

## **5.1. Epistemology**

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**Philosophy: Introduction to Philosophy (1981/1982), (30 p.)**

**Part 1. Epistemology (epistemology, gnoseology).**

### ***Bibliographic Sample.***

-- R.M. Chisolm, *Theory of Knowledge*, Utrecht/Antwerp, 1968 (knowledge and right opinion, direct and indirect evidentiality (evidentness), criterion, phenomena (phenomena), truth, mind values);

-- A. Virieux-Reymond, *L' épistémologie*, Paris, 1966 (invariants and formal structures, method theory of the sciences;-- small introduction to French epistemology at the time); -  
- historical:

-- G.-G. Granger, *Rational thinking*, Meppel, 1971 (emphasizing the reason aspect at the expense of the religious, mythical, and vital);

-- psychological: J. Piaget, *Psychology and Epistemology*, Utrecht/Antwerp, 1973;-  
Genetic epistemology (A study of the development of thinking and knowing), Meppel, 1976 (the development of knowing and thinking described by 'a structurally thinking psychologist).

### ***Description.-***

Epistèmè, scientia, science',- broader: 'gnosis, cognitio, knowledge' are the dual subject of the theory of knowledge. All knowing has an objective side (the 'noëma'), namely the world and life (including the inner life), and a subjective side (the 'noësis' namely the consciousness of the object.

The two belong together: without "scientific consciousness" one does not do science; the "class consciousness" is at home with the social class and its problems; the "primitive consciousness" makes the primitive "live in a very different world from ours.

Knowledge, then, can be described as consciousness, awareness: of which one has no "awareness," one does not know; of which one is not "aware," one does not know.

It should be noted that consciousness or awareness can be measured with modern equipment (and thus belongs to the strictly experimental psychology), but is actually only known (realized) by the intro- or retrospection, so considered minor by the experimental psychologists, i.e. by means of the reflexive (on itself, as a loop, recurring) method. Which shows that one does not escape a minimal 'conscientism' (consciousness and introspection).

***Knowledge sociology can be used to draw up an elementary typology (theory of species):***

(a) are superficial (externalistic, acting as outsider types):

i/ tradition and fashion as the stable and the mobile element in our knowing: ecclesiastical and folk traditions are tough; after W.O. II existentialism, around May 1968 neo-Marxism and today structuralism, yes, post-structuralism (and the New Philosophers) were 'fashionable';

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after all, the so-called “intelligentsia” (i.e., the creative vanguard, pioneering in all kinds of cultural fields such as art, science, politics, economics, etc.) is much more subject to “fashionable” forms of knowledge than the people or some clergy insofar as they are integrist (Catholic) or fundamentalist (Protestant);

**ii/** modest opinion (either individual or group) and dogmatism or ideology: opinion is unpretentious, aware of the unexamined character of its assertion; dogmatism (which should be strictly distinguished from ‘dogma’ in the sense of generally accepted truth within a group) is traditionally, indeed more often than not, religiously underpinned, whereas ideology, in particular the more recent social ideologies (liberalism (individualistic), socialism (Marxist: collectively oriented but ‘étatist’, i.e. with strict state authority; anarchism: collectively oriented but anti-étatist), solidarism and/or personalism (both individual- and collectively-oriented ‘synthesis’), nationalism (people-oriented), fascism (party- and army-oriented), etc.) are pretentious opinions, if necessary even to the point of fanaticism (cf. *H. Hempel, Variabilität und Disziplinierung des denkens*, München/Basel, 1967, S. 130/168 (*Ideologische Denksysteme*)), but, different from dogmatism, at least in its religious sense, opinions which adorn themselves with a semblance of scientific research;

**(b)** deepening (internalist, as an ‘insider’ familiar with the case itself) types are primarily two feature forms:

**i/** professional science and **ii/** philosophy; they rely on historia, inquisitio, research, and indeed methodical research (not haphazard, but according to the rules of the real research) into the objective truth concerning things and processes.

Unless ... professional science (better, in that case, according to McLuhan ‘s expression, professional idiocy) and philosophy (better, in that case, false profundity and/or speculation) lapse into ideology, dogmatism, opinion, tradition, fashion or whatever, that, as knowledge, remains unexamined.

Only personal confrontation with the thing’ (the so-called ‘object’) itself i.e. the sight into ‘a substance’ gives, with luck at least, expertise, i.e. responsible knowledge (whether that personal confrontation is scientific or non-scientific).

B. Bolzano (Prague:1781/1848), later the ‘Austrian School (with Franz Brentano (1838/1917) and his pupils (C.Stumpf (1840/1936), A.Meinong (1853/1927) and E. Husserl (1859/1930)) have pointed out to us the necessity to go “zu den Sachen selbst” in ‘a methodical effort of our knowledge-oriented consciousness. In this way one discovers the so-called ‘ground’ of the matter itself: for it is made clear either by direct encounter or by indirect inference in the investigation.

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**Note.-** The dilettante knows ‘something’ about everything; the specialist knows ‘everything’ about something; the informed person is situated in between: he is (thoroughly) informed about ‘an object’. This course means such thorough information, not the other two types of acquaintance with philosophical knowing and thinking.

***Description of philosophy as a knowledge type.***

Philosophy can be defined as interpretation of self (philosophy of life) and the world (universe) (world view). Such characterization is insufficient because:

(i) human existence - also, since S. Kierkegaard (1813/1855), yes, since F. W.J. Schelling’s “positive” (i.e., based on factual reality) philosophy (1775/1854), called “existence” (in the sense of actual human existence) -

(ii) the (as opposed to ‘small art’ so-called ‘big’) arts, especially the word arts, of course,

(iii) professional science, which deals with a ‘subject’, i.e. a part or aspect of reality; they are all as many interpretations of life and the world. Their task is to make clear the so-called specific or generic difference (class characteristic). Which we are now, all too briefly, going to do.

**(i) *Human existence as “existential” or prereflexive philosophy.***

The Scottish Philosophers (XVIIIth and XIXth centuries with Th. Reid (1710/1796) as a leading figure and *Cl. Buffier, S.J., Traité des vérités premières* (1717) as French forerunners) have emphasized ‘the common sense’ (sensus communis) or the pre-scientific and pre-wise mind: it possesses, beyond all professional science and philosophy, without proofs of all kinds, insights which reveal ‘an immediate judgement of general-human nature. Three types of knowledge can be distinguished in it:

**a/ *a-priority truths***, i.e., insights that can be formulated without syllogism or conclusive speech (see later) (e.g., “Three times three is nine” (which is worded differently among numberless peoples but not thought differently));

**b/ *aposterior* views**, i.e., truths of a more empirical or experiential nature (e.g., “Yellow differs from red”);

**c/ *fundamental* though contingent (i.e. non-necessary, at least purely a-priori reasoning) *truths*:**

**c1/** the existence of the clearly observed (“Surely I see it with my own eyes here before me!”, with introspective dominant) or the clearly remembered (“I saw it myself, with my own eyes!”, with retrospective dominant);

**c2/** the existence of one’s own, changeable consciousness contents (“I am sad,” “I decide to do something”)

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as well as the existence of one's own enduring identity ("It's me who did it and I feel remorse for it, even now, after years, because I did it"); - the so-called deeper "I" as the origin of one's own actions is evident from this -;

**c3/** the existence of the fellow human being ("I as well as thou and he, resp. they, we are human beings with a good heart but many weaknesses"); - the deeper 'I' of the other betrays itself in appearance and behavior as I-not-me (to speak with A. Schopenhauer (1788/1860), if I am loving, and as not-me (id.), if I am hostile to the fellow human being.

**Note.-** Fr. Maine de Biran (1766/1824), one of the forerunners of French existentialism, adds to this list of prescientific and prescientific insights the so-called "sensitive" or "divining truths" (cfr. *Maine de Biran, Mémoire sur les perceptions obscures*, 1807 (Paris, 1920 reissue)).

De Biran quotes *Voltaire's Histoire générale* where the latter tells us that the son of the unhappy Mary Stuart, James VI, Prince of England and Scotland, in his mother's womb - one thinks of what *Luke 1:41* tells us about S. John the Baptist in Elizabeth's womb at the salute of Mary, Jesus' mother - endured the effects of the fear his mother endured at the sight of the fateful sword. John the Baptist in the womb of Elizabeth at the salutation of Mary, Jesus' mother - endured the effects of the fear his mother felt at the sight of the fateful sword about to pierce her lover, David Reggio: King James VI retained, throughout his life, a terror and an involuntary form of trembling at the sight of a drawn sword, no matter what he did to control himself (o.c., 25).

Maine de Biran also points to some (far from all) dreams, which have warning value (o.c., 27). Even simpler: who does not hear one say (or say it himself, spontaneously), "It was inspired in me"? Or: "Suddenly I saw it in" ('Eurèka'). Or: "I'm going to sleep on it again".

Current parapsychology, along the lines of ancient occultism, has opened our eyes to this second layer of the *sensus communis*, so that, with good reason, we add to it the divinatory or sensible truths (of a contingent nature, but as fundamental as the "secular" or inner-world truths cited by the still strongly rationalist Scottish commonsensists).

The existentialists (especially French) have emphasized that all philosophy and even all creative professional science has as its source some privileged existential experience. For example, *J. P. Sartre* (1905/1980), in his *Situations*, Paris, 1947/1949, vol. I (*La liberté cartésienne*), claims that Descartes, the father of modern innatist rationalism (assuming innate ideas or "idées"), in his early years, endured the "compulsion" of rational reasoning in the mathematics and especially geometry of the time,- a trait which typifies, indeed makes systemic, Descartes' entire work (as Martial Guérout made clear).

