties : now a brilliant fireworks display, then the silent outflow of the magma; (d) denouement : the volcano falls silent.

*Note.--* 'Kinetics' is the analysis of the 'kinèsis', motus, movement (in the very broad, philosophical sense of change (WDM 155: theory of change)).

*Note -- Sociometric.* WDM 155 taught us what sociometric can be. It is, immediately, clear that, in addition to the synchronic relations, the diachronic tension field also belongs -- in part -- to the sociometric: in the growth group, tensions occur!

The distinction between lying and hiding the truth, dramaturgically viewed.-- Return to our man identifying with his colleague.

**(1).--** The possible attitudes toward his wife can be reduced, perhaps, with Freud, to three.

**a.--** He may, mordantly, conceal his adventure,-- which amounts to omission. As Freud says (but he means the dream event) : the dream exhibits the whiteness of censorship (which omits some lines of a journalistic text).

**b.--** He can shift the 'rumor' (that he is living through an adventure) : "Yes, but that must be about my colleague: he is really involved in an adventurous life."

**c.--** He can reverse the true fact: "I'm just not into that adventure that your friend tells, as if it were about me."

*Conclusion:* we are, here, faced with a straightforward application of our typology of opposites (WDM 157vv.). The man does not tell the true facts he keeps himself, technically expressed, in the negation.

WDM 164.
**(2). - *The ethical reviews.***

**(a)** *Ecclesiastically spoken:*
**(i)** lying is present only where the one who is lied to (the victim) has a right (WDM 60v.) to the communicated true facts,

**(ii)** while "withholding the truth" is present where the person who expects the facts disclosed, but is not entitled to them, does not learn the true facts. One thinks of the professional secrecy of doctors, teachers, neighbors (even the community of neighbors is obliged to keep secret what one learns, e.g. by living next door), priests (the famous secret of confession) and so on.

A doctor, who says to a neighbor who asks, "It's cancer for sure, doctor?", "No, ma'am, it's something completely different," is not "lying" in the strictly ethical (theological) sense: he is rightly hiding the true facts or "truth.

**(b)** Human, -- in the sense of 'hypothesis' (WDM 60: John of Salisbury).-- The actual circumstances (= 'hypothesis') -- time, place,-- actors/actresses involved and their/ her situations all this makes the traditional Church 'rule' (rule of conduct), eventual, not so easy. Immediately the question arises as to whether the man, who entered into a 'slip-out-rivalry-with-a-against-colleague', is committing (WDM 57; 159) omission (and thus lying).

**(i)** Suppose that his wife is an emotional being, often having difficulty controlling herself, then it is perhaps (note the modality (WDM 54: probably)) better, i.e. in conscience more responsible, that the man should keep silent (in which case he would not be 'lying' stricto sensu). After all: the evil resulting from speaking up would perhaps be greater than the good, which is meant by it.

**(ii)** If, however, the woman involved in the "love triangle" is "open to reason", then the "hypothesis", i.e. the totality of the practical circumstances (= "context" or "situation"), is radically different: in such a case the ideal (here: open conversation with his wife, even if this conversation contains "painful" elements for the man) becomes realizable (modality: "possible") and this, in a responsible way. The husband, who then (in this 'hypothesis') withholds, 'lies' (in the ecclesiastical sense) and commits 'omission' (i.e. robs his wife of something she is entitled to, given the marriage).

WDM 165.

*Note.--* Again: the totality, which, in part, is meant by the elements (here the details, which are the circumstances), is decisive.

The comparative method, which "collects" (WDM 107), either distributively or collectively (WDM 88), alone exposes this.

**(3) --** *The depth psychological analysis.*

We point out some (not all) aspects.

**(i) It is a** fact that, especially (but not only) women undergo 'spiritual osmosis' (WDM 152): the possibility exists that the woman concerned, over time, through 'intuitive' perception (WDM 152), acquires a kind of certainty as to the fact that her husband (always that 'whole coherence'; WDM 151) is engaged in an affair.

She becomes aware of this e.g. in the 'new' style of the love game, in his sometimes -- unlike before -- embarrassed downcast looks, in his later coming home etc.,-- details, which taken together (the famous convergence argument of cardinal Newman (John Henry Newman (1801/1890)): again: the convergence of the totality -- confirm her 'presumption'.

**(ii)** Second 'psychoanalytic' feature is the possibility that transference (WDM 149: Ribot, also Freud) takes place,-- negatively this time. By seeing in just one case (hers) a man (WDM 122: synecdoche or exchange of just one with all or almost all, -- a false induction) call his marriage into question, the woman in question may (note the modality) conceive a kind of secret resentment ('ressentiment') against all men, resp. mans (husbands). She conceives antipathy for all that resembles her, individual husband.

**(iii)** Third psychoanalytic aspect.

The complex (WDM 161) is, here, possible.-- By living for days, weeks, months, years with that disappointment ('frustration'), the woman's frame of mind miscarries : by focusing on that ONE aspect of her total life (i.e. her husband, who relates to another, a 'rival'), she totalizes that frustration and finds "that her whole life, because of that shrew, has failed". What is, originally, a complex i.e. an inner division concerning one aspect, generalizes and grows into a neurosis (nervous disease). Food for neurologists, psychiatrists, psychotherapists,--physicians in general, pastoralists et al.

WDM 166.

*Note:--* We ignore, here, the question posed by *William James* (1842/1910; the Pragmatist) in his *The Varieties of Religious Experience* (*A Study in Human Nature*), New York, 1902, *Lecture 2* (*Circumscription of the Topic*), 41ff.

In *W. James, Variants of religious experience* (*An inquiry into human nature*), Zeist/ Arnhem/ Antwerp, 1963, 27vv, - the Dutch translation - James, as a descriptor of personally lived (and in that sense, 'existential') religion, poses the question of the difference (WDM 155: difference science) between the specifically religious and the non-religious processing of - especially the nasty and failing sides of - the universe.

James believes that the religious man - in contrast to e.g. the purely Enlightenment-rational acceptance of "the great educator, who is 'necessity'" (WDM 48) - possesses a surplus of processing power. He typifies this in the following terms: whereas the purely 'moral' ('Humanist') man resigns himself to a world order (which often appears to him as pointless), "the religious man accepts evil"-in this case: the failed marriage-as a form of sacrifice" (Dutch translation., 33),--this, thanks to a complex sacrificial disposition, in which
**(i)** higher happiness **(ii)** is associated with lower unhappiness" (ibid.).

True harmony of opposites (one type of pair of opposites; WDM 157). He adds, "No other emotion than religious feeling can lead a man to such a peculiar state." (Ibid.).

The woman, in the considered case, will, therefore, in that perspective of James be able to process her failure(s) in at least two different ways.

**(4) -- *The depth psychological analysis.***
We knot, briefly, again to WDM 71/73 (transc. truth).

Let us now examine the side of the 'man'. It is based on metaphysical truth ('What is, that is') and logical truth ('What I recognize as objective fact, I must accept as true'). But the concealment (concealing, shifting, reversing) of his truth, i.e. his slip, is the domain of his ethical (= moral) truth:

**(i)** unless he lives as the "judge, who did not fear God and did not bother people" (WDM 81), he has ethical principles, including on the sanctity of marriage and marital fidelity (not to mention the "fidelity" to the eventual small children);

WDM 167.

**(ii)** as a non-nihilist (i.e., one who does not deny truth, value, and coherence (unity)), he knows that on that one point (or perhaps on several) his praxis does not conform to his principles : he lives, ethically, in a partial existential lie.

**1.** Now everyone -- certainly the Psychoanalyst -- knows that the ethical lie goes hand in hand with a complex i.e. more than one value attraction (tendency) which do not agree with each other,-- resulting in inner division.

**2.** Not wanting to know regarding his slip can (modality) extend,-- from that one tender point to pretty much his whole lifestyle.

It begins with the concealment (threefold) of the one - just one - point, the slip. But it continues with in order to sustain that concealment, with a whole series of "little lies" and, incidentally, real, heavy "lies. "Yes, my colleague stayed to chat a bit,--after work. You know: in the condor". "Oh yes: the boss's secretary came by with a load of work that had to be posted tomorrow. "I have to go to Holland - for my work (experience something like that now) - for three days. This European competition, which is going strong in 1992, is forcing our company to expand": "Yes, I know: lately people are also talking about you, like - you remember - they started talking about me".

"But say, female, I hear more and more about this 'relationship' of yours with Hugo. I suppose it's like in my case: talk, talk, man".  "Let us be honest: our marriage looks but poorly anymore. Thou hast long suspected 'something' -- from me (I want to say). But I, in turn, know that from you too: there is also 'something', I mean with Hugo". Go on: the 'man' knows he is inventing (i.e., he is slandering, i.e., telling invented evil). But he puts his wife, who saws, checkmate,--with things, which resemble what was told of him (except for the objective truth). From now on the divisive element is there: if there is no repentance, it will end in - yet another - divorce.

WDM 168.
**4.-- *Dichotomize or complement.***
The theory of negates, apart from e.g. the tension, also talks about the dichotomy.

Starting point is, of course, again the whole collection or the whole (system). But, within it, either a part (an objectively distinct part) or subjectively distinct part) is considered separate and in itself (set apart),-- insofar as distinct (= difference) from 'all that part, resp. part is not'. This seems, at first glance, banal, but the examples will teach otherwise.

**a.-- *The singular*** (singular or individual).
Something that is unique, singular -- and in this sense 'singular' (enunciated) -- can only be so defined, according to its forma (WDM 28), form of being. Think of yourself, ye who read this : that which defines you, in your unique individuality,--how will ye articulate (let alone prove) it? WDM 5v. (idiography) taught us that all that has proper names is of that type.

**b.-- *The form of being* ('forma').**
But - peculiarly - also the general (universal) forms of being, - they too have an own to nothing different from it, irreducible 'being' (beingness, essence). All that is, e.g., non-red (WDM 5), falls outside 'all that is red' (to stick, now, to Husserl's little example),

*Note.--* In this sense even all universals (WDM 106) are based on duality, but differently from the unique. The unique sets itself both by the general form of being, which it has, or against all that is not that form of being, and also by the individual form of being, which it has, against all that, within the specimens exhibiting the same general form of being, is not that one, just one or unique (singular) specimen.

Distinctiveness, so fundamental in our knowing and thinking, hinges on these two types of complementation.

Again: the comparative method exposes that there are
**(i)** on the one hand, something is (with general and with individual form of being) and
**(ii)** on the other hand, the rest (also dual), i.e., all that is the negate (negation) of that something.

**c.-- *Figure and background.***
**(1)** One is familiar with the foreground/background systechy!
**(2)** One application of this is the 'figure/background' system. The girl I see playing in the sand on the blond beach -- how she, with her jet-black hair and bronzed skin, stands out against the horizon bathed in sunlight!

**1.** In the psychology of perception, 'figure' is called a (geometric) form, which detaches itself from a totality. As a result, the 'figure' becomes a foreground against a background. Always within that totality.

Musically: the melody, in a song, which separates itself, among other things by repetition ('refrain') from the whole of it, is the so-called 'theme'.

*Note.--* It is, at once, obvious that such a figure is one type of 'Gestalt' (perceptual form). What, in passing, the Paleopythagoreans (WDM 13) call 'number.form.harmony'.

**2.** *M. van Loggem*, transl., *Norbert Sillamy, Lexicon of Psychology*, Utr./Antw., 1974, 87v., even broadens this systechy.

**(a)** The fact that a pupil lags behind at school is merely the appearance on the surface (i.e. the foreground) of a disorder (= figure) which betrays both the total state of health and the total psychosocial situation (both aspects are the background against which the figure appears).

*Note.--* The Structuralists would speak here of surface and depth structures, Says Sillamy: "The organism (of the pupil) functions as a whole, from which the parts, which, from time to time, come to the fore, cannot (*note:* understand: not simply) be detached." (A.c., 88).-- Which is an outright application of systems theory (WDM 146).

**(b)** Every division is formulable in precisely the same terms : what is separated (objective, subjective,-- part or portion), is figure, which stands out against the background, the complement. This is the negate.

### II.D.-- 5.-- *The harmony of opposites.*
*By way of introduction,--* H.H. Pope John-Paul II, in the Cathedral of Antwerp, on Friday, 17.05.1985, thematized the commitment ("engagement") of the layman in the Church. He said among other things:

"In the words of C. Houtman, "In the Bible, nature (WDM 12) is drawn as a power with a Janus head (*note:* two-sided reality):
**(1)** She can be kind to man, -- give him food, for example;
**(2)** but she can also threaten him, -- rob him of his life for example".

WDM 170.

-- *J. W. Goethe* (1749/1832), in his *Faust* (1808/1832), I, says, through Mefistofeles: "I am the spirit that always denies. And rightly so! For everything that comes into being is worthy of destruction. It would be better, therefore, if nothing came into being! Thus everything that you know to be sin and destruction - in short, evil - is my own peculiar element.

What the Pope says in general-Biblical natural philosophy, that deepens Goethe, in the above text. And in the sense of pagan theologies, of which we give a few samples.

**a.--** *S.N. Kramer, L' histoire commence à Sumer* (WDM 156), 124, says: "Although the Sumerians thought that the great deities - especially the goddess Nansje (= Nanshe) - behaved ethically well, yet they believed that, at the foundation (*note* : better 'causing') of human culture, the same deities had also introduced evil (falsehood, violence, oppression).

In particular: the list of 'me' (i.e. the principles (WDM 7: archè, principium)), invented by the deities to make the cosmos (the universe, nature) run smoothly, included not only truth, peace, goodness, justice, but also falsehood, strife, complaint, holy fear.

Why had the deities seen fit to cause and favor evil, sin, suffering, miscalculation? (...). Did not the sages (WDM 10) of Sumer think that the will of the deities and its motives, respectively, were inscrutable?

In other words: what the Pope calls the Janus head of nature (of natural scientists), that the Antique-Sumerian theologians ("sages") interpret as caused by the deity.-- Which comes very close to the Satan that Goethe articulates.

**b.--** *W.B. Kristensen, Collected Contributions to the Knowledge of Ancient Religions*, Amsterdam, 1947, 272v., characterizes this as follows.

**(1)** *Appl. model.*
The Babylonian god Anoe (= Anu), the universe god, "Father of the Seven Gods; is "a demonic god of totality" (o.c., 272).
'Totality' means, here, the dichotomy of good and evil. "In Anu were united all divine energies.
**(a)** He was the universal destroyer:
**(2)** Salvation and calamity proceeded from him". (Ibid.).
His nature (= creature form) was "demonic" in the religious science sense of that term.

WDM 171.
*Meaning:*
**a.** Both good and evil, -- and salvation and calamity,-- they spring from the causation by the deity,
**b.** which, to our fallible human mind, resp. reason, are, precisely because of this, unfathomable, i.e. incomprehensible.

**(2) *Regulatory model.***
Kristensen - a true connoisseur - generalizes, "This type of deity representation was known to most ancient peoples and asserted itself, especially, in relation to the highest deities.

The 'god' of Job, the Greek Zeus, the double Fortuna in Rome, the Indian Varoena (= Varuna),--even an Ahura Mazda (= Ahura Mazda, in Iran, among the Zoroastrians), who encompassed both celestial spirits,--all exhibit, as sovereign determiners of destiny, the nature of the Babylonian Anoe: salvation and calamity emanated from them,--fall and rise, d.i. the opposites, which constitute the permanent (note: understand: the, in the Heathen perspective eternal) life of the world and in which the Babylonians saw "the divine totality.
The will of these deities was fate -- the 'Moira' (of the Greeks), -- 'divine', but inhuman." (O.c., 272v.).
"The ancients were perfectly aware of this contradiction in the 'divine' being." (ibid).

*Note.--* Kristensen, by using the term 'divine', does not express himself strictly monotheistic (including Biblical): he follows the language of Pagan theologians. Divine' means 'that which is peculiar to the deities' (WDM 17: extra-natural, not supernatural).

**c.--** *C.J. Bleeker, The Mother Goddess in Antiquity*, The Hague, "1960, 27, takes the same position -- the demonism or ambivalence of extra-natural deities -- also for the female deity.

**(1)** The mother earth figure e.g., worshipped everywhere, although in polydemonistic form (i.e., according to very local religions spread throughout primitive humanity), Bleeker labels with the Greek term 'Pan.dora; 'she who gives everything (and good (salvation) and evil (calamity))' (o.c., 27). He explains: "The demonic nature of the Earth Goddess (...): she not only gives, but also takes back." (o.c.,28).

**(2)** The Earth-goddess female great goddesses -- Ishtar (Babylonia), Isis (Egypt), Anahita (Iran, Athens (Hellas), Freyja (Germania), Kubele (Phrygia -in Asia Minor), Lakshmi (= Lakshmi) and Kali (India) -- exhibit, like the original Earth goddess, 'Terra Mater' (in Latin) or Dèmètèr (= Demeter,-- in Greek), that demonic, this means two-sided, good and evil (ethical), salvation and calamity (eudemonological or destiny-analytical) encompassing character.

WDM 172.
### An Indian applicative model.
The couple Shiva (= Shiva) - Shakti (= Shakti).-- Bleeker, o.c.,133v., develops it summarily.

**(a) *Shakti, i.e., the primal or "smug" force***, energy (*E. Wood, Vedanta Dictionary*, New York, 1964, 171 (Shaktis (Powers)), of Shiva, bears a plurality of names.

**1.--** She is called Doerga (= Durga), the unapproachable (unapproachable).-- She is 'virgin', Koemari (= Kumari), yet the 'wife' of Shiva.

**2.-- a**. The salvific side is expressed in the names Oema (= Uma, the benevolent one) and Gauri (the golden one).
The ominous side, which predominates, is expressed in the name Kandi (the wild, impetuous, uncontrolled) and Kali (the black).

