

## **'The Consciousness of Lower Animals'**

By Hermann Poppelbaum

As early as 1907, in a lecture given at Munich (*Theosophy of the Rosicrucian*) Lecture 8), Rudolf Steiner laid the foundations for a spiritual-scientific psychology of animals. He there says that the animal kingdom is to be divided into two great groups those who are able to bring forth a sound out of their inner life, and those who have not this faculty. Of the latter group, he goes on to say that they are still at the stage of picture-consciousness which man had on the old Moon—that is, in the cosmic epoch which preceded the solidified Earth of to-day. It follows from the general trend of the argument that the consciousness of the voiced animals approaches nearer to the structure of human consciousness. As to how far! it attains it, is a matter for further inquiry.

Let us try, to begin with, to gain an insight into the consciousness of the lower, voiceless animals. To begin with, we must be clear that Rudolf Steiner also includes among them those vertebrates which only produce "noises," like many fishes and amphibians, for example. Indeed, he expressly distinguishes the croaking of frogs from the true gift of the voice, and it is pretty clear that the hissing and whizzing of many reptiles, especially the snakes, has not yet passed the threshold of true voice-formation.\* Only when we come to the warm blooded vertebrates, the birds and mammals, do we find the faculty of producing sounds from within, which we may well describe as the "warm voice," in contrast with the "cold noising" of the lower animals.

Indeed, only the mammals and birds make use of the same instrument as man does for the production of sound, namely the larynx and windpipe and oral cavity in the immediate outpouring and in pouring of the breath. Only when air breathing establishes a rhythmic inter-relation between the outer surroundings and the inner life of the body—only then does consciousness awaken to actual contact with an *outer world*. So long as gill-breathing and skin-breathing predominate, the animal is still enchanted in those picture-experiences, which, as in the case of old Moon-man (see Rudolf Steiner's descriptions in *Lucifer-Gnosis* and *Occult Science*), are not images but symbolic pictures of the objects experienced. In reptiles we see the transition actually taking place.

Our task is now to gain a clear idea of these picture-perceptions of the voiceless animals. We can take our start from a comparison with human dreams.

\* See Dr. Steiner's *Speech Formation and Dramatic Art*, Dornach, 1924. Lecture 11, page 245 (in German).

Here too—beside the reminiscences of waking sense-existence—the changing of events and processes into symbolic pictures is predominant. This happens, for instance, with the organic conditions of the body, as in the examples which Rudolf Steiner often gives where the heart is symbolised as a seething fire, or the aching head as a vaulted roof full of cobwebs and nasty creatures. But there are also dream-experiences, clothed in symbolic pictures, which relate to the surrounding world—as when the rattling of an alarm clock is symbolised as an express train rushing past, or a falling chair as a pistol-shot in a duel. (The most beautiful example of a symbolic dream which the author knows is related by Dr. Norbert Glas in his *Essays on Dream-life*.\*)

Such examples can serve us as a first approach to the picture-world of animals; but we must go farther. For the human world of dreams is still largely arbitrary, inasmuch as it is always connected with the personal reminiscences of the day. The same process in the surrounding world will be clothed by two human dreamers in altogether different pictures. Indeed, as Rudolf Steiner often said, we only become aware of the real core of the dream experience if after awakening we are able to separate this arbitrary clothing from the dynamic and dramatic processes that underlie it.

There is nothing arbitrary in the picture-consciousness of the invertebrates, just as little as there was in man's consciousness on the old Moon, whereof Rudolf Steiner tells us in *Lucifer Gnosis* : "Though the pictures of Moon-consciousness were still less like the objects to which they were related than our dream-pictures are, nevertheless there was a perfect correspondence between picture and object." "While they had, in common with our present dreams, the fleeting and symbolic quality, they were distinguished from the latter by their absolutely regular and law-abiding character."

We shall therefore look to find the same correspondence of picture experience and object in the voiceless animals. We might describe it as a "one-to-one correspondence" of the symbolic picture and the object. This dream life and symbolic awareness of surrounding circumstances differs from our human relation to the world, above all in one respect; namely in the absence of real "things" in the field of consciousness. For the apprehending of "things"—that is to say, of separate and space-related objects—is only possible to that higher consciousness which has displaced the Lunar, namely to the Terrestrial or "Objective" consciousness. It is essential to the perception of objects that the subject should be able to experience himself as separated from the world around him. Clearly this only becomes possible when a real lung-breathing emerges. Indeed, the gill and skin breathing animals, even in their bodily life, have not yet emancipated themselves from the rhythms of the surrounding water and air. (I shall deal with the consciousness of higher animals in a subsequent essay.)