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**(ii) (*Great*) art as a philosophy of life and world.**

Philosophy differs from human existence (insofar as there are no remains of learning systems present in it) and from art in that it makes use (mentalistically expressed) of concepts (contents of thoughts) or (linguistically expressed) of technical language (terminology) in the interpretation of the world and life, which contain claims to reality: insofar as existentialism and art also contain comprehensible language with the pretension of representing reality, they are more or less explicit 'philosophy', yet existentialism and art are often too unpretentious to be real philosophy (especially where art is fictitious without its 'fiction' meaning reality).

Concepts or technical terms are general terms, reflecting lawfulness in reality (and thus "abstracting" from the concrete-individual that is so often in the foreground in existentialism and art): living cases (casuistry) and examples (exemplarism) often lead to existentialism and art.

Yet there are hybrid forms: Jean-Paul Sartre, the great existentialist-Marxist wrote novels in which his abstract notions are articulated (they are "philosophical novels").

Everyone, by the way, who knows literatology knows that there is such a thing as a "novel à thèse", i.e. a story, apparently individual-concrete, but with a "thesis" to be defended in it (e.g. the Elendmalerei of naturalistic novels, which denounce natural and cultural misery in concrete-individual figures and situations).

A medieval cathedral, in its stained glass windows and sculptures, is 'a living' representation of the Catholic world and philosophy of life: sometimes the 'didactic' in such art is particularly striking. In this sense there is 'philosophy' in it, but always in the more implicit (unreceived, ungraspable) sense.

***Bibliogr. sample:***

**(1)**

-- R. Harper, *Nostalgia (An Existential Exploration of Longing and Fulfilment in the modern Age)*, Cleveland (Ohio), 1966 (Grimm's fairy tales serve as an understanding model a.k.a. to represent the atmosphere of some XIXth and XXth 'century middens);

**(2)a.**

-- J.-P. Richard, *Poésie et profondeur*, Paris 1955;

-- O.H. Fidell, *Ideas in Poetry*, Englewood Cliffs, N.J., 1965;

-- G.R. Urban, *Kinesis and Stasis*, The Hague, 1956;

**(2)b.** -- R.S. Seal/ J. Krg, *Thought in Prose*, Englewood Cliffs, N.J, 1962-2

**(iii) *Subject matter science as a life and world view.***

Professional science is an interpretation of the world and life, and it is comprehensible and, in this sense, closely related to philosophy. However, professional science is not ontological, i.e. it fixes itself in a part or aspect of the total reality (specialism concerning the object) instead of the 'being', i.e. the totality of reality.

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The 'ontology' (also called 'meta.physical') is that which defines philosophy and marks it off from professional science. The professional scientist thinks fragmentary: he settles in his object, limits his interest to everything that is not his object, 'abstracts' from the rest of reality.

That is the typical 'strength' of the professional scientist: he 'controls' his sector as completely as possible, as thoroughly as possible. The ontologist (metaphysician), i.e. the philosopher, cannot do that: he is, for that, too totality-conscious: his 'object' is the absolute system, the absolute collection of all that 'is' anyway. Beyond that there is 'nothing'.

Since Aristotle of Stageira (-384/-322), the teacher of Alexander the Great, one has called the absolute collection (which collects all that is) the 'being' (in the collecting sense) or the 'being'. By the word 'being(the)' one designates the last collection (and the last coherence or system).

**Conclusion:** The interpretation of the world and oneself in it (called 'being' after its two main parts) in concepts and terms with a claim to reality and an awareness of totality, - this is philosophy. Insofar as it is present in any case in existence, art and professional science, these three human activities are 'philosophical'.

**Propedeutics.-The** totalitarian nature of philosophy entails that, in the order of the curriculum 's, it comes last:

(i). Isokrates of Athens (-436/-338), with Xenophon of Athens (-430/-354), the great educator of classical Hellas, advocated a general development, supported on a number of learning subjects

1/ Arithmetic, geometry, music, astronomy (the pythagorean subjects);

2/ grammar, rhetoric, dialectics (reasoning) (the sophist subjects),

later at Alexandria called 'enkuklios paideia' (encyclopedic knowledge) and still later in the Middle Ages 'artes liberales' (liberal arts or skills): he saw them as propaedeutis, forefront education, with respect to philosophy (also called 'wisdom'); they are 'propedeutics' in a first sense;

(ii) later the elementary study of one or another subject science was also called propedeutics; indeed, whoever starts out in philosophy, needs such a "basis", especially nowadays that we live in a scientific culture, with which the totality-conscious philosopher, by virtue of his sense of the totality of "being", must necessarily take account.

**Digression: Science theory (epistemology in the stricter sense).**

Science has as its object the similarity and coherence of the subject sciences (comparative or comparative epistemology). It is diachronic (historical epistemology) and synchronical (systematic epistemology).

**Bibliogr. sample:** In addition to Virieux-Reymond (p. 1 supra) they named -- B. Bolzano, *Wissenschaftslehre*, 4 Bde, 1837 (1929 reissue);

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-- *Bridgman, The logic of Modern Physics*, New York, 1927<sup>1</sup>, 1960<sup>2</sup> (physicalist operationalism: observation, description through terms that are physically observable, hypothesis formation (necessary and sufficient conditions to attempt the explanation) , testing (of the logical implication of the hypothesis));

-- *Fr. Guéry, L' épistémologie (Une théorie des sciences)* in *A. Noiray, dir., Le philosophie*, Paris, 1969<sup>1</sup>, 1972<sup>2</sup>, t. I, pp. 135/ 178: Piaget; - Bachelard (*Le nouvel esprit scientifique*, Paris, 1934), Canguilhem, Althusser; - Serres);

-- *R.E. Butts/ Jaakko Hintikka, Proceedings of the Fifth International Congress of Logic, Methodology and Philosophy of Science* (Ontario, Canada, 1975), Dordrecht/ Boston, 4- vol., 1977 (broadly conceived science theory); non-positivist:

-- *W.B. Gallie, Peirce and Pragmatism*, New York, 1966 (esp. Peirce's Theory of Knowledge: pp.59/137).

-- *K.-O. Apel, Hrsg., Charles S. Peirce, Schriften I (Zur Entstehung des pragmatismus)*, Frankfurt a. M., 1967;

-- *id., Schriften II (Vom Pragmatismus zum Pragmatizismus)*, ibd., -1970;

-- *J. Habermas, Technik und Wissenschaft als Ideologie*, Frankfurt, 1968 (typical of the science doctrine of the Frankfurter Schule: the "analytic" (understand: positive) theory of science should be corrected by "a dialectical-critical" theory of science that includes the socio-historical context of science and technology);

-- *H.G. Gadamer, Wahrheit und Methode*, Tübingen, 1961<sup>1</sup>, 1965<sup>2</sup> (in the style of Schleiermacher and Dilthey, of the existentialists Heidegger and Bultmann, this theory of science is 'hermeneutic' (verstehend', understanding or comprehending, i.e. based on lived interpretation);

-- *K.-O. Apel, Szientistik, Hermeneutik, Ideologiekritik (Entwurf einer Wissenschaftslehre in erkenntnisanthropologischer Sicht)*, in *K.-O. Apel et al, Hermeneutik und Ideologiekritik*, Frankfurt a.M., 1971.

This bibliographic sample proves that the modern intelligentsia does not agree on the concept of science.

Regarding the history of science:

-- *Maurice Daumas, Histoire de la science*, Paris, 1957; as well as two works dealing with the origins of science:

-- *R. Berthelot, La pensée de l'Asie et l'astrobiologie*, Paris, 1938<sup>1</sup>, 1972<sup>2</sup> (In Mesopotamia there arose a type of thinking that worked first biosolar or bio-astral, then astrobiological (checking the connection between life on earth and the heavenly bodies);

-- *J.P. Vernant et al, Divination et rationalité*, Paris, 1974 (in Chinese, ancient Mesopotamian, ancient Greco-Roman, and even African cultures, divination (i.e., paranormal knowledge or manticism) is far from being anti-'positive' (i.e., geared to perception and understanding); on the contrary, divination is the first form of professional scientific knowledge).

According to M. Daumas, o.c., just about everywhere three subject sciences got off the ground, astronomy, mathematics, and géneesology (just about simultaneously in China, India, and Hellas).

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As *W. Jaeger, Plaideia (Die Formung des Griechischen Menschen)*, 3 Bde, Berlin, 1934/ 1936<sup>1</sup>, 1936/1947<sup>2</sup>, the Greek philosophers who are called ‘physicals’ (natural philosophers), constitute a great step forward in professional science: they conceive of them as investigations into the ‘nature’ (being, nature) of the things and processes of the visible world, which forms a ‘cosmos’, d.i. ‘a rank-appropriate whole, in which man is more or less central, is conceived.

-- *Al. Koyré, Galileo and Plato*, in *Journal of the History of Ideas*, IV (1943), showed that G. Galilei, the founder of exact modern science (which combines mathematical and experimental accuracy), represents “a new step forward that separates us from the ancient and middle-century conception of science.

***Definition of the concept of (positive) science.***

Subject science has an “abstract” (i.e., disregarding some data) character:

**a.** its ‘material’ object is thoroughly delineated against the rest (whether configurations, feedback, influence of the un(der),conscious, group phenomena, rhythm or number operations);

**b.** also the approach or its ‘formal’ object is sharply delineated against the rest of approaches:

**b1.** description, explanation and review of statement is always present;

**b2.** this description, explanation and review are intersubjective: they are done by and subject to the judgment of the group of people who are called ‘subject scientists’ (Peirce speaks of ‘sensus catholicus’ (i.e. the general sense, interpretation) and Royce of ‘interpreting community’ (i.e. interpreting community)); all other people are excluded;

**b3.** this community of interpreters is always, minimally and essentially (methodically) or maximally (ideologically) secular, i.e. worldly, oriented: what this visible and tangible world exceeds and/or is beyond, does not apply to this group of people, who therefore either put extra- and supernatural data in brackets (methodical naturalism or secularism) or exclude them (ideological-dogmatic secularism).

