

1. Basic structure

Content

1. 1 Given/requested: solution.....	10
1. 2 Four types of problem solving.....	12
1. 3 Phenomenology	15
1. 4 Intuition (Contemplation).....	19
1. 5 Culture in terms of task and solution	20
1.6. This chapter summarized:	22

1. 1 Given/requested: solution

A *basic systechy*. A pair of opposites - 'systechy' - always controls the grasping of a problem. This is done by correctly grasping the given and the required. This is followed by reasoning out the solution. A 'systechia' (Greek: su.stoichia) or pair of opposites as a basis urges itself, i.e. to grasp what "shows itself" (the given (GG) and the required (GV)) and to reasoningly 'demonstrate' what the solution (OPL) is. In symbol-shortened form: "GG ^ GV - OPL". Here the conjunction sign '^' stands for 'and'.

The concept of an 'algorithm' can also be mentioned in this context. An 'algorithm' is a diachronic configuration (a set of places to be filled in one after the other) with a well-defined purpose. In this case: to perform impeccable reasoning. A model. In a classroom. On the board, the teacher posts: " $2 + 2 = .$ ". Rewrite: "GG: $2 + 2$. GV: $.$ ". The dot on the board means the OPL to be found. The general rule that is supposedly known is "a partial sum and a partial sum together make up a total sum." That understanding is at least unconsciously present in the mind of a schoolchild.

Ancient mathematics. Ancient mathematicians taught problem solving. Today's problem mathematics still does. A few models.

- GG. Johnny gives Pete 36 marbles. He keeps $\frac{3}{5}$ of them. GV. How many did he have initially? And now a solution. All the marbles is $\frac{5}{5}$. $\frac{5}{5}$ minus $\frac{3}{5}$ is $\frac{2}{5}$. Now $\frac{2}{5} = 36$, so $\frac{1}{5}$ equals $\frac{36}{2} = 18$. Then $\frac{5}{5} = 5 \times 18 = 90$.

- GG. Johnny has 90 marbles. He gives $\frac{2}{5}$ of them to Pete. GV. How many does he have left? And now an OPL. All the marbles is $\frac{5}{5}$. $\frac{5}{5}$ minus $\frac{2}{5}$ is $\frac{3}{5}$. $\frac{1}{5}$ is $\frac{90}{5} = 18$. So $\frac{3}{5}$ is 3×18 . Jantje has $3 \times 18 = 54$ left.

One sees that the rule of three is hereby partly given. It reasons from all (here: $\frac{5}{5}$) over just one (here: $\frac{1}{5}$) to some (here e.g. $\frac{2}{5}$ or $\frac{3}{5}$). That three-part system of concepts is a general insight (rule) whose applications the schoolchild carries out on the basis of his unconscious insight on the subject.

Ancient rhetoric. Bibl. st.: R. Barthes, *L' Aventure sémiologique*, Paris, 1985, 85 / 165 (L'ancienne rhétorique). 'Rhetoric' (Greek: *technè rhètorikè*; Latin: *ars oratoria*) taught rapport in such a way that a message came across plausibly. Call it "persuasion" or "eloquence. Well, rhetors applied the algorithm outlined above. To get from a given and asked to a solution, they knew direct and indirect proofs.

- **1.** Direct proofs. Greek: *pisteis a.technoi*, which stands for proofs that do not require reasoning. One can distinguish two types in this:

a. Beliefs already present in the mind of the audience (thus: axioms; mindset)

b. what the speaker can show on the spot (a known law; a witness acting).

They are both proofs without 'technè', skill (here concerning reasoning). They belong to the domain of 'phenomenology' which assumes the direct and intuitive experience of phenomena and thus reflects what is immediately GG (see below).

- **2.** Indirect proofs. Greek: *pisteis en.technoi* which stands for proofs that do contain reasoning. Starting from what the speaker and the audience, or from what the speaker alone knows for now, he must now "argue" (reason). One should note: these proofs also begin with the GG and the GV but they belong to the domain of 'logic'.

Conclusion. Whether they are schoolchildren or the people in the Athenian "agora" (public assembly), those involved usually possess only the "common sense" in all human beings. Yet, after what has just been explained, it appears that the operations of thought and what they presuppose about unconscious axioms and certainties do not turn out to be so simple. Which shows that one should not confuse the logic of the common mind with logic of the simplistic mind. Which sometimes happens in time!

1. 2 Four types of problem solving.

Bibl. st. : Ch. S. Peirce, *Pragmatisme et pragmatisme*, I, Paris, 2002, 215/235.- Peirce (1839/1914) was an American scientist, philosopher, mathematician and founder of so-called pragmatism (see below). In *The Fixation of Belief*, in : *Popular Science Monthly* 12 (1877), he outlines four methods of making a belief true.

1. Singularity method ("Tenacity").

To a task (GG + GV), the idiosyncratic responds exclusively with its own solution. Thus economic problems, neglecting other solutions, are solved by free trade. Thus, by G. Galilei (1564/1642), Italian physicist and defender of Copernicus' heliocentric system, the problem of tides and astrology is "solved" by the refusal of any research on the subject. Cf. Ch. Alain, *L'effet lunaire*, in: *Psychologies* (Paris) 77 (1990: juin): 50/53. Where one biographer reproaches Galilei that such method is "as bad as superstition." As a paragon, Peirce mentions someone who was a rabid supporter of free trade. To keep his opinions cool, he read only free-trade-oriented texts. The "truth" is reduced to the beloved, individual conception axiomatically presupposed.

2. Method of justice ("Authority").

A task is responded to exclusively with a solution imposed by some authority. Church or political systems thus perpetuate an 'orthodoxy,' a straightforwardness (according to Peirce). 'Righteousness' should not be confused with 'sincerity.' Sincerity, is a subjective quality by which one spends what one has within; one comes out honestly for what one thinks inwardly.

3. Preferential Method ("A Priori").

One claims to honor the free discussion, but each individual or each tendency asserts what is "a priory", i.e. preferably advocated but without verification of reality outside the closed sphere of discussion. However, unlike both previous forms of opinion, the other opinion is accepted. Thus (according to Peirce) those metaphysics which are in the taste of reason. Thus the theory which states that man acts only out of selfishness : it falls into the taste, nothing more.

4. Scientific Method ("Reality").

A task is responded to with testing against reality. What is for Peirce real ("real")? That which continues to exist in a sustainable way completely independent of our consciousness,

and cannot be influenced by our consciousness. This method puts "inquiry," research, first. Peirce calls himself a scholastic realist. He conceived his pragmatism as a method for testing ideas; they should encourage us to actually do something with them. Hence he lets science rise from reality itself insofar as it can be represented in objective terms. In particular: whoever encounters an objective given 'reality' (it is Peirce's English word) as a cognitive, i.e. cognizable, being, will meet again and again the same given and its 'forma' (understand: understanding) when tested. Hence Peirce mentions "external permanency" as the main characteristic of scientificity. Discussion, yes, testing (with refutation), too; but the results show themselves "in the long run," that is, in the long run! The latter is: in the long run, objective reality penetrates.

We begin with a witticism by W. James (1842-1910) the renowned psychologist of religion and author of *Varieties of religious experience*. Every new doctrine goes through three stages: One attacks it by dismissing it as absurd. Then one accepts it as true but without further bearing. Finally, one recognizes its true meaning and its opponents claim to have discovered it." Though bolted, yet what James says does repeat itself more often, especially in scientific circles.

As Peirce put it, obstinacy ("I stick to it through thick and thin"), straightforwardness ("We've always learned this way"), and preferentiality ("I'm willing to argue about that but this is my individual opinion anyway"), are sometimes quite at work in scientific circles. Such until the fourth attitude, reality-based inquiry, makes it appear that "time and again it is in reality this way and not otherwise" and thus refutes the other three attitudes as false, this time "in the long run."

With the latter, opinions (and presuppositions) do not depend on "one's own sense" or "what others preach" or from "one's own preferences," but from the given reality itself. To put it with Parmenides of Elea, founder of the Eleatic school, (in southern - Italy, -540/...) to say: "they think according to reality itself". In other words : the presuppositions are adapted to reality itself. Thus those presuppositions become the representation, as accurate as possible, of "all that is." This type is now sometimes called "the mirror man" (who reflects what is). Given the very human, all too human" tendency to harbor the first three methods, this fourth method is "difficult.

Many people denote idiosyncratic, straightforward, or preferential. Without grasping the sense, the meaning, of what is given objectively, they give it their own, subjective

interpretation. Thus they do not give things their due meaning, but establish their own meaning, which they project into things. Few interpret "objectively scientific.

So much for a highly condensed outline of the four methods of solving a task.

Curious fact - Peirce does not dwell on the fact that every human being, if he is not careful, exhibits each of the four forms of opinion. We are all equal. We harbor opinions such that we neglect any other viewpoint, if we do not already stubbornly - tenacity - exclude it. We share beliefs with others who have authority in our eyes and so we are "right minded" - authority - with others. In passing: as already St. Augustine (354/430), the great church father of patristics, noted, we have the lion's share of our beliefs themselves never tested but 'believe' in them anyway. We hold theses because they are to our liking : some preference - a priori - is the real 'reason'. We hold opinions which we establish on our spontaneous experiences, yes, on our own methodical tests - realities.- This foursome can be found both among famous scientists and simple folk.

Medicine.- These four attitudes are found in just about all sciences but preferably in the human sciences.- Thus we read B. Kiefer, *Science médicale : un joli désordre*, in: *Le Temps* (Geneva) 18.05. 04, 39. The author is editor-in-chief of *Médecine et Hygiène*. His article begins as follows:

"A science, medicine? To be honest, it is rather an immeasurable aggregate of practices and theories that have not been proven and with a scientific nature that has not been tested very well." For example, to mention through it: psychoanalysis, the genetic approach to diseases, the division of medicine into branches specializing in organs (cardiology, pneumology and the like). Kiefer: "What is scientific in the strict sense are not comprehensive theories but small pieces of theory proven thanks to studies. For example, the fact that ten séances of psychotherapy are as effective in treating a group of patients going through depression as a drug. Or even : compared to a placebo, a drug reduces blood pressure and after two years of treatment improves the lifespan of standard hypertensive patients. It is to the credit of science that it knows its limits. In particular, it is to its credit that it tests theories in such a way that the small pieces of valid insights are brought to coherence. This is important because practical medicine, once confronted with a concrete patient, has to do not with the valid little pieces but with their coherence.

1. 3 Phenomenology

Phenomenology as a representation of available knowledge

The phenomenological method involves a direct way of knowing reality, starting from an intuitive experience, in which subject and object meet. One tries to describe as accurately as possible the given, insofar as it shows itself, and this independent of any theory and prejudice, independent of any subjective consideration. Thus, for example, the phenomenology of teaching is only possible if the person who wants to come to an understanding of what that is "teaching" is himself actively teaching. In that empirical contact with the thing itself the insight of being arises and grows. Afterwards this phenomenological method can be supplemented, improved if necessary, with other and indirect ways of knowing, such as psychological and depth psychological methods, language analysis and de- and reductive methods.

Evidences ... with reservations. G. Bolland, Hrsg., *Hegel's kleine Logik*, Leiden, 1899, 103, - the German philosopher G.F. Hegel (1770/1831), was the great inspirer of so-called German absolute idealism - wrote "Every developed man possesses a crowd of points of view and basic conceptions 'as directly given in his consciousness.' Yet much thought and long life experience precede this". Practically, this means that everyone - including the common mind - starts from what might be called "evidences," among which the axiomatic ones have a meaning that reaches far. As *La Logique de Port-Royal* noted, these "evidences" are not always reliable. Ch. Peirce showed us that they can be fourfold in each of us.

In other words: we find something 'given' and thus 'evident' by virtue of singularity, straightforwardness, preferentiality and ultimately also - at least in Peirce's order of enumeration - ever-testable 'reality' ('reality' says Peirce). The latter exposes the actual fact because whoever tests validly confronts 'self' with reality 'itself'. He who merely 'believes' by virtue of one of the other three forms of opinion mentioned by Peirce, confronts himself 'self' via his own bias or that preconceived by others or by virtue of his own preference 'not' with reality 'self'. The distinction is enormous! So what the hegelian Bolland mentions as "given directly in consciousness" is subject to "intense reservation."

Bolland specifies. What is called "instinctive knowing," "innate thinking," "natural cognition," "sense of community" and the like are among those contents given directly into consciousness which he states are "brought to consciousness only through general experience and reasoning." Which insinuates that they are at least worth assuming. Even if this is with the caveat explained above, namely, if they are testable: again and again and in principle by everyone.

Parate knowledge. Bolland mentions: a mathematician - like every formed scientist - has solutions to problems in the form of "ready knowledge". These, of course, are forms of available knowledge of a knowledge value all their own: much thought and long life experience of a verifiable type have preceded them. To consider this as 'given' and as 'evident' is justified (unless it concerns 'data' and 'evidences' that are uncertain also in the scientific - including mathematical - field). The history of the sciences - including that of mathematics - is full of such provisionally assumed evidences.

Bolland also mentions religion, ethics and law. These are - the proposer says - according to some thinkers "a matter of faith." Yet this kind of available knowledge concerning God, morals or law is in fact the result of development, education and formation. One quickly sees that such contents of consciousness can only serve as a tested or universally testable fact as the basis of phenomenology with many reservations.

"Where did you come?". When a substitute teacher enters the classroom, his/her first concern is to ask the students, "Where did you come?" This is the question of available knowledge that serves as a prelude to what follows.

Available knowledge, in the vast majority of logical reasoning, is "that which we have come to" in life. In other words: we are in the class of life and we are tithing on what we have acquired as contents of consciousness - to use that Hegelian term - as best and worst as we can! It is good to realize clearly that representing what is 'given' ('evident') to us again and again amounts to representing as correctly as possible what we have 'acquired' along the way, while living. Also that this given is not always the 'reality' itself but that reality seen through the glasses of obstinacy or straightforwardness or also of the debatable preferred opinion. Nothing more.

Phenomenology according to Husserl

Bibl. st. : H. Arvon, *La philosophie allemande*, Paris, 1970, 133/156 (*La phénoménologie*). The background of this method is the Austrian school of which F. Brentano (1838/1917) is the founder and C. Stumpf (1848/1936), A. Meinong (1853/1927) and E. Husserl (1859/1938) are the best-known representatives. Brentano paved three roads: the concept of intentionality (directedness of our consciousness toward something) elaborates Husserl in his phenomenology; the concept of moral self-evidence (the direct manifestation of values of conscience) further develops M. Scheler (1874/1928); the investigation concerning the concept of being influences M. Heidegger (1889/1976). - We now cite two basic features of Husserlian

phenomenology - representation of the phenomenon - i.e. what shows itself and is thus given, viz. the phenomenological reduction, and then the eidetic reduction. The peculiarity of phenomenology as of any description is, that the given (GG) is the requested (GV) to be represented as correct. Indeed, one must try to grasp both the given and the requested.

1. Phenomenological reduction. "Reduction" means "reduction," "containment. Phenomenological reduction reduces the phenomenon to itself to the exclusion of all that does not show itself directly. Thus all that is only partially similar to the phenomenon or only related to it is excluded.

Model: Repentance as a phenomenon. All that is then not repentance is "eingeklammert" (put in parentheses). The method is the internal and the external equation.

- **Internal.** Regret is a form of regret: one suffers from the woes of one's own behavior such as loss of honor, damage to health, etc. ... In all repentance there is an aspect of regret but repentance is more. Remorse is a form of regret: one regrets having behaved unscrupulously. If one will: the ethical degree of regret. All repentance includes an aspect of remorse but is more. Remorse is remorse that repents and recovers, among other things.

- **External.** Behaving unscrupulously in a cynical manner is an opposite - a counter-model - of remorse and repentance. Such approach to one's own wrong behavior lies outside the phenomenon of repentance. One explanation of repentance states that it is an inspiration from God. That is possible, but such a thing lies outside the direct experience of repentance (except in some people with God contact). One explanation lies outside the phenomenon. So is any theory concerning repentance beyond the immediately experienceable. A theory concerning a phenomenon is not a phenomenology. Countermodels (cynicism e.g.), explanations (inspiration from God e.g.), theories show coherence with the phenomenon of repentance but are not repentance.

- **Conclusion.** Internal comparison builds the whole phenomenon by exposing portions (aspects). It is partial phenomenology in that it shows partial similarities. External comparison pays attention to what lies outside the phenomenon but is related to it. It is indirect phenomenology in that it illuminates the phenomenon from what is related to it. One sees: one pays attention to similarity - partial and whole - and to coherence while comparing internally and externally (inside and outside the phenomenon).

Definition. To define is to express the identity of something in words. Phenomenon description represents the phenomenon, whole the phenomenon (not skipping portions), just whole the phenomenon (not confusing with anything outside the phenomenon). Thus - to repeat for a moment - "regret and remorse that becomes repentance (recovery included)" is repentance, whole repentance, only whole repentance. Such a definition rises from the ethical evidence that becomes possible if repentance is lived through and rationally vetted.

2. Eidetic reduction. The 'empirical' phenomenon description dwells on one or more singular - concrete cases. The 'eidetic' phenomenon description generalizes, i.e. summarizes what is the common property of the singular - concrete cases. 'Eidos' means "common understanding." 'Eidetic' means 'the eidos concerning'. The general understanding drops all that is accidental (nonessential): whether one repents after adultery, dishonest business practices or prostitution e.g. is "eingeklammert" as nonessential. Whether repentance is intensely felt or quietly lived through e.g., is accidental and not "eidetic."

Honesty as a phenomenological attitude.

The Bible, Psalm 32 (31) sets us on our way.

1. "I remained silent as my life force drained away in groaning all day long. By night, by day Your hand (understand: God's presence) weighed on me (...)"

2. "My fault have I made known to Thee. I did not conceal my wrong and said, 'I turn to God and confess my sin ...'"

Phenomenological view. 1. There is the obvious: the psalmist did wrong! With that circumstance or fact he is directly confronted in his innermost being.

3. Yet with that fact is something co-given that is related to it: "If I confess, I lose my honor." A kind of honor involves shame and immediate resistance to honest admission (confession).

Note: With the Austrian psychologist Paul Diel (1893/1972), it can be argued that vanity, i.e., that sense of honor that rests on nothing (and is therefore empty or vain) prevents the psalmist, perishing with remorse, from taking the liberating step: "If I confess, I lose my (vain) honor." What is associated with the phenomenon, the error, prevents the right attitude toward that phenomenon. Yet apparently his respect for the truth, though shameful, has grown stronger: "If I confess, I save my honor." Yet now not the vain honor: "I have not concealed my wrong;"

Summary: Honesty including deference to the truth that if necessary shameful, says, "what is, is." And what shows itself, shows itself, even if what shows itself provokes the resistance of not wanting to have a conscience. "What is wrong is wrong." The identity axiom "what is, is" governs phenomenology as an urgent logical law.

1. 4 Intuition (Contemplation).

More than once, "intuition" is invoked as inspiration, as a direct and unreasoning knowing. Now it turns out that this term covers more than one meaning. To some of these we will briefly address. Usually the term includes two characteristics, namely a knowing that is instantaneous ("sudden") and direct ("immediate" i.e. without intermediate terms).

J.-P. Sartre (1905/1980), French existentialist philosopher, in his *L'être et le néant* (1943), defines: "There is only contemplative knowing. Deducing and expounding - called 'knowing' in the improper sense - are only instruments that lead to contemplation. When it is attained, the means used to attain it weaken. Whenever it is not reached, deduction and exposition remain merely signposts pointing to a contemplation that is still out of reach." Sartre, as a phenomenologist, summarizes, "Contemplation is the presence of consciousness in the given."

That one can then distinguish between e.g. sensory intuition - I see you coming now

- and intellectual intuition - I recognize that $2 + 2 = 4$ -, we will now leave out of further consideration.

In both cases there is direct presence of the beheld in our consciousness. Both arise suddenly.

Truth and contemplation. There is mere mental intuition and true intuition. Ch. Lahr,

Cours, 676, gives two examples of sudden "intuition" but one of which merely resembles true contemplation yet is not.

- In P. Bourget's *L'émigré* (1852/1935), Landri de Clavier - Grandchamp suddenly experiences the clear intuition that the intendant Chaffin is deceiving the marquis, his father, and belongs to the gang of exploiters plotting his downfall.

- In *Coeurs russes* by E.-M. de Vogüé (1848/1910), the peddler Fédia uses a heroic lie to return Akoulina to her children by passing herself off as the instigator of the fire of which she had been accused. All concerned suddenly had the intuition that the truth had been discovered.

Well, it appears from the whole story that Landri's 'intuition' was true and the 'intuition' awakened by Fédia was false. In the second - the untrue - case, there is subjectively the psychological sensation of sudden 'intuition' but no direct contact with objective reality. One remains within the merely mental. Similarity is not yet total identity! Subjective intuition may resemble objective intuition, but does not coincide with it and therefore is not it. Not everything that presents itself as intuitive intuition corresponds to reality.

Bibl. st.: P. Foulquié / R. Saint-Jean, *Dict. de la langue philosophique*, PUF, 1969-2, 380/383, gives other examples which we discuss here briefly.

H. Bergson (1859/1941), Jewish-French philosopher, in *La pensée et le mouvant* (1934), defines his concept of contemplation as follows: "We call 'contemplation' the sympathy with which one enters into a given in order to coincide with its uniqueness and that which cannot be expressed in general terms." Or still: "Contemplation is, to begin with, consciousness but direct consciousness, an insight that is narrowly distinct from what it realizes, a consciousness that is contact and even coincides with that which is contemplated."

H. Bergson; gives as examples the intuition by which we know our fellow man - the "alter ego," the "I once more." Of course, as a vitalist (philosopher of life), he wants life to be known through an appropriate intuition by which we know life as coinciding with it: by living we have a contemplation of what life is.

I. Kant says: If I strip the representation of a body of what is sensorially experienceable in it - such as hardness, impenetrability, color - then something remains of it, namely the empirical contemplation that concerns vastness and form. The latter are "pure contemplations," i.e., they are not sensually experienced and thus in that sense "nothing," but they make it possible as pre-given (a-priori) to "contemplate" concrete things. Thus are 'time' and 'space' are also pure contemplations (but not real concepts) that allow things to be situated in time and space. One sees that the term "contemplation" is open to more than one "interpretation" (interpretation)!

1. 5 Culture in terms of task and solution

Real. Hegel's concept of "real" (1770/1831). Well known is Hegel's statement:

"All that is real ('wirklich') is reasonable ('vernünftig') and all that is reasonable is real." Fr. Engels (1820/1895, German socialist philosopher and with K. Marx the founder of Marxism) says that if any phrase was misunderstood, it is that statement. And he gives examples of correct understanding. Kingship in ancient Rome once became "unreal" such that the time was ripe for the republic. Analogously, French kingship was becoming unreal when, with the French Revolution, the time was ripe for the republic.

"Actual" means (1) "factual" (in the ordinary sense) (2) but also "up to the task. All that cannot cope with factuality is unreal. As an aside, the second meaning is a metonymy of the first. OPG (= GG ^ GV) - OPL. - We translate "actual" in the second sentence by "all that the task (the given and the requested) can cope with in such a way that the solution is realized.

Culture. K. Bellon, *Culture*, in: J. Grooten / J. Steenbergen, *Philosophical lexicon*, Antw./Amst., 1958, 68, defines, "All that man changes about nature to make it more suitable for his own purposes." Classically, the couple "nature/culture" is on point. But what is "nature"? Do we define "nature" as the given (GG). Once man encounters nature, it becomes a given (GG) with a demanded (GV), i.e. a task (OPG) that demands solution (OPL). Culture then is "man's way of solving tasks" and that man is "real," i.e. capable of culture, to the extent that he can handle tasks. With J. Dewey (1859/1952), American philosopher and educator, said: culture is problem solving.

Such a definition lets both primitives and postmoderns (cf. 1.2.11) get justice, for those who used to be dismissed by Westerners as "savages" or "nature people" solve problems (sometimes better than we do), even if starting from partially different axioms. Ethnocentrism has disappeared from our definition.

Such a definition likewise lets justice be done to both the working-class man and the intelligentsia, for e.g. a plumber solves problems, albeit in his 'primitive' (technically - practical) way, in which an intellectual can only look on meagerly. 'Elitism' has disappeared from our definition.

Logic. It turns out that to act logically invariably consists in first grasping the fact in order to immediately grasp the required thing so that this task, thanks to (logical) culture, moves towards its solution. Logic and culture are similar in structure and are related because culture operates logically and thus contains logic as a basic aspect.

Remark. - Axiologically, culture is thus an added value or a value added to nature by human intervention.

1.6. This chapter summarized:

The basic structure of logic governs the grasping of given and asked and reasoning out to a solution. Ancient mathematics and rhetoric already testified that this is not always easy.

Peirce warns us that all of this may well be more colored by our beliefs. These can take various forms without our always being aware of them. For example, our perceptions may be distorted by our idiosyncratic, straightforward, or preferred prejudices, or by a combination of all three. We then do not always start from the data and questions in themselves with their external, objective, and real-world permanence.

The task can also be misunderstood from a phenomenological point of view.

'Basic beliefs' and 'evidences' can cloud phenomenological perception. They are like a kind of ready knowledge, given directly into consciousness, and the result of our development, education and formation. However, as long as they have not been tested for their truth value, they too are subject to some reservation. A correctly understood phenomenology, however, will grasp the essence of the data and do justice to the basic axiom of logic: "what is, is."

In all this, intuition can also be disruptive. Again, there is indeed a caveat here: not everything that presents itself as intuition leads to an objective contact with reality.

Finally, culture can be defined as a given and a requested that demands a solution, so that the creation of culture is also logical, and logic founds culture. Both achieve reality.

To work out data and questions to a solution, free from our subjective beliefs, from a traffic understood phenomenology and from unreal intuitions, in order to penetrate to what is objectively real. Behold the basic structure of general logic.