

10. Habitats

On Overcoming the Deep-rooted Metaphysical Prejudice That the Human Individual Is Separate from the “Outside” World

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Connectedness: A Summary

This chapter leads toward a new understanding of our own selves—that is, a new understanding of the lone self that habitually founds its self-consciousness upon its supposed isolation. Stressing our relations of interdependence with the rest of the world, we will look at the way nature always surrounds its beings with their respective *habitats*. Then we will advance the idea that sense experience is what provides the self with its own individual and specific “habitat.” In philosophical terms we could say that this approach is about giving up the notion of subject-object separation. This deep-rooted, not-at-all-conscious notion *can* be given up, at least during phases of intensified “presence.” And even in everyday life we feel ourselves much less separated from our habitat of current appearances than our supposed separation from the world around us would allow.

The preceding chapters stressed that current appearances need our attention and our intentional activity to emerge into consciousness. As this activity becomes an experience we can esteem those appearances we participate in as being exclusively ours. It is as if we were continually busy choosing just them. We may learn to respect them as the source of new stimuli in our biography that constantly accompany us. As a rule, we do not consciously take our surroundings to be part of ourselves, though we may well feel fond of home, emotionally attached to our place of birth, and involved with all the people who really are part of our lives.

The Inseparable Connection to the Surroundings

Ecology deals with interrelationships within the sphere of life. While in studying the anatomy of an organism one restricts one’s interest to what is inside the spatial limits of a body, it is obvious that the real living being cannot exist in separation from its habitat. Even in the

inanimate realm experience shows us that the physical object is inseparably connected to its surroundings, as we will see in the following sections. As for human society, the world economy has become a pertinent issue, with local economies losing the autonomy they had when we were all less connected by communication and transportation. We are becoming more and more involved in globally extended social processes and so find ourselves more and more responsible for social as well as ecological issues of global extent. In reflecting upon the surroundings we *inhabit*, we soon find that we exist within different spheres in different ways:

- My physical body is usually in direct contact with, and supported by, the ground—or a floor, or furniture. While it may float, and occasionally jump into the air briefly, my body seems to exhibit a certain heaviness common to both animate and inanimate things.
- To stay alive, I must breathe regularly, occasionally drink water in some form, and eat meals. I participate in life processes as a member of the collective of animate beings. While such beings seem to possess their own discrete, delimited inside spaces, their life processes nevertheless intermingle, in the end forming one unified sphere of life. But this is not to dispute that my own life processes remain individual and centered within (although not confined within) my own skin.
- I can be aware of my present relation to the domains in which I participate via my senses. I experience a world outside myself and, equally, I am aware of sense-related mental pictures appearing through an inner psychic activity of my own, which in turn is intimately connected to my moods. I find my moods being triggered by sense percepts, and I find my moods having influence on my reactions to appearances. Thus I have a private, inner sphere of emotional processes that are very obviously *about my relation to the outer world*. But in this sphere I get the impression of my being lead by behavioral mechanisms.
- Inasmuch as I cannot identify myself wholly with the seemingly automatic psychic sphere just mentioned, a further sphere may be added to our list. We are not accustomed to think of it in terms of a habitat of its own, but, looking back in our biography, we can recognize specific situations in which the choices we made were inside the scope offered us by the surroundings that we met. In this sense they may be compared to the habitats that we know of from the bodily, the organic, and the psychic realm. Can we become

conscious of a corresponding biographic habitat in which our personality is emerging in the present moment?

The notion of an individual “biographic habitat” has been introduced in comparing different realms of existence. We will now inspect in more detail the various relationships in these different realms. In each sphere of nature, seemingly isolated bodies have distinctive and essential relations to their respective environments. It is unusual to use the expression “habitat” in the context of the inanimate, but it is just there in the inanimate realm where the correspondence of the state of a body with that of its surroundings is most perfect, and at the same time most routine.

Physics

Physics is usually taken to be based on the existence of material objects that interact reciprocally according to immaterial laws. Laws are about the characteristic behavior that objects exhibit if brought into a physical situation. Our strong instinct prefers to endow matter with the status of reality. It seems that this is because matter relates to tangibility, to the experience of touch, even if one merely has electrons in mind. By contrast, the relationships with their lawfulness are felt to be immaterial, and they make things we would like to be stable and reliable vulnerable to change.