**Conclusion:** the abstractive or one-sided character of professional science contrasts it with philosophy, which by definition is non-abstractive both as to material object (the ‘being’) and as to formal object (unwritten, unexplained and untested data ... ‘are’ there as well as the other and the interpretive community surpasses the merely scientific interpreters; secularism is also felt as one-sided by the philosopher, who at least poses the problem of non-secular reality (meta.physical)).



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***This description can also be different.***

*Th. Kuhn, The Structure of Scientific Revolutions*, 1964 (Ned.: Meppel, 1972) points to the historical growth of science:

(i) there are short-lived revolutions. One thinks of

a/ primitive dowsing,

b/ ancient astronomy, mathematics, and medicine, as well as to the Greek physical (natural science),

c/ Galilean exact science (mentioned above); one thinks of Aristotle's physical, Galilei's mechanics, Newton's Principia, Franklin's Electricity, Lavoisier's *Traité élémentaire de chimie*, Darwin's *Origin of Species*, Einstein's theory of relativity, etc.;

(ii) there are periods of calm and diligence in which 'normal' science (understand: established forms of knowledge) predominate, characterized by a disciplinary (= professional science) 'matrix' (table of elements); this matrix is, according to Kuhn,

1/ 'an uncluttered whole,

2/ common to a professional science group,

3/ of

(a)1. beliefs of a cognitive nature: "The law of work (= action) and resistance (reaction) e.g.; or still: ill-considered philosophical ('metaphysical') views: "the whole of reality consists of matter, energy and information",

(a)2. judgments of an 'evaluative' nature (value judgments): 'It is more scientific to approach the phenomena quantitatively than qualitatively' (or vice versa); 'Simplification is preferable';

Both of these, cognitive and axiological, basic judgments or assumptions, are assumed without sufficient evidence (are therefore biases but useful biases);

(b) Methods, called 'techniques' by Kuhn, of an exemplary nature ('paradigms' or school examples): model problems or tasks with accompanying model solutions, of a general nature yet sufficiently flexible to allow creative imitation in the professional scientific world.

Mathesiology (Ampère), mathesiotaxy (Durand de Gros).

These two names mean science classification or classification (typology). A triad governs this substance: for the objects of subject sciences are either ideal (in mentalistic language) or symbolic (in linguistic language) or empirical; the empirical are subdivided into natural and human or "spiritual"; hence the triad of subject sciences.

-- *C. Hempel, Philosophy of Natural Science*, Prentice-Hall, Englewood Cliffs, N.J., 1966, speaks of

(a) Non-empirical sciences (linguistics, logistics, mathematics),

(b)1. natural sciences (physics, chemistry, biology),

(b)2. 'social' (understand: human) sciences (psychology, sociology, political science, ethnology, economics,- as well as history, etc.).

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-- H. van Praag, *Information and Energy (Building Blocks of a New Worldview)*, Bussum, 1970, p. 45vv., speaks of 'symbol sciences' (which study 'ideal' matters) and 'reality sciences'. He also speaks of 'information sciences' and 'energy sciences':

"All sciences have to do with energy and information concepts, but in the natural sciences one puts the energy concept first, in the cultural (or humanities) sciences the information concept." (o.c.,47).

-- M. Cl. Bartholy/ P. Acot, *Philosophie. Epistémologie. Précis de vocabulaire*, Paris, 1975, designs 'a double epistemology:

(a) epistemology of the 'exact' sciences, divided into:

(a)1. 'formal' (Aristotelian logic (analytics), euclidean geometry, number theory, logics, non-euclidean geometry (Lobachefsky, Riemann), meta-language) - which corresponds to idealistic or symbolic sciences of just now -;

(a)2. physical, biological sciences - what corresponds to 'natural sciences';

(b) epistemology of the human sciences (Freudian psychoanalysis, linguistics - here is an exception with a moment ago, where linguistics was classified with the symbol, ideal or sign sciences - , cultural anthropology (ethnology) Marxist historical materialism and economics).

So much for this rather "kriteriological" classification of the subject sciences, about which a bit more later - in the clarity section.

The same "kriteriological" attitude leads to another dichotomy of the professional sciences, which appears in two forms.

(i) *Natural sciences 'erklären', and 'humanities', 'verstehen'*. (10/12) W. Dilthey introduced the distinction between 'natural sciences', which operate 'erklärend', explanatory, and 'humanities', which operate 'verstehend' (understanding). -

The German historical school with Droysen at its head) reacted against Comte and Buckle, who wanted to distill "general laws" from the formless mass of historical facts on the model of the natural sciences of the XIXth century and in the spirit of the Anglo-French Enlightenment: human freedom with its unpredictability, the singularity and individuality of man and his creations prevent a "scientific" approach as it applies to non-human things and processes.

**Consequence:** historical 'science' remains descriptive (idiographic, i.e. capturing the individual in story), does not become 'nomothetic' (distilling general laws).

The *Einleitung in die Geisteswissenschaften* (1883) brings up Dilthey's ideas. The dichotomy 'idiographic/ nomothetic' comes from W.Windelband (1848/1915), from the neo-Kantian Badener Schule. From the same school comes H. Rickert (1863/1936) with his distinction between natural science and cultural science (in which the axiology or theory of value is emphasized).

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This duality actually dates from long before the XIXth century: *K.Löwith, welt-geschichte und Heilsgeschehen*, in *W.F Otto et al, Anteile Martin Heidegger zum 60. Geburtstag*, Frankfurt a.M., 1950, S. 107, says that the distinction between nature(science) and spirit(science) emerges particularly sharply in the XVIIth century.

Descartes, in the line of Galilei (and parallel to Fr. Bacon, divides 'being' into 'res extensa', extensiveness (nature) and 'res cogitans', thinking (spirit): of (material) nature a certain and well mathematical-naturalistic knowledge is possible; of spirit not much more is known for the time being than pure opinion, tradition and habit of thinking.

*Vico*, on the other hand, in his *Scienza nuova*, starts from the same duality, yet of nature, which is foreign to us men, because we did not make it ourselves, no 'transparent' knowledge is possible, at best mathematical and scientific knowledge (only God, as the creator of nature, has transparent knowledge of nature); of spirit, however, in human history, true and certain knowledge is possible, because we men are the makers of history ourselves." *Vico's new approach unfolded thanks to Herder and Hegel, Dilthey and Croce.*" (o.c., 107).

The same duality continues to the present day. *C.P. Snow, Two Cultures and the Scientific Revolution*, Cambridge, 1959, has pointed this out. In the human sciences themselves it has continued to the present day.

(i) *C. van Pareren/ J. van der Bend, Psychologie en mensbeeld*, Baarn, 1979, gives on the one hand, an account of the behavioristic and cognitive psychologies and, on the other hand, of the psychoanalytic, humanistic and marxistic psychologies. The first ones orientate themselves to the natural scientific approach, the others to what exactly pops up outside that science (the unconscious, the human possibilities, the dialectical movement of history).

(ii) *L. Rademaker/H. Bergman, Sociological Currents*, Aula, 1977, gives, on the one hand, sociologies as the positivist and, on the other, sociologies as the phenomenological or the Marxist. Which again points to the dichotomy.

### ***Reconciliation.***

Hard science and soft science in the humanities may go hand in hand: Ronald Laing, for example, studied family systems and human interaction in a similar way to Th. Szasz's strongly positivist-behaviorist communication-theoretical discipline; however, Laing also engaged in existential-phenomenological soft science, which defines science as a means to

(i) about 'a certain area of reality

(ii), collect reliable information that has been tested in some way.

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The “soft” view of science refuses to identify “scientific” method with “experimental” method.

***The so-called ‘pragmatic’ view of science***

The word “pragmatic” here should be understood in the sense of:

1/ eclectic (picking from many views at once)

2/ on the basis of its usefulness - is one form of such a reconciliation of the “closed” (exclusive) schools and methods in favor of “open” methodology.

-- G. Barraclough, *Scientific Method and the Work of the Historian* - ‘a talk presented at the International Congress on Logic, Methodology and the Philosophy of Science (1966) -, in D. Bronstein/ Y. Krikorian/ Ph. Wiener, *Basic Problems of Philosophy*, Englewood Cliffs, N.J. 1964<sup>3</sup>, pp. 206/217, reconciles, as a historian, idiographic approach with nomothetic ‘science’ by arguing that, after idiography, there is room, in the science of history, for generalization and law study: there are constantly returning, in the human world, schemata that are truly subject-scientific formulas (e.g. dictatorship, revolution, class struggle, being apart in time of political and artistic climax, etc.).

-- K.-O. Apel, *Szientistik, Hermeneutik, Ideologiekritik* (see above), takes the conversation of the ordinary person, and even more of the physician) as a model of epistemology:

(i) In every conversation it happens that one no longer takes the other as an equal (‘Ich noch einmal’, A. Schopenhauer would have said, ‘I-new-again’) but as an ‘object’ which he examines in an investigative way (‘Nicht-Ich’ in Schopenhauer’s language, ‘not-me’); e.g. when a comrade suddenly finds out that his comrade might be lying to him or when the family doctor who has entered as a friend of the house proceeds to examine the (health of the) ‘patient’: from” I-not-yet” (friend) the examined person suddenly becomes “not-me

(ii) Human science is to be put on this footing, according to Apel: it reconciles both aspects in a ‘dialectical’ mediation of the professional scientific ‘explanation’ and the ‘hermeneutical’ ‘understanding’ (by denouncing the ‘ideology’ (i.e. the pseudo-scientific aspect) both in the explanation and in the hermeneutics) as one-sidednesses).

