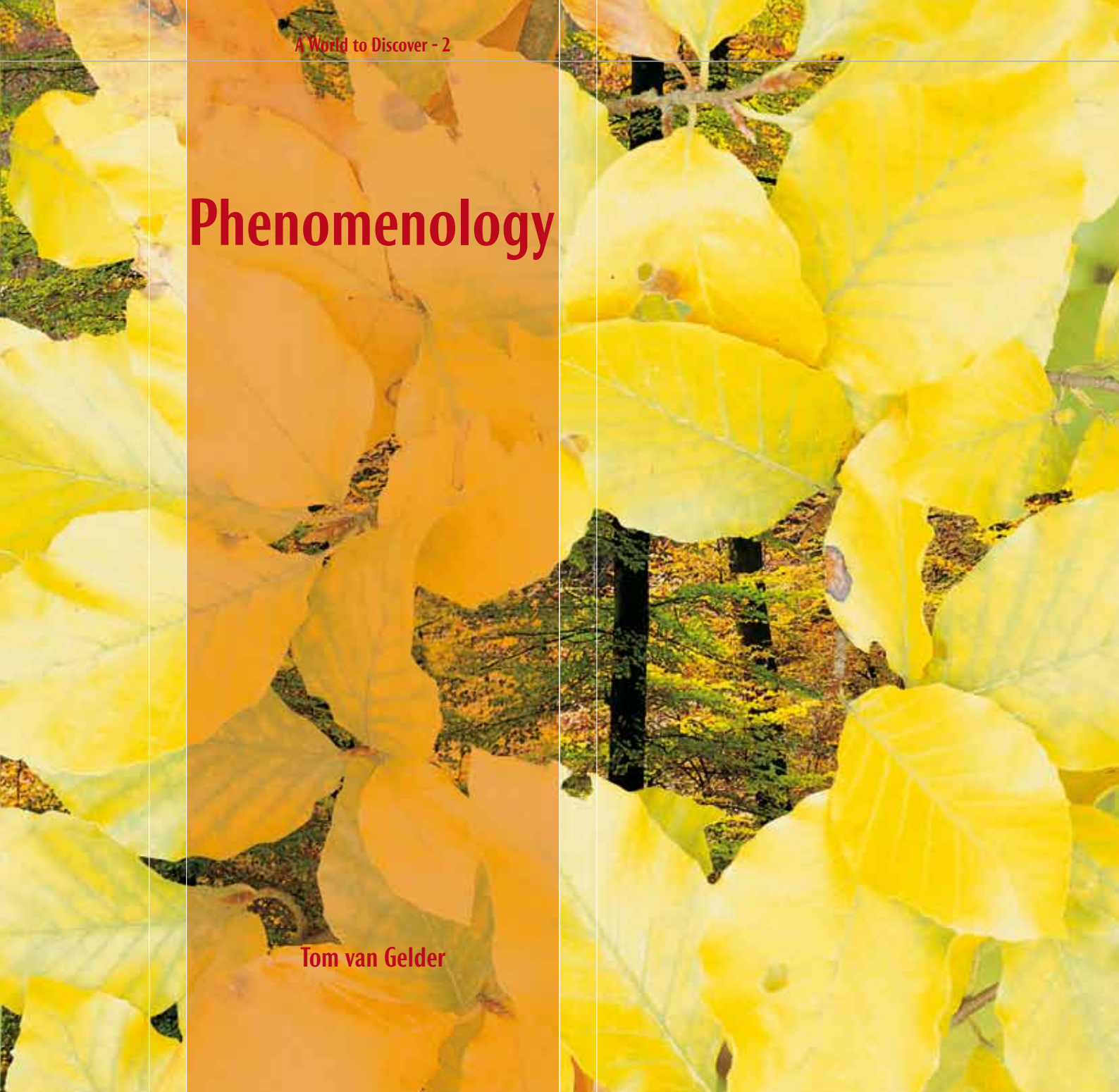
A World to Discover - 2

Phenomenology



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Phenomenology

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'If you wish to understand yourself,
seek yourself in the wideness of the world;
if you wish to understand the world
seek in the depths of your own mind.'

Rudolf Steiner, 1922

Preface

This module deals with phenomenology, a method used to study nature, which may be said to complement conventional science. The results of phenomenological research are frequently applied in biodynamic farming and market gardening, and courses teaching such farming methods are also designed along phenomenological lines. The purpose of the present book is to familiarise you with this method, allowing you to better understand the research findings and to apply the method for yourself. Each chapter includes a number of exercises, which enable you to explore the method. The examples given in these exercises can be replaced by similar examples from other disciplines. It is worthwhile taking the time to do these exercises, as they familiarise you more thoroughly with the method.
The module is based on the writings of Jochen Bockemühl, who has elaborated and explained phenomenology.
This book was written as part of the EU Leonardo da Vinci project ESA-4, which aims to develop a European educational programme to train managers of ecological and biodynamic farms.
In addition to the European Union, I would like to thank Onno Bakker, Jan Saal and Douwe van der Werf, who have contributed to this book by commenting on previous drafts. In addition, I would like to thank the many generations of students with whom I discussed the subject over the years. Without them, this book could never have been written.

Autumn 2004, Tom van Gelder

Contents

1. Introduction

1.1 What is phenomenology?

Phenomenology assumes the existence of a physical world and a spiritual world, which influence each other. Spiritual phenomena[1] are not regarded as the products of matter, but as independent phenomena that permeate and guide the physical world. Hence, the spiritual world is one of the factors which determine visible phenomena, and lies hidden behind them. Visible phenomena can be used to explore the spiritual world.

Rudolf Steiner (1861 – 1925) has often contended that it is possible to explore the spiritual world, just as we explore the visible world, and he developed a variety of methods for this purpose. One of these methods is that of phenomenology. Phenomenology starts by carefully studying objects, situations, events, etc. The phenomenologist then uses the observations as a basis to penetrate into the spiritual world. An important element is that, as an observer, you not only observe an object in a detached manner, but develop an intimate connection with it, penetrate into it and incorporate it in your mental image.

This type of phenomenology should strictly be referred to as Goethean phenomenology[2], as it is based on the way in which Goethe (1749 – 1832) studied phenomena in the eighteenth century. Rudolph Steiner developed this method further, after which it was particularly Jochen Bockemühl who elaborated and published on it. The phenomenology discussed in the present book must be distinguished from the phenomenology developed by people like Heidegger and Husserl, which is a type of philosophy that uses phenomena as a starting point for philosophical considerations.

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[1] Spiritual phenomena is a broad concept, which covers all non-physical phenomena, including life, soul and spirit, but also angels, archangels, elemental beings, etc.

[2] In the remainder of this text, the term phenomenology will be assumed to refer to Goethean phenomenology.

The objectives of phenomenology are:
- to examine the spiritual activity behind visible appearances by examining visible phenomena;
- to develop personal, individual and specific actions that do justice to an object and suit its development.

This module discusses the following topics:
- The module examines the relations between humans and their environment, and the way they formulate research questions and start to observe consciously.
- The next two chapters deal with the first four modes of observation, linked to the four elements.
- Chapter 4 and the first four sections of chapter 5 discuss the four ethers, which are translated into modes of observation.
- The final two sections of chapter 5 deal with individual, specific actions.
- The module ends with an outline of the phenomenological method.

1.2 Working and observing

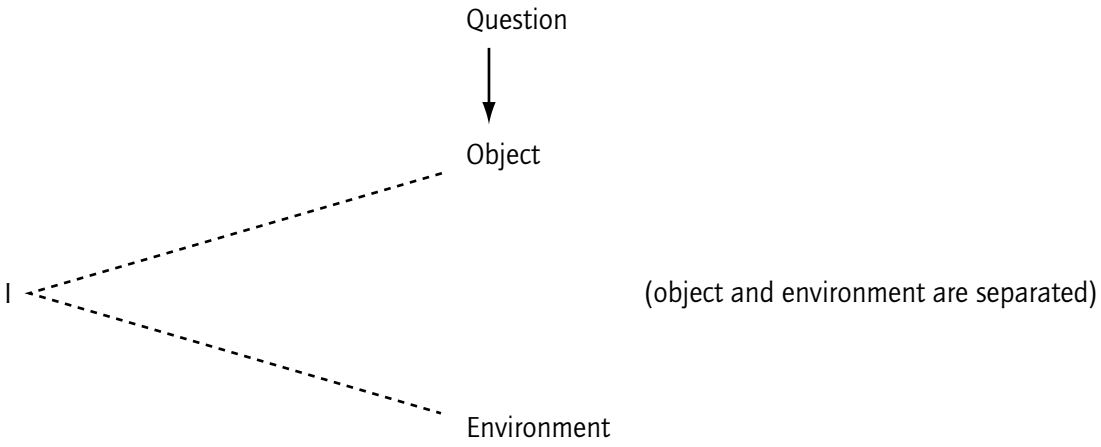
When you're working intensely on something, you will hardly observe anything and will not ask any questions. You want to do your work well and your attention is fixed on that work. You are, as it were, absorbed in it, and you tend to take things for granted. It is only when something unexpected occurs, when something strikes you, something unusual happens or when you switch to some new activity, that you start to observe and ask questions. You concentrate your conscious mind on what you have been doing and look at it in a detached manner. You create a distance between you and the situation with which you were so closely tied a moment ago that you actually were a part of it. Such a distance can be created not only by an unexpected occurrence, but also by reflecting on the activity afterwards.

Normal active situation * (I coincide with the situation)

After something unexpected has happened, and you have started to observe and ask questions, you experience the situation like this:

I ---------- Situation (the situation and I have become separated)

Since you're now confronting the situation and asking questions (like 'What is happening here?', 'How can this happen?'), you can explore the situation. You will soon notice that the unexpected event happened in a particular environment. This means that the situation you're confronting consists of two entities: the object of your observation (a physical object, a situation or an event) and its environment.



What coincided while you were engaged in active life, has now separated into three aspects. You have created a distance, you have become an explorer and it's in you that the observations converge. You are what unifies the exploration. You want to go on observing until you have understood '*it*', until you have grasped its essence. If the question you're trying to answer has to do with solving a problem, you will try to ensure that your action does justice to the object in its environment. If you manage to achieve these two things, knowing the essence of the object and doing it justice, your action will be moral, that is, in agreement with the essence of the object.