\* *Natura*, 1927, page 218, *The Dream of the Hydrant*. (Dr. Glas lectured in this country, on the Psychology of Dreams, last summer during the conferences at Glyn Garth and Gareloch.)

The field of consciousness in the picture-consciousness of lower animals cannot therefore consist of single details, clearly outlined and separate from one another. It can only be a reproduction —pictorial, symbolically synthesized—of a whole wealth of coexistent factors. The total situation which is significant for the animal's life must somehow find expression in its picture-experience in consciousness. It must be a wonderful kind of *summary awareness*. We human beings, to begin with, cannot easily put ourselves in the creature's place. Observation and experience, however, confirm the theory to an astonishing degree. I will here give a few examples.

It is well-known that dragonflies lay their eggs by simply letting them drop into the water when they fly over ponds, pools or streams. The eggs sink in the water and there develop to the well-known pirate larvae. The landscapes which dragon-flies perceive as favorable for the dropping of their eggs must be exceedingly varied in aspect, and it is obviously absurd to suppose that they have all the details objectively present to their consciousness. Without a doubt the insect bases its action on a total experience of the essentials as a whole, utterly different from the way in which we would perceive and judge the given circumstances. How strange this experience must be is evident from the following fact. It has been observed that dragonflies are easily deceived. For instance, they will lay their eggs when flying over the freshly-tarred and glittering roof of a barracks. Gross as the error is when seen from human standpoint, it is intelligible at once if we presume in the consciousness of these lower animals, not an image of the outlined, differentiated, world around them, but a symbolic, totality, gathering up into a whole' the components which man would separate.

The nature of these strange and wonderful pictures is indicated once more by Rudolf Steiner in his description of Moon-consciousness. "Assume, for instance, that Moon-man is approaching an object which is sympathetic or advantageous to him. Then there arises in his soul a colour-picture bright and radiant in quality. If, however, something harmful approaches him, he experiences a dark and ugly picture." That the lower animals too must have such pictures is shown by the following experiments.

Dahl made experiments with spiders. He wanted to investigate how the spider observes the flying of its insect-prey into the web. He touched the net with a tuning fork. Immediately the animal rushed to the spot and surrounded the vibrating metal with a dense web, to prevent the escape of the supposed fly. A still grosser error than the dragon-fly's—and yet we understand this failure at once when we know that in the creature's consciousness there is no "thing, the fly," but that it only experiences an inner picture, which with a very magical power seizes its whole existence and drives it on to action. It is completely spellbound by a picture indicating the presence of something worthy of its desire.

I take a further example from Hans Volkelt's book on the mental life of animals, *Die Vorstellungen der Tiere* 1914. This author observed the astonishing fact that a spider, which will immediately consume any fly caught in its web, will make the most violent movements of revulsion at the very same fly if offered to it outside the web —say at the aperture of its hole. Nay, in the end it will even run away from its natural booty! We can imagine no clearer evidence of the fact that the spider does not observe its prey at all as an "object," but is completely absorbed by a picture-experience in this case "dark and ugly," to quote Rudolf Steiner's words.

We must however avoid the mistake of supposing that the picture-experience is vague and undefined, merely because it gathers up in one a variety of circumstances which man would perceive separately. On the contrary, these pictures must be so clear and definite as to exclude all doubt. Their effect on the experiencing soul is absolutely radical. This, too, distinguishes them from the mental pictures which man has, in face of which he can collect himself in quiet contemplation. The impression which the animal receives allows no pondering or hesitation, it strikes through at once.

This takes us to the other pole of consciousness, I mean the pole of action. Such an incisive picture consciousness provides us with the key to all the strange paradoxes in the conduct of the lower animals. Biologists have conceived special mechanisms to explain it —reflex arches in the nervous system and the like, whereby they imagine certain sense-impressions to be permanently switched on or connected to certain organs. This theory, however, brought them no nearer to the phenomena of impulsive action than the vague talk of "instinct" which formerly prevailed.

We must be fully aware of one decisive trait in the instinctive actions of the lower animals. They are by no means *merely automatic*. However rigid in general principle, they are remarkably pliable in detail of execution. We can best observe the paradox in the insects, those creatures of instinct *par excellence*.