However, Barraclough does emphasize the scientific (after the hermeneutic) where Apel emphasizes the hermeneutic (after the “explanatory”).

**(ii) *The structure of experimental or “hard” science.***

We are going to exemplify this structure through an application.

***First approach.***

Observation is the beginning of experimental science: it provides the data (“dates”) of sensory experience. As a rule, those sensory experiences must be publicly repeatable.

1/ Historical, 2/ introspective, 3/ sensitive facts are irrepeatable, excluded:

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Compare seeing the moon on the horizon with perceiving the moon in the zenith (where it appears smaller than on the horizon); compare both these perceptions with the so-called “seeing” by a seer or sensitizer of the moon at a time when no one else sees it.

It is known that **(i)** the physical environment, **(ii)** any instruments (‘n telescope e.g.) and **(iii)** well-defined biases in observation can play a disturbing role and be source of error.

### ***Second approach.***

Experiences, observations - these ‘data’ must, in a second phase, be recorded in a description both for the observing scientist and for the community of fellow scientists. This representation (or model of knowledge and thought) or description must first of all contain (what *B. Bolzano* (*Wissenschaftslehre*, I, S. 71ff.) statements in themselves (Sätze an sich): these ‘say’ what is observed (e.g. “At the zenith I see the moon smaller than at the horizon”) and consist of (what Bolzano calls) representations in themselves (Vorstellungen an sich), i. e. parts of statements (e.g. “the moon is smaller than at the horizon”).i. parts of statements (e.g. “moon”, “smaller than”, “zenith”, “horizon”); these statements consisting of representations in themselves form the content of a judgment, which someone expresses for himself or in a communication to a fellow scientist.

Yet in strictly “experimental” science, these judgments (and their contents of statements and representations) must be translated into what has been called, since Bridgman (1927), “physical or operational” definitions (language).

**Reason:** the strict unambiguous meaning of the judgments for all consciences among themselves. The representation ‘zenith’ or ‘horizon’, ‘moon’ or ‘less than’ must be converted into time-space language and that is, since the late Middle Ages and Galileo, by means of ‘operations’ (‘operations’) that measure the phenomenon.

Only then can one be sure that the representations and sentences in themselves mean precisely the same thing to all co-scientists.

The rule is: the more modes of measurement (and thus instrumentation), the more insecure the univocity of the feature models will be; the more feature models are formulated with one mode of measurement, the more ambiguous they are.

### ***Third approach.***

When the moon sighting

1/ observed in a repeatable manner and

2/ described in a physic- operational way, the scientist can advance ‘an assumption or hypothesis, i.e., an attempt at explanation or explanation (ab- or retroduction, in Peirce’s language) of the experienced and described.

‘n explanation - here of the fact that the moon shines larger at the horizon than at the zenith - is to formulate the **(i)** necessary and **(ii)** sufficient conditions (factors) of the occurrence of the phenomenon.

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A condition is necessary if the phenomenon never occurs without it. A condition is sufficient if the phenomenon determined by it always occurs when it occurs.

Now one can make ‘a combinatorial table as follows: the interval between the viewer to the moon and the moon itself is the terrain without some viewing instrument (according to Kaufman and Rock (19G2)); this terrain - without - viewing instrument is the condition of the moon’s magnification at the horizon yet not at the zenith;

Well, this relationship between horizontal instrument-free terrain, on the one hand, and, on the other hand, lunar magnification can be combined next: the horizontal viewing instrument-free terrain is - a-priori seen

- (1) Necessary for lunar augmentation,
- (2) Sufficient for it;
- it is there (3) necessary but not sufficient for it,
- (4) sufficient but not necessary for it;
- it is there (5) at the same time necessary and sufficient for it,
- (6) neither necessary nor sufficient for it.

This calculus or account of the possibilities of the causal relation in question is especially important in case (3) and (4).

Applied to the appearance of the moon: if the same observer views the same moon on the horizon through a tube, it is smaller than without the tube;- the testability of a hypothesis is to check its explanatory value.

Now, just as ‘a description is not physically valid if it is not translated into operational terms, ‘a hypothesis is not ‘valid’ if it cannot be tested (verified). This implies that it is translated into operational terms: ‘operations’ are proposed, which give rise to new observations.

***Fourth approach.*** The final stage of science in the experimental sense is the performance of testing or verification. The rule for that verification is the structure of the experiment or trial: ‘an experiment is the manipulation or influence of the conditions in nature in such a way that one can observe the logical inferences of the hypothesis.

These conditions must be necessary and sufficient. The hypothesis was, in our case, that ‘a horizontal viewing instrument-free field as an interval between the viewer and the moon on the horizon is the necessary and sufficient condition of the apparent magnification (one thinks of gestalt psychology) of the moon. The verification is the double experiment which consists in viewing the moon horizontally first without viewing instrument and then with viewing instrument: all other conditions remain identical; but the experimenter ‘manipulates’, i.e. changes arbitrarily, the necessary and sufficient condition. In other words, as C.S. Peirce says, man intervenes workaday or actively in the arrangement of conditions. One could add to this twofold experiment by trying to look at the moon on a hilltop and in the depths of a valley, for example.

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The hypothetical-deductive structure of the start of the test is clear:

- (i) the hypothesis is the interval landscape between lunar and horizontal;
- (ii) the 'logical implication' (or 'derivation', 'deduction') is double: the lunar 'gestalt' is larger without viewing instrument; it is smaller with viewing instrument. It is precisely this double implication that is manipulated in the test.

*Analysis of the trial itself.* The test focuses on two types of "change agents" (variables):

(i) *the independent variable*, in this case, the presence or absence of the interval landscape: it is that condition or factor which the experimenter directly 'changes' at will but methodically (not haphazardly) to ascertain its 'effect' ('effective' or also 'pragmatic', i.e. method tailored to the result, since Fr. Bacon called 'effective' induction);

(ii) *the dependent variable*,

in this case, the changing sham 'gestalt' of the moon; i.e., the examined relation between condition ('cause', if necessary and sufficient) and effect (result) is 'functionally approachable: the moon's 'gestalt' is 'function of' interval landscape, i.e., it depends on the interval landscape.

It should be noted that the two named change cores are the tracked or controlled 'variables'. There are, in fact, in every experiment, uncontrolled change variables: these are the vulnerable spot of every trial, for they can be 'effective' without the trialist realizing it (and checking it immediately). This implies that every trial is bathed in uncertainties (which further investigation or chance will expose if necessary).

*Bibliographic note:* for more and more technical explanations see *L. Vax, L'empirisme logique (De Bertrand Russell à Nelson Goodman)*, Paris, 1970, pp. 28/59 (*Le positivisme logique*; especially p. 56: where R. Carnap adheres to language alone, there *Bridgman, The Logic of Modern Physics*, New York, 1927, demands language as well as technique (i.e. observation, preferably with equipment).

*Internalist and externalist epistemology.*

'Internalism' is that praxis which acts on the matter itself: thus professional scientists, 'at home' in their subject, are potentially good epistemologists. Yet this is not always the case: if someone does not work comparatively or if he, according to McLuhan's term, becomes a subject idiot, then he does not oversee his subject; that is why 'externalism' is an equally good start for sound epistemology: one looks at science as an outsider and sees, e.g. in the ecological damage done by science, 'what' science 'actually' is. In fact, both perspectives are complementary.

Thus, at the 32nd Flemish Philologists' Congress in Leuven (1979), what- and how-questions were asked concerning the human sciences (understanding and method of human sciences), yet also why-questions (the ethical-social consequences of human sciences):

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Indeed, philosophy,-history, linguistics, literary science, psychology, sociology, agogic (pedagogical and andragogical) science,-all have an effect on life, which actually lies outside the sphere of those sciences.

Around 1900 the famous crisis of science arose, which, in its way, exposed the internal and external problems of science:

(i) the fundamental research was aimed at the axiomata or presuppositions (the ‘foundations’) of science; in physics the old rigid image of law no longer made sense (quantum physics has uncertainties), in biology the older mechanicism (non-directive, purely causally determined pattern) came into conflict with the purposefulness (teleology) of life; In psychology and sociology the old pure natural law had to be reconciled with the ‘laws’ specific to human phenomena; In other words, the “fundamental” epistemology from 1900 onwards had to revise the foundations, which in part lay outside the actual subject science (and in essence were “philosophical” presuppositions; (philosophy of science or criticism or meta-science);

(ii) cultural research, especially initiated by the vitalist-existential thinkers (not without connection to romanticism), emphasized the alienation from life of professional science not least in its technological applications; indeed, fundamental epistemology focuses more on “pure” science, cultural or culturological epistemology particularly examines the ethical-social implications of science (applied and applicable).

*J.K.Feibleman, Technology and Reality, The Hague/Leiden, 1981, defines ‘technology’ as the ‘in situ’, i.e. immediate practical and unpretentious solving of (practical) problems, whereas, in his view, experimental science is the extension of technology, in that it solves practical problems (i) if necessary in the lab (extra situm) and (ii) aimed at generalization and legality.*

In any case, he says, both, professional science and technology profoundly change our concrete concept of “reality,” - making it clear that ontology, core piece of philosophical activity, cannot do without the two and vice versa.