In order to become aware of the role of the factual environment, we need only remind ourselves of gravity. Immediately it becomes clear that all terrestrial bodies participate in conditions extending at least to a cosmic scale. These conditions can vary in many ways. As astronauts experience in spaceships when cruising without propulsion, bodies lose their weight while their inertia remains. When this happens, the astronauts’ bones tend to weaken. When immersed in water, bodies also lose weight, but become harder to move. Some even float on the surface, and balloons float in the atmosphere, apparently being weightless. A candle’s flame rises up from its wick like a rising balloon as the process of combustion proceeds. In an isolated atmosphere, say inside a jar, the flame reacts to accelerations of the jar (along with its atmosphere and the candle) like a body of *negative inertia*! It leans forward in the direction of acceleration, contradicting our deeply ingrained expectation.

Even such a common substance as water tends to vanish in the altered environmental conditions of wintertime. It turns into a quite different, solid substance—ice—a thin layer of which changes the frictional conditions of road surfaces, with destructive results.

Furthermore, the inorganic realm already teaches us that bodies may belong to their own special environments despite seemingly identical physical situations! So, for example, pieces of different metals will react to the presence of a magnet in different ways—some reacting to it directly (iron), some by having their mobility impeded by an unusual kind of friction (copper), some hardly at all (metals of low conductivity).

Physical phenomena involve specific laws of nature coming into action under appropriate conditions. Thus, on the small scale of a room, the air is warmer near the ceiling than at the floor, while in the open landscape the atmosphere normally gets colder with height. In the first case you can remind yourself of gases changing their density with temperature and thus stratifying accordingly. In the other you will have to take into account that in rising, gases expand in the context of the atmosphere as a whole, and the expansion produces cooling. Obviously a body of gaseous nature is so intimately entangled with its environment that its phenomena can be accounted for only as part and parcel of a greater whole.

Appearances Resulting from Conditions Cooperating in the Present

When a rainbow appears in the drops of rain falling from a dark cloud, a whole scene is set. The conditions cooperating to produce the rainbow are apparent:

- The sun shines from behind the observer.
- The position of the observer's eyes is important, for as it is changed the rainbow will move.
- The drops of rain in front of the observer are illuminated by the sun.

In this example no body, no proper object, stands out as the center of surrounding influences. All the conditions are cooperating on an equal basis to produce the phenomenon. This must have been the kind of thing George Berkeley had in mind as a typical “idea of sight” in contrast to one of touch (chapter 2).

Of course, now that we begin to think about it, all visual appearances in the landscape depend on similar cooperative conditions. We see “green” leaves, but their color changes as we change our perspective in relation to them and the sun. Usually we do not take this into account; we notice only the object: green leaves. But, for example, under an overcast sky the coloration of

leaves changes dramatically depending on whether we view the leaf surfaces from above or below. From below we usually see the darker side of the leaf; its colors, produced in a translucent situation, are luminous. When, on the other hand, we view the leaf from above, its surface is reflective, giving the color a whitish cast. As plants grow, their leaves may overlap to form an inner, darker space. As seen from outside that space, the leaves will tend to look a little more bluish; from inside their mutual shade, they will, by contrast, exhibit a slightly yellowish tinge.

Just as we noted how *conditions unite* to produce a rainbow, we can also observe how *laws unite* in every phenomenon. When a candle is ignited and comes to burn smoothly, illuminating its surroundings, a multitude of physical laws will necessarily be cooperating: the wax will melt; liquid wax will move to the wick in a complicated current; gaseous wax will spread from the wick and react with the air; and the chemical reaction will work in such a way that a bluish part of the flame can be distinguished below the more brilliant yellow part, the latter being prone to emit soot at its upper end.

We may remind ourselves of the examples pointed out in the previous section. In each one, as we change the conditions we modify the process, perhaps allowing it to deteriorate from a practical point of view. As a result of the changes, certain laws recede from the scene, while others gain importance. Far from being a mere inventory of numerous corporeal objects, the physical realm begins to reveal itself as a coherent and dynamic system of lawful interrelatings. These interrelatings are prerequisite to all specific appearances.

Rocks and Minerals

Because rocks and minerals originate from strata of the earth, they may lead us to events in the geologically distant history of our planet. In geological practice, scientific understanding comprises knowledge of all the successive processes that brought forth the specimen on hand. A stone taken from rubble will lack the “pedigree” of a comparable specimen derived from the matrix rock. As it is severed from the geological layer in which it was formed, the naked stone degenerates to a mineralogically or chemically definable body, and we restrict our understanding of its nature to what we can elucidate in the laboratory.