When an ant has fallen into its sand built funnel, the ant-lion will throw sand after it with extraordinary skill to make it tumble to the bottom where it can get it. Put the same creature on a plate of glass and it will exhaust itself in hopeless efforts to dig itself in backwards. The wasp that has just gained access to a glass of syrup with the most cute intelligence, will violently try to fly out through the closed glass window. This dual behaviour is still more striking in the ant. What the little creature undertakes in a single instance to attain a definite end will vary in the most astonishing degree with the circumstance, nay even with the day. The ant will adopt the most varied ways and means, including quite exceptional ones, which accidentally come to its hand. It will overcome or circumvent manifold hindrances.

Yet the same ant (*Polyergus*), which will attack a hostile nest in solid column of formation and kill all those who resist, yet only deprive the fleeing ones of their larvae and pupae without doing them any harm, this ant will starve in the immediate neighbourhood of the best possible food if there is no "slave" at hand to feed it. Not that its oral parts are such as to prevent its eating; they are well formed. It is only because it lacks the most primitive power to connect the feeling of hunger with the perception of its food. If the food accidentally touches its mouth, it gobbles it up at once.

*Thus, in the instinct, wisdom and utter limitation live absolutely side by side.*

There can be no doubt: at the point where the animal's perceptive experience passes into the impulse of action, a process takes place where the general urge is somehow brought into connection with the special situation. At this point there must be a strange "free play," to allow for each special instance. Some kind of imaginative faculty or "fancy" must be active here.

Here we become aware of an important analogy. I mean the analogy to the behaviour of an organic *Form*-type in relation to the surrounding world in which it manifests. Take the case of the plant. From the invisible realm of potential forms (the *Type*, see Rudolf Steiner's works on Goethe's *Theory of Metamorphosis*) the prevailing outer conditions conjure forth, as it were, a corresponding modification. The given circumstances do not *produce* the *Type*, they only make it visible.\* So we might argue, from the sphere of *form*, to that of *consciousness* in animals. From the invisible source of a still plastic, typical impulse, the special action of the creature is, so to speak, called forth by its perceptive experience of each individual situation. Action is not determined by hard and fast patterns which must be slavishly copied; underlying it are plastic types, capable of manifold variations.

That which underlies the animal's instinctive action—in voiceless animals at any rate—differs therefore from the concrete "once-ness" of a human resolution. There is a general and all embracing picture, which includes many possibilities. Animal impulse is more mobile, more plastic-pictorial, than the clearly-outlined resolves of man.

\* Rudolf Steiner: *Introduction to Goethe's Scientific Writings*, Vol. 1., pages xxx. et seq.

Now let us put together what was said above of the peculiar quality of the picture perceptions, and what has here been said of the plasticity of urge and impulse. We then divine that these two poles of animal consciousness belong together, nay more, that \* Rudolf Steiner: they are but two aspects of a single process. The picture-experience "strikes through" into the sphere of action. The intensity of the picture works directly into an impetus of corporeal action. What is experienced in consciousness "strikes down" into the limbs and brings them into movement. That which in man falls into two distinct acts-cognition and action-is merged in the lower animals into a single process, containing the "summary awareness" on the one hand and the "type-determined action" on the other. Infinitely remote from these is that which comes in between the two in man, namely the free and direct experience in consciousness and the individual resolve, matured in conscious knowledge.

Man alone attains these gifts as the insignia of his noble birthright and as the burden of his responsibility. He can meet the pictures that surge in upon him with liberating contemplation. He does not let his action be engendered by the dynamic forces of his impressions. Whenever he acts *as man* he derives the power of his impulse fresh and direct out of the spiritual world. To this end the power of Intuition is given to him-the very opposite of "summary awareness." The determining factor in an action intuitively determined is in each instance the finding of the corresponding, absolutely individual Intuition." (*Philosophy of Spiritual Activity*) chapter ix.)

Picture-experience only arises again in man, when in true freedom he undertakes the path of supersensible knowledge. Then he receives again in a higher form, as cosmic, body-freeing "Imagination, " what the animal possesses and what he meantime has foregone. Moreover, the plastic Impulse-type of the animal is also given to him again at a higher level. For in place of it he receives the truly human gift of finding individual solutions-not only individual to each instance in real life, but born out of the inner force of his own individuality. This is the gift of "moral imagination" —moral fantasy.