This is how one understands *D. Dubarle, Le christianisme et les progrès de la science, in Esprit (XIX (1951): 9, pp. 300/318: the believer, as culture-bound, cannot simply put the cultural influence of science in parentheses.*

This gives rise to a dichotomy concerning epistemology:

(i) the instaurative epistemologists (‘n George Sarton e.g.) advocate science (heuristically and agogically);

(ii) the reductive epistemologists engage in “criticism” of the sciences.



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The scientist (K.O. Apel) favors professional science: 'n neo-positivist like R. Carnap, will, in the line of the empiricist D. Hume and of the positivist A. Comte, extol science to the point of triumphalism;

An existentialist like Sartre, along the lines of the hermeneuticist W. Dilthey, is more likely to criticize them.

People like *K. Popper, Conjectures and Refutations*, New York, 1962, are science-loving yet emphasize its instantaneous and provisional nature: science is reduced to

1/ theories that offer strong resistance to criticism and/or are 'a better approach to truth than others and

2/ reports of theory tests.

C.S. Peirce, however science-minded, also comes to 'fallibilism'. Not to mention *Pitirim Sorokin, Fads (whims) and Foibles in Modern Sociology and Related Sciences*, 1956: in its mania for imitating natural science, human science often suffers from

1/ The confusion of "scientism" (science fanaticism) with real science,

2a/ the testomania (the penchant for test trials) and quantophobia (the penchant for taking everything quantitatively) and

2b/ the quantitative detection of the trivial (losing oneself in trivial things with 'quantitative' methods). Unfortunately: Sorokin 's criticism is true more times than not in the case of experimental human scientists.

### ***Digression: ideology critique.***

It is impossible to outline a current theory of knowledge without saying a word about ideology. The word has come into use since *Destutt de Tracy* (1754/1836), *Eléments d'idéologie* (1801/1815), where it means capability, especially knowledge psychology ('idée', -since Descartes and Hocke, consciousness representation and content).

Cf. Cabanis, Volney, Daunou and others sensualists and positivists. Generally speaking, "ideology" is something like a system of thought alien to life, preferably with a scientific or philosophical outlook and often strongly socially motivated. It is easily pejorative: Napoleon said of some contemporaries that they were ideologues (utopians) with disdain.

Thus we understand that G. Balandier (in *Cah. Intern. de Sociologie*, 33 (1962), p. 128, speaks of myth, ideology, and program as three different and yet somewhere equal things; that *G. Schiwy, Der französische Strukturalismus (Mode, Methode, Ideologie)*, 1969, separates ideology somewhere from fashion and method, although they also run together.

One has defined 'ideology' as a system of representations (resp. theory) with the pretension to be strictly scientific concerning politics, morals, religion, etc.) yet without the strictly scientific praxis on which the ideology should be based, but supported by a praxis (i.e. a kind of life in practice) to which it is unconsciously inherent.

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This interpretation of ideology is, among others, the Marxist one: any system of thought which takes itself for “ideal” (understand: “spiritual”) - e.g. the traditional philosophy, religion, morality, state conception of the bourgeoisie - is, in fact, not at all ideal and spiritual, but very material.

Reason: the bourgeoisie ‘justifies’ its economic-social position of ruling class by these so-called ‘idealistic’ systems of thought; to the extent that this bourgeoisie itself sincerely believes in its ideology(s), to the same extent it is the victim of a ‘false consciousness’, which deceives itself and testifies to an ‘alienated’ attitude towards reality.

Its ‘consciousness’ (mentality) is ‘unreal’, ‘utopian’ (which has no ‘topos’ or place anywhere). K. Marx’s critique of ideology thus sees ideology as the fragile superstructure of an economic-social substructure (infrastructure), of which it gives a distorted picture: Marx is a materialist and an economist, i.e. he explains one-sidedly ‘ideal’ ‘products’ as consequences of material, particularly economic, states.

His concept of ideology is therefore itself subject to ideology critique: to unilaterally reduce all human (particularly bourgeois) conceptions to material-economic ‘products’, manufactured in the workshop of the capitalist system, is in turn to fall into ‘constructions’ that do not necessarily correspond to ‘reality’ (which are equally unreal). Genuine ‘scientific’ socialism, as Marx would actually have it, would have to be founded on other than this narrow research base.

*J.-B. Pontalis, Objekte des Fetischismus*, Frankfurt a.M., 1972, talks about ‘fetishism’. The first meaning of ‘fetish’ is ‘a seemingly ordinary physical object, to which the fetish believer (‘fetishist’) ascribes a more than ordinary, i.e. religious, meaning.

Analogously (i.e., partly identical, partly different), secular psychology uses the word fetishism for exaggerated appreciation of certain, average, unremarkable objects (psychopathologically, this becomes sexual fetishism: the erotic-fetishist erotically overvalues either body or objects (clothes) of the beloved). These meanings have been adopted by Freudian psychoanalysis.

K. Marx used ‘fetishism’ in the socio-economic sense: commodity analysis with its ‘commodity fetishism’ bears witness to this (reification’ say current Marxists: the thing (‘res’), in itself, without the socio-economic context of exploitation of the proletariat by the capitalist, receives as a commodity ‘an exaggerated “veneration”, sign of ideological, i.e. unreal consciousness).

The foregoing shows that ideology criticism, in turn, can use the word “fetishism” for exaggerated, because not based on real scientific research, “belief” in “ideas and conceptions” that do not actually deserve that “veneration.

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H. Ruyer, *L' utopie et les utopies*, Paris, 1950, Gives the concept and history of "utopia" (among other things, Ruyer criticizes Marx's replacement of the "utopian" socialism he contested with so-called "scientific socialism").

Utopian visions of society date back to Platon, but the word 'u.topia' was created by Th. More (1478/1535 (ou + topos: no place) and means either a society or a future humanity, which one considers 'ideal', desired, but of which one knows it exists 'nowhere'. A Utopist is someone who is often 'critically' minded and sharply sees what goes wrong in the established society and white black designs a counter model in the nowhere.

R. Ruyer, o.c., 115, then says that utopias are like the misty envelopes in which realizable conceptions are at work. Which indicates a meliorative use of words.

That not only the West believes in utopian notions is shown by W. Bauer, *China und die Hoffnung auf Glück (Paradiese, Utopien, Idealvorstellungen)*, 1971, where the author dissects pre-modern and modern conceptions of happiness and ideal societies (up to and including the "Cultural Revolution") in China.

Who, of course, among today's philosophers, has re-evaluated utopia is E. Bloch (1885/1977): the task of philosophy is to bring to consciousness the not-yet-formed, the future (and not the past). The new, the hope, the dream, the possibility, the utopia, - all these are given emphasis. Against Freud's view of the unconscious (very much directed towards the past) Bloch emphasizes the not-yet-conscious, which expresses itself in tendencies (directed towards the future) and latencies (imperceptible but ready possibilities). Against Marx's disparagement of religion, Bloch claims that where there is hope, there is at once religion (and not mere utopia or opium of the people, as Marx claimed). Cf. *Das Prinzip Hoffnung*, Fr. A. 1967 (1953/1959<sup>1</sup>); *Geist der Utopie*, 1918 et al. works of Bloch.

**Conclusion:** ideology critique must, on the one hand, reject utopia as unscientific (unless in the form of scientific futurology) and, on the other hand, confess that every utopia is 'an unspoken ideology critique.

Defeat (empowerment) is another theme of ideology criticism, especially that of the Frankfurt School, with its "critical theory" or its "negative dialectics" (M. Horkheimer, Herbert Marcuse, J. Habermas and others).

Liberation, empowerment, - these are XVIII - d'century enlightened ideas, yet in the mouth of the Frankfurter Schule they acquire an ideology-critical, Marxist sound:

(a) the scientific-technical data of the subject sciences (especially the experimental ones) have only instrumental importance;

(b) the hermeneutic-historical achievements have 'practical' (i.e. moral or ethical) importance;

(c) the insights of critical theory (ideology critique) have emancipatory effect.

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The concept of disempowerment refers to the “alienation” (dispossession, often alienation):

(a) legally, that term means the transfer of a possession (good, title) to a stranger;

The French ‘aliénation’ has a psychopathological meaning, which, incidentally, is also attached to the term ‘alienation’ in its philosophical-epistemological use: loss of personality, whether total (madness, insanity) or partial, causes someone to be alienated or stolen from himself;

(b) philosophically, ‘alienation’ means that state of consciousness or self-consciousness which recognizes properties which are his own, in a reality, foreign to and situated outside himself, as if they were the properties of that foreign reality (and not his own) that self-loss may be peculiar to individual or collective (class, society, group) consciousness.

One sees that ‘projection’ (externalization of the interior either in one’s own external behavior or in one’s fellow man or another external (‘alien’) reality) is not far removed from alienation. With Hegel, Marx, - later with Sartre, alienation plays a central role: for example, history is conceived as the loosening of man (individual, collective) from naive consciousness (which implies ‘alienation’).

*P. Ricoeur, I, e conflit des interprétations*, Paris, 1969, pp. 148ss. and more sharply, *S. IJsseling, Rhetoric and Philosophy*, Bilthoven, 1975, pp. 116vv, point, following Marx, Nietzsche and Freud (‘the three critical materialists’), to the rhetoric, covert or open, lying in all human speech, a.o. in professional scientific and, even more so, philosophical speech: people do not so much say objective truth - even if they consciously want to do so -; nay, often unconsciously they defend, under the guise of ‘objective truth’, highly profitable theses (such is the ‘eloquence’ or tendentious rhetoric in their speech). Ideology (Marx), Interpretieren (Nietzsche), Rationalisierung (Freud) are called such speaking.

*C.J. Pinto de Oliveira, Information et propagande (Responsabilités chrétiennes)*, Paris, has pointed out the rhetoric at work in propaganda, which the communication media disseminate daily.