A great mass of knowledge about geological processes has been acquired, thanks to modern technology. For example, deep-sea exploration gave new insights into the formation of rock material in underwater eruptions. It also taught that all lime material goes into solution before

reaching the deep sea floor, while silicates remain to contribute to sedimentation, thus leading to silicate minerals of organic origin. But the technical means only serve the ability of the geologist to “put things together.” This putting together is done by applying the “principle of actuality,” that is, by imagining that the geological processes were the same as those taking place in the present according to currently observed laws of nature. So it seems that the planet itself becomes intelligible as a developing organism. And it is also understood that the question of its development eventually leads to linking it to the whole of the cosmos. We only take rocks lying on the ground to be relatively isolated objects because we encounter them on an inadequate time scale. On an appropriate time scale they turn out to be wrapped up in continuous processes, as we know them in the animate realm.

Even Organisms Appear as the Environment Calls for Them

Humankind was quite unaware of the role of habitats in nature up to a relatively short time ago. Some time in the seventeenth century Jan Baptista van Helmont made the following experiment: He filled a big pot with 200 pounds of dried earth. Then he moistened the earth and planted a small willow 5 pounds in weight in it. In the 5 years that followed, he kept the earth moist with rainwater and covered it with a lid to prevent dust from settling. The willow grew to become a tree that itself eventually weighed 164 pounds, while the earth in the pot lost only two ounces in its dry weight. Van Helmont thought that the willow tree had transformed from the water alone. Under the influence of the sun and thanks to the support of the moistened soil, which in itself turns out to be full of organic processes, the plant had sucked practically all its matter out of water and air, as we would now say. These basic factors in the willow’s surroundings will readily sustain other plants than just the willow. But the environment has its climate, its special soil, its illumination, and further factors. For example, certain plants indicate the presence of specific chemical elements in the soil.

When we introduce plants or organisms into a certain location we will find that they will live and thrive only in their appropriate environments. Certain environments will rightly be expected to contain the organisms known to be typical for them. This was already well known in times when one was not so certain that organisms must have been descended from similar parent organisms, which is why it seemed sensible to picture a heap of garbage as producing rats. And, as a rule, microorganisms really will appear if given their appropriate environment.

In “nature,” that is, outside the influence of humankind, plants appear in situations that fit them. Furthermore, these situations are decisively determined not only by the local climate and soils, but also by the plants themselves. Coexisting plants form “plant communities” that are themselves like organisms, with the individual species playing the role of different organs. As seen in the context of a larger time scale, plant communities are not necessarily stable entities, but can evolve into further forms in which plants with ever longer life cycles can participate. Here the tropical forests come to mind, built up as they are by an intricately interwoven multitude of very different life forms. As is well known, such highly organized cooperative organisms are lost—as seen on a human timescale—if certain members of them are cut down.

It is worthwhile to compare the relationship between “objects” or “bodies” and their surroundings in the three realms we have taken into account up to this stage:

- Inasmuch as the conditions that participate in the appearances need only interplay in the *present* we will assign it to the inanimate physical realm. So for example, as the rainbow recedes from the scene, no physical trace of its past existence remains.
- In the geological structure of the earth, all we possess are what we interpret as the traces of processes that took place in the past encompassing a joint development of parts that we now distinguish. Our interpretation even requires us to imagine scenes in which we ourselves could not have existed. We must go beyond the inorganic approach.
- Vegetations form habitats in which the species that are involved mutually play the roles of both inhabitant and habitat. They cooperate to produce the situation in which they appear together. The contributions of many life forms unknown to the layperson must be taken into account even to understand the formation of the soil.

Moving on from the paradigm of an inorganic physical realm to the living, we no longer find conditions that may be taken as wholly external to the beings participating in them. The concept of the spatial environment as alien to a body located in it is insufficient. The laboratory, where we can simulate environments at will, may suggest the simplistic thought that even we ourselves are separate from the world. But this is to forget our own role in creating the simulations

Farming

Human agriculture has managed the life processes found in untouched nature to produce a variety of materials for food, clothing, and shelter. We achieve this mainly by doing away with the plant communities in which hunters and gatherers can glean only a small fraction of what the farmer can produce per acre. We bred cultivated plants and domestic animals and learned to set up “artificial” habitats for them. Just think how crops of annual plants require their seeds to be collected and sown every year in soils from which competing plants are excluded. And how the soil, no longer the product of previous stages of natural life, must now be fertilized with natural or synthetic materials transported from elsewhere.

Modern farming can be understood to be modeled after the example of the laboratory. In a laboratory-like setting—for example, in a hydroponic growing chamber—the farmer can regulate all elements of the crop’s environment, including the earth itself, substituting an inert mineral tissue through which a chemically controlled solution can flow. The lighting, along with the temperature and humidity of the atmosphere, is kept at optimal levels. Production continues through the year, because there is no year. Nowadays, this is a practicable option. The hydroponic system, although thoroughly artificial, is designed to provide a habitat complementary to the plant, even if the entire arrangement is for the service of our own needs.

A different kind of agriculture—one based on plant communities—is possible. Craig Sams, Chairman of the UK Soil Association has described the original culture of cacao and the current problems in its production. The cacao tree originates from a lower layer in the rain forest, growing under higher trees, typically mahogany. These give it partial shade, and the leaves that fall down to the ground from the forest’s canopy fertilize the soil in which the cacao tree grows.

This culture of cacao can be sustained indefinitely. When plantations are managed on this more traditional basis, the farmer plants tall shade trees such as mahogany and red cedar. In the long run, these become a valuable by-product—their value can eventually exceed that of the cacao itself. The cacao trees are planted sparsely at five-meter intervals and yield about 500 kilograms per hectare. This at first seems to compare unfavorably with yields of 800 kilograms in “modern” plantations, which have a four times greater density of cacao trees grown without the taller trees the rain forest had contained. Chemical fertilizing becomes necessary, and diseases, which must continually be controlled, get more virulent with time. No extra income from the valuable timber is forthcoming. Craig Sams is supporting smallholder cacao farming on the sustainable basis indicated above—and the Maya Gold Chocolate brand is the result. But, above all, a vast social benefit ensues.

Needless to say, intermediate kinds of farming are practiced. Habitat control can comprise irrigation, chemical fertilizing, herbicides for weed control, pesticides against insect plagues, and so on, all of which isolate the plant from the original local situation. At a certain point genetic engineering will be brought into the picture, as we find our crops unsuited to the artificial habitats we have created for them.

The human attempt to bring nature under control may be understood as the consequence of a deep-seated disbelief in the *sense* of giving the environment an influence on our affairs.

Animals Behave According to “Image Habitats”

While plants are limited to their cycle of vegetative and generative metamorphosis, animals have the additional dimension of *behavior*. Moving through the landscape, they act under the direct influence of *images*—of scents, for example. A certain species will be bound to react to images associated with it. Given a chance to prowl through a meadow, a cat will stalk ever so carefully, then pause and move warily toward a spot in front of it while assuming a posture of readiness to jump forward. We recognize this as the behavior of a cat when hunting. If a sign of movement then occurs, the cat will pounce upon its location.

As the typical image of a prey animal, the “mouse” is of central importance to cats. If you pull a little woolen ball fixed to a string across the floor, the cat will pounce on it again and again. It seems that at least young cats love this sort of play. But if we take them to be engaged in a mere game, we miss the meaning associated with the moving woolen ball. While it is by no means a mouse, it combines traits typical of mice, as recognized by the cat. The cat is reacting to a “prey situation” out of its deepest nature.

We may call the combination of environmental features relevant to the cat’s behavior an *image*. An animal acts instinctively within an *image habitat* that belongs to the species as its particular perspective. The individual animal needs to be within a spell of the appropriate attention—an actual, present *drive*—in order for an image to work in this way. Early in the morning, birds are observed to sing, and in their singing they participate in a chorus. At other times they are dedicated to picking up morsels of food, while at still other times some will be fully engaged in social life, flying off and landing again with their group, and so on. In each case the attention, or drive, shapes the interaction with the image habitat.

The image nature of triggering percepts has been demonstrated in many cases in the field of psychology. We ourselves are acquainted with the effective character of images and with their

relation to changing phases of directed consciousness. We often react to perceptual situations compulsively. For example, when engaged in a conversation on the telephone, we tend to disregard the rest of our surroundings while being drawn in by the specialized spell of attentiveness that is currently our *state of mind*. No one is present, but we are fully occupied by a *voice image*. Predictable reactions to images play an important part in countless social processes. In advertising, these reactions are not only made use of, but systematically trained.

The close, instinctive connection between animal reaction and image habitat guarantees that the animal will act *wisely*—at least it will do so if it is in an appropriate natural environment, where the images have their due meaning. On the other hand, it seems tragic to watch an animal chained to a fixed pattern of reactions in situations where these reactions are futile—as when a fly endlessly batters itself against the invisible barrier of a window.

Human presence of mind allows for a breathing space between the recognition of the situation and appropriate action. This breathing space makes room for *decision*.