**a.** As a salvific agent ("soteira", savior,-- in the ancient Greek), she is depicted as an attractive young virgin woman, holding in her hand a blue lotus flower, while "standing" on an animal (tiger, lion) (i.e., as a subjectess of the animal level, in the invisible and the visible world).

**b.** As a disastrous ruler, she looks, in art, like an old, ugly "witch," with four arms and decked out with snakes (again, controlling the animal) and ... skulls around her neck.
"Kali fights and controls the demons (WDM 66vv.: the noble yoke; Kali, in order to be able to fight evil, transforms herself into an old, ugly witch (the equal through the equal): (o.c. ,134). In other words: this Mother Goddess role (active function,-- hence she is a 'Funktionsgöttin' (Usener)) comes through, especially, in India, to the common people, who, precisely in that uncanny, 'dark' form, invoke, yes, call upon her as savior.-- One watched: she is a female-motherly being. Not a 'male - animal' being.

**(b) *Shiva, the typical male-animal god***, is - also, but differently - demonic. He is both the giver and destroyer of life (WDM 13: universe-soul substance))

WDN 173,

**1**. On the one hand, Shiva is a procreation and fertility god (indicating sexual magic).

**2.**On the other hand, he is an mortal, i.e., an ascetic (askew), who - half naked, smeared with ashes (the rest of the up and burnt out life), surrounded by skulls - devotes himself to a meditation mobilizing the whole soul.

**a.** In art, Shiva, then, is depicted, e.g., as participating in orgiastic (wildly erotic) dance groups.

**b.** Or - standing on an overwonne demon (again, the 'exorcist' or saving function; he is, in that role, a 'Funktionsgott' (Usener)) - Shiva dances in a circle of flame. "The image of his efficacy as destroyer of the world." (Bleeker, o.c.,133).

*Note -- The circular or cyclic conception of the universe*, which holds that the universe, including the human world, sometimes goes through an upsurge (creation), sometimes through a downfall (decay), is only an inference from the religious-historically understood 'demonism'. It is precisely in this that the supernatural ('divine', in Kristensen's parlance) expresses itself.

Note--Specialist parapsychology and, in a much more incisive way, true occultism (of which spiritism is only one aspect) study, indeed practice, the extraterrestrial (paranormal). It is, therefore, not surprising that both branches of the analysis of phenomena are confronted both with the twofold and with the inscrutable, which characterizes demonism.

*Biblical assessment.*
Apart from nature and the so-called 'divine' or paranormal outside nature, the Bible knows the supernatural, i.e. the One, True Godhead, who is both transcendent (transcending everything) and at the same time immanent (intimately present in everything).

Do we listen, for a moment, to *Genesis 3:1vv*..
**(a)** We are in the Earthly Paradise, which resembles an Oriental garden, pleasure garden. With the inevitable trees.

**(b)** The serpent (the male-animal type), who "does not fear God and does not bother men". (WDM 81; 166), says : "(...) God knows that, the day that you (Eve, the woman) still dare to eat from the tree in the center (*op.:* the cosmic 'tree; symbolizing all that lives), your eyes will be opened and you will be like deities, knowing both good and evil;

WDM 174.

One sees it: the Bible begins to take root in a demonic universe. The Bible - unlike many of its contemporaries, still - has no illusions about this universe. It is,-by the serpent, who does not fear God and does not bother men, -conceived and controlled (i.e. it is the principle of it; WDM 7).

Not without heavy reason, Jesus himself, through *St. John* (*12/31*), calls Satan "the prince of this world" ("world" - here - in the cosmically - broad sense).

In the first great confrontation with "the prince of this world," had Jesus not heard him say, "(The devil) takes Jesus up to a very high mountain, shows Him all the empires of this world, with their glory, and says, 'All this,--I will give it to you, if, bowing down deeply, you worship me. (....)". (*Matthew 4:8v*.).

### *Conclusion.*

Apparently, the Bible, too, is convinced that the two-sided demoniac is the true background of "this world. That same Bible is, precisely, a response to that brutal fact.

*Note --* Of course we recall WDM 31, where we already spoke of a type of 'harmony of opposites', the dialectic type. This is merely a "secularization" (transfer in the profane realm of originally sacred (WDM 17) data) of what we have just been expounding.

### *The practical conclusions, using the philosophy of history.*

It may all seem very other-worldly and "theoretical. But listen to what follows.

*Karl Löwith* (1897/1973), *Weltgeschichte und Heilsgeschehen*, (World history and salvation events,), in: *W. Otto u.a. Anteile* (*Martin Heidegger zum 60. Geburtstag*), Frankfurt am Main, 1950, 150, writes:

"However inconceivable it may seem, to begin with, that radical secularization has its origins in a religious 'Entweltlichung' (withdrawal from the world), 'world flight', this would nevertheless only confirm a general rule of history: in the process of history, something else - the negate - always emerges than was intended at the beginning of a movement (...). The great innovators of history prepare for others - the negate - the paths which they themselves - the negate - do not tread".

WDM 175.

As applicative models of this "general" rule, K. Löwith indicates:

**(i) *J.J.Rousseau*** (1712/1778) prepared the French Revolution (1789/1799); but he would not have recognized himself in Maximilien de Robespierre (1758/1794; who played a decisive role in 'la Terreur' (the Reign of Terror), from May 1793 to July 27, 1794, -- a dictatorial system).

**(ii) *Karl Marx*** (1818/1883) prepared the Russian Revolution (from February to October 1917), during which the Bolsheviks took power, which had taken the wind out of the sails of the minoritarian Mensheviks, in Brussels and in London, at the Congress in 1903); but he would not have recognized himself in Vladimir Lenin (1870/1924; the founder of Bolshevik Marxism).

**(iii) *Friedrich Nietzsche*** (1644/1900; WDM 38; 58: 61; 73; 78) prepared the Fascist Revolution (WDM 10; 122; 147); but he would not have recognized himself in Adolf Hitler (1889/1945), who, in 1942, in the Brenner Pass, gave to the Duce, Benito Mussolini (1883/1945; Italian dictator, who, in 1919, founded the Fascist Party, proponent of a "totalitarian regime") the works of Fr. Nietzsche as a gift, have recognized.

We can add other examples.

Thus, e.g., **William of Ockham** (1295/1350), the Nominalist. *A. Weber, Histoire de la philosophie européenne*, Paris, 1914-8, 234 claims that William Occam (a second spelling), who, meanwhile, achieved fame in the novel *Il nome della rosa* (The Name of the Rose; Milan, 1980;--basis of the film of the same name) by *Umberto Eco* (1932/2016; semiologist in Bologna), with his "revolutionary" action, aimed at the purification and renewal of the Catholic Church, meant well, but nevertheless ended up shaking off by the laity (particularly some princes) "the yoke of Christian Rome. What he, originally, had not wanted.

Other model: **Martin Luther** (1483/1546), the Reformer. According to *Joseph Lortz, Die Reformation in Deutschland*, 1939 - Lortz is "the Nestor of Catholic Luther research," Luther was **(a)** a deeply religious in nature, **(b)** who inadvertently removed himself from the Catholic Church. What *Dr. Günther Deschner, Luther* (*Eine Bilanz nach 500 Jahren*), in: *Bunte* (10.11.1983), 126, agreed "Nothing was further removed from Luther than the founding of a new ideology. Even the splintering of the Roman Church was not in his intention. (...). His success was fueled by other - *note:* the negativity - forces: these lay both in him and in the structure of his period".

WDM    176.

Third example: ***René Descartes*** (1596/1650, the founder of Modern philosophy). *C. Forest, O.P., Le cartésianisme et l'orientation de la science moderne*, (Cartesianism and the orientation of modern science), Liège/ Paris, 1938, 3, says: "Cartesianism, as a system, was abandoned rather quickly.

 Yet Descartes continued, as a result, to influence both Modern philosophies and Modern sciences no less."

One of the most striking inferences, which thinkers, after Descartes, derived from his presuppositions, were the theses of materialism (WDM 37). To which Pater Forest: "The point is not to impute to Descartes the materialist interpretation of science (...). He remained, until the end of his life, a believer. His spiritualism (WDM 37) is, here, not questioned.

But the conceptions which men bring into circulation go beyond what they had foreseen: with inexorable logic they pursue their course, through the thinking minds." (o.c.,4).-- So that Descartes may rightly be called a prematerialist.

### *Nature and Explanation.*

One would, perhaps, best characterize the above cases with the term "turnaround (into the opposite)" or, at least, turnaround (into something else).  One recognizes the structure of the harmony of opposites, in one of its applications.

***As an aside,*** dialecticians have a keen eye for that turnaround,-- the leap from thesis ("thesis") to the opposite thesis ("antithesis"),-- from the "affirmation" to the "negation. However varied: the negation, in whole or in part, stands out.

"The paths of history, between origin and purpose, between intention and consequence, turn over." (K. Löwith points out statements.