*School and Defense*,” a committee of inquiry that began in Sweden in 1952, published its report in 1957. Education, which should teach 1/ personality development, 2/ vocational preparation, 3/ social awareness and 4/ citizenship, should also cultivate propaganda criticism - a part of ideology criticism - so that, especially in times of war (why not in times of peace?), mankind would see through the rhetoric.

***The method of propaganda works as follows:***

(1) It connects symbols, loved or loathed, with realities it wants to make attractive or repulsive (one speaks of one’s own youth movements as “groups,” of those of the ideological opponent as “gangs”);

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(2) it works with simplisms (simplified representations of complicated things);

(3) She works with emotionally charged words instead of factual descriptions ('propaganda' is substituted for pure 'information');

(4) It uses or abuses the authority argument: well-known persons, although not competent in the matter, are quoted in their statements ('opinions', so to speak);

(5) it speculates on the "human respect" ("respect humain"), which prevents the individual from daring to confront his surroundings;

(6) it deliberately mixes truths, half-truths and falsehoods;

(7) she works with repetitions (which "hammer in").

It should be noted that point (6) formulates the Munsterberg principle: Willi Munsterberg was Lenin's intimate friend and one of the founders of the German Communist Party; he became, over time, a specialist in propagandistics (Kominternpropagandachef in France) and created "concoctions" ("myths") to systematically discredit the Nazis: they respond to a need, according to Munsterberg, and, over time, become "more real" than "reality. The famous Arthur Koestler, who worked with Munsterberg, denounced this method afterwards.

In any case: ideology criticism is at once language and speech criticism (rhetorical analysis) and propaganda criticism.

### ***Bibliographic Sample.***

-- S. Breton, *Théorie des idéologies*, Paris, 1976 (ideological mode of speaking, tension ideal/ able and willing, religious form of ideology, relation between philosophy, ideology and knowledge, crisis of ideologies);

-- D. Eickelschulte, *Ideologiebildung und Ideologiekritik*, in Ch. Hörgl/ Fr. Rauh, *Grenzfragen des Glaubens*, Einsiedeln, 1956, s. 245/273 (Bacon's doctrine of idols, the Enlightenment, Destutt de Tracy, especially extended: Marx, Mannheim, Geiger);

-- *Les idéologies dans le monde actuel*, Paris, 1971 (thorough studies by various theorists),

-- H.J. Hampel, *Variabilität und Disziplinierung des Denkens*, Munich/Basel, 1967, S. 130/161 (*Ideologische Denksysteme*; - 'logical' viewed but as a study of mentality);

-- L.J. Halle, *The Ideological Imagination*, Chicago, 1972 (the social ideologies, from Hobbes and Rousseau over the French Revolution to Marx and Lenin and the fascisms; emphasis on the contrast between liberal and totalitarian ideologies and on the, since the French Revolution, frequent professional revolutionary, who, individually, opposes the established order without ready knowledge of what to replace it with);

-- B. De Clercq, *Religion and Ideology in Politics*, in *Tijdschr. v. Philosophie* jr 27 (1965): 2 (June), pp. 233/261 (later published as a book) (denominational parties create 'an ideological Christianity');

More epistemological:

-- G.G. Granger, *Science, philosophie, idéologie*, in *Tijdschr. v. Philosophie* 29 (1967): 4 (Dec.), pp. 771/780;

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-- P. Cressant, *Lévy-Strauss*, Paris, 1970, pp. 10/16 (*Science et idéologie*: A. Badiou, F. Regnault, L. Althusser et al. are cited on the relation 'ideology/ science, which is double: a/ science takes root in ideology, i.e., total or partial error;

b/ ideology as ideology is discovered by science (because ideology, unaware of itself, does not know itself). Althusser, the structuralist Marxist, speaking of 'ideology/theory', says:

"In ideology, (...) men express not their relations to their conditions of existence, but the way in which they live out their relation to their conditions of existence." (Pour Marx, Paris, 1965, p. 240);

This means that ideology has no cognitive value; on the contrary, it masks; one understands that the structural critique of ideology forces the rejection of hermeneutics (and phenomenology) which, precisely, puts experience at the center; which Lévi-Strauss makes true by conceiving de Saussure (the linguist with his distinction "language/speaking"), Marx and Freud (for their emphasis on the unconscious), as well as geology (which organizes the landscape, experienced as chaos, through analysis and investigation) as four forms of one type of knowledge: "true reality is never the most obvious"; "the sensible, once made transparent, is rational" (hyperrationalism) (o.c., 22); hermeneutics and, in particular, phenomenology, with its emphasis on the immediately experienced, fails to see that the "real" is to be found behind, below, beyond the superficially lived).

-- J. Robinson, *Economic Philosophy*, Chicago, 1962; pp. 1/25 (*Metaphysics, Morals and Science*: "A society cannot exist without its members harboring common feelings as to the appropriate way in which things should proceed and, these feelings are expressed in 'an ideology'" (o. c., 4);

-- Apel, Bormann, Bubner, Gadamer, Giegel, Habermas, *Hermeneutik und Ideologiekritik*, Frankf. a.M., 1971 (in depth); - somewhat in connection with what today is called the "antiauthoritarian education" (better true: authority-critical education):

-- C.S. Peirce, *Die Festigung der Ueberzeugung*, Baden-Baden, 1965 (*The Fixation of Belief*), esp. S. 49/58 (the four methods of opinion stabilization: the obstinate (individual), the authoritarian (social), the a-priori (especially philosophical), and the method of external permanence, i.e., the experimental-scientific);

-- G. Schiwy, *Les Nouveaux Philosophes*, Paris, 1979, esp. pp. 23/48 (post-structuralism with R. Barthes, M. Foucault, J. Lacan and their respective analysis of "discourse" i.e. the direct and lateral reason of our civilization and its ideologies);

-- J. Moreno, *Gruppenpsychotherapie und Psychodrama*, Stuttgart, 1973, S. 1/8 (the therapeutic vision as more thorough than the communist and capitalist ideologies, which are too superficial).

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***Digression: Philosophy.***

***Bibliographic Sample.***

Naturally, the mass of books and journals is incalculable (just as it is for the professional sciences). Therefore, once again, a choice.

-- G. Varet, *Manuel de bibliographie philosophique*, t. I (*Les philosophies classiques*), t. II (*Les sciences philosophiques*), Paris 1956.

***Dictionaries:***

- A. Lalande, *Vocabulaire technique et critique de la philosophie*, Paris, 1968; <sup>10</sup>
- P. Fonlquié/ R. Saint-Jean, *Dictionnaire de la langue philosophique*, Paris, 1969; <sup>2</sup>
- W. Brugger, Hrsg., *Philosophisches Wörterbuch*, Freiburg, 19618 (with an extremely useful survey of the history of philosophy (India, China, Japan, the West));
- J. Grooten/ G. Steenbergen, *Philosophical lexicon*, Antwerp/ Amsterdam, 1958 (with appendix on formalized logic);
- O. Willmann, *Die wichtigsten philosophischen Fachausdrücke in historischer Anordnung*, Kempten/ Munich, 1909 (still extremely useful).

***Issues:***

- O. Willmann, *Abrisz der Philosophie (Philosophische Propädeutik)*, Wien, 1959 (*Logik*, 1912-4; *Empirische Psychologie*, 1912-4; *Historische Einführung in die Metaphysik*, 1914);
- A. Brunner, *Die Grundfragen der Philosophie*, Freiburg, 1949<sup>3</sup> (systematic);
- M. Dessoir, Hrsg, *Die Philosophie in ihren Einzelgebieten*, Berlin, 1925 (*J. Rieffert, Logik*; *E. Becher, Erkenntnistheorie und Metaphysik*; *M. Schlick, Naturphilosophie*; *K. Koffka, Psychologie*; *E. Uitz, Aesthetik und Philosophie der Kunst*; *P. Menzer, Ethik*; *P. Tillich, Religionsphilosophie*; *A. Vierkant, Gesellschafts- und Geschichtsphilosophie*);
- D. Bronstein/ Y. Kriterion/ Ph. Wiener, *Basic Problems of Philosophy*, Englewood Cliffs, N.J., 1964<sup>3</sup> (*methodology, ethics, politics and history, science, knowledge, art and aesthetic experience, religion, reality, philosophy*, - in sixty-three excerpts); - as one can see, the field of philosophy is very broad.

***Planetary Philosophy:***

- J. Plott/ P. Mays, *Sarva- Darsana- Sangraha (A Bibliographical Guide to the Global History of Philosophy)*, Leiden, 1969 (in a very broad spirit conceived and explained bibliography of 'global' (understand: planetary) philosophy);
- P. Raju, *Eastern and Western Philosophy*, Utrecht/Antwerp, 1966 (Western, Chinese and Indian philosophies, with a series of comparative reflections);
- J. Ferrater Mora, *Introduction to Modern Philosophy*, Utrecht/Antwerp, 1962 (Soviet philosophy, Western European and Anglo-American philosophies).

***Historical overviews:***

- H.J. Störig, *History of philosophy*, 2 dln., Utrecht/Antwerp, 1972<sup>2</sup> (also includes Indian and Chinese philosophy);
- F. A. Lange, *Geschichte des Materialismus*, 2 dln., Leipzig, 1866<sup>1</sup>, 1905; <sup>2</sup>
- O. Willmann, *Geschichte des Idealismus*, 3 Bde, Braunschweig, 19072 (Lange and Willmann always remain very useful and complement each other);
- A. Bolckmans, *Overzicht der wijsgerige currents in de wereldliteratuur*, Ghent, 1972 (introduction: the Middle Ages; part 1: Renaissance and Baroque, Classicism; part 2: Enlightenment and (pre)Romanticism up to the present).