Human Detachment from Sense Perception Allows Attachment to Ideals

As we have seen, the step from the animal to the human being does not do away with reactions governed by images. When we learn to drive a car, instinctive reactions become habitual. A great part of many skills is based on patterns of behavior acquired through years of practice.

But there is a sphere of freedom from such fixed reactions in which we can decide—can choose, plan, and follow our own ideals. *This is an “ideal” in itself*. It is the ideal of the person who is independent of what his or her environment suggests. On this basis a feeling of self-confidence is nurtured. The attachment to ideals has in many ways turned people away from the images appearing via sense perception. We see many signs of this tendency:

- According to a long tradition the world of the senses, as the “outside world,” is inferior to the world of intellect appearing “inside,” in the mind.
- It is thought that the *outside* world of the senses seduces individuals to sin, misleading them, distracting them from the right path that they must find *inside*.

- A much younger tradition walls off the inner, “subjective” realm of the mind. There is an objective world outside it, but what appears within from the outside is by no means the true reality of the outside. All the isolated mind can do is to become critical, sustaining a stance in which it keeps up its splendid isolation.
- Appearances are taken to represent processes that have nothing to do with ourselves. The outside world turns out to be governed by chance, or impersonal law
- Contemporary natural science embraces the reductionist agenda. It not only tries to explain the workings of the outside world, but also those of the human body and the mind. In the long run it does away with any self. All individual, unique, even mental events lose real meaning and so this agenda tends to sacrifice the basis that made it so successful. For we must remind ourselves how individuals had to fight against the doctrines of their times when they laid the foundations of materialistic science. What they became famous for was their struggle for freedom of individual thinking.
- There is a strong incentive to take over and control the outside world in order to overcome its alien and, above all, seemingly contingent nature.

The human being is going through a transient phase of self-consciousness in which *no individual* habitat at all is really appreciated. That is, we do not recognize empirically given sense experience as a working, *integral part of our own individuality*. As a result a picture emerges that finally lets us give up the concept of human individuality because the *experiential* source of individuation in the biography has been disclaimed.

Nevertheless, We Are Supported by Our Own Singular Biographic Habitats

We are beings of habitat in every respect:

- We make use of our physical body according to the conditions of the present local physical situation. (We must.)
- We breathe in the *sphere of life* and feed from the activity of the plants. (We must.)

- We are continually *reacting* to images in a habitual way. (We must.)
- All the same, it is true that we do try to *seclude* ourselves from the hustle and bustle of daily experience, striving to find compelling reasons—generally accepted motifs—for decisions, for which we can be made responsible. (I dare say we must, sometimes.)
- *But* our lives have become the very special ones that we have lived thanks to being guided by many “chance” experiences, *which we need not have taken up*. These may seem to be sensual, or just as well mental, experiences. Such events that come by chance really bestow us with chances! They, I would suggest, form the sphere of the human biographic habitat. (In this last sphere we are left free to act according to our own judgment.) That we find ourselves acting out of this sphere more authentically than out of our isolated “inner life” can become an experience, but it cannot be proved to us by anyone else.

As individual selves we lead our lives in our own biographic habitat. To retreat into the seclusion of “inner experience” is in this sense to retreat from ourselves—from the conditions that enable us to grow most healthily.

Not even our physical bodies can function independently of the “outside” world. As living beings, we spread out into the life-sphere of the earth. As we awaken, sense experience arises—*either* to trigger behavior, *or* to be overwhelmed by “inner rulings,” *or* perhaps to be seriously and creatively taken up as integral to our biographies.

Outlook: Individual Recognition

The concept of a “biographic habitat” may be hard to accept, since it seems to imply that the interwoven physical environments of the multitudes must be specially directed to fit each and every individual. But in our discussion of habitats in other realms of nature we have seen that the same physical environment does take on different meanings for different beings—but does so in a larger harmony, without becoming “schizophrenic.” In the human case we have only added the assumption that each person may impart individual significance to his or her own experiences by *recognizing* them—which is also to allow the individual to express them authentically. You will

recall that this recognition of the full expressive content of experience was the original meaning of aesthetics, as Baumgarten envisaged it.

We will have to take up the question of how appearances are to be understood if they are to be recognized as belonging to our biographic habitat? Certainly this recognition will lead to a change in perspective, for then our specific “outside world” turns out to be an organ of our personality, just as our living body and our seemingly inner psyche. And then we will welcome that specific “outside world” as our source of innovation, of inspiration, of distinction in our biographies. And, of course, all the while our connection to that source will become manifest in our actions.