**(1)** *Gianbatista Vico* (1668/1744; *Scienza nuova* (1725), a work of history) and J.*B. Bossuet* (1627/1704; *Discours sur l'histoire universelle* (1681),-- both believers, see the cover as a sign of Divine Providence. G.W. Hegel (1770/1831; WDM 31; 53.1; 70; 91), the dialectician, liberal Protestant, refers to the cover as 'eine List der Vernunft' (a ruse of Reason, understood as the universal or world and history speech, i.e. that rational force which, apparently in a rational way, controls both the cosmos and (cultural) history (WDM 7: principle)).

WDM 177.

**(2)** Hegel, who did not hide his sympathy from the "Philosophers" (i.e. enlightened rationalists) of the eighteenth century -- even from those who most fiercely opposed the "cause" of Christianity and Spiritualism (insofar as it assumes a personal God and the personal immortality of the human soul) -- had a disciple who turned his "Idealism" into Materialism,-- Karl Marx (in this sense K. Marx merely carried on Hegel's prematerialism -roughly, as the French Materialists of the XVIIIth century carried on Descartes' prematerialism; *cfr. R. Serreau, Hegel et l' Hégelianisme*, Paris, 1965-2, 26s. (Spiritualism et materialisme)).

K. Marx mainly put economic factors (WDM 108) in the place of an - in his eyes - imaginary 'Rede' (world speech). But he too saw the turnaround. He interpreted it as an effect of the 'social dynamics' (i.e. the whole of the 'forces' (classes, for example) active in a society). One and the same reality - society - exhibits, at a certain moment, "self-reversal" (turning something into something else or into its opposite). What Marx thought of the revolution, among other things.

### *The self-validation of religion.*

A startling application of the cover theory offers us *Anselm Grün, S.B., Dealing with the Evil One* (*The struggle of the ancient monks against the demons*), Bonheiden, 1984. Steller relies, primarily, on Evagrius Ponticus (346/399; an Eastern monk and desert father). The work, which in terms of C.G. Jung (WDM 151; deals with the experiences and teachings of Evagrius, begins by emphasizing that the search for God (a truly biblical theme) can also be subject to self-reversal.

**(a)** The experiences of (desert) monks, can be described as follows. "The demons can control a person to such an extent that he becomes possessed. They work diseases, such as schizophrenia (WDM 103), epilepsy (falling sickness), insanity and hysteria (nervous disease type).

The stories of the monks describe the most various symptoms of physical illnesses,--which they attribute to 'demons': one monk eats his own 'dirt' ('coprophagia; i.e., eating excrement); another scratches himself and cuts himself wounds; still others are dragged -by the demons- to and fro; and some are driven to suicide." (o.c.,16).

WDM 178.

A remarkable example is world-famous: St. Anthony the Great 251/356), anachorete (desert monk, living alone), known for the (erotic) temptations, to which he resisted.

"Antony went into the desert, to live for God alone (...). But the road - in solitude - leads him not only into the presence of God, but equally into the presence of the Evil One. The Evil One now, openly, enters upon him. And his loneliness reveals itself as an unpleasant duality with the Evil One. Antony must take up the fight with the Evil One. (...) The experience of Antony is typical of all early monasticism (approximately from the IIIrd to the VIth centuries)". (o.c.,9).

**(b)** The monks have experienced that their path to God leads - above all - to the struggle with dark powers (.,...). These 'powers', which they see at work in their desires, drives, motivations and emotions, they call 'demons'.

They describe, at length, the different types of demons,-- their techniques and methods of drawing people into their spell." (o.c.,10).

### *Conclusion.*
**(1)** To seek God, at least in those conditions, is at the same time to be confronted with the "spirit of denial of God" (WDM 170; 173 (who does not fear God and is not bothered by men)).

**(2)** These demonic power(s) hold as their principle 'the totality' (and good and evil intertwined), i.e. the affirmation and its negation or its antithesis.

**(3)** As already from Sumer (WDM 170) - up to Jesus (WDM 174), who also faced the same struggle in the desert - the monks denote their conflictual situation as caused by extra-natural factors ("beings"), notwithstanding the fact that they - at the same time - hold the drives, in part, responsible.

**(4)** One may ask, when studying the history of religion, whether not all - not just the one situated in the desert and the monastic life - religious life is one reckoning of that nature.

**II.D.-- 5.A.--** *The differential equation.*

**1.** WDM 156 taught us, in passing, that, in the differential calculus, one works not only with differences (which is called "differential"), but with small or, even, ultra-small differences. A variable quantity is, viz., considered to the extent that it undergoes small increase or small decrease.-- We now extend this.

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

**A**. One still encounters people who see 'quantity' (how big it is) - possibly expressed mathematically - as conflicting with the sense of the qualitative in reality.

*Consequence:* 'criticism' of quantification and mathematical methods, which involve qualitative data.

**B.** Aristotle - in his Categories (predicaments) (WDM 84) - does distinguish the two property/measure (quality/quantity), - but does not separate them. He sees them as joined together ('harmony of property and measure'). Which we now, further, examine.

**a.--** *The tropology of Ainesidemos of Knossos* (+/- -50).

Ainesidemos (= Aenesidemus) is a skeptic, i.e. a thinker, who puts 'skepticism' (research) at the center, insofar as this research only leads to uncertainty and doubt. He is a "phenomenist" i.e., regarding human knowledge, he believes that we only know "ta fainomena", the things insofar they show themselves to us - through our senses -: our knowledge is purely phenomenal, phenomenon-bound; it does not reach the very essence of the data.

Furthermore, he is a Heraklitian (WDM 31).

*Bibl. st.:*
*-- V. Brochard, Les sceptiques grecs*, Paris, 1887-1; 1969-2, 253/298:
*-- R. G. Bury, Sextus Empiricus*, 4 vols., Cambridge (Mass.), 1961, I (*Outlines of Pyrrhonism*), xxxvii/x1;
*-- J.-P. Dumont, Aenésideme*, in: *D. Huisman, air., Dict. d. phil*., 22/24.

**(1)** *The tropics*
Central to this Cretan are the so-called tropoi ('tropoi; modes of thought --- WDM 117vv.). These have, in his system as a sense to prove that both our sensory experience and our thinking, are fundamentally relative ('relative'). Which amounts to relativism or relativity thinking. We must suspend our final judgment of everything ('epoche'), in that we know nothing; in the proper sense.

WDM    180.

**(2)** *The tropes or forms of opinion are based on:*

**(i)** the very object of our sensory experience or our intellectual knowledge,

**(ii)a** on the distance between this object and ourselves (one detects something in the distance, but sees it accurately at close range, e.g.),

**(ii)b** and the state of our senses (a poor hearer does not hear what a good hearer does).

**(3)** *Quantitative changes* in the object itself cause changes in the qualitative perception - even jump changes.

**(3)a.** *Distributive changes.*

*Reg. model.--* If a form of being (forma; WDM 28), within the range of our senses (and, immediately of our mind (intellect/ reason)), occurs either more frequently (frequent') or more rarely (less frequently), this, within that same time span (interval), it appears, at any given time, qualitatively different,-- this, eventually, leaps and bounds (discontinuous).

*Appl. model.*

**A.** Both the comet ("tail star") and the sun are celestial bodies. Nevertheless, (cause) the tail star, for the reason of its rarity, arouses wonder in the population, while the sun, for the reason of its frequent occurrence (high frequency), is not sensational.

**B.** With us, an earthquake is rare (and arouses a jolt of emotion); in California, e.g., where it is much more frequent, one "learns to live with it," - The Ancient Romans said, "Assueta vilescunt" (Things, as far as frequent, are 'daily fare' (one becomes accustomed)).

*Note*.-- The cause is, here, the object of observation (celestial phenomenon, earthquake); the effect ('consequence') the impression of mind. What Ainesidemos, thus, gives as an example (and, after him, the Gallic rhetor (WDM 1; 12; 62) Favorinus of Arles (+80/+160)), is psychological-axiological (the impression on the soul and the value judgment that springs from it). Which is only one type of causality (causality).

*Note.--* We can outline a type of differential: some (unique) -- very/ fairly rare -- (fairly very) frequent.

**(3)b.** *Collective changes*.

A form of being, insofar as collectively modified, - e.g., a mass - changes qualitatively.--

*Applicable model.*

**(a)** According to Ainesidemos, precisely one grain of sand can appear prickly, while many grains of sand, gathered in one large mass (heap), can appear soft.

*Note.--* Again, a psychological-axiological effect.

**(b)** A small dose of wine, e.g., "strengthens the soul" gradually increases, this dose, suddenly (leaps and bounds) turns into the opposite: too much wine, e.g., works, suddenly, harmfully.

*Note* -- This is, obviously, a biochemical example.

*Note.--* Compare with WDM 176vv.: here the turning to something else, to the contrary, is posologically founded (posology is dosology).

*Moral Model.*

Within the ethical standards of our forebears, cleavage (the lower neckline of a female garment), if not too deeply cut, was considered morally good,-- too deeply cut, as morally irresponsible. Sometimes cleavage was "moral", sometimes "immoral" (i.e., acceptable or shocking to the sense of value, i.e., exposing the female body).

The leap between demure and immodest was - somewhat - mathematically expressible ("A few more inches of fabric wouldn't hurt"), but still - to some extent - arbitrarily determined.-- Which, again, means a new type of "effect.

*Note.--* Differential doctrine: (too deep, deep, just) cut out -- (just, little, very little) cut out,-- with, somewhere at the breaking point, the cover.

*Digression.*

WDM 127 (the trial cond. meth.,-- regulatory model);-- 135 (operational application),-- they taught us what 'reducing' is.

***Anaxagoras of klazomenai*** (Anaxagoras of Clazomenae; -499/-426) passes as the founder of the experimental method, at least in its Antique form.

***Bibl. st.:*** *D.A. Gershenson/ D.A. Greenberg, Anaxagoras and the Birth of Scientific Method*, New York, 1964-1 (with introduction by Ernest Nagel, an authority on the subject), 40ff., claims that, with him, one finds, within Antique thought, just about all the main features of our present natural sciences. Thus o.a. And especially the experimental proof.

One such piece of evidence is a brilliant application of gradual quantitative change, as an omen (cause), followed by a sudden (jumpy) qualitative change.

WDM 182.

"Since Anaxagoras considered the air, beneath the earth, capable of 'carrying' the same earth, as it were (*note:* in this he is typically pre-modern), he was clearly aware that every gas was susceptible to a considerable dose of pressure. This, not only when it was at rest, but also when it took the form of tremendous jerky waves. One thinks of the wind: although, for ancient man, invisible, yet the air-in-motion was palpable; indeed, in a storm form, it was destructive. Cfr o.c.,40.

Anaxagoras was among the first to provide the experimental proof of the fact that air, however impervious, can resist a strong force. Yes, the same air, which we so easily disperse, when we "step through" it and which offers so little resistance to any body, which "steps through" it

Public experimentation brought forward Anaxagoras, of which we have, even now, reliable records.

Gershenson/ Greenberg, ibid., give, thereof, model.
**1.** He took a wine bag (made of leather) and twisted the neck of that bag - gradual quantitative change (pressure increase) until the compressed air (gas) made the very pliable bag hard. Which, differentially speaking, is a reversal of the opposite (from soft to hard).

**2.** He then had proof, by means of pressure tests, that the air inside the bag, instead of passing through, resisted pressure forces coming from outside.

*Note.--* Gershenson/ Greenberg, o.c.940f., then describe how Anaxagoras, through experiments with the klepsudra (water clock), put forward an analogous proof.

*Note.--* This proves, with already an Antique example, that the relationship 'quantity (changing)/quality (changing with it)' is more than a purely psychological matter: the model is, here, natural science.

One would add strength to the contemplation of Anexagoras' experiments if one pressed the leather sack until it bursts (the jump break point).

**b.-- *The 'productio experimenti' of Francis Bacon of Verulam*** (1561/ 1626).
With, among other things, his *Novum organum scientiarum* (1620; short: *Organum*), *Francis Bacon* (not to be confused with the Middle Ages Roger Bacon) is considered the programmer, i.e. the designer and leader, of the Modern experimental method.

WDM 183

He designed, in that context, 'tables' (a set of rules), as a guide. One of these is called, in the learned language of the time, 'productio experimenti' (literally: bringing forward the experiment).

### a. *The baconian or causal induction.*

WDM 126 (summative (= Aristotelian) and amplificative ind.); 131 (mathemat. ind.); 140 (analog. ind.). -- they already taught us a series of induction types.

The causal or causal induction is one application. One pays attention, viz., to the connection "cause/effect" (WDM 85: action/passion).

**a.--** The examples (Ainèsidèmos, Anaxagoras), above, are applications of this type of relation (WDM 82; 153).

**b.--** Francis Bacon, evidently (at least to those familiar with the history of philosophy and science) following in the footsteps of Scholasticism, insofar as it was Aristotelian, put this type of induction at the center.

*Consequence:* Fr. *Ch. Lahr, Logique*, 585, labels this type as "l' induction vraiment scientifique" (the truly scientific induction).

The question is: is precisely one verified causal relationship (minimal summative induction) - e.g. precisely one time water boils, in normal conditions, at 100° Celsius - generalizable to all such cases?

The answer: the causal induction. if one - says Bacon - gradually changes the cause (= omen), then - if there is generalizable causal connection - the consequence (= sequel) changes, too, gradually. The emphasis here is on proportionality.

### *Appl. model.*

The law (WDM 126 (extrapolation);135 (invariant); 141) says that the volume of a gas is inversely proportional to the pressure applied to it.

The medically frequent fact that a substance - e.g., a poison - if gradually modified, also exhibits a gradually or, also, jumpily modified effect.

Cfr. Ch. Lahr, o.c., 585 (not proportionally without more, but abruptly). To which Lahr concludes : there are thus cases in which quantity is an essential ('integral') component of the cause.

### *Appl. model.*

**(a)** The ultraviolet radiation - in the spectrum, situated between the visible light waves and the x-radiation - is a radiation with very short electromagnetic wavelength (order of magnitude: between +/- $4 \times 10^{-7}$ and +/- $5 \times 10^{-9}$ meters).

WDM 184.

**(b).1.** Natural UV radiation comes, among other things, from the sun's rays. Thanks to a surrounding ozone layer, where the sun's UV rays cause chemical processes, these rays reach our planet in a filtered way. Scientists are concerned about the effects of the gradual depletion of the ozone layer.

**(b).2.** Artificial UV radiation is created in mercury vapor lamps, among other things. One thinks of our sunbeds.

**(c)** UV radiation has an advantageous effect, e.g. by causing the production of vitamin D in the skin of animals and humans -- it has, however, a powerful ionizing power (it produces ions, i.e. electrically charged atoms or groups of atoms). It affects, for example, photographic films. An appropriate dose can have a good effect on the skin (and the organism), but an overdose is lethal for plants, animals, and humans. Recently, for example, there have been strong indications that overexposure to UV radiation causes skin cancer.

### Conclusion.

One paid attention to proportionality: a quantitative change in UV irradiation also founds (causes) a qualitative change in the effect, which can then be beneficial or harmful,-- depending on.

### Appl. model.

Dr. *Catherine Kousmine* (1904/1992) studied, from 1922 to 1928, in Lausanne (became a laureate of the medical faculty there). She opened a medical cabinet in 1934 (after six years of clinic training). From 1936 to 1946, she did research work with Professor Guido Fanconi.

### Her works include:

-- *Soyez bien dans votre assiette jusqu' à 80 ans*, (Be well in your plate until 80 years,), Paris, 1980;

-- *La sclérose en plaques est guérissable* (*Histoire clinique de 55 cas de SM*), (Multiple sclerosis is curable (Clinical history of 55 cases of MS),), Paris, 1984;

-- *Sauvez votre corps*, (Save your body),  Paris, 1987.

The main thesis (thesis) of this last book is: current medicine is disease theory and disease care, but not health theory and health foundation, unless indirectly.

In the field of dietetics, i.e. the regulation of nutrition, most doctors she met were ignorant. Nevertheless, after years of research, she concluded that nutrition is a first-rate health phenomenon.

Degenerative diseases in particular have kept her medical attention going.

WDM 185.

By this it means chronic (lasting) diseases, which are external, either in the organs or in the tissues, due to damages, which, without immediately apparent cause, interfere with their functioning. If not cared for, they are, usually, progressive (they increase). They can be congenital or show up late, in a human life.

**1.** Today we are all carriers of degenerative diseases. Their effects are sometimes benign, 'functional', easy to repair and relatively tolerable (dental caries (tooth decay), varicose veins), eczema (skin rashes), hives (burning itchy skin rashes e.g. after eating strawberries, oysters)). Other effects, however, are important, serious, incapacitate, yes, are fatal" (o.c.,21).

**2.** This generalization of degenerative diseases dates back to the last century. It increased since World War II (1940/1945). "What is striking, when one analyzes this phenomenon in the countries, is the generalization. We are, practically speaking, all affected. The 'degenerative' diseases exist, in one form or another, in all social classes: both among the peasant and the urbanite, both among the manual worker and the bank manager." (Ibid.).

"The cause must therefore, logically speaking, be sought in factors (*note:* partial causes) that affect us all, abstracted from our - rural or urban - center of life, from our - sedentary or not - occupations." (Ibid.).

Dr. Kousmine reasons, here, from the consequent (outworking, continuation) to the portent (cause, factors, conditions).

**1.--** *First lemma* (hypothesis).
Often people look for the pathogenic cause in the degradation of the living environment (think air pollution).
Kousmine notes that environmental pollution is very unevenly distributed (very strong in congested cities and in industrial areas; much less strong in the outdoors).

*Consequence:* the general factor cannot be that non-general defilement. In other words: this hypothesis does not correspond to the given (the generality).

WDM 186.

**2.-- *Second lemma*.**

The change in dietary habits is a fact, affecting all, since one hundred to one hundred and fifty years. "It is therefore legitimate to ask the question whether there is not a connection of the 'cause/ effect' type between

**(a)** our current diet and

**(b)** this troubling and recent development" (O.c., 92).

This is, therefore, the working hypothesis (lemma).

**a. *A historical note:***

In past centuries, the overly well-fed urbanites, in the big cities acquired degenerative diseases. "Their families died out and were replaced by those who came from the outdoors, where people lived much more frugally.

The new and important fact lies in the fact that also the rural population, which, for a long time, represented the stock of health of nations, has been affected by the degenerative diseases and this, as much as the other social classes. (...). Henceforth, no social species is immune. Immediately one faces a 'dégénérescence de la race ' (degeneration of the 'race' (biological species))" (Ibid.).

**b.** The first book, *Soyez bien dans votre assiette*, is, essentially, based on observations between 1950 and 1970.

"The situation has deteriorated considerably since then. For example, in the case of cancer: whereas two generations ago cancer mainly affected people over sixty, today it affects people younger and younger". (O.c.,23).

What strikes Dr. Kousmine is that, since 1980, more and more families of cancer sufferers are occurring. One example: two future cancer patients get married. Because they lived together and ate at the same table, they commit the same dietary errors;

*Consequence:* they die, both of them, at the age of seventy-five, one of lung cancer, the other of breast cancer.

They gave birth to six children, who inherited the same eating habits. The three sons die, between the ages of 54 and 56, of cancer (of the bladder and intestines),-- twenty years earlier than their parents. The three girls escape cancer, but are stricken with osteoarthritis (*op.:* chronic, non-inflammatory joint disease) with incapacitation,-- i.e. a second degenerative disease, peculiar to our civilization. (o.c., 24).

WDM 187.
***Conclusion.***
Kousmine's lemma, if also verified by other forms of research, would be that:
**(a)** a small dose of unhealthy food does not have (that) harmful effect,
**(b)** while too large a dose does have a harmful effect.
In other words: again and again Aristotle's rule do not view a property (quality) without its measure (quantity).

### c.-- *The method of accompanying changes of John Stuart Mill.*
(WDM 135 (operative summation); 139),-- they introduced us to John Stuart Mill. He refounded the tables of Francis Bacon.
Thus he called what Bacon called 'productio experimenti', "the method of accompanying modifications",-- "if a phenomenon is modified, while all factors, except precisely one, remain unchanged, then that precisely one factor is the cause sought".

*Father Lahr, Logique*, 589, gives as an example: (antecedent, sign) alter the number or amplitude of the vibrations of a sounding body, (consequent, continued) and thou shalt observe the effect of such alteration in the altered sound.

In other words: a quantitative change drags, with it, a qualitative change (in psychological perception).

### d.-- *The Marxist-Leninist dialectic on quantity/quality.*
Yossief Vissarionovich Oyougachevili, nicknamed *Stalin* (1875/1553), in his *Dialectical materialism and historical materialism* (1937,--as a corrective to *R. Descartes' Discours de la méthode pour bien conduire sa raison et chercher la vérité dans les sciences* (Discourse on the method for conducting reason and seeking truth in the sciences), (1637)) sets forth the four major features of (Modern) dialectics (WDM 31).

The third main feature reads as follows.
**1.** The movement (= change) a.o. the becoming - of matter (WDM 37: materialism) - establish (cause) something new.

**2.** Causing something new occurs in two ways.
**(a)** Something new arises in a circular (cyclic; WDM 173) or circular manner.

*Appl. model*.--Men can, with heat energy, generate motion (in the mechanical sense), with that motion energy, again, decaying into heat energy.

**(b)** Something new arises leaps and bounds ("revolutionary").
A trivial-seeming quantitative change causes a qualitative jump.

189/410

WDM 188.

*Appl. model*.

*Physically*: the water, once it reaches zero degrees Celsius, freezes; once it reaches one hundred degrees Celsius, it boils and evaporates: two qualitative jumps, which, downward and upward, are achieved gradually, little by little.

The **chemical** arsenic trioxide ("rat poison"), a heavy poison, acts, in small doses, curative,--in large doses killing.

On the **psychological** level: a bullying, undergone once, is bearable, tolerable; repeated too much, it becomes hateful; until "the drop makes water overflow": suddenly the toleration ends and the tolerator becomes explosive.

On **the aesthetic** level: a piece of music, at first enjoyable, runs for a time, to become, finally, heard too much, uninviting.(*P. Foulquié, La dialectique*, Paris, 1949,64s.).

On the **sociological** level: the working masses, if not overly exploited, find this bearable,--if overly exploited (think of the Russian revolution), turn into a revolutionary mood (the breaking point).

**e.-- *The eristic method of Euboulides of Miletos*** ((380/-320).

'Eristics' (redoubt, redoubt), if it does not degenerate into logical nitpicking, is a method, which refutes (falsifies) theses of philosophers, professional science press, rhetors and theologians by means of the counter model.

In the name of Euboulides, two examples of eristics have been bequeathed, which concern the qualitative leap.

*Model 1.-- The bald head.*

Depriving someone of just one hair does not (yet) mean that he, thereby, becomes "bald. To deprive him of two, three, etc., also does not.-- So one can deprive him of all hairs,-- without him becoming bald.-- Compare with WDM 126: g1, g2, . gn.

*Model 2.-- The grain heap.*

precisely one grain does not make a "grain heap," two, three, etc., either. So a hundred thousand grains do not make a grain heap either.

*Criticism.*

*Fr. Lahr, Logique*, 701, says: Euboulides knows

**(i)** what is true of each member of a set individually (that it does not make up a set (bald head, grain heap) - in the commonsense sense), to

**(ii)** to the whole collection as a whole (totalization).

WDM    169.

Lahr could have added that in natural languages there is a distinction between: just one grain - some grains - a heap - a heap - a big heap - an indistinguishable heap. Cf. WDM 118 (neo-rhetoric).

In logistic-mathematical languages, one can speak of a set of just one (or, even, zero) members; but then, that is an artificial language.

Compare with, in the same natural languages: a coin or banknote - a pocket money - an amount - a capital - the great capital. Each time, with gradual quantitative change (per right one), at some point, a qualitative leap : that **(1)** sensation, **(2)** threshold feeling, **(3)** agreement, **(4)** habit play a role in this, is certain. But natural languages have their akribeia or accuracy.

*Note --* *E.W. Beth, The Philosophy of Mathematics* (*From Parmenides to Bolzano*), Antw./ Nijmegen, 1944, 78/86 (Eristics); 85/92 (Skepticism), treats, at greater length, the proper value of eristics. He, too, says, o c., 85, that, notwithstanding obvious pettiness or flat thinking, eristics
   **(1)** is the introduction to a more in-depth investigation and
   **(2)** may claim full probative value.

The two sophisms -- the bald head and the grain heap -- force a sharp understanding of 'summative induction': that precisely one or few elements of a (understood in natural languages) set do not yet constitute a 'set' (= bald head, grain heap), is correct; that a sufficient number do constitute one, after the qualitative leap, which natural languages provide, is also correct.-- Cfr WDM 34 (Zenon the founder of eristics).

### II.D.-- 5.8.-- *The idea 'differential'.*

We have already met many of them,-- differentials, -- starting with WDM 105 (comparison differential, -- the basis of all the others).-- Let us, now, dwell on its idea (= regulative model).

### a.-- *the combinatorial (configurational) basis*

WDM 114; 135; 136;-- 153.-- they taught us what pairwise comparison and ordering is, applied to placing elements in boxes (places).

On one (horizontal or other) line we place boxes, provided with a certain order (= configuration).

WDM 190.
**b. -- *The antithetical basis,***
WDM 157 taught us the systechy (opposition pair) of Paleopythagoreans.

| + | +/- | - |
|---|---|---|
| good | undecided | evil |
| All well | Not all | All not (= none) |
| Greater than : > | Equal: = | Smaller than: < |

One sees the configuration, with its places -- with the 'values' (ethical, set theory, quantitative) placed in it. Each 'place' (box) is paired-d (= pairwise) with a value.

The order(s), peculiar to this configuration, is governed by the systechy, visible in the signs '+, +/-, -' Paleopythagorean view: an 'arithmos' numerus, 'measure' (number form harmony; WDM 13), i.e. a configuration.

**c.-- *The differential mode of being (idea). .***
As soon as one has, instead of the dyad (WDM 154), a triad (ibid.), which, moreover, is ordered according to numerically expressible (all, some (= not all), all not (= none)) (ultra)small differences (WDM 156; 179), one has a configuration, which can be called 'differential'. In the logical sense, then: the logical differential.

***Put more succinctly:***
a logical differential is a systechy, a.k.a. opened up in its middle (the 'dia.stema', intervallum, between space (interval)) and, o.g. quantitative (small) differences, filled up with 'values'. Whereby it is clear that the triadic differential is the smallest.

***Note.-- The mathematical equation.***
One looks at e.g. (letter math) 'x +y + z' or (number math) '7 = 3 + 4'. One knows the enormous role the equation plays in arithmetic and in algebra. Solving it is one of the classic exercises. The professional scientists-physicists, chemists,-- human scientists-who can make it to some numerical or letter-shaped equation formula consider themselves lucky.

One sees, immediately, that also the mathematician, theoretical or applied, always compares. Which again confirms the universality of the comparative method. Cfr. *F.-J. Thonnard, Précis philosophie* (*en harmonie avec les sciences*), Paris, 1950, 124/131 (*Les sciences mathématiques*).

WDM     191.
*Note.-- the n-adic differential*.-- WDM 154.
*Applicable model*.
All possible, all actual,-- very much, much, quite a lot, quite (much, little) quite little, too little, almost none, just one,-- none.

### The scaliness.
Large scale, small scale, are terms we commonly use. But now we realize that they express a differentiation that is built into our natural language.

### Appl. models.
**(1)** *Economic:* large enterprise, medium enterprise, small enterprise.
Since Lord J.M. Keynes (1883/1946) one speaks and about microeconomics (popular economy on a small or medium scale) and, especially, macroeconomics (the same popular economy, but on a national or also international scale).

**(2)** *Ethics:* as already stated above (WDM 95), ethics is, easily, in an individualistic tradition, called micro-ethics (small-scale morality); recently, however, under the pressure of contemporary political theology' (in particular 'liberation theology'), the term 'macroethics' has emerged. It looks at conscientious behavior from the point of view of social relations (e.g. between the social classes).

**(3)** *Historian. K. Bertels/ D. Nautal Introduction to model understanding*, Bussum, 1969, 86v., cites a student of the historian Lucien Febvre (who advocated the 'histoire des mentalités' psychological historiography), Fernand Braudel (1902/1985). His 'structural' history is based on a phaseological principle.

*Note.--* 'Phasis', apparitio, appearance, means, among other things, the showing of a heavenly body -- think of the phases of the moon -- on which it rises at the facial horizon.

'Phaseology' means, then, to bring up the order of phases. Well, historically (civilizational), Braudel distinguishes:

**(a)** microhistory ('with net hour', 'from day to day', or some more concerning time) - think of the jousting of the 'political class' -;

**(b)** medium-term history (e.g., a development extending over several decades (decades));

**(c)** macro history (consider the role of the Atlantic Ocean from 1600 to 1850).

WDM 192.

*Science History.*

Historical epistemology (history of subject science) is, today, a busy branch. *I.B. Cohen, Revolution in Science*, Harvard Press, 1985, talks about the idea of a "professional scientific revolution. Well, unlike many a proposer on the subject, Cohen sees this macrohistorically,--and in four stages (phaseologically). He applies this p.m. to the Copernican revolution.

### The categories (fundamental ideas) of aesthetics.

**1.** *C. Lefevre, S.J., La composition littéraire*, Bruxelles, 1936-3, 13s., says: "The terms 'pleasant', 'graceful', 'beautiful', 'sublime', -- these ideas express (what may be called) a progressive series (une progression) (Ricardou De l' idéal, 112s.)." Indeed: the ideas 'gracieux'/ 'beau'/ 'sublime' are scaled ideas.

After all: one can define the graceful (graceful) as what is clean on a small scale; the sublime, on the other hand, is what, on a large scale, is called clean.

### Appl. model.

**(a)** The fine, colorful lacework of sex lingerie, e.g., is, apparently, small-scale clean or "graceful" (aka, in other contexts, "lovely").

**(b)** The classical image of a Greek goddess can be called, simply, "beautiful.

**(c)** But the peaks, with the eternal snows, gleaming in the summer sun, of the High Alps,--that is 'large-scale' clean, 'lofty'

**2.** One can, with the late Professor Edgar De Bruyne (1898/1959), draw up the antithesis.

**(a)** The comic (laughable) is the ugly, small-scale (and therefore annoying, but not serious enough).

**(b)** The ugly is the basic term.

**(c)** The tragic is the ugly, but large-scale (and therefore deadly).

### Guido Gezelle (1830/1899).

If anyone, in our dear Flanders, possessed aesthetic sense, it was this priest-poet. Two samples,-- to illustrate the aesthetic categories.

*Editors' note*: *It is hardly possible to translate Gezelle's poems, which were written in an older Dutch dialect. Therefore, we only present the original version, untranslated.*

### Micro-esthetisch model.

Bewonder het bevallige in zijn '*Voetjes'* (1858(?)).

"Dit voetjen -- en dat voetje -- gingen, te gare (*opm.:* samen), de kalvekes wachten (*opm.:* hoeden).

De kalvekes liepen in 't kooren.-- Dit voetjen -- en dat voetje, ze liepen al zere (opm.: snel) vooren.

Dit voetjen -- en dat voetje zal ik, te gare, in het waterke wasschen. Het waterke zal ze spoelen.

WDM 193.

Dit voetjen -- en dat voetje zullen in 't water koelen.
Ze zullen zoo rood, als de roozekes, blinken.
Ze zullen zoo wit, als de melk, zijn.
Lijk bezekes onder de blaren".
(*Fr. Baur, inl., Guido Gezelle's dichtwerken* (*Tijdkrans, Rijmsnoer, Laatste verzen*), Amsterdam, 1943-1,722).

Of luister naar O Zaarde (= zacht) blomke....
"O zaarde blomke, -- 't moederhert -- der aarde eerst uit - gekropen,
hoe heerlijk is -- uw hoofdsieraad. -- met morgendauw -- bedropen".
(*Gaesar Gezelle, vrkl., Keurgedichten van Guido Gezelle, II*, Amsterdam, s.d., 127).

**Note.--** The diminutives are one of the means of rendering the small - beautiful. The children's world is, further, a gathering place of "loveliness. Gezelle was very fond of them.

### Macro-esthetisch model.
De estheet, die Gezelle was, komt anders over, waar hij *De reuze* voordraagt.

"Uitgekleed, in 't zonnebranden, -- al uw leden, naakt en bloot,
heerscher in de nederlanden,  koning van de bosschen groot,-
eekenboom, zoo sterk voorheden wie heeft u neêgestreden?
Winden vielen, vast en vele, -- stormend' u en stootand' aan;
grepen u, bij hals en kele,-- wilden u in 't zand gedaan:
staan, zoo liet het al te booze -- windgevaart! u, schrikkelooze!
Donderende drakentoten (*opm.:* drakenmuilen), hemelmachten, onbekend,
vonken viers (*opm.:* van vuur) en vorken schoten, dapper, u den ton omtrent:
niets en heeft ontroerd of onder 't -- bliksemvier u neêrgedonderd.
Wie dan heeft u omgestreden, groene reus, met al uw macht?
Naakt en bloot uw schoone leden, effenvloers, in 't zand gebracht?
 Wie kon al uw' krachten dwingen, -- haarlooz; en in schand' u brengen?
Staan en blijft, voor menschenhanden, -- niets, 't en zij dat eeuwig leeft.
Koning van de nederlanden, -- sterk is hij, die nooit en beeft:
't menschdom heeft u, baas bedegen (*opm.:*: bedijgen = sterk worden),
groenen reuz', omneêrgekregen"
<div align="right">(01.10.1896; Fr. Baur, ibid., 391).</div>

**Note:** -- In addition to the language almost bordering on mythology to represent the large-scale beautiful, there is the antithesis (stand -- precipitated: WDM 157).

WDM    194.

*Fr. Baur*, o.c., a little further, gives another related model: *Of the old tree*, whose salutation is:

"Met uitgestroopten arm, -- ten halven afgeknuist (*opm.:* afgeknot, totdat er een knuist van rest), -- wie staat er daar, en steekt een' onbestaande vuist -- ten hemel? Is 't een reus -- in beelde? Neen 't, 't en is -- geen menschenbouw. 't Is eer een' wangedaantenis, een steenen berggedrocht, dat, staande fel en fier, -- de scherpe houwen torst -- van 't vonkend hemelvier (...)".

*Note.--* Here the large-scale ugly ("misandry" and other terms) is expressed,-- again strongly recalling mythology and ballads.

### *Micro-macro aesthetics.*

The harmony of opposites regarding aesthetic categories also exists.

**1.** Here is an amusing model (the comic). *Jean Racine* (1639/1699), the French classical tragedian, in his farce (comedy) *Les Plaideurs*, has a summoned man say - humorously - to the commissioner, "Monsieur, ici présent, -- M'a, d'un fort grand soufflet (a punch in the face), fait un petit présent ('gift')."

**2.** Well known in Russian literature, Nikolai Gogol (1809/1952) is for his tragicomedy.

*Dr. Leo Kobilinski-Ellis, Die Macht des Weinens und des Lachens* (*Zur Seelengeschichte Nikolaus Gogols*), (The Power of Weeping and Laughter (On the History of the Soul of Nikolaus Gogol)), in: *R. von Walter, Uebertr., Nikolaus Gogol, Betrachtungen über die göttliche Liturgie,* (Reflections on the Divine Liturgy), Freiburg i. Br., 1938, 80/100, sets out.

Gogol (also: Gogolj) has one main characteristic:

**(i)** at first glance, he laughs, constantly, -- soberly, describing all the small, yes, the infinitely small -- in and around him, in the Ukraine ("microscopy" says Kobilinski-Ellis); one hears the gentle giggling and even grinning of things, in their soulfulness;

**(ii)** but that why/by which he laughs (and sells humor), is at the same time, that why/by which he weeps. That is tragicomedy. -- The reason is in his Platonic Christianity: people, nature,-- they are in God's ideas (models, ideals; WDM 50; 63; 107 (caricature)) successful, beautiful, ideal; but, in fact, for Gogolj, the mystic, they are failures, ugly, 'caricatures' of the ideal. Therefore/ because of this he laughs at them, but with him God's idea comes through so strongly that he weeps at it, simultaneously.

WDM 195.

**The polarity profile** (semantic differential).

WDM 2; 91 (Morris' theory);-- 'semantic' is all that gives content, meaning to a sign. A 'profile' is a sketch of something such that some features are 'telling' (think of the silhouette or side view of a face). Polarizing' is, in the broad sense, to focus the opposites.

### Applicable model.

D. Szanton, *Cultural Confrontation in the Philippines*, in: *Cultural Frontiers of the Peace Corps*, Cambridge (Mass.)/ London, 1966, 35/61(fn. 53), depicts how the people, who, as part of the so-called U.S. Peace Corps, were in the Philippines, absorbed the native population and its culture.

The scheme, a whole range or spectrum (i.e., a set of varieties within the same area),showed as 'categories' (substantives, adjectives):

**(1)** From acceptance to fondness;

**(2)** aloofness;

**(3)** From rejection to aversion. One sees the triad '+ / ± / -'.

**Note.--** Ch. E. Osgood, *The Measurement of Meaning*, 1957 - improved by P. Hofstätter and others gives an analogous scheme in opinion research (polling), but with mathematical precision.

Thus, one can examine the "image" (image impression) of someone, among an audience. Think of the profile of a teacher: one presents, to the parents, a three-part differential 'competent/ undecided/ incompetent', to which the parents, in a secret consultation, fill in the box, with a cross e.g.. The aggregation of '+/+-/-' then shows the polarity profile.

One can do this in sales science (marketing): a commodity is tested e.g. 'sells well/ undecided/sells poorly'. This, with the resellers to the consumer.

### General Conclusion.

We still think in identitarian terms: the polarity profile, for example, consists of opposites (a multiplicity, namely of non-identical data). But it is a single profile (a unity, namely of effects (formae), forms of being, which - somewhere - are nevertheless identical under one or more points of view. But both non-identity (multiplicity) and identity (unity) together make up analogy or partial identity.

One discovers this thanks to one method, the method, the comparative or comparative method. Even the most modern things we have been able to order, with that ancient method.

WDM 196.

**II.E.-- *Harmology: the methodical ordering*** (systematic analysis).

***Introduction.***

**1.** *D.R. Hofstadter, Metamagical Themes* (*The Magic Cube's cubies are twiddled by cubists and solved by cubemeisters*), in: *Scientific American*, 1981, March, 14/27, touches on the problem of the possible and actual configurations of Ernö Rubik's cube (of the colored type, 3 x 3 x 3, but such that the six 3 x 3 -- sides rotate around the center point, within one condition (order type), namely, the cube as a whole cannot, under any circumstances, disintegrate).

Which is one type of topological structure (the elements remain the same, but their shape changes).

**2.** This brings to mind *Claude Lévi-Strauss* (WDM 93; 96), *La pensée sauvage*, (wild thinking) Paris, 1962, where the author speaks of "le bricolage" (tinkering). What he, therein, denounces - when this tinkering becomes theoretical - is the graceful, non-systematic and, therefore, non-methodical proceeding. With this, the Structuralist Lévi-Strauss touches on one of the main points of this course. We shall now consider a few applicative models of ordered, i.e. systematic, analysis.

**II.E.-- a.-- *The rules of experimentation of Fr. Bacon*** (WDM 182vv).

Everyone, be it on a practical or theory-backed practical level, experiments. But look how Fr. Bacon established order in that experimentation.

**(a) *Galenos of Pergamon***

(= Galenus, the famous physician (129/200)), on experimentation, not so unmodern, is known for the fact that he introduced a series of conditions for experimentation. Thus, among others:

**(i)** the systematic alternation (variation) and
**(ii)** Controlling for interfering factors.

***In passing:*** *R. van IJzendoorn et al., Critical psychology* (*Three currents*), Baarn, 1981, 113v., talks about the experiment (methodically, then) on the extension of the pre-scientific praxis: a scientifically uneducated farmer, for example, possibly, on his cultural level (WDM 130), demonstrates a sensible method (i.e. a reasoned approach).

***Conclusion***: neither Galenos nor - certainly not - Francis Bacon are the radical inventors of methodical experimentation, for which they sometimes pass. One did not underestimate even the so-called experimental antiquity without question!

WDM 197,
**(b) *Francis Bacon.***

**1.** He is known, rather, as an Empirist (WDM 18). But listen, nonetheless, carefully to what he says precisely:

**(a)** Empiricists resemble ants: they accumulate materials without coherence; with this they are content.

**(b)** The partisans of the a- priori method (*note:* the Intellectualists or 'Speculators') resemble the spider : from her own material she spins beautiful webs, full of refinement and symmetry. But it lacks solidity and usefulness.

**(c)** The partisans of the experimental method resemble the bee: from the flowers she draws the substance for her honey; she works it out - thanks to a faculty peculiar to her - so that her nectar emerges from it.

*Bacon's Novum organum* (1620) explains:
"Thus everything can be expected from the close connection of experience (*note:* emphasized by the Empiricists) and reason (*note:* emphasized by the Intellectualists). The disappointing 'divorce' of the two faculties has, to this day, perverted everything in the sciences."

Let us, now, look at the rules (= reason), which Bacon indicates to make experimentation (= experience) orderly. He gives several. But here is the most particular one.

**(i).-- *'Sortes experimenti': the haphazard experimentation,***
In some still completely "obscure" data, where no lemma (explanation) is yet possible, one does have to proceed haphazardly.
Claude Bernard (1813/1878; WDM 22v.) called this "tasting to see once,--to try to fish in murky waters."

**(ii).a.1. *'Variatio experiment': alternating in the experiment*.**
**(a)** one experiments e.g. the effect of heat on bodies (baconian or causal induction): one starts with wood.

(b) But one alternates: one examines how heating acts on stone, iron, and other solids,--and then examines what heat causes in liquids and gases.
Or one experiments the effect of poisons on laboratory animals of all kinds.

*Note:* one can then compare much better, the method.

**(ii).a.2.** '***Productio experimenti', quantifying***.
WDM 182vv. explained this: one examines whether the quantity and its changes cause an effect.

WDM 198.

**(ii).b.** *'Inversio experimenti': the inverse experiment.*
*Appl. model.*

In chemistry, one can analyze water, H²O.-- But one can also try to synthesize water ("synthesis").

One can inculcate in the students the "global" method, which emphasizes the wholes (totalities, gestalts). But one can also work the other way round: train the pupils' sense of detail and precision (the 'associative method'). Then we compare their effect on the rational behavior of students.

*Conclusion.*

**1.** If one, now, summarizes, one sees that in Bacon's rules a certain logic understand: orderliness and clarity is at work. As he says himself: building reason into experience itself. First we look at the stage (WDM 191) at which we are in contact with the reality to be analyzed (no hypothesis possible yet or a hypothesis already possible). Then one tests a network situated around the point to be analyzed.

**2.** Since it is about the relationship "cause/effect," Bacon designed tables.

**(a).1.--** A table of the presence of causality: it notes all the circumstances, which accompany the causal process.

**(a).2.--** A table of gradation in causality: it notes all intensity changes (doses) in the process.

**(b)** -- A table of the absence of any effect : where the effect does not occur,-- each time noting all the circumstances,-- as above, of course.-- In that three-part analysis it may be seen, according to Bacon, that a cause begets an effect, viz. where, invariably, the omen is followed by the sequel.

Then, precisely, the **(1)** necessary and **(2)** sufficient conditions of causation show themselves.

To which *Ch. Lahr, Logique,* 587, notes what follows.
**(1)** Night invariably follows day (a pure order fact);
**(2)** the Earth's axis rotation is one condition
**(3)** the solar light is the cause: the axis rotation explains the day-night alternation only insofar as, in our planetary system, a luminous hearth is at work.

In other words: omen/sequel is not yet an actual connection 'cause/effect'.