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-- C. Bertels/E. Petersma, *Philosophers of the 20th Century*, Assen/ Amsterdam/ Brussels, 1972 (seventeen contemporary philosophies are clarified, on the basis of one or more representatives);

-- A. Noiray, dir., *La philosophie*, 3 t., Paris, 1972<sup>2</sup> (dictionary, highly topical, with, slipped in, articles on history (since Hegel, Marxism, phenomenology, existentialism, psychoanalysis, epistemology, structuralism, technical thinking, political thinking);

-- Ch.-H. Favrod, *La philosophie*, Paris, 1977 (introduction and dictionary (persons, currents),-- very current);

-- id., *Les idées du XXe siècle*, Paris, 1978 (theories, vortices, hypotheses, critiques, influences, - this time including the professional sciences and the arts);

-- D. Huisman / A. Vergez, *La philosophie contemporaine en cent textes choisis*, Paris, 1973 (philosophy-conception, psychoanalysis, linguistics, epistemology, ethics, metaphysics);

-- J. Parainvial, *Tendances nouvelles de la philosophie*, Paris, 1975 (Catholic work which, following the influences of Marx, Nietzsche and Freud, the 'sophist' thinkers C:Jartre, Derrida, Deleuze) and the 'philosophical' thinkers (Thibon, Weil, Bruaire, Toinet, Fessard (Christian humanists); Marcel (phenomenologists); Heidegger, Jaspers, Merleau-Ponty (existentialists); Berger, Henry, I,évinas, Marion, Ricoeur, Boutang e.a., bring up);

-- M.-Cl. Bartholy / P. Acot, *Philosophie, épistémologie, précis de vocabulaire*, Paris, 1975 (except lexicon kept current, - Platonism, Aristotelianism, Cartesianism, Anglo-Saxon empiricism, Kantian criticism, Hegelian dialectic, phenomenology, clarified by texts);

-- A. Roussel, *Textes philosophiques*, Paris, 1972 (especially cultural-philosophical fascinating anthology with explanations);

-- I.M. Bochenski, *History of Contemporary European Philosophy*, DDB, 1952 (excellent introduction to materialism, idealism, philosophy of life, existentialism, ontology, mathematical logistics, in the XXth e.);

-- H. Arvon, *La philosophie allemande*, Paris, 1970 (excellent survey of irrationalism, dialectics, philosophy of language and hermeneutics, phenomenology, existentialism, and neo-Cantonism);

-- H. Albrecht, *Deutsche Philosophie heute (Probleme, Texte, Denker)*, Bremen, 1969 (phenomenology, existentialism, Hegelianism, Marxism, logical empiricism, positivism, - language analysis, aesthetics, anthropology, - with good anthology and introductions to it).

-- G. Schiwy, *Les Nouveaux Philosophes (Le retour de la métaphysique)*, Paris, 1979 (A. Glucksmann, B.-H. Lévy, M. Clavel, G. Lardreau, Chr. Jambet, G. Susong, M. Guérin, J.-F. Dollé, Ph. Nemo, J.-M. Benoist);

-- S. Bouscasse/ D. Bourgeois, *Faut-il brûler les Nouveaux Philosophes? (Le dossier du 'procès')*, Paris, 1978;



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-- R. Ruyer, *La gnose de Princeton (Des savants à la recherche d' une religion)*, Paris, 1974 (this name 'Princetongnosis' dates from around 1968; adherents: G. Stromberg, V. Weisskopf, E. Whittaker, G. Whitrow, U. Siam, D. Bohm, I. Good, Fr. Boyle, W. Elsasser, W. Beck, E. Wigner, Eric Berne, i.e. Anglo-Saxon or Asian physicists, astronomers, physicians, biologists, who, mindful of the limits of 'science', seek 'a new cosmos and life view, 'a kind of 'gnosis' or transempirical knowledge,-which makes them, in the USA, differ greatly from the following of Galbraith (the economist), H. Marcuse (the révolte-philosopher of May 1968) and N. Chomsky (the new-left linguist)).

### **Philosophy.**

The word 'wise' originally meant 'knowing' (he, she, who knows); the verb 'to point' meant 'to make knowing'. Pointing and indicating are related in meaning ('analogous'): to point at something is to point at something. One thinks of 'to teach'.

Pythagoras of Samos (-580/-500) is said to have created the term 'fil.o.sophia': 'sophos', wise,- 'sophia', wisdom, and 'philo(s)', covetous, befriend, compose the word: the gods possessed 'wisdom' but man is seeker of wisdom (Pythagoras' phalibilism stings in that modest term).

Our word 'wise' is meaningfully related to English 'witch', Russian 'vieshchii' (masculine), resp. 'viédma' (vr.), Sanskrit 'veda': in it the root 'know' sticks out.

Indeed, the magician(s) is he, she who knows: C. Castaneda, *The Lessons of Don Juan*, Amsterdam, 1972, still attests to that meaning ('he who knows' is the magician whom Castaneda initiates into his, 'knowing' ).

Pythagoras, aldus E. Dodds, was a shaman: it is therefore not surprising that the name 'philo.sophia' arose on the border between magic and science, respectively philosophy.

### **Unity science and philosophy**

When one looks at J.K. Feibleman, *A System of Philosophy (Logic, Ontology, Metaphysics, Epistemology, Ethics, Aesthetics, Psychology, Politics, Sociology, Anthropology, Philosophy of Life, Philosophy of Nature, Philosophy of Language, Philosophy of Science, Cosmology, Philosophy of Law, Philosophy of Education, Philosophy of Religion)*, The Hague, 1963 vv. one is amazed at the encyclopedic scope of those eighteen volumes of one of today's top American philosophers.

Why not a 'unified science', which would be the collection (and comprehensible unification) of all the results of all the partial sciences instead of a philosophy? The question is not without sense: An Aristotle, a Thomas of Aquino, a Leibniz still possessed virtually all the science of their time. After CS. Peirce and H. Poincaré, through hyperspecialization and the explosion of science, such is no longer possible.

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Even unitary science is a huge task, not only informatively (getting all the data together), but also conceptually (finding the basic concepts that create true unity).

But there is more: philosophy is, fundamentally, something else than professional science (see above), which always remains abstract, especially experimental science (which excludes historical, intimate, introspective and sensitive facts, because they are not **1/** public **2/** repeatable by scientists at experimental discretion, -which philosophy cannot because of its totality consciousness).

Yet, as mentioned above, philosophy cannot do without a more than superficial and dilettantish contact with the professional sciences. Hence books such as H. *Barraud, Science et philosophie* e.g., which tests a non-exhaustive (who could do that?) but purely demonstrative (i.e., working with samples) confrontation between philosophy and science, and so many others.

### ***Basic structure of philosophy.***

If it is something other than professional science, to what (structure) does one know it (specific property)? Philosophy lapses into Eastern philosophies (viz. the Indian: +/- -2000 (Rig-veda; cf:

-- J. Gonda, *Les religions de l' Inde*, Paris, 1965;

-- J. Neuner, *Hinduismus und Christentum*, Wien, 1962); the Chinese: +/- -2500; cf.

-- A. Forke, *Die Gedankenwelt des chinesischen Kulturkreises*, Munich/Berlin, 1927; the Japanese (shinto and Chinese influences; cf:

-- P. Lüth, *Die japanische Philosophie*, 1944))

and western.

Well, however diverse, the following components clearly stand out:

(a) the informational part: theory of knowledge (science), theory of thought and theory of methodology (methodology) show how the thinker acquires knowledge, organizes it and does so methodically, not haphazardly;

(b) the (meta)physical part:

(b)1. the preconstitutive part

This deals with the origin of all that is (whether that origin is called 'God', the unbounded or whatever), namely all that is situated before the own 'constitution' (nature of being, nature) of things and processes;

(b)2. the constitutive part deals with what is, in itself (whether one says that everything is matter (materialism) or idea (idealism) or whatever);

(c) the normative, deontic aspect: ethics (moral theory) deals with the conscientious behavior of man; politics deals with social behavior ('polis' meant '(city) state' among the ancient Greeks); - aesthetics deals with the beautiful and the work of art; - technology deals with the act of utility ' (normative is also 'axiological).

All of this is framed by the ontology or theory of reality, which views "being" either synchronically or diachronically (historically): knowledge, origin, nature of being, behavior, - all of that is "being(de).

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In addition to this basic structure, sometimes more so emphasized (modernity is strongly epistemological, logical, methodological; antiquity and the middle ages more (meta)physical ((pre)constitutive) and normative), sometimes otherwise, there is method, which is non-single or singular.

E. Rogge, *Axiomatik als möglichen Philosophierens (Das grundsätzliche Sprechen der Logistik, der Sprachkritik und der LebensMetaphysik)*, Meisenheim, 1950 sets out the three most striking XXth century methods, which can be employed either exclusively or inclusively (eclectic, pragmatic): positivism (logics), rationalism (criticism of language), hermeneutics (metaphysics of life) run side by side but influence each other, yes, can, in one and the same thinker, provided that he “coordinates” (d.i. thinks inclusively) - and not ‘centered’, i. e. exclusive - cf. Piaget’s couple ‘coordination’/‘centration’, fruitful combination.

Reason: these three approaches each expose one aspect of reality. In the same vein works P. Kurtz, *Decision and the Condition of Man*, Seattle, 1965, in which the proposer wants to “reconcile” the three main Western ways of thinking - naturalism (parallel with positivism with Rogge), “philosophical analysis” (cf. language criticism, more or less, with Rogge), existentialism (cf. hermeneutics with Rogge) - and make science and philosophy interact.

Comparative methodology is practiced by J. Donald Butler, *Four Philosophies and their Practice in Education and Religion*, New York, 1968<sup>3</sup>, ‘a fascinating comparative study of naturalism (Hobbes, Rousseau, Spencer), idealism (Platon, Descartes, Kant, Hegel), realism (Aristotle, Thomas Aquinas et al.), pragmatism (Fr. Bacon, Comte et al.), existentialism, language analysis, showing that some thinkers belong to more than one strand.

C. van Peursen, *Phenomenology and Analytic Philosophy*, Amsterdam, 1968, comparatively discusses the two “cultures” (P.C. Snow) today (without the middle term of Rogge and Kurtz).

Also fascinating remains A. de Waelhens, *Existence et signification*, Louvain/ Paris, 1958 (which takes a comparative and confrontational approach from a phenomenological standpoint).

The most extreme is W. Hirsch, *Ueber die Grundlagen einer universalen Methode der Philosophie*, Bad Homburg/ Berlin/ Zürich, 1969.

Of particular interest seems to us A. de Waelhens, o. c., 75/103: the term ‘new philosophy’ expresses (esp. from ±1910) that thinking, instead of working in an intellectualistic-rationalistic or scientific-positivistic way, conceives itself as the life in the world which comes to full consciousness of itself. Hegel and Marx, even Kierkegaard and Nietzsche proceed in this way; so does Bergson, as well as existential philosophy: experience and thinking are, from the outset, in one; thinking, then, is unfolding, in whatever way, what is implicit in the experiential life, taken as a whole.

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***Digression: Theology (divinity).***

**J. MacMurray, *Conditions of Freedom*, London, 1949, p. 87, says:**

“Religion (religion) is the matrix (ordered table) of all the meaningful activities of human consciousness.”

And even *Karl Mannheim*, a sociologist, who advocated so-called “integration” (as a counterfoil to pillarization (departmentalism)), - integration in which he sees the cornerstone of all social activity, claims in his *Freedom, Power and Democratic Planning*, London, 1951, that religion, in this integration, is the decisive factor.

*O. Willmann, Gesch. d. Idealismus, II (Der Idealismus der Kirchenväter und der Realismus der Scholastiker)*, Braunschweig, 1907<sup>2</sup>, s. 9, claims that Christianity has following structure:

(a) ‘a transcendental (understand: other-worldly) moment (i.e. history-making factor), i.e. the supernatural and extraterrestrial powers, which, in Christianity, are at work;

(b) three “temporary” (understand: earthly, secular, “diesseitige”) moments:

1/ the predestination, in the general framework of ‘sacred’, ‘holy’ or, still, ‘salvation’ history, of redemption, viz. This predestination is clear from the historical (priestly) and prophetic, but also from the sapiential or wisdom and apocalyptic or revelatory books of the Old Testament, which hold out the prospect of a redemption which is valid for all peoples (yet for which the small ‘chosen’ Jewish people offer the foreshadowing and preparation);

2/ The entrance or breakthrough, into the person and work of Jesus Christ, the second person of the Holy Trinity, and into the person and work of the Holy Spirit, the third person of the same Holy Trinity, - both sent by the Father, the first person of the Holy Trinity, revealing Himself in their person and work, - the entrance, viz., of salvation;

3/ The continuation, after evangelical times, of that same redemption in the Church as the community of the redeemed in the midst of all nations.

Yet with that, according to O. Willmann, interpreter of an ecclesial and mid-century theological and popular Christian conviction, reaffirmed in the Second Vatican Council (where this Council is speaking of the meaning and value of non-biblical religions), - with this one sees only one aspect (the biblical): “From the Gospel, not only Mosaic revelation receives its full illumination, but also the primordial or archaic revelation which precedes it and reaches back to the beginning (of humanity)”. (o.c., 20).

This is the explicit affirmation of the “global” (globus = globe) or, better, planetary nature of Christianity, which, thus, in a sense, “integrates” all possible religion.

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The same O. Willmann, o.c., (80/92 (*Das Verhältnis der Philosophie zur Theologie*), claims, rightly so, going against the so-called 'enlightened' (understand: secularist) historiography, that "knowing about 'divine' things" as springing from the The same O. Willmann, o.c., (80/92) (*Das Verhansnis der Philosophie zur Theologie*), claims, rightly so, against the so-called 'enlightened' (i.e. secularist) historiography, that "the knowledge of 'divine' things" as springing from some revelation of the "deity" (deity must here be understood in the antique sense of "other- and supernatural being") was conceived of as the "higher" type of knowledge, while "the knowledge of human things and contemplation (speculation)" was conceived of as a subordinate type of knowledge,- both in India and in Hellas.

Patristics (i.e., ancient church philosophy and theology) and scholasticism (i.e., its mid-century continuation) elaborated this "pagan" view in a Biblical-Christian way.

The schedule has been as follows since the Hellenistic-Roman period:

(a) the seven 'technai' (arties liberales, free 'arts', understand: subject sciences) form the propaideusis (prefiguration); they are partly philological' (i.e. linguistic) - since the proto- and deuterosophistic (cf. *W. Jaeger, Paideia*, I, 397ff., who speaks of 'formal' subject sciences), viz. grammar, rhetoric (theory of eloquence), dialectics (theory of discussion and thought) - the mid-century trivium -; they are partly 'mathematical' (in the Pythagorean sense of 'in the nature of "number form harmonious": 'arithmos' means

1/ more than one (i.e., two or more),

2/ structure of geometric nature ('form', 'gestalt'),

3/ harmony), viz. arithmetica (number science), geometria (geometry), music (kitharist music, which was explained geometrically by the Pythagoreans), astronomia (celestial science: the universe, conceived geocentrically, was conceived as a 'second application of number and geometry); *W. Jaeger, o.c.*, calls this part 'real',

(b) philosophy, also called 'sophia', wisdom, for short;

(c) the Christian 'sophia' or 'wisdom' (also 'didachè' or 'doctrine' (the emphasis then being on the dogmatically fixed nature of that wisdom in its invariants or essence nuclei of an unchanging nature), - later also called 'theology'.

O. Willmann, o.c., 82/83, explains how St. Klemens of Alexandria (+ 215), teacher therein of Origen of Alexandria (+ 254), is the first to interpret that scheme, in itself pagan, indeed Jewish (think of Philon the Jew (-25/+50) at Alexandria), in a Christian sense:

"Just as the formative sciences (ta enkuklia mathèmata) cooperate in the service of its ruler, philosophy, so philosophy itself cooperates in its turn in the acquisition of (Christian) 'wisdom' (understand: biblical theology)." (Strom. 1). However, understand this subordination sequence correctly:

"Theology is the teaching of Christian truth; philosophy the Christian teaching of truth" (id., *Die wichtigsten*, S. 57).

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***Bibliographic Sample.***

In the first place, we put *W. Jaeger, A la naissance de la théologie (Essai sur les présocratiques)*, Paris, 1966 (Dt. *Die theologie der frühen griechischen Denker*, 1953; Eng. *The theology of the early Greek Philosophers*, 1947) in which the famous classicist the 'natural' theology, i.e. that knowledge of God and gods which is based on the study of the *fusis, natura, nature*, does not only begin with the oldest Greek thinkers, together with their type of professional science and of philosophy, but forms the core of it, except for the skeptics, who only later, in the Hellenistic-Roman period, are fully discussed.

This study by Jaeger confirms, by the way, what *O. Willmann*, more than half a century earlier, had already made clear in his masterpiece, *Geschichte des Idealismus*, I (*Vorgeschichte und Geschichte des antiken Idealismus*), which has been improved and especially supplemented but not refuted, until now.

*Cl. Tresmontant, La métaphysique du christianisme et la naissance de la philosophie chrétienne*, Paris, 1961, confirms, with more recent means, what *O. Willmann, II (Der Idealismus der Kirchenväter)*, already made clear at the beginning of this century, namely, that Christian thought is both a thorough continuation and a thorough criticism of the ancient pagan ways of thinking, especially regarding theological questions.

*Cl. Tresmontant, Introduction à la théologie chrétienne*, Paris, 1974, situates theology in a current and broader framework.

*F. Cayré, Patrologie et histoire de la théologie*, 3 t., Paris, 1938/1945/ 1944, is probably the most accessible and surveyable work on the subject.

*E. Hocedez, Histoire de la théologie au XIXe siècle*, t.1 (*Décadence et réveil de la théologie (1800/1831)*), t.2 (*Epanouissement de la théologie (1831/1870)*), t.3 (*Le règne de Léon XIII (1878/ 1903)*), Bruxelles/ Paris, 1949/ 1952/ 1947, brings us fully into the present ground crisis which affects not only our overall culture but also Catholic theology.

*E. Schillebeeckx*, transl./edited, *Feiner/Trütsch/Böckle, Theological Perspective (An Overview of the Present Situation in Theology)*, I (Fundamental Problems), II (Dogmatics), Hasselt, 1958/1959, shows the crisis of foundations even more clearly.

That professional science, philosophy and biblical exegesis are intertwined was recently demonstrated in *Collationes* (Flemish Magazine for Theology and Pastoral Studies), *New Approaches to the Bible*, vol. 10 (1980): 4 (Dec.); two 'internalist' approaches, the 'historical-critical' (now called 'classical' because it has been traditional since the XVIIIth century) and the 'structuralist' (in the spirit of Saussure), and two 'externalist' methods (psychoanalytic (in the spirit of Freud and Marxist (in the spirit of Christianity).) and the structuralist (in the spirit of de Saussure), and two 'externalist' methods (the psychoanalytic (in the spirit of Freud) and the Marxist (in the spirit of 'Christians for Socialism')) are applied to the parable of the Good Samaritan. This proves how useful a sound epistemology can be.