Exercises

(all exercises can be done individually, in pairs or in groups of five to ten people; you can help each other by asking questions)

- *Try to find examples of unexpected events that led you to observe and ask questions. Describe these events, let the others ask you questions to clarify the situation for them: what exactly happened, what questions arose, what observations did you make, did these questions and observations change at a later stage, etc.*

- *Select a situation in which you did something automatically. Suitable examples are actions that are very common and not very important. What were you thinking about? What did you observe? You can do this exercise on your own, but it may be helpful if others ask you questions.*

- *Try to define the environment of a particular object. What is part of that environment and what isn't?*

- *At the end of the lesson, or at the end of a day, try to reflect on something you did. Try to review in your mind what has happened, as accurately as you can. Your attitude should be that of an outsider's view of yourself and what you have done. Pay attention not only to what happened but also to how the reflection happened. What was easy to do, and what problems did you face?*

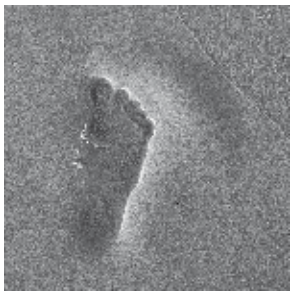
2. The four elements

Imagine you're taking a walk in the forest on a day in spring. The weather is fine: the sky is blue with the odd cloud, there is a light breeze, everything feels very pleasant. You smell the fresh perfumes of the awakening greenery. As you look around you, you see trees, shrubs and herbs. You see the tree trunks, the various hues of green and the light filtering through the leaves. Now and then you hear leaves rustling. You notice the yellow dandelion flowers and the tender pink blossoms of wild cherry trees. You hear the gay songs of all sorts of birds. A squirrel dashes up a tree. There is a puddle on the path. You pass a bench and a sign saying 'No admittance'. You meet other people, who are walking their dogs. It's nice and warm in the sun, but still slightly cold in the shade. You get to a bridge and see the water flow. Not all of it flows at the same speed: it is faster in the middle of the brook than along the banks. There are eddies in the stream. The water hits a rock that's lying in it and flows around it, appearing to stand still just behind the rock.

All of these things and events can be classified in various ways. You could distinguish between living and lifeless objects, between man-made and natural objects, between plants and animals, between higher and lower plants, between mammals, birds and reptiles, between growing organisms and dying organisms, etc. What classification you use depends on the way you observe. One of the many ways to observe is that based on the four elements, a classification of nature that was already used by the ancient Greeks. In the above example, you can distinguish all four elements: earth, water (or liquid), air and fire (or warmth).

You see solid objects, which are called *earth*, including the trees, the bridge, the plants, the animals and the people, the bench and the no admittance sign. You also see flowing, eddying and standing *water*. You feel the movement of the *air* and see its blue colour. You feel the temperature, that is, the cold and the *warmth*.

The features of the four elements are discussed below, after which the elements are linked to observational attitudes in chapter 3.



2.1 Earth

The word earth refers to the solid element and includes everything that has a solid shape. All lifeless and living solid objects in nature and all man-made objects belong to the solid element. Thus, rocks, stones, the soil, ice, plants, trees, animals, human beings, cars, machines, houses, books, etc. all belong to the element called earth.

What do these objects have in common?

- They have a fixed form. You can grasp them.
- They have clearly defined boundaries. You can't move through these objects and if you try to do so, you bump into them. You can establish their boundaries.
- You can't look into them. You're looking at their exterior; your senses hit a barrier. And since you can't look inside, the interior remains hidden. Even if you open up a solid object, you'll still be looking at a new 'exterior'.

Concepts relating to the earth element include *solidness*, *boundaries* and *impenetrability*.

As you hit the objects belonging to the earth element (either literally or metaphorically as your senses encounter them) you become aware that things exist outside yourself. You become aware of the objects as well as of yourself.

2.2 Water

The element called water includes anything that flows, that is, all liquids, not just water itself. In fact, water is only included in it if it's in its liquid state, not as ice or vapour. A brook or a lake is not a solid object like a tree or a table. You can't grasp it; the water flows, and you can see through the water.

Features

- Water and liquids flow; there is movement, there are eddies.
- Water is contained within a riverbed or some other form of the solid element.
- Water is penetrable; though it has boundaries, both physically and to the senses, these boundaries can be penetrated.
- You can be inside the water, so there is no hidden interior.

The water element is characterised by the concepts of *flow and movement* and *penetrability*.

Water can, in a way, also be regarded as a solid object. The water in a pond or puddle does not flow. The water's surface is a boundary. The water in Dutch ditches is often too turbid to allow you to look into it, so its surface presents a barrier to your senses. Conversely, there are solid objects whose shape can be changed and objects that you can see through. So there are certain similarities between the earth and water elements, but their features can be grasped more accurately by studying their differences. That will show you that features that characterise the earth element do not apply to the water element. You don't bump into water, you can move through it and your senses can penetrate its surface. Even in a puddle, the shape of the water is determined by that of the soil around it. And the ditch water is turbid because there are solid particles floating in it.

2.3 Air

Air is the element that surrounds everything. You're entirely surrounded by air, and you can move through it. If you take a step forward, the air will make way for you effortlessly and reunite behind you. Air thus differs from the solid element and the water element, which you can observe and encounter.

Air spreads in all directions. It does not accumulate in a particular place like solids and water, and its composition is the same everywhere.

Air can only be observed indirectly, for instance in moving leaves, paper being blown away, white-crested waves forming on water or wind brushing past your face. The presence of air that doesn't move can be derived from the fact that birds and insects fly.

If you look through air, you see objects as they are; air does not distort the objects.
The air causes the blue colour of the sky and the red colours of sunrise and sunset.

Features
- Air makes way for other things, by moving aside.
- Air spreads in all directions.
- Air itself is invisible and allows things to be observed without distortion.
- Air causes the colours of the sky to manifest themselves.

Air is thus characterised by the concepts of *unselfishness* (in that it moves aside, is itself invisible, makes other things visible and causes the colours of the sky to be seen) and *spreading*.

Just like water shares certain features with the earth element, air shares some features with water. For one thing, it flows. But whereas water can be contained in a riverbed and remains together as a unit, air spreads in all directions.

2.4 Warmth

You can observe warmth (or heat, as it's called in physics) by feeling that things are hot or cold. You always sense the temperature of objects relative to your own temperature and that of your environment. This means your observations of warmth are relative. You can't keep out warmth; it pervades your body.
In addition to this warmth in the ordinary sense of the word, there is also warmth which can arise within you out of nothing, for instance if you become excited about something, if you 'warm to some idea', if you're affected by something or if you start to blush. You become active. Cold can also arise in this way, for instance if you become nervous, withdraw into yourself or create a distance. You can't keep out these types of warmth and cold either; they pervade you completely.
You can also perceive the warmth and cold that are radiated by others through their moods, when they're enthusiastic or have cold thoughts.

Features

- Warmth, whether in the form of physical, personal or 'social' warmth, immediately pervades you entirely.
- Warmth has no boundaries.
- Warmth can arise within you out of nothing.

As we go from earth, via water to air, the substance becomes ever more rarefied, and with warmth, any sense of tangibility is lost: you can only perceive it. You can observe warmth in the air, in an indirect fashion, for instance in the turbulence of the air on a hot day, or the white vapour you exhale on a cold winter's day.
Warmth is the element that pervades everything and that provides impulses (for instance to become active). Warmth induces internal and external activity.
Warmth can be characterised by the concepts of *pervasiveness*, *lack of boundaries* and *impulse creation*.

Exercises

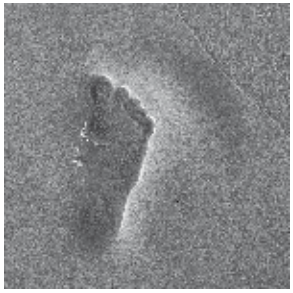
- *Make some observations, and classify your observations on the basis of the four elements. Assess the features of the elements and try to draw conclusions about these features.*

- Do you think the classification based on the four elements is useful? What arguments can you find for and against its usefulness?

- Solid objects can be grasped, while water runs through your fingers, air is intangible and warmth pervades you. Try to find other, similar differences.

3. Using the elements to aid observation

The four elements, earth, water, air and warmth illustrate four different features of the things around you. They can also make you aware that you can observe the world in different ways, namely as solid shapes, as flow, as characteristics and as impulse. You can describe a dog by describing its exact shape (= earth element), or you can describe, imitate and experience its movements (= water element), or you can characterise it (= air element) or describe what impressions it evokes in you (= warmth element). Thus, the elements provide a basis for four different types of observational attitude, four different modes of observation.
The present chapter uses the features of the elements to describe observational attitudes, and presents some results and examples. It ends with some exercises. With these modes of oberservation you focus on the object. The modes of observation for the environment will be discussed in chapter 5.
In many cases, you have probably been observing on the basis of their four modes of observation, or aspects of them, without being aware of it. As you start to practice using the method, you may find that you're using a particular mode of observation frequently, or not at all, or only certain aspects of it. Distinguishing the modes of observation and naming and classifying your observations on the basis of one of these modes may help you identify gaps and achieve balanced observation.
This method can be used for living objects, situations and events, which means that where this book mentions objects you could also substitute situations or events.



3.1 Earth: exact observations

Attitude

This mode of observation is based on precise observations, using the attitude of the earth element. In your inner self, you assume an attitude corresponding to the earth element, and start to observe an object's *solidness*, *boundaries* and *impenetrability*.

- *Solidness* means that you assess what the object is, what it looks like, what features it has, etc. This includes precise measurements, weighing, etc.
- *Boundaries* means that you confront the object. You don't connect with it, and you don't judge it (as that would preclude further observations) and you disregard subjective observations (like whether it is beautiful or ugly), as they would say more about you than about the object.
- *Impenetrability* means that your senses observe only the exterior of the object, and that you're aware that if you were to open it up, you would only be looking at a new exterior. You will not be able to penetrate into the object's interior.

This approach allows you to observe the object precisely and objectively[3]. You can assess what it is, how large it is, how heavy it is. You can identify its boundaries by accurately drawing the object. You observe as many details as you can (depending on the scale), without destroying the object. This means that you will observe different details when observing an organism than when observing a landscape or an organ. You observe both the object as a whole and its parts, using as many of your senses as you can. The observational attitude linked to the earth element is largely determined by the concept of *measuring*. You should observe from a sense of respect and admiration for the object. This will enable you to get to know it better than when you start to dissect it. In addition, an attitude of unprejudiced examination can help you observe new features of an object that you may have seen many times. You often think you know something, even though you may never have looked at it closely. This is certainly true for the things that you work with and encounter every day.
You can force yourself to look closely by drawing an object or making a clay model of it. This means that you automatically observe its proportions, which you might otherwise forget to do.
This attitude corresponds to the mode of observation that is used in conventional science, and is excellently suitable for observing man-made, technical objects. When applied to living objects, this mode of observation yields precise information. You should be aware, though, that this mode means that you

[3] The concept of objectivity is also discussed in part 1 of *A world to discover*, section 1.1, which deals with the personal, subjective aspects of observation. Observations depend on personal interests and concepts. If different people use the same questions and concepts, they will make the same observations. If everyone uses a tape measure to measure the same length, their observations will not be influenced by their personality.

observe everything as if it were lifeless.
Earth-type observations provide the basis for the other modes of observation. Without these precise observations, the other modes of observation would not have a sound foundation to start from, and they might wander off into the realm of fantasy.

Results
After you have completed these observations, you will have described an object in terms of precise observations which can also be made by others. You will have information on the object as a whole as well as on its details, but you will not have destroyed the living object. You will have restricted yourself to its exterior.
You will have largely reduced the aspects that interested you to a list of concepts. Your drawing or your clay model will hardly have any life in it, since it was intended to reflect precisely what you observed. The whole process of looking at an object and measuring it makes it become static and lose its mobility. Of course, this is directly related to your observational attitude and is partly caused by the fact that you didn't connect with the object. That is as it should be, because it has enabled you to keep an objective distance and to observe precisely.
You can also use instruments to assess features of an object that are independent of the observer. If you want to measure length, it makes sense to use a tape measure; that will yield more accurate results than just estimating. At the same time, however, something is lost, for instance in that it becomes harder to get a sense of the object's proportions. If you express the colour of a leaf as a number, that certainly makes it objective, but you lose the experience of finding the colour by composing it from other colours. Also, an instrument measures only that which it was designed to measure, a fact which is sometimes overlooked.

