THE PLANES OF CONSCIOUSNESS

In the Secret Doctrine of the Rosicrucians, we find the following Sixth Aphorism:

The Sixth Aphorism

VI. As Life is the Essence of Spirit, so is Consciousness the Essence of Life. Spirit is One, yet it manifests in many forms of Life. Life is One, yet it manifests in many forms of Consciousness. While the forms of manifested Consciousness are innumerable, yet the wise know Consciousness to manifest on Seven Planes: and these Planes of Consciousness are known to the wise as (1) The Plane of the Elements; (2) The Plane of the Minerals; (3) The Plane of the Plants; (4) The Plane of the Animals; (5) The Plane of the Human; (6) The Plane of the Demi-Gods; (7) The Plane of the Gods.

In this Sixth Aphorism of Creation, the Rosicrucian is directed to apply his attention to the concept of Life-Consciousness manifesting on its seven planes. This concept is represented by the Rosicrucians by means of the symbol of a linked chain of seven circles, each link penetrating the one on either side of it.

The Sixth Aphorism wisely states that "Life is the Essence of Spirit." No matter what else Spirit may be, or may not be, it cannot be denied that Spirit must possess the attribute of Life, in order to be Spirit. Likewise, the Aphorism states: "Consciousness is the Essence of Life," which is also self-evident; for no matter what else Life may be, or may not be, it cannot be denied that Life must possess the attribute of Life.

A modern writer has well said that "Mind is the Livingness of Life," and, of course, Mind is naught but a term employed to indicate "states of consciousness." Even the average person implicitly testifies to the fact of the necessary presence of Consciousness in Life by his distinctions between the various forms of living things. The higher the manifestation of Consciousness in a living thing, the higher the degree of "Life" he attributes to it; and when the indications of Consciousness are lacking, he pronounces the thing "lifeless." The proof of conscious activity among mineral forms at once leads to the thought that "then minerals must be alive." Consciousness, in its essence, manifests as "the attribute of receiving impressions from outside stimuli, and the power to respond thereto;" and the student will at once recognize this attribute as the fundamental test of living substance.

Just as the Rosicrucians hold as a fundamental doctrine the teaching that "Everything is Alive" (see preceding chapter), so do they hold as equally fundamental the teaching that "Everything is Conscious." But, here is where half-knowledge is apt to fall into a trap, and to attribute to the Rosicrucian beliefs quite foreign to them. For in the Rosicrucian teachings (and in the most advanced modern psychology, as well) the term "consciousness" is not restricted to those phases of consciousness most familiar to us, but, rather, to all forms of "awareness," whether higher or lower than the "consciousness" of our everyday lives.

The term "Consciousness" is one most difficult to define adequately; and this quite naturally, for Consciousness can be defined and described only in the terms of its own experiences—there is no other term analogous to it which would serve to indicate it to one who had not experienced consciousness. The word which probably best expresses the general idea is the term "awareness."

The Rosicrucian teachings hold that Consciousness manifests on Seven Planes, each of which planes is interlinked with and blends into the one on either side of it (see figure illustrating the symbol). But each plane is composed of seven sub-planes, and each sub-plane of seven minor planes, and so on until the multiplication is made seven times. Each of the Seven Planes of Consciousness is named in the following synopsis of the teaching, and the main characteristics of each plane is given.
I. The Plane of the Elements

On this Plane of Consciousness is manifested the actions and reactions between the subtle elements of which all material forms are composed. Here occurs the play between the atoms, the electrons, the ions, the corpuscles, and the still more tenuous particles of substance of which science has as yet no knowledge. And, going still further back, it may be said that on this plane occurs the play of phases of substance as much more tenuous and subtle than the electrons as the latter are more tenuous than the atoms. Little can be said concerning these practically unknown forms and phases of matter, although the occult teachings are quite full of them.

In previous quotations from Haeckel, and other modern scientists, we have seen that advanced modern science recognizes the presence of "something like consciousness" in the atoms of matter, and "ascribes their movements to "likes and dislikes," "loves and hates," arising from the perception of certain qualities in each other, and the response thereto: this means, of course, that the atoms possess and manifest "feeling" and "will" in an elementary form, phase, and degree. There are results arising from these manifestations of consciousness on the part of the atoms, however, which are not usually taken notice of by writers of the subject, either in the ranks of the occultists, or those of science. Let us now consider these, briefly.

Science informs us that all forms of physical energy or force, manifesting as light, heat, electricity, magnetism, etc., arise from vibrations of the particles of which matter is composed. These vibrations are, of course, caused by the motion of the particles; and these motions are caused by the manifestation of attraction or repulsion between the particles. Proceeding further, we see that the manifestation of attraction and repulsion between the particles of matter arise from the "likes and dislikes," the "loves and hates" of the atoms and particles—and that these, in turn are but manifestations of elemental consciousness. So we see, here, that even the manifestation of physical energy and force is but the accompaniment and result of the presence and activity of elemental consciousness.

On this plane of consciousness are operated many of those forms of "magic" known to all occultists. The occultist moves Matter not by exerting a physical force upon it by means of his mind and will, but, instead, by acting upon the consciousness of the material atoms by the power of his own consciousness! This is no place, of course, to go into detail concerning this phase of occultism, