

a concise summary

Rudolf Steiner
The Science of Knowing

compiled by Luc Ambagts

steinerinessentie.nl

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“Let us recall why it is in fact that thinking, to direct experience, already contains its essential being.

This is because we stand inside, not outside, the process that creates thought-connections between the individual thought-elements.

Through this we are given not only the completed process, what has been effected, but also what is at work.”

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A. PRELIMINARY QUESTIONS

1. The Point of Departure

One cannot imagine a sharper antithesis than between the teachings of Hegel and Schopenhauer. But these two men have in common an unlimited reverence for Goethe and the belief that he adhered to their world view. It is no different with more recent scientific theories. The reason for this phenomenon, however, lies in the fact that one seeks an outer agreement of one's view with details torn out of the wholeness of Goethe's thinking, which thereby lose their meaning.

Anyone who enters more deeply into the totality of Goethe's personality will be able, if he also brings along a philosophical disposition, to separate out the philosophical sense and to present it as Goethean science. But he must take his start from Goethe and not approach him with an already fixed view.

There are people whose intellect is especially able to think purely mechanical interdependencies and effects; they picture the whole universe as a mechanism. Other people have an urge to perceive everywhere the mysterious mystical element in the outer world; they become adherents of mysticism. All error arises when a way of thinking like this which is valid for one category of objects is declared to be universal.

Goethe takes his way of looking at things from the outer world and does not force any particular way upon it.

2. The Science of Goethe According to the Method of Schiller

Goethe's gaze is directed upon nature and upon life, and his way of looking at things in doing so will be the object (the content) of our discussion; Schiller's gaze is directed upon Goethe's spirit, and his way of looking at things in doing so will be the ideal for our method.

Philosophy will play a part in cultural life again only when, instead of going back to Kant, it immerses itself in the scientific conception of Goethe and Schiller.

3. The Task of Science

Each science has its own area in which it seeks the interconnections of phenomena. But there remains a polarity between the world of ideas achieved by the sciences and the objects that underlie it. To elucidate the interrelationships here is the purpose of the following discussion.

B. EXPERIENCE

4. Determining the Concept of Experience

We penetrate with organizing intellect the endless manifoldness of shapes, forces, colours, sounds, etc., that arises before us. What results from such asking and seeking has already a twofold origin: experience and thinking.

Pure experience is the form of reality in which reality appears to us when we confront it to the complete exclusion of what we ourselves bring to it. Our inner states also appear on the horizon of our consciousness. Even thinking itself appears to us at first as an object of experience.

We confront experience pure and simple and seek within it the element that sheds light upon itself and upon the rest of reality.

5. An Indication as to the Content of Experience

The world of pure experience is a manifoldness of things of equal value.

It is only when the spark of thought strikes into this world that one thing appears to stand out more or less than another. An endless number of unrelated particulars is what experience offers us.

It is not only the things of the outer world and the processes of the inner world that stand there, at this stage of our knowing, without interconnection; our own personality is also an isolated entity with respect to the rest of the world. We find ourselves as one of innumerable perceptions without connection to the objects that surround us.

After the activation of our thinking, each particular thing of this total picture no longer appears in the way our senses alone communicate it, but already with the significance it has for the whole of reality. It appears then with characteristics totally lacking to it in the form of experience.

6. Correcting an Erroneous Conception of Experience as a Whole

An almost axiomatic view exists since Kant. This view declares the entire world of phenomena to be a mental picture inside our individual consciousness. On the foundation of this presupposition one then erects further assertions about the nature of our activity of knowing. This characterization is already what thinking determines it to be, and has therefore absolutely nothing to do with the initial appearance of this world.

The examination of the relationship between thinking and experience, as the two factors of knowing activity must therefore precede this characterization.

7. Calling upon the Experience of Every Single Reader

We are characterizing experience as precisely that in which our thinking plays no part at all.

The basic error of many scientific endeavours, consists of the fact that they believe they present pure experience, whereas in fact they only gather up the concepts again that they themselves have inserted into it.

If the form of experience we have described thus far is an essential characteristic of the things of experience, it would be of no use to investigate the interconnection of things.

The situation would be entirely different if, in this form of reality, we had to do only with its inessential outer aspect. We would then have to overcome its manifestation to the senses in order to develop out of it a higher form of manifestation.

The answer to this question is given in the following investigations.

C. THINKING

8. Thinking as a Higher Experience within Experience

If, for example, I grasp the thought “cause,” this leads me by its own content to that of “effect.” Lawful interconnection, is already present in thinking in its very first appearance.

A science of knowledge established in the sense of the Goethean world view lays its chief emphasis on the fact that it remains absolutely true to the principle of experience. To found a science of knowing upon the principle of experience we need only take up this element of thinking that is to be found within experience.

The thought-content of the world on the one hand manifests as an activity of our consciousness, on the other as a direct manifestation of a lawfulness complete in itself as a self-determined ideal content.

Now, because we stand inside this thought-content, because we permeate it in all its component parts, we are capable of really knowing its most essential nature.

Manifestation to the senses gives us no enlightenment about its own essential being; Thinking gives us enlightenment both about itself and about the essential being of the manifestation to the senses.

9. Thinking and Consciousness

We grasp thought ‘a’ and thought ‘b’ and give them the opportunity to enter into a lawful connection. It is not our subjective organization that determines this particular connection. The human spirit effects the joining of thought masses only in accordance with their content. Our thought-world is therefore an entity fully founded upon itself.

We actively bring the ideal world into manifestation, and at the same time, that what we actively call into existence is founded upon its own laws. The objective aspect of its content is the essential one, not the subjective aspect of the way it arises.

One needs to give up the usual opinion that there are as many thought-worlds as there are human individuals. Instead of this opinion, we consider the following one: There is absolutely only one single thought-content, and our individual thinking is nothing more than our self, our individual personality, working its way into the thought-center of the world.

10. The Inner Nature of Thinking

Goethe first of all takes the objects as they are and seeks to penetrate their nature. He then sets up the conditions under which the objects can enter into mutual interaction and waits to see what will result. Goethe seeks to give nature the opportunity to bring its lawfulness into play, to express its laws itself, as it were.

How does our thinking manifest to us when looked at for itself? It is a multiplicity of thoughts woven together and organically connected in the most manifold ways. But when we have sufficiently penetrated this multiplicity from all directions, it simply constitutes a unity again.

Without the outer world, many people maintain, our concepts are only empty schemata without any content. The concept is something added onto the objective world. If this view were justified, one of the following three presuppositions would have to be correct.

1. The world of concepts only reproduces the entire content of this world in a different form. If that were the case, one truly could not see why it would be necessary to lift oneself above the sense world at all.
2. The world of concepts takes up, as its content, only a part of “what manifests to the senses.” But in order to recognize which characteristics of a thing are essential, there must already be a certain norm making it possible to distinguish the essential from the inessential. This norm must after all be thinking's very own content.
3. The concept could in fact be the mediator for grasping entities that are not sense-perceptible but that still have a self-sustaining character. This view does not in any case speak against the fact that the world of concepts has content.

It is in any case clear that thinking is full of content; and its content does not coincide with that of any other form of manifestation.

D. SCIENCE

11. Thinking and Perception

If we take the statement: the earth attracts all bodies, we notice at once that the thought leaves open the possibility of being fulfilled in the most varied ways in sense perception. Psychologically that element comes first which in point of fact is derivative.

In all cognitive treatment of reality we approach the concrete perception. Within us the urge makes itself felt to investigate the essential being, of the perception. This urge is nothing else than a concept working its way up out of the darkness of our consciousness. We recognize that the concept we have grasped is what we sought as the essential being of the perception.

The inner unity of our thinking rests upon judgments that joins two concepts without taking perception into account at all. The judgment under consideration here has a perception as its subject and a concept as its predicate. In this kind of judgment, a perception is inserted into my thought-system at a particular place. Through such perception-judgments, one recognizes that a particular sense-perceptible object, in accordance with its being, coincides with a particular concept.

The conviction should permeate all the sciences that their content is purely thought-content and that they stand in no other connection to perception than that they see, in the object of perception, a particular form of the concept.

12. Intellect and Reason

Our thinking has a twofold task: to create concepts and to bring together the individual concepts into a unified whole. Making distinctions is the task of the intellect. Reason has to show that what the intellect keeps strictly separated is actually an inner unity. Reason leads back to reality again.

The concept is the single thought as it is grasped and held by the intellect. If I bring a number of such single thoughts into living flux in such a way that they connect with one another, then the creations of the intellect live on only as part of a totality. These configurations that reason has created shall be called ideas.

If, in the judgment that every body has weight, we join the subject-concept with the predicate-concept, there already lies in this a uniting of two concepts and therefore the simplest activity of reason.

All judging, insofar as the parts entering into the judgment are concepts, is nothing more than a reuniting of what the intellect has separated.

When I think $7 + 5$, I am in fact grasping 12 mathematical units in thought in two parts. If I think the total of these mathematical units at one time, then that is exactly the same thing. And I express this identity in the judgment $7 + 5 = 12$. Primary is the magnitude, which is so and so many repetitions of the unit.

13. The Activity of Knowing

As a citizen of the sense world and of the thought-world the human being takes possession of science, by which he joins the two into an undivided unity.

If the world were inhabited merely by sense beings, its essential being (its ideal content) would remain hidden forever. For the laws that govern the processes of the world to come to manifestation, a being would have to perceive both the sense-perceptible form of reality and the lawfulness itself. Such a being must, in its own activity, unite these two factors of reality.

Our science of knowledge grasps the activity of knowing by indicating its ideal purpose: to bring incomplete experience to completion by revealing its core. It determines what this core is: thought, idea. And it demonstrates in our chapter on "Thinking and Perception" how this revealing takes place. Thinking is the essential being of the world. Individual human thinking is the manifestation of this essential being.

If one recognizes fully that we cannot skip over our consciousness without landing in non-being, but does not recognize at the same time that the essential being of things is to be encountered in our consciousness in the perception of ideas, erroneous views then arise that speak of a limit to our knowledge.

Thinking is adequate to constitute the world. Any other factor (force, will, etc.) turns out to be nothing more than an abstraction from the perceptual world that awaits explanation by thinking.

14. The Ground of Things and the Activity of Knowing

If thinking forms a judgment, it is the very content of the ground of the world itself, having flowed into thinking, that is connected. We have direct insight into the factual grounds, not merely the formal grounds, for why a judgment takes place.

The essential being of a thing comes to light only when the thing is brought into relationship with the human being. The world is not known to us only in the way it manifests to us, but rather it manifests as it is, although only to thinking contemplation.

E. THE ACTIVITY OF KNOWING NATURE

15. Inorganic Nature

The system of processes where one fact is always the result of other ones like it is called inorganic nature.

The opaqueness and unclarity of a phenomenon in the sense world can be overcome if we see, with total exactness, that it is the result of a definite constellation of facts. Our spirit, therefore, groups the facts of the inorganic world in such a way that it sees an event or a connection as the consequence of the facts' interrelationships. In this way man's spirit reduces all the phenomena of inorganic nature into the kind of phenomena in which the effect appears to his spirit to emerge necessarily out of what is bringing about the effect. Such a phenomenon is called an archetypal phenomenon. It is identical with objective natural law.

The archetypal phenomenon presents itself purely in thoughts. But one can also set up the necessary conditions artificially. This happens in scientific experiments. One produces a phenomenon with different modifications. A constant is then found to run through all these modifications. That is the archetypal phenomenon.

The germ of the view we have developed here is to be found in Goethe's correspondence with Schiller. They call this method rational empiricism, because it takes nothing other than objective processes as content for science; these objective processes, however, are held together by a web of concepts (laws) that our spirit discovers in them.

Scientific satisfaction from a view comes to us only when this view leads us into a totality complete in itself. In order to have a wholeness in inorganic nature we must strive to grasp the entirety of the inorganic as one system. The cosmos is just such a system.

16. Organic Nature

The method of physics is simply one particular case of a general scientific way of investigation in which the nature of the pertinent objects and the region this science serves are taken into consideration.

In organic science we can definitely say that under the influence of certain circumstances a species had to evolve in such a way that one or another organ became particularly developed; what is there as content, however, the specifically organic, cannot be derived from outer conditions.

One must, above all, focus one's thinking on the question: From what do we then derive the content of that general "something" of which we consider the individual organic entity to be a specialized case? This particular form is, after all, something in and of itself. Something that does not passively allow itself to be determined by outer circumstances but rather determines itself, actively, out of itself, under the influence of the outer circumstances.

The basic factor is a general image of the organism, which comprises within itself all the particular forms of organisms. Following Goethe's example, let us call this general organism *typus*. This *typus* is not developed in all its completeness in any single organism. Only our thinking, in accordance with reason, is able to take possession of it, by drawing it forth, as a general image, from phenomena. We must hold onto the *typus* and then with it travel through this great realm of many forms. Then this realm will become understandable to us. The *typus* plays the same role in the organic world as natural law does in the inorganic. The *typus* puts us in a position to regard the individual organism as a particular form of the archetypal form.

In inorganic nature the fact and the law confront each other as two separate factors, and absolutely no further spiritual work is necessary except, when we become aware of a fact, to remember the law that applies. In the case of a living being and its manifestations we must develop, out of the *typus* that we must have grasped, the individual form arising in our experience. That is a spiritual process of an essentially different kind. A law governs the phenomenon as something standing over it; the *typus* flows into the individual living being; it identifies itself with it.

The method of mechanics is to prove things: Under these conditions, a phenomenon occurs; the conditions are there, so the phenomenon must occur. This method is scientific because it completely permeates a phenomenon with a concept, because, through it, perception and thinking coincide.

In organic science the developmental method must here take the place of the proving one. One establishes here that under definite outer circumstances a particular form has developed out of the *typus*. This is the far-reaching difference between inorganic and organic science.

In the *typus* content and form are closely bound to each other. Therefore the *typus* does not in fact determine the content purely formally the way a law does but rather permeates the content livingly, from within outward, as its own. Our spirit is confronted with the task of participating productively in the creation of the content along with the formal element. The kind of thinking in which the content appears in direct connection with the formal element has always been called "intuitive."

The typus can offer no means of proof but can merely provide the possibility of developing every particular form out of itself. Our spirit must produce the content along with the form. It must take upon itself an activity that the senses carry out in inorganic science and that we call beholding. Our power of judgment must be a thinking beholding, and a beholding thinking.

Just as in organic nature the typus takes the place of the natural law (archetypal phenomenon) of inorganic nature, so intuition (the power to judge in beholding) takes the place of the proving (reflecting) power of judgment.

With intuition a truth is not imposed upon us from outside, because, from our standpoint, there is no inner and outer. For us, intuition is a direct being-within, a penetrating into the truth that gives us everything that pertains to it at all. The insight gained on the path of intuition is just as scientific as the proven insight.

Every single organism is the development of the typus into a particular form. Every organism is an individuality that governs and determines itself from a center. It is a selfenclosed whole, which in inorganic nature is only the case with the cosmos.

F. THE HUMANITIES

17. Introduction: Spirit and Nature

Man should not, like a being of inorganic nature, work upon another being in accordance with outer norms; he should also not be merely the individual form of a general *typus*; rather he himself should set himself the goal of his activity. Here the humanities (spiritual sciences) receive their task.

It is inherent in the being of our spiritual activity (*Freiheit*) for law and activity to coincide: what is enacted governs itself. The humanities are therefore pre-eminently sciences of our spiritual activity (*Freiheitswissenschaften*). The idea of spiritual activity must be the idea that governs them.

The human spirit is able to assume only that place in the generality of the world that it gives itself as an individual spirit. What matters here is not the idea as it presents itself in a general form (*typus*) but rather the idea as it arises in the single being (individual). The important thing is personality finding within itself its own determinative elements.

In nature the particular is determined by the general; with the idea of humanity the generality is determined by the particular.

18. Psychological Knowing Activity

The psychological method is the penetration of the human spirit into its own activity. Self-apprehension is therefore the method here. We are disengaging the individual spirit from its chance limitations and are seeking to raise ourselves to the contemplation of the human individual as such. One has to study the nature of the human spirit as an active entity. One should separate the human spirit from its various expressions and return to this spirit itself as the producer of them.

But what lives and manifests in the human being is also that of the nation to which he belongs. The point is for his place within his people to be such that he can bring to full expression the strength of his individuality. It must not be left to chance whether he finds this place or not. The constitution a people gives itself is nothing other than its individual character brought into a definite form of laws. To grasp the individuality of a people as a reasonable one is the method of ethnology.

19. Human Spiritual Activity (Freiheit)

Man's goals, intentions, ideals, etc., will bear the same character as the rest of his thought-world. Dogmatic science as a principle of conduct leads to moral commandment.

Our epistemology recognizes as a foundation for truths the thought content lying within them. When a moral ideal comes about, it is the inner power lying within the content of this ideal that guides our actions. Man's willing is sovereign. The human being is his own lawgiver. When a person acts morally, this is not for us the fulfilment of duty but rather the manifestation of his completely free nature.

Therefore history, whose subject, after all, is man, is to be based entirely upon man's nature. Its willing, its tendencies are to be understood.

The methods of psychology, ethnology, and history are based upon the direct apprehension of ideal reality. The object of their study is the idea, the spiritual, just as the law of nature was the object of inorganic science, and the typus of organic science.

20. Optimism and Pessimism

The human being in thinking carries out the most perfect process of the world. Only in the way he illuminates things are they real.

The human being has within himself the basis, the goal, and the core of his existence. The outer world in itself is neither good nor bad; it first becomes so through man.

G. CONCLUSION

21. The Activity of Knowing and Artistic Creativity

With both knowing and artistic activity the human being lifts himself from reality as product to reality as producer.

In science nature manifests in a purely ideal way as “that which encompasses everything individual”; in art an object of the outer world appears as depicting that which encompasses everything individual. That which appears in science as idea is an image in art. Science seeks out the lawfulness in nature; art implants this lawfulness into raw substance.

The overcoming of the sense-perceptible by the spirit is the goal of art and science. Science overcomes the sense perceptible by dissolving it entirely into spirit; art does so by implanting spirit into the sense-perceptible.

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On the website [steinerinessentie.nl](#) (steiner in essence) you can read concise summaries of the works of Rudolf Steiner. Four titles will be available in 2018:

The science of knowing (ga 2)

Theosophy (ga9)

The agricultural course (ga 327)

Spirit, nature, life - Lecture from March 1, 1913

The website is still mainly in Dutch, but more translations in English and German are to be expected.

The aim of this project is to make Steiner's work more easily accessible by writing short summaries and by presenting the essence of each book or chapter as an action: what does Steiner ask us to do here?

The progress of the project is entirely dependent on donations. Your contribution is welcome to the account number IBAN: NL65TRIO 0197733174 (BIC TRIONL2U) in the name of Luc Ambagts, stating “steinerinessentie”.

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