Exercises

- *Modesty*

Draw one of the shoes you're wearing, without looking at it. Compare your drawing with the actual object.

- *Observing an object or situation*

Observe an object as precisely as possible, using as many of your senses as you can. Write a description or make a drawing or clay model of the object. Observe both the object as a whole and its details. The main thing is that you don't write down or draw anything that you haven't actually seen precisely as you describe or draw it. So if it's a leaf, you must draw each and every serration along its margin, and if it's a tree, all branches must be drawn at the right level and sticking out from the trunk at the correct angle, etc. Don't resort to clichés. Look at proportions.

The object may be anything that interests you and that you want to examine: a plant, a tree, a flower, an animal, a stone, a piece of machinery, a constellation of stars in the sky, a farm, a landscape, etc.

Describing a situation is harder than describing an object, as a situation is temporary: it is only present at one particular moment. The situation may be anything: a movement by an animal or human being, a situation in class, a practical or interpersonal situation during your practical work, a scene from a play or ballet, etc.

- *Observing in a group*

Form groups of five to eight students. Select an object or situation that interests all of you. Observe for a agreed length of time; 15 to 30 minutes should usually be enough. Jot down your observations. Try to use as many of your senses as you can. Take measurements if necessary, and pay attention to proportions.

After you have done this, one of the group reports his or her observations, while the others add anything he or she may have missed. Concentrate on the following aspects. Are any observations reported which you have also made or which you didn't make? Are there different nuances in the observations? Has the person who reports the observations used a different perspective than you or the others?

The discussion can be ended when it no longer yields any new observations.

• *Attitude*

After you have completed the above observational exercise, reflect on your attitude. What attitude did you have while observing? Was it one of interest and respect, or just the opposite? Did you feel admiration for the object? Could you change your attitude? Can you say anything about the effect of a particular attitude?

3.2 Water: experiencing movement

Attitude

Water as an element is characterised by *flow* and *penetrability*. Seeing flowing water makes you want to flow along. The nature of this desire may depend on whether you're looking at a slow river, a rustling brook or a wild mountain stream. You might even feel a desire to jump into the water and allow yourself to float along with it. On the other hand, when you watch the smooth surface of a quiet lake, you start to feel quiet and tranquil yourself. So your mood is influenced by the nature of the water.

You not only *observe* flow, but you automatically connect with it. You no longer remain an impartial observer, as you were in earth-type observations. You develop an inner flow, adopting to some extent the flow you observe.

The penetrable character of water shows itself in the fact that clear water allows you to see plants and fishes in it, as well as the streambed.

Features

- Not only can you see *flow* directly, you can also observe and perceive an ongoing movement in the solid shapes of plants, animals and humans. This might be called a solidified movement, frozen in time. It is possible to experience this movement in your inner self by connecting with an organism, empathising with it and adopting its movement.
- You can observe *flow* in processes involving change or development. And if you connect with the process, you can internalise this perception.
- *Penetrability* means that you can observe or experience the interior of an object. You can see through

an object or process to experience its inner movement. You perceive some of the forces that have shaped the object.

This mode of observation is valuable for everything that has acquired shape over time and for everything that is influenced by time, that is, everything that changes and develops.

Respect and admiration are particularly important for this mode of observation, as you connect with the object and adopt its flow, and have to be able to perceive and experience the mood that the object evokes in you. This requires you to be receptive to its movement and mood and not to confuse them with your own movement and mood. Nor should you lose yourself in an object, but concentrate alternately on the object and on yourself.

The basis of water-type observation is a concrete or imagined (actual or solidified) movement or a number of images from an object's history. The result is the movement perceived in your inner self, which you can amplify by concentrating on it. Bockemühl called this inwardly perceived movement a '*dynamic experience*', which reflects the forces that have shaped the object. This experience cannot be expressed in words. You will have to call it up again each time. As you describe it, it loses its dynamic character. Nevertheless, you will have to try and describe it, draw it or depict it in some other way. Just like water running through your hands, the dynamic experience keeps slipping away. Someone else will have to 'internalise' and create a mental picture of the description in order to experience this movement.

You can think of different kinds of water-type observations:

- You can regard a tree with its trunk and branches as a solidified movement. You can follow a branch with your eyes, and amplify this by imitating the movement with your hands and arms, or even with your whole body. As you follow the movement, you re-create movement in your inner self. This leads to a '*dynamic experience*' and a feeling or mood. Not only a tree, but any object can be examined in this way.
- You can also follow and inwardly imitate the movements of an animal or a human being.
- You can 'see' movement in the way living things evolve, for instance in the developmental stages of a plant, an animal or a child, the stages by which a disease develops or the colours that change with the seasons. By calling up these stages one by one in your mind, you perceive movements and lines of development. These, too, can be intensified and grasped as a '*dynamic experience*'.

- If you remove the leaves from a plant and compare them, you can see a development in the metamorphosis of the leaves (see section 3.3). The same goes for the range of colours of a plant's leaves, from light green at the top of the plant, via dark green in the middle to yellowish at the base.
- The processes by which a farm, a region, a town, etc. develop also display development and dynamics.

In many cases, examining objects and situations automatically raises the question how they have developed. They make you want to study the process by which they came into existence. It's important to distinguish between history and present state, as you're often unconsciously inclined to include the past in the present and use it as an explanation.

Results and examples

The result of the water mode of observation is that:

- you describe, draw or otherwise depict an object as a movement, or (if time is a factor) describe the object's developmental stages or its history;
- you as an observer connect with the object or situation;
- you perceive the shaping forces in a 'dynamic experience';
- you become aware of the impressions and feelings that have been evoked in you.

This type of observation does not allow you to examine the static shape as precisely as you did in the previous step. You have to follow movements, for instance by imitating them or drawing them. This will result in drawings which are less accurate than those based on earth-type observations, but which display life. There are various ways to depict the movement you have observed, after which you need to experience the movement yourself. You can start by calling up the various developmental stages in your mind. It may then be helpful to imagine yourself following the development by first imagining the object in one stage and then transforming it into the next. This will allow you to experience the changes in the object's shape and the forces that shape it, in a 'dynamic experience'.

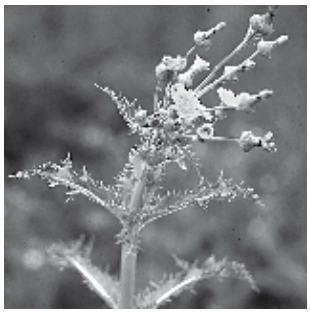
Visual description and impressions of a common oak

The leaf of the common oak clearly shows veins with a pinnate (feather-shaped) structure. Its margin has fairly deep incisions, which separate the lobes. The lobes themselves have rounded tips. Although the secondary veins run towards the tips of the lobes, the latter are never sharply serrated. The characteristic

shape of the lobes can even be seen at the base of the leaf blade, where the two first lobes partly cover the short petiole; these are called auricles. Examining this leaf, you get the impression that the welling, surface-forming forces are so dominant here, that the forces of attraction are unable to form sharp serrations. Although the tendency to do so can be seen as the leaves first open up, as their edges still show fairly sharp points, these soon disappear. The welling forces, which make the leave surface 'swell' outwards from the inside, can be said to overwhelm the forces that attract from the outside. (*Van Romunde, 2000*)

Creeping thistle

Creeping thistle, field milk-thistle and coltsfoot
In a study into these three weeds, farmers reported the following observations:
Creeping thistle: a certain dynamic character can be perceived in the highly curved shape of the leaf. Its margin features many spines. This means that the vegetative force of the leaf does not extend horizontally, in the plane of the leaf, but shows extreme tension.
Field milk-thistle: the leaf is curved and features many spines along the margins. Its outer margin is lobed; it does not have a simple geometric shape, but is more playful. The leaves protrude from the stalk at an angle. Towards the top of the stalk, they hang down in a free, unconstrained dynamic curve (like an arc of water in a fountain). Like the leaf and its margin, the orientation of the leaves relative to the stalk expresses the playfulness of its abundant vitality as a dynamic quality.
Coltsfoot: striking features include the long petioles and relatively large, flat leaf blades. The leaf's vegetative force shows a peripheral orientation and is abundantly present there. The same dynamic character is found at the petiole, which is round and fleshy. Its upper surface features a groove with reddish margins. The prickly leaf margin is a surprising feature. (*Baars and de Vries, 1999*)



Field milk-thistle

Coltsfoot

Exercises

You can only do these exercises after you have done the earth-type observations. Try to use expressive imagery in your verbal descriptions. You can also do these exercises in a group and exchange your findings.

- *Movements of an object*

Describe the movement represented by the shape of a solid object. Make an accurate, true-to-life drawing of the movement, using the knowledge you have gained from your earth-type observations. Don't go into details, but use long, flowing lines in your drawing. It might be helpful if you remove the pencil from the paper as little as possible. Clay modelling may be more suitable for animals and other three-dimensional objects. Imitate the movements with your hands and arms or with your whole body.

Now try to create a mental image of this movement. Observe your 'dynamic experience' and describe it. Describe your impressions and mood.

- *Movement of a situation*

Describe the movement you observe in a situation. Create a mental image of the movement. Describe the movement or express it artistically. Then observe the 'dynamic experience' and describe it. Describe your impressions and mood.

- *Movement in the past*

Select a plant, an animal, a farm or something else that has gone through a change or development. Describe the developmental stages of a number of its aspects. Describe the lines of development. Internalise these and describe the experience this provides.

3.3 Metamorphosis

Metamorphosis is a phenomenon whereby organisms changes shape or whereby components of an organism that occur in series, such as leaves on a plant or the vertebrae in a human body, change shape. Familiar examples include the metamorphosis of a tadpole into a frog and of a caterpillar via a pupa into a butterfly. Below, we discuss some examples in plants. You can find further examples in Bockemühl (1980) and Suchantke (2002).

Plant leaves

Many plants have leaves that are all slightly different. If you remove the leaves of one plant and compare them, a pattern of change emerges, which is similar for all plants. Figure 1 shows the leaves of a poppy.

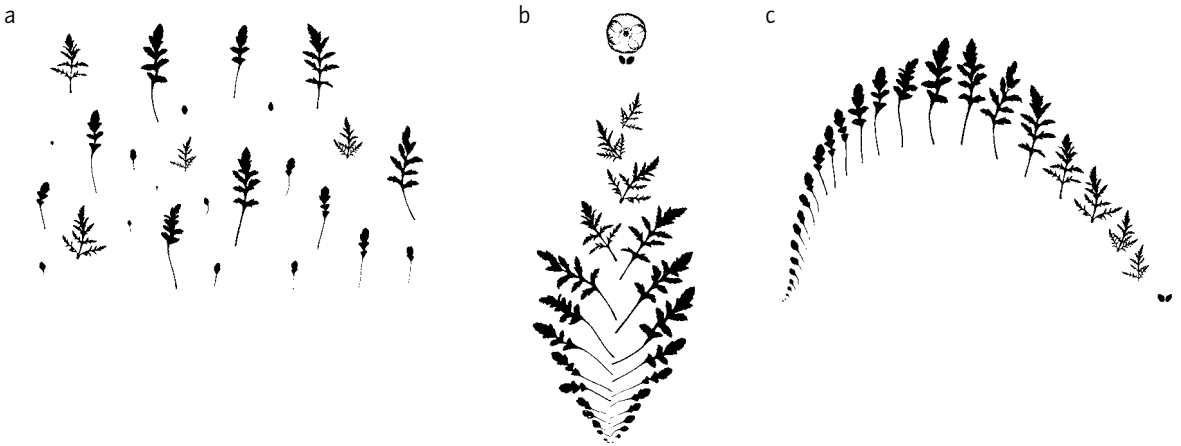


Figure 1. Leaf metamorphosis in poppy (from Bockemühl, 1990)
a. leaves arranged in random order
b. leaves as they were arranged on the plant
c. leaves arranged in logical order

This leaf series shows that during the growth stage, the leaves *elongate* and at the same time *expand* in all directions. The leaf mass spreads outward. This is followed by the *segmentation* stage: the leaf becomes ever more deeply incised, in a process that starts from the outer margin. Acute shapes appear while round shapes disappear. In the next stage, the process is reversed: the leaves become smaller again and the leaf mass withdraws into the stalk. This is the contraction stage, in which the leaf base becomes wider and more *acute*. This is called *narrowing*. We thus see a process involving four movements: elongation, expansion, segmentation and narrowing. The plant produces a series of different leaf shapes. Although you don't see the transitions between the leaf shapes, you can create a mental picture of them them and thus re-create the continuous process of leaf metamorphosis.

Figure 2. Leaf series for milk thistle (from Bockemühl, 1980)

If you look at the movement represented by an individual leaf, however, you can see the reverse process, starting with narrowing, then segmentation, then expansion and finally elongation.
Figure 3 combines these two opposite movements. The outer circle shows the fully grown leaves, while the inner circle shows immature leaves. The arrows running left and right from the centre indicate the growth movement of the leaves. The bottom left part of the outer circle shows the first leaf to be formed, followed by the next leaves. The final leaf that is formed, just before flowering starts, is shown in the bottom right part of the outer circle. The thinner straight lines connect corresponding stages of fully grown and immature leaves, which do not represent the same leaf. There is not only a metamorphosis in the leaves themselves, but also one from leaves to sepals, petals and anthers.

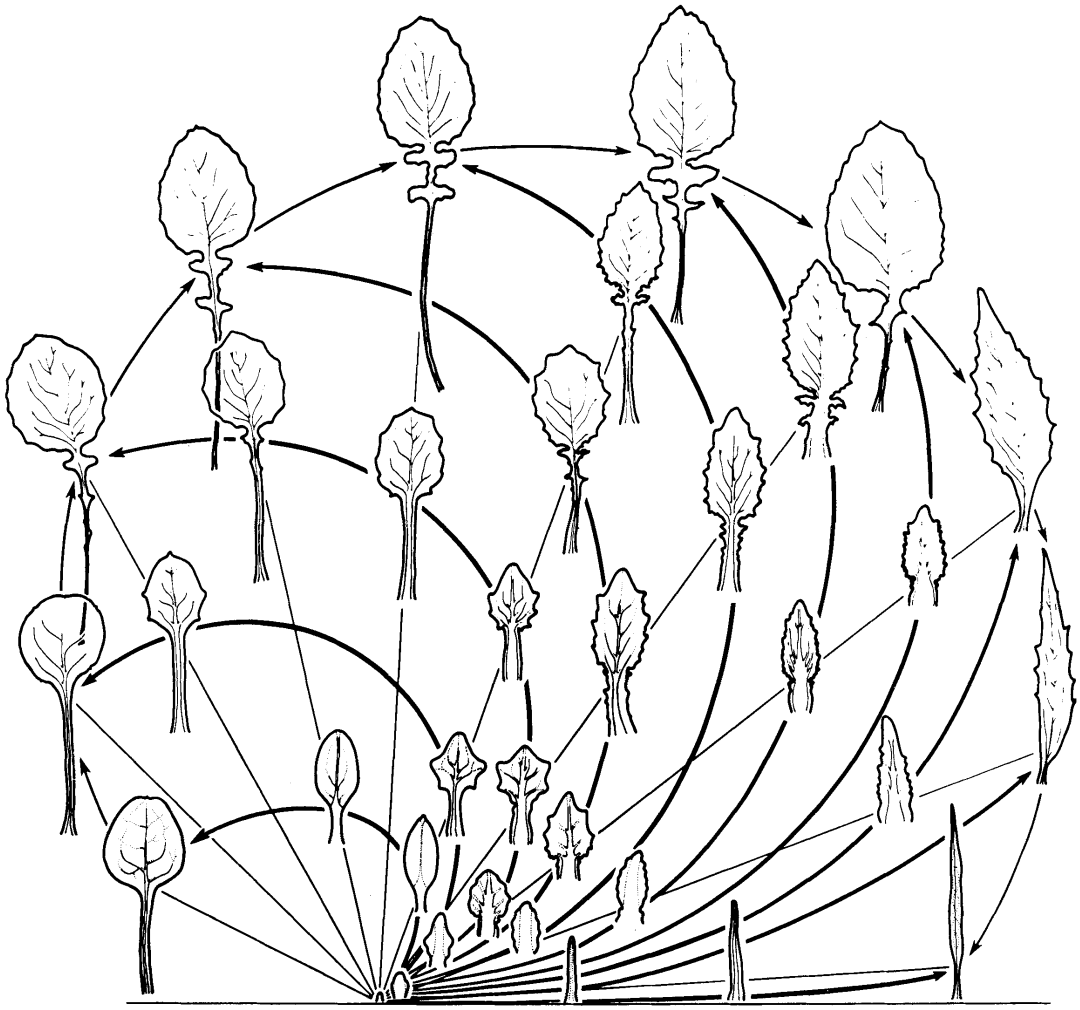


Figure 3. Leaf development in nipplewort (from Bockemühl, 1980)

Exercises

- *General*

Remove the leaves from a plant and place them side by side in an order that you feel is logical. Try to identify the stages of metamorphosis. Describe the stages as they occur in this plant. Write an imaginative and empathic description of what you see and of the developments and movements.

- *Movement of a development*

Observe the leaves of a plant. Try to imagine that you're the first leaf, or the first stage. As a leaf, you can image your legs to represent the thin petiole, your trunk as the flat, wide leaf blade, and your head as the leaf tip. Now change yourself into the next leaf and observe the resulting change in your perception, experience or feeling. Now change into the next leaf, etc.
When describing this, you're actually capturing something that can't really be captured, as it involves an inner movement, a movement in terms of feelings. Use expressive imagery in your description.

3.4 Air: observing characteristics

Attitude

The features of air are:

- *spreading*, that is, the tendency to achieve evenness; and
- *unselfishness*, that is, making way for other things and allowing them to manifest themselves.

In the two previous steps, you have observed objects from the outside (earth-type observations) and have observed their external and internal movements (water-type observations). You can now go a step further and open up your inner self in an unselfish, self-effacing way to allow that which you have observed to manifest itself. Just like air allows other things to manifest themselves, you can allow an object to manifest itself within you. This is something that also happens when you remember something, but such recollection is still rather close to the water element. The

characteristic aspect of the air element is that something new appears, something that is not outwardly visible. The mental picture you create reveals the characteristics, an ideal image or 'gesture' of the object you're observing. This is a concrete mental image, which shows the 'gesture'. If you're observing a common oak, the air-type observation yields an image of what typifies the common oak. This image integrates all observations. You can achieve this by imagining the oak as accurately as possible, from all sides and in every detail, and then trying to define its characteristics. Once you have identified these in your mind, you can find them in each component.
You must not colour the characteristics or the image with value judgements, as that would mean you're partly or solely observing yourself, rather than the object. Just like objects in real air are more clearly visible if the air is pure, the characteristics will be clearer if you yourself are inwardly 'pure'.
Compared to the water mode of observation, the air mode involves more inward-looking observations. The object is no longer observed in the outside world, but as a mental image. This image, however, is concrete, in the sense that it could exist.

Results and examples
The result of this type of observation is that you observe characteristics. These may be general characteristics (like the characterisation of the oak genus, or the cruciferous plant family), or the specific characteristics of a particular plant you're observing. You can't see characteristics in the real world; there is no such thing as an ideal oak representing the genus *Quercus*, or a general crucifer.
If you observe one common oak, you can observe the characteristics of this particular tree. After you have observed many common oaks, you can start to see the characteristics of the species. And after you have observed several species of oak, like cork oak, durmast oak and red oak, you can observe their 'oak-ness'. This goes beyond the gesture of the common oak and includes all oaks.

An example: dog and cat

As you approach a farm, the first animal you meet is the *dog*. It sees you coming a long way off, starts to bark and runs towards you. How the animal behaves, will depend on how it was trained. The dog will probably follow you. It is probably curious to see what will happen and wants to accompany you. As you get closer to the house, the dog may start to bark more fiercely. It will often try to decide which one of you is boss: it or you.

It's probably only after you have entered the house, met the farmer and been given some coffee, that you see the *cat*, which lies snoozing in some corner of the room and may come over to nuzzle up against your hand. It doesn't run to meet you brimming with expectation, but only starts to show signs of activity after you've been in the house for a while.

A striking feature of dogs is that they spend a lot of their time outside running around in the area where they're allowed to go. They patrol the area's boundaries, guard them and bark when a stranger tries to enter. When given an order, they go straight for their target and don't let go. Dogs don't spend much time indoors, usually only to eat or rest, which they always tend to do at the same spot. Dogs can easily be trained and are social animals.

By contrast, cats spend much time indoors and can snooze for hours on end in a warm place of their own choosing. They don't go out much, and if they do, they tend not to stray far from the house. They do tend to go to all kinds of places, as they don't accept boundaries, although they do defend a territory. They catch mice and other animals, which they bring indoors. They like to lie on people's laps, can hardly be trained and remain themselves, preferring their own company. Cats are by nature solitary animals. Indeed, it's been said that it is they who allow people to live in with them, rather than the other way round. (*Van Gelder, 2003*)

The air-type observation reveals the characteristics of these two animals. A *cat* takes up a central position; it decides for itself how it will behave and is a self-willed and individualist animal. A *dog*, by contrast, guards the boundaries of an area and is characterised by movement, activity and openness. It is a social animal and allows itself to be trained. You can strengthen your observations and develop a mental image,

which enlivens and clarifies the characteristics. The gesture allows other features, such as hunting behaviour (dogs chase their prey, while cats stalk it) and various physical traits (the elongated head and long legs of dogs against the round head and short legs of cats) to be fitted in.

Exercises

- *Select an object (a physical object, situation or event) for which earth-type and water-type observations have been made. Try to identify the characteristic features. Try to find an image that would clarify the gesture. If you've chosen a tree, this might involve drawing an idealised tree (such as an idealised oak). If you've chosen an animal, it might mean trying to capture its appearance or behaviour in an image or analogy. All objects, but especially those that are larger than an organism, such as a farm or a landscape, allow you to study new aspects that provide more information about the object as a whole.*

- *Parts reflecting the whole*
  Trace the characteristic gesture in various parts of the object.

3.5 Warmth: finding the core

Attitude

Warmth pervades you, or it can spontaneously arise within you when you become enthusiastic about something. You can use these features, *pervasiveness* and *impulse creation*, in making observations:

- *pervasiveness* by identifying with the object (a physical object or a situation), penetrating into it and at the same time allowing the object to enter your mental image;
- *impulse creation* by perceiving how the object has affected your soul and how it has induced you to act.

The observational attitude corresponding to the warmth element is based upon the characteristics or

gesture of an object, and you search your mind to find its core and the impression it has made on you.
A comparison with a plant may clarify this idea. A fully grown plant with roots, leaves and flowers is something tangible. You don't have to imagine it, as it's there in front of you. But after the plant has died and has left only its seeds behind, you have to imagine the plant. The plant is present in the seed as a potential. It's as yet unclear exactly how it will turn out. It may become tall or short, stout or paltry, etc. The seed contains the plant as a whole potential range of appearances, while in an actual plant, one of these has manifested itself. In terms of observation, warmth as a mode of observation corresponds to the seed. It allows you to discover the core, the essence or the impulse, in which all manifestations of the object are potentially present.
You should allow all observations to enter your mental image: the concrete observations, the movements, the dynamic experience and the characteristics. You then make them disappear again, and wait to see if an image of the core or essence develops. This is an image of the impression created in you by your encounter with the object. Such an image is usually a symbolic image, and it is accompanied by an expression (its significance to you) or a certain mood. The symbolic image, with its expression, mood and orientation (that is, the direction in which it would seem to develop) contains all potential manifestations.
Since this observation of the symbolic image and its expression is personal, you may start to doubt whether it is accurate. You can test this by comparing images in a group of people. You will often find that different people come up with very different images for the same object, but that these images do express the same idea. If this is not the case, it often turns out that there were hidden differences in the questions you asked or the perspectives from which you observed.
Going from earth, via water and air, to warmth implies a movement from the exterior of an object to your own inner self. The observation has developed from a concrete observation, through movement, dynamic experience and characteristics to a symbolic image. This is a movement from exterior to interior and from a concrete manifestation to a symbolic image. It is a process of densification, of searching for the layer that is hidden behind that of the previous observations. It gets you ever closer to the core.
Strangely enough, this has also made the observation more objective. If different people make earth-type observations, they all observe on the basis of their own questions and concepts. Their observations are personal and therefore subjective, even though the concepts used may be objective. When observing a symbolic image, the observation is objective, even though the concepts used are personal and subjective.
If you're observing a farm or a landscape, you can also try to identify the intentions of the people who

work there, that is, the impulses of the people who created it. You don't do this by asking them (as they would only tell you what they *wanted* to do), but you try to derive the intentions from what they actually did. Intentions reveal themselves in actions and can thus be observed. The aim is to discover the underlying intentions by studying the actions.

Meditative attitude

The warmth element corresponds to a meditative attitude[4]. Here are some suggestions to achieve this.

Meditation requires you to become calm and shut yourself off from your environment, from the noises around you and from your own spinning thoughts. Sit on a chair, put your feet on the ground. Sit up straight yet relaxed, and breathe quietly in and out. Continue like this until you've calmed down. Meanwhile, pay attention to the noises around you and gradually shut yourself off from them by no longer taking notice of them. Say 'Hello, noise'. Similarly, silence your thoughts by telling them to give way to something else. If they continue to trouble you, you can assign them to a particular place or tell them to come back in an hour or so. Now imagine you're in contact with the earth through your tailbone and with the sky through the crown of your head. Allow this to flow through you for a while.

Now imagine that you're in a dome of light, with bright white light on the inside, while the outside is sealed off by a bluish violet light. Once you're calmly seated inside the dome, you call up mental pictures, images and perceptions of the object. You will see these as images before you. Call up earth-type, water-type and air-type observations in sequence. Do this for about 10 to 15 minutes. Once you're satisfied with the images, erase them. Tools that can help you do this if they refuse to go include a match with which you burn them or an eraser.

[4] See the bibliography for further suggestions. Valuable guidance for meditation is provided by Steiner's seven basic exercises. These exercises help you concentrate your thoughts, become aware of your feelings en guide your will.

Your mind is now empty, and you must wait and see whether a symbolic image arises, without explicitly wanting it to. You want it and at the same time you don't want it. You must wait and have faith. By wanting it too strongly, you will block its appearance. The image that arises is often a symbolic, imaginary image. It is often a well-known, common image, derived from fairy tales, mythology, the bible, etc.
You can regard the image that arises as an impression that the object has evoked in you. It is an imprint of your encounter with the core, the essence of the object. It is not only the content of the image which is important, but also the intention, mood and orientation which it offers. The image expresses something. This is the impulse contained in it. It is important that you try to observe all this and record it (quickly) by jotting down notes, drawings, etc. If you don't, you may lose the precise expression. You can also ask the image questions. You can observe where it touches you and which movements it induces in you. These may relate to parts of your body but also to your thoughts, feelings or desires.
You can go through all of these steps in one session, but you can also build up the observational images in the evening, and then wait until the morning, as you wake up, to see what image has arisen.
If you now look at the object again, it may look completely different; it will often be brighter, more vivid, and you may notice new aspects.
There are various ways in which this exercise can go wrong. The first problem is that you may find it impossible to shut yourself off from your environment and from your own thoughts. The next problem may arise in trying to concentrate on the object, as your thoughts may stray from it. One technique to help you with this is the first of Steiner's basic exercises (concentrating the mind). The next potential problem is in erasing the observational images, which may refuse to go or keep coming back. The final problem you may encounter is that no symbolic image ultimately appears, for instance because you want it too strongly. All of these problems can only be overcome by regular exercise.

Examples

Dog and cat

The image that arises for a dog is a *circle*, while that for a cat is a *dot*. The circle is appropriate for a dog because it is environment-oriented and open. The dot is appropriate for a cat because this animal tends to lie beside the stove, which is located at the centre. These features are also found in their posture and bodily traits, with cats having more rounded shapes and dogs having more elongated, radial shapes.

Rye, wheat and spelt

A number of people have studied the developmental processes in three types of cereal. This led to the following images:

rye	wheat	spelt
• a knight in armour	• an affluent middle-class woman	• a well-dressed noblewoman
• dark blue to black sky with a bright, radiant, white building with active people inside	• pale yellow colours, without shape	• a sunrise with the sun as a fiery orange ball
• beautiful blue water, with a blue sky above it, and fishes swimming in it	• a row of soldiers, marching stiffly	• a young man

Although these images are very different, there is a common quality. Compared to wheat and spelt, rye is associated with an active world, surrounded by blue. Wheat is associated with a completed development, which has reached its end and is no longer very active. The images associated with spelt have to do with youth and a development from the inside. (*De Vries, 1985*)

An ash

Two people participating in an exercise about an ash in a windbreak each saw an image while meditating. When they saw the tree again after their meditation, they both had the same reaction: the tree seemed more viable and brighter than before, and they noticed a branch they had missed before. None of the other participants showed this reaction.

Exercises

- *Inner peace and concentration (see also: van de Weg, 2002 and Oehms, 2000)*
  - *Stretch your entire body, starting from your toes; yawn if you feel the urge to do so. Let your upper body droop down, loosen your arms and head and then slowly raise yourself up again. Loosen your muscles by shaking them. Start with your feet, which you shake loose from the*

ankles, then your lower and upper legs, pelvis, hands, forearms and upper arms, shoulders, head and lower jaw. Tighten all your head muscles and then relax them again. Stretch yourself once more and let your upper body droop down again. Describe what you observe: how did you feel before and after the exercise?

- *Sit down, in a relaxed attitude but straight. Focus your attention on the various parts of your body in turn, starting with your feet, ankles and so on up until you've reached the top of your head. Feel the location and weight of each of the parts of your body. Describe what you observe and how you felt before and after the exercise.*

- *All kinds of thoughts are actively running through your head. Call them up and look at them, then decide what to do with them. Throw away the unimportant ones (imagine something like a wastepaper basket) or make them fade into the background. Set the important ones aside, for instance by putting them on your desk. Continue this until your mind is empty. Now focus your attention on a spot at the centre of your head. This spot is empty and brightly lit. Make it larger. This is the space where mental images can arise. Were you able to empty your mind in this way? Did you create a bright empty space?*

- *Breathe quietly in and out, taking three to five seconds to inhale and exhale, holding your breath for three to five seconds after inhaling and also waiting three to five seconds after exhaling before inhaling again. After you've done this for some minutes and have calmed down, focus your attention on an empty spot in your chest. Did you manage to find an empty spot in your chest?*

- *Create a protective space by imagining yourself in a dome of light, with bright white light on the inside and bluish violet light on the outside. This dome will protect you against outside influences. Did you manage to create this space? Can you describe it?*

- *Create a meditation room. After you have completed the above exercises, and have decided to start meditating, your imagination may create a building that you can enter to meditate. After*

you have created this room, you can call it up when you wish to meditate. It doesn't matter what it looks like, as long as you're able to concentrate in it and feel comfortable there. Did you manage to create such a meditation room? What does it look like?

- *Mental image*

Build up a rich, complete mental image of the object or situation that you want to use for warmth-type observations. First think of the concrete observations, then concentrate on the movement and dynamic experience, and then on the characteristics. Concentrate on these observations for 10 to 15 minutes, or however long you feel you need.

Now remove the mental image and wait to see whether a symbolic image arises. Describe or draw this symbolic image, paying attention to the intention and orientation of the image, what the image expresses and the mood associated with it. You should also pay attention to the impression the image makes on you and the part of you that is touched by it. You can also ask the image questions, like how it would prefer to develop.

4. The four ethers

Whereas you can perceive the elements as external phenomena, you can't perceive the ethers directly. You can, however, perceive their effects through the elements. The elements are found on earth; they are bound to it and attracted to it. This is most clearly the case for the solid element, least so for the warmth element.
The opposite is true for the ethers. They arise from the environment and their effect runs counter to that of the earth's gravitation. They work from the cosmos, and attract earthly matter. An example of such an ether working from the cosmos is light. You can observe the force of light when a seed germinates into a plant, which starts to grow and elongate upwards, breaks through the asphalt surface and grows towards the light. The plant grows away from the earth and towards the light, that is, towards the cosmos. Light gives the plant power to overcome gravity. The etheric force overcomes the weight of material substance.

There are four types of ether: warmth ether, light ether, chemical or tone ether and life ether.

- Warmth ether is the etheric side of warmth: the inner, impulse-creating warmth or the warmth of enthusiasm that occurs as the intention that underlies actions. Its elemental counterpart is fire, or externally perceivable warmth. Warmth ether and warmth as an element are closely related.
- Light ether illuminates everything and makes all material things visible. It is the force which makes plants grow upwards and makes people stand and walk upright. Light ether corresponds to the air element.
- Chemical or tone ether is the force that structures the development of phenomena and can be seen, for instance, in the natural succession of plant communities. Chemical ether corresponds to the water element.
- Life ether is the force that makes an object and its environment appear as a unified whole. It is the force that unifies an object's course of life. Life ether corresponds to the earth element.

4.1 Warmth ether

Warmth is the most rarefied element, and is more like a quality than like a substance. It represents the transition between the elements and the ethers, and shares features with both.
Warmth as an element can be perceived as the external heat of objects and as body temperature. This warmth is produced when material substances are burned.
Warmth as an ether is the inner, impulse-creating warmth, which incites activity and which arises when you become enthusiastic about ('warm up to') something. It arises within yourself and has no material features. This is the warmth you need to proceed to action. Because it incites action, warmth ether points towards the future.
Warmth ether is characterised by *impulse-creation* and *directionality*.

4.2 Light ether

Light makes everything visible by illuminating material things. You can't see anything in a dark place, but as soon as the light is switched on, you can see things and you are surrounded by a colourful environment filled with objects. Light delineates objects and enables you to see their spatial boundaries. You can't see light itself; you can only perceive its presence through the objects and the air it illuminates.
Another characteristic of light is that it radiates from a source. The light diminishes with the distance from the source, as it is scattered in space. As the amount of light increases, the illuminated space becomes larger. Light is linear, can be split up into two beams by an object placed in its path, and can't turn corners. Nor can it fill a void around a corner, unlike air.
Light ether induces growth and elongation (plants grow towards the light; bones in animals and humans grow and elongate under the influence of vitamin D, whose production is stimulated by light) and makes space expand. Light draws your gaze outward, to the objects. This shows you that light ether attracts. As seen from within the object (matter), it is a process of elongation; as seen from the periphery (ether), it is

a matter of attraction.
Because there is light, there is also darkness. Light ether works between the poles of light and darkness, with the colours of twilight in between. Between light and darkness there is an area that, on the one hand, has qualities that are mixtures of the two poles (half-light) and, on the other hand, has qualities of its own (such as colours).
Light ether is characterised by *delineation and the creation of space*; *linearity and attraction*; and *polarisation*.

4.3 Chemical or tone ether

Chemical or tone ether is the type of ether that separates and connects. Its effect is perhaps most clearly seen in music. Music consists of individual notes of different lengths, which do not merge into one another. The intervals ($^1/_2$, $^1/_4$, $^3/_8$, $^5/_8$, etc.) and the frequencies or pitch values of the notes have fixed proportions. If these proportions didn't exist and notes were arbitrary or merged into each other, music would be impossible. In addition, music needs a musician, who imagines the music in his or her mind. If a musician just plays notes, you won't hear music. It's only when the musician imagines the music, that is, hears it inside his or her head before playing or singing it, that you hear music. This is the effect of tone ether. Music is thus based on a force that separates and, at the same time, recombines what was separated in a harmonious way. Tone ether works through proportions, distances and measures. It separates and recombines, creating a unified whole.
Chemical substances also show certain fixed ratios between the chemical elements themselves, as well as in compounds like salts, acids and proteins. That's why this type of ether is also known as chemical ether. This ether plays a role in all processes where things are separated and then recombined in new and harmonious proportions.
The chemical or tone ether is characterised by the concepts of *separating, structuring, creating proportions* and *harmonising*.

4.4 Life ether

Life ether is visible as the life force of organisms. It is the force that creates organic units that are more than the sum of their parts, and in which each component is an integral part of the whole. It causes delineation as well as integration. In each component of the organism the whole is visible. It also ensures that each component readjusts to the whole when an organism changes. Life ether doesn't reject anything and adjusts everything to the whole. It ensures that a changing organism remains recognisable as an individual. In that sense, it provides the continuity and individuality in a 'biography'. It is also the force that allows an organism to endure and remain itself, thus maintaining the organism's integrity. Hence, this ether can restore an organism's health, by healing wounds and making them disappear completely in due time.

Life ether is the force that ensures that

- an organism is a spatially defined, indivisible unit;
- an organism is and remains itself, even after changes or injury;
- an organism is an individual;
- all its components are expressions of the whole and derive their proper form and function from the whole.

Life ether is the principle that creates *integration* and *individuality*.

Exercises

- *The elements are perceived as effects that proceed from a central point, while ethers proceed from the cosmos. Find examples to illustrate this.*

- *Try to find examples of the actions of the four ethers in nature.*

5. Ethers and observational attitude

As we have seen, the observational attitudes relating to the elements centre on the object. The elements of earth, water, air and warmth have led you from external observations of the object to inward observation of the symbolic image. Since it's impossible to go any further inward, you then need to turn your perspective outward again. The ethers help you focus on the influence that the environment has on the object. You now need to ask yourself: what is the nature of the object's environment and how does it affect the object?
The term environment is used in a broad sense here, including the spatial environment as such as well as its development in time and important events that have occurred in the environment and have decisively influenced the object's development.
You can only understand the appearance of a common oak by also examining its environment. The oak is shaped by its environment and in turn shapes that environment. You can see the oak as the combined outcome of the potential qualities that were present in the seed and the influence of its environment. The oak will show different levels of vigour on different soils, and will take on a broader shape in an open field than in a forest. If its environment has dried up over time, or if the forest has been thinned at any stage, the tree will show this. The consequences of a direct hit by lightning or coppicing will remain visible for a long time and will decisively influence the tree's appearance.

An example
On a sunny day in spring, you're taking a stroll through a flat, semi-open landscape with pastures and fields. You can't see very far, as there are groves and shrubs all around limiting the view. You're walking along a road lined with trees, whose tops overarch the road like a tunnel, filtering the sunlight. Along the sides of the road, the branches hang very low, but there is more headroom along the middle. The leaves are denser and darker on the outside of the treetops. The beeches look healthy. You hear thrushes and tits singing, and a woodpecker is hammering on a tree trunk. The smooth tree trunks are about 50 cm in diameter, and show overgrown scars where branches have been sawn off, as well as holes probably made by woodpeckers. After you have walked along the lane for a while, you notice a manor house at its end.

You can now distinguish the effects of the various ethers:

- Light ether reveals that the trees have a different shape and differently coloured leaves on the outside than at the centre. The vitality of the trees is also an aspect of the relationship between object and environment: the trees are in a suitable place. Bockemühl called the relationship between the tree-lined road and its environment the 'context of phenomena', that is, the relationship between an object and its spatial environment.
- Tone ether reveals an object's past: smooth trunks, overgrown scars and woodpecker holes. These relationships across time are called 'context of transformation'.
- Life ether reveals the significance of the lane, namely as a sightline for the manor house. This is known as the 'context of life', that is, the cohesion within an object's course of life or 'biography'.

Ethers are not visible, and the same is true for the 'contexts', that is, the relationships and cohesions. You can, however, imagine them. After you have imagined them, you may think you can see them, but this is always a matter of interpretation. If you change your perspective, you may well come up with different relationships, which might be just as valid as the other ones.

5.1 Warmth ether: observing the impulse

Attitude

Warmth ether is characterised by *impulse-creating* and *directional* activity. Warmth as an ether was already discussed in the section on the mode of observation corresponding to warmth as an element (section 3.5).
The elemental quality of warmth is reflected in the process of building up images and then making them disappear again. This is a process that you control yourself and in which you see the past, that which is already known, pass through your mind.

The etheric quality of warmth is reflected in the appearance of the symbolic image and the orientation it expresses. This is a process you can't control: you have to open up your inner mind and then wait and see whether something will appear. The expression of the symbolic image reveals the potential options; the

expression of the symbolic image contains the future. The number of these options will later be reduced again, as you learn more about the object's environment (after having studied the other 'contexts').

5.2 Light ether: relationships with the environment

Attitude

Light or light ether allows you to see objects and their environment. The light brings them out of the darkness and allows you to see the circumstances surrounding an object at a particular point in time. Light ether reveals the *relationships within the spatial appearance*; this is known as the 'context of phenomena'.

Light ether is characterised by *delineation and the creation of space*; *linearity and attraction*; and *polarisation*.

- *Delineation and the creation of space:* on the one hand, light ether spatially defines an object; on the other hand, it creates a lighted space surrounding the object. Although the object's environment is theoretically infinite, it is limited by the distance across which the light can penetrate. You will have to define a relevant boundary, to decide what to include and what not.
- *Linearity and attraction*: these imply that the object grows towards the light and is attracted from the cosmos.
- *Polarisation*: you observe in terms of polarities, like light and dark, with twilight in between. This can be extended to all other factors that involve two poles and a gradient. Which factors are involved depends on the object. In the case of a plant or a landscape these may be physical polarities such as acid–alkaline, dry–wet, sand–clay, nutrient-rich–nutrient-poor, young–old or vegetative–generative.

Generally speaking, light ether as a mode of observation means that you observe the present cohesion in the object's environment and how its influences the object. You examine how the proportions in the object's environment have shaped the object and are expressed in the object.

Thinking allows you to experience the cohesion within the object's present appearance (which may consist of many individual observations) and to develop it into a *mental image*. It is this image that represents the 'context of phenomena'.

Aspects you can study include the following:

- The environmental factors and their polarities and gradients, that is, the transitions between light and dark, acid and alkaline, dry and wet, etc. You can situate the object along these gradients. An object's environment is assumed to consist of a number of factors. Examples of environmental factors include soil, water, climate, etc., and the soil in turn includes factors like soil type, nutrient content, pH, etc. All of these factors affect the object in some coherent way.
- What unifies the appearance, that is, how the object and its environment are one and how the object reflects its environment. A common oak is always a unified whole, but will differ in different environments. It reflects its environment, in a relationship that you can examine by looking at both the oak and its environment. You can also think of the relationship between the behaviour of a herd of cattle and the design of their shed.
- The orientation in terms of compass directions. You can see that the north side of a tree has a different shape and colour than the south side, and has different plants growing underneath it, since the circumstances differ.

You can concentrate on an object's environment as a characteristic mental image. You can ask yourself what characterises the environment or its various parts, and try to understand the object from that perspective.

Light ether and the 'context of phenomena' correspond to the power of imagination, that is, the ability to form a mental image by thinking.

Examples

Plant shapes and soils

Figure 4 shows the relation between the soil and the leaf shapes of a number of plants. The leaves in the top row, which are smaller and more acutely shaped, are from plants growing on an unfertilised, sandy–loamy soil. Those in the bottom row are larger and have more rounded shapes; they come from plants growing on a soil fertilised with compost. These leaves reflect the quality of their environment. The acute shapes reflect the nutrient-poor sand, while the round shapes reflect the nutrient-rich compost.

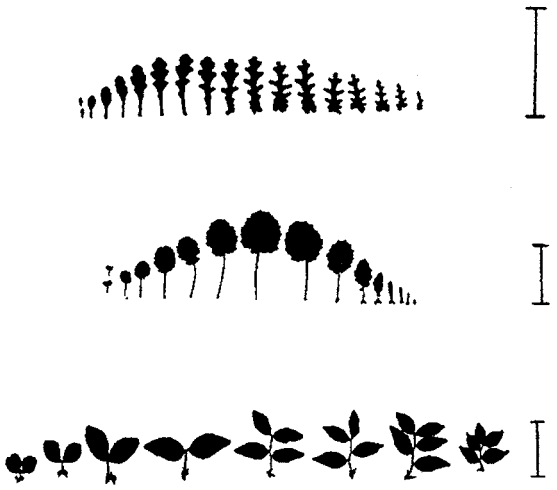


Figure 4: Leaf series from ragwort, rape and broad bean grown on a sandy–loamy soil (above) and on a compost-fertilised soil (next). (*From Holdrege*)

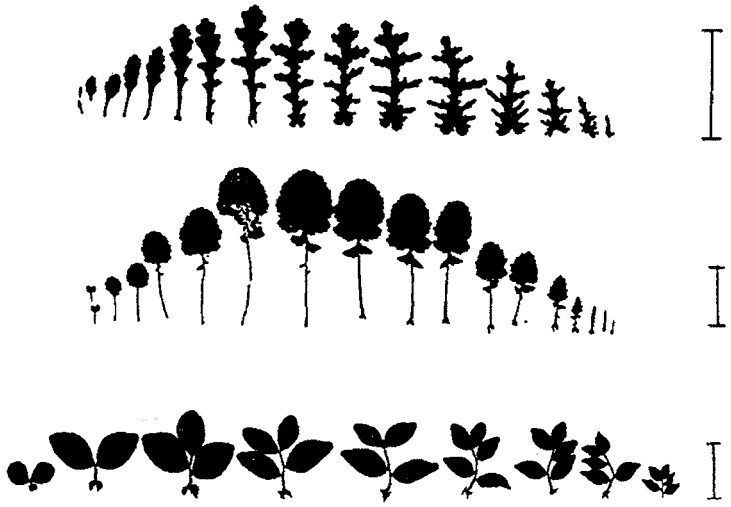
Plant shapes and light

- A plant growing in bright daylight is bright green and has flowers with bright colours; its shape is differentiated, its leaves have acute shapes.
- A plant growing in the shade has a dull, dark green colour; its flowers have pale colours and there is a musty smell.
- A plant growing in the dark looks pale and its shapes are undifferentiated. (*Bockemühl, 1985*)

Other environmental factors, like water and pH, have other effects.

In the forest

A wooded hillside facing south is moist, bright and warm. This is reflected in the image of the full, round, vigorous, bright red flowers of the peony that emerge from the lush green of the bush. By contrast, the pale green flowers of the stinking hellebore, which flowers in winter, reflect a bright situation in a cool, shady beech forest on dry soil. (*Bockemühl, 1985*)



Exercises

• Relation between shapes of plants and heir environment

Study the shapes of a few plants, either the leaf shape or the shape of the plant as a whole. Describe their environment. Do the same in a different environment. How is the environment reflected in the plants? What relationships can you identify? In describing the leaves, you should also use the concepts of elongation, expansion, segmentation and narrowing which were discussed in the context of metamorphosis.

• Polarities

Try to define relevant polarities of factors in an object's environment. Define and describe the poles, the gradient and the midway point, which may also have its own features. Determine where the object is situated along the gradients. Summarise this for all relevant polarities. Examine this for the object. Are the environmental factors reflected in the object?

- *Environment*

Describe the environment of an object or a situation, in such a way that you can translate the description into an image. Then develop a mental image. What are the characteristics? Examine whether you can see the characteristics of the image of the environment reflected in the object.

5.3 Tone ether: relationships across time

Attitude

The 'context of phenomena, that is, the relationship between an object and its environment, is not permanent. Rain and sunshine, summer and winter alternate, and the environment changes over the years. *Light ether* as a mode of observation ends where observation ends and change becomes apparent.

What you see at a particular moment is the outcome of events in the past. Traces of such events are still visible, as the branches and buds on a tree show. As you encounter observations indicating the passage of time, change and development, you enter the sphere of activity of *tone ether*. Bockemühl calls this the *context of transformation or development*, the relationships that become manifest as a result of the periodic development of natural processes. The object reveals how environmental influences have affected it over time and across the seasons.

Tone ether is characterised by the concepts of *separating, structuring*, *creating proportions,* and *harmonising.* The observational attitude that corresponds to tone ether reveals changes and developments in an object's environment. It is generally difficult to see developments if you observe an object continuously. You can notice changes in an object more clearly if you haven't seen it for a while. Like the notes in music, the continuous flow needs to be interrupted; the stages or context of phenomena need to be *separated*.

These contexts of phenomena have to be examined in sequence in your mind. You structure the images to reveal developmental lines and patterns. Any development will start at a particular point in time and end at some other point. One development may be more decisive for the object you're studying than another: you *create proportions*. Finally, you can interrelate the changes and developments and see – or rather,

listen – how they *harmonise*, that is, how they fit together as melodies or dissonances. You perceive how the object's environment remains reflected in the object across the years and seasons. Observing the 'context of transformation' requires an inspirational sense of proportion, for instance using your intuition to listen to what the images of past and present have to say.
By examining how various plant species flower in sequence at a particular spot you can observe the 'expression of the earth', and the same can be said of the succession of plant communities in the course of many years.

An example
The peony and the stinking hellebore we saw in section 5.2 show the following features: the peony 'talks' about the climax of the year, as its swelling globular bud produces a lush, colourful flower. By contrast, the pale green flower of the hellebore, which sprouts from the innermost parts of the plant in February, 'talks' about the winter season. Because of its striking pale colour amidst the dark green leaves, it has the same kind of effect as the brightly coloured peony flower. (*Bockemühl, 1985*)

Exercises

- *History*

Describe the history of an object's environment. Translate the description into a number of images, which halt the flow of time at characteristic moments. Look for patterns and lines in the history, put them side by side and study their interaction. Create a mental image and try to detect the relationships. Try to listen to the harmony by allowing the images to merge into one another and following the lines and patterns. How do the processes harmonise? Are there any dissonances, that is, disturbances in the development?

- *Traces of the past*

Try to find traces of the past in an object. Try to find out when and how they arose. Try to distil images of what the object and its environment looked like at the time and how what you see now has developed.

5.4 Life ether: cohesion within an object's course of life

Attitude

Life ether is characterised by *integration* and *individuality*, which means that the observation is focused on that which unifies (integrates) everything while at the same time creating a unique individual. What you're looking for is that which always allows you to recognise an object (a plant, a tree, an animal, a human being, a place, a landscape, a farm, etc.), and you also look for decisive events in the object's course of life. This transcends the previous mode of observation, in that you're now trying to identify the unique aspects of the course of the object's life. Any organism, landscape or farm, anything that is alive, has its own course of life, which results from the impulse such an organism etc. had when it came into existence, and is shaped by its interactions with the specific circumstances of space and time, important events and human intentions. This leads to different, unique outcomes in different places.
Bockemühl calls this mode of observation the *context of life or meaning*: it is that which links the events in a life; it represents the meaning of a life. If you have studied an object for a long time, you have gradually become familiar with its life story and you can see this reflected in its current appearance. This shows you that you have transcended the 'context of transformation'. You have come to know the object as an individual, though the changes.
You get a feeling for the context of life by studying how the object's present appearance developed from the potential options that were present at the moment it arose. You do this by examining the circumstances of space and time, the important events and human actions. You start to recognise individual lines and patterns. You can translate all of this into an image in your mind, but your will is also intuitively affected, as it becomes clear to you in what direction the development could proceed. You can see the preferred development and you can imagine various scenarios and compare the effects they would have.

Results and examples

The result of this mode of observation is that it tells you how the object came to be what it is now, what its 'biography' looks like. It is not easy to put this into words; you're able to see lines and patterns and to develop an image. You also see lines from the past that indicate what its future development might look

like, or you can intuitively indicate how the development could go from here.
If the question that prompted your observations had to do with solving a problem, you can now provide an answer. You know what possible actions you can take and have a realistic idea of their consequences. You can assess whether these would fit into the object's 'biography'.
If you lose sight of a man you used to know well, and you meet him again after 25 years, you may not recognise him at first. You can still imagine his face as it used to be, but it's hard to predict the changes since then. But as soon as you look into his eyes, or when he starts to talk or laugh, or makes a particular gesture, you suddenly recognise him. This means that there are certain aspects that change and others that don't change. If you then get to talk to him, you can understand the changes; they become clear from the circumstances and events in that person's life.
One of the ashes in a windbreak looks poorly developed and has an unusual shape. It is flattened on two sides and its branches are somewhat bent to the east. The tree currently stands in the middle of the windbreak, one half of which is younger than the other. There's another windbreak, at a right angle to this one, at a distance of about 20 m. The unusual tree looks as if it has been pounded by the winds for many years. An inquiry shows that the windbreak in which the ash stands has been planted in two stages; the younger part was planted only seven years ago. In addition, the two separate windbreaks used to be connected up to that time. The unusually shaped tree used to stand on the corner linking the two. When the new part was planted, the two parts of the old windbreak became separated by a gap.
An extensively managed, biodynamic mixed farm, which has developed gradually and has maintained many relations with its neighbours, shows various tendencies indicating a lack of equilibrium: an acidified, heavy clay soil, deteriorating soil structure, sheep suffering from liver fluke, flooded grasslands, a failed attempt at beekeeping. All of these problems indicate an excessive influence of the cold, wet earth pole. It seems a good idea for the further development of the farm to stimulate the warmth and air poles. It is decided to construct paths made of shell clay, dig a pond for the water, create some elevated, dry patches among the grassland and to plant flowering shrubs for the bees. (*Vereijken, van Gelder & Baars, 1995*)

Exercises

- *Biography*
  - *After having described the contexts of phenomena and transformation for an object, you can decide what major events or human intentions have had a decisive influence on the object's current appearance.*
  - *Indicate how these are reflected in the object, that is, how the object and its environment relate to each other.*
  - *Summarise this in a biographical outline, or in a few key words.*
  - *Indicate what its future development might look like.*
  - *What types of solutions can you come up with for any problems?*

- *Further developments*
  - *Compare what the object looks like now and what it might ideally look like.*
  - *Describe the biographical lines.*
  - *How could its development go from here; what solutions do you envisage and what effects would each of them have?*

- *The contexts*

Try to describe the difference in attitude between the 'context of phenomena', the 'context of transformation' and the 'context of life'. Can you relate these to the concepts of imagination, inspiration and intuition?

5.5 Individual, specific action

We have now come to the end of our discussion of the various modes of observation. You started out with a question. In order to answer that question, you first applied four modes of observation that led you from the concrete object to the mental observation of its essence. Then you examined the three contexts in its environment. You started by observing the object and ended with the cohesion within the object's 'biography'. You have come to know the object and its environment in many ways.

You can now use the object's potential qualities and the cohesion within its 'biography' to answer the question.
If you manage to come up with an original solution, which is tailored to the situation at hand and which is suitable for you, the aim of phenomenology has been achieved.
What is the difference between the normal way of answering questions and solving problems by the phenomenological method? The normal way of answering questions goes straight from the concrete observations to the answer. The researcher connects with the question, but not with the object. He or she must remain objective and could be replaced by a different researcher. The examination concentrates on simple, general, impersonal explanations, and studies only that part of the object which is of interest. Since the answer has general validity, unexpected reactions may occur. The only observational attitude that is applied is that corresponding to the solid (earth) element.
In phenomenology, the researcher connects with the object, and his or her observations are at least partly personal. The aim is to identify overall relationships, and to find a tailor-made solution for this particular situation, a solution that may not be applicable elsewhere. The system is less likely to show unexpected reactions.

aspect	**conventional**	**phenomenology**
observations	objective, impersonal	subjective, personal
solutions	general, impersonal solutions	specific, individual solutions
reaction by the system	system may react in unforeseen ways	less risk of unexpected system reactions
approach	reductionist	holistic

An example of unexpected reactions in agriculture
Agriculture (like other areas) provides many examples of unexpected reactions by systems. More than a century ago, Justus Liebig discovered than plants grew well on artificial fertiliser. What he didn't realise was that these plants were more likely to become ill and became more susceptible to pests. To solve this problem, people invented pesticides, without realising, however, that these polluted the environment (leading, for instance, to DDT accumulation in the fatty tissues of polar bears).

An example of lack of involvement in livestock farming

Livestock farming presents many examples where 'inconvenient' body parts of animals are removed: the horns of some cattle, the tails of pigs, the beaks of poultry. All of these are removed, often in painful procedures. Veal calves are reared in the dark to produce light-coloured meat. All these measures can only have been invented by people who lacked involvement. If the researchers had empathised with the animals, they would have come up with other solutions for the problems of livestock farming, which do not involve maiming animals. Instead, changes would have been introduced in their management, housing and diet.

An example of individual, specific action: mastitis

A farmer's cows regularly contract mastitis. His handbooks tell him the conventional remedy against this disease is antibiotics. This would not involve making changes to his farming methods.

If he were to choose a phenomenological approach to the problem, he would work on the principle that mastitis doesn't always equal mastitis, but that the disease as it occurs in his cowshed is specific, individual. Cows do not just contract mastitis; there must be something wrong with the cows, something of which the mastitis is one of the possible expressions. The mastitis is the cow's signal that there is something wrong with the farming methods.

The farmer will look for the underlying cause of the mastitis problem. To this end, he needs to examine the cows, their circumstances and his own methods; he has to connect with the cows, the cowshed and the other circumstances, and empathise with the whole system. At the end of the process, it will become clear what measures are open to him. This solution will not be applicable to another farm, where the farmer, the cows and the circumstances will be different, and the farmer will look at them in a different way.

Such a thorough process of examination yields a permanent solution to the problem, and the farmer need not fear unexpected reactions from the system, for instance one in which suppression of the mastitis with antibiotics leads to fertility problems because the underlying causes have not been appreciated and removed.

Exercises

- *Unexpected reactions*

Search the relevant literature for examples of unexpected reactions.

- *Individual, specific actions*

Give examples of general and individual actions. Try to identify the differences between the two. Try to identify different reactions by the object and its environment.

Have you ever performed an individual, specific action? Describe the circumstances, in terms of the original question, your attitude, the observations you made, the relationships (contexts) you found, etc.

After you have completed all the observations, you want to proceed to an individual, specific action. How do you arrive at the right action? Describe the developmental process.

5.6 Observing the spiritual world

Phenomenology bases its approach on phenomena that can be observed by the senses. It then tries to connect with the essence in order to come to individual, specific actions. But the range of options available to understand nature doesn't end there. It is also possible to observe spiritual phenomena directly. For instance, certain aspects of the vital body of plants or animals can be observed through clairsentience and clairvoyance, or indirectly through the use of divining rods or pendulums. And crystallisations or chromas of plant juices may provide indirect information.
Clairvoyance can also be used to study the soul body and reveal its colours. This shows the condition of the soul at a particular moment or over a longer period of time. These colours are universal and have been described in various publications.
It is also possible to observe elemental beings, that is, gnomes, nymphs, fire beings and higher order beings. It has been reported that many of such beings are present in our environment.
The bibliography below includes a few books that can introduce you to these subjects. A preliminary basis can be achieved through the books included under the heading of meditation.

6. Outline of the method

When you're observing an object, you can ask a number of questions.

- You can ask what it looks like and how big it is, and what its features are; these are question relating to its present state (3.1).
- You can ask how it came into existence, that is, ask for its history and development (3.2).
- You can ask what strikes you about the object, that is, what its characteristic qualities are (3.4).
- You can form a mental picture of the object, that is, ask for its essence, its core (3.5 and 5.1).

Your perspective has shifted from the object or situation outside yourself to a mental imagine within you.

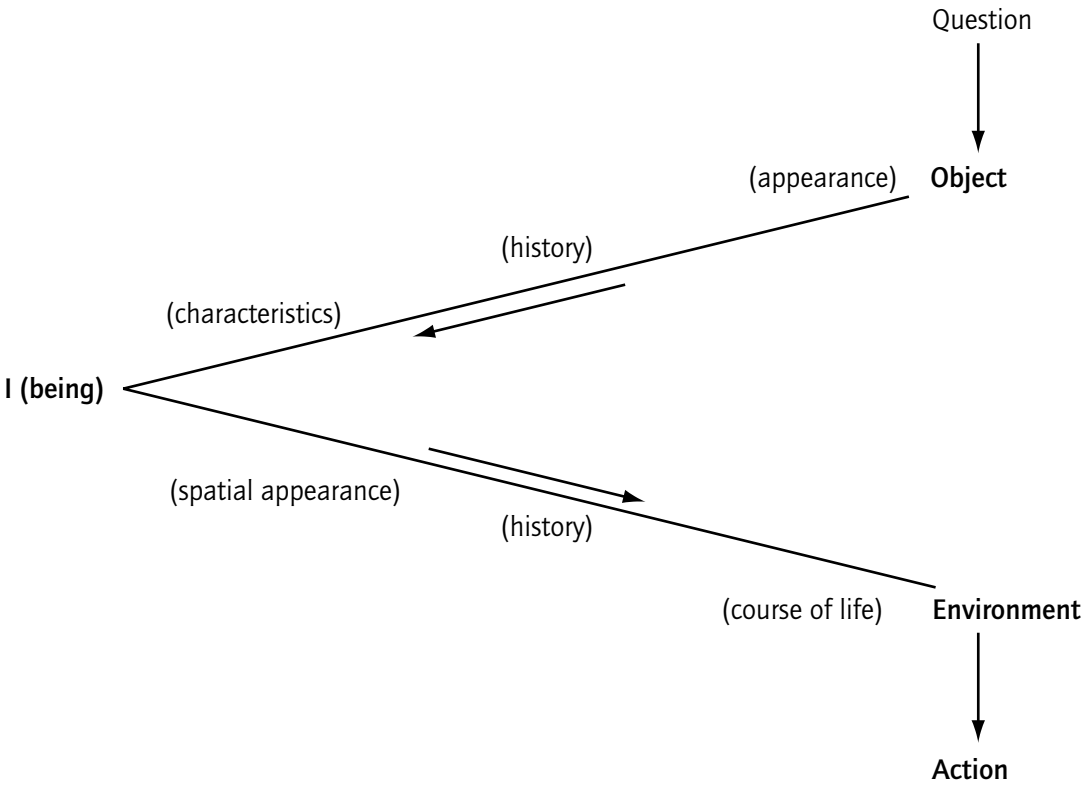
After that, you need to turn your perspective outward again, to the object's environment. And again, you can make various observations:

- the relationships within its present physical appearance (5.2);
- its history (5.3); and
- the characteristic features of its course of life 5.4).

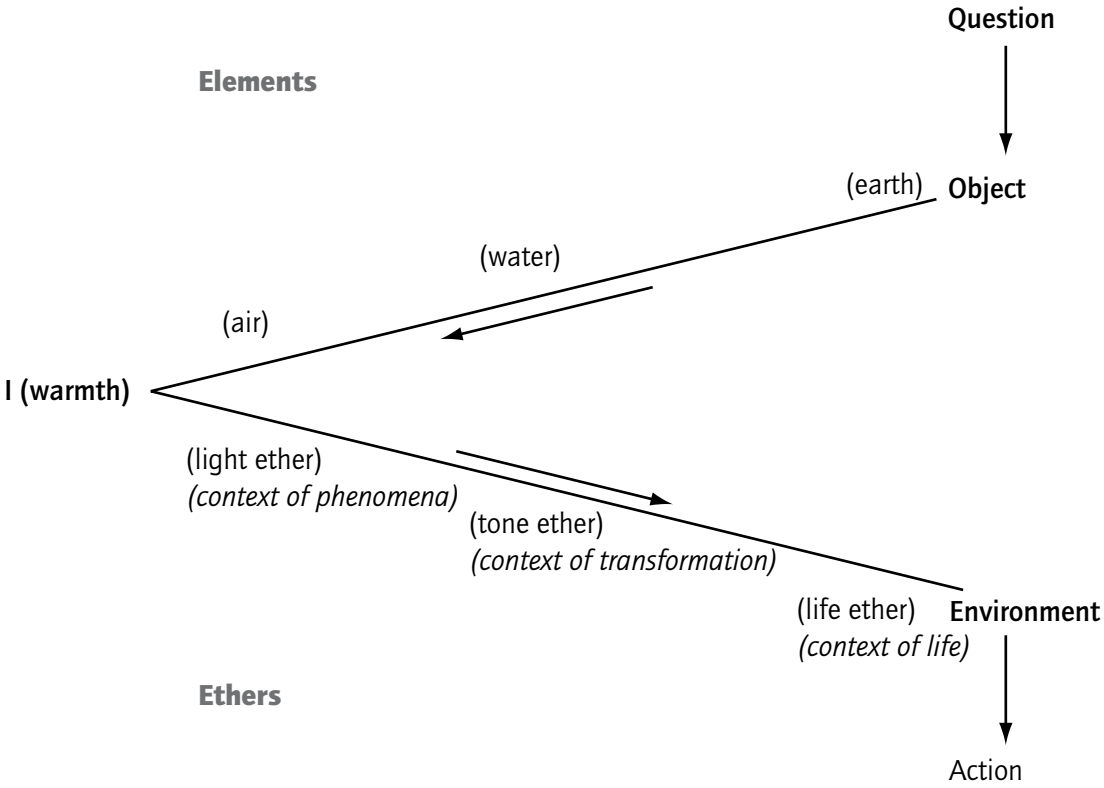
Once you have observed these, you've come to know the object and its environment so intimately that you can begin to act (5.5).

If all you wanted to do is get to know the object, you can stop as soon as you've arrived at its core, as soon as you can say: 'I now understand how it works'. If your objective is to change something and act, you'll have to go through the entire process, since action requires you to know the object's environment as well.

This can be represented in the following diagram:



The observational attitudes linking the external object with the inner world of the observer are related to the elements, while those linking the observer with the object's environment are related to the ethers. The features of the elements and ethers may help you determine the attitude with which you make your observations. This yields the following diagram:



This meets the objectives of phenomenology:

- By searching for the core or essence of the object, you meet the first objective, that of understanding the spiritual activity behind the visible appearance.
- By placing the object in its unique environment and then trying to define an action, you meet the second objective, that of developing an individual, specific action that does justice to the object.

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Phenomenology

Working with nature means working with living entities (plants, animals, humans, landscapes, farms). Suitable actions require an intimate knowledge of life, but nothing is harder to study than life itself. Where science, with its exclusive interest in material aspects, is too restrictive, phenomenology allows you to discover the essence of living entities.

The method described in this book consists of seven modes of observation, each corresponding to the features of the four elements and the ethers. The modes of observation relating to the elements allow you to experience an object's movement, observe its key characteristics and discover its essence. The modes of observation relating to the ethers allow you to concentrate on the relationships between the object and its environment, its transformations across time and the cohesion within its course of life. You can then decide what would be the right next step in the object's further development and can take the action that is right for you personally. Phenomenology thus leads to your own individual insights and your own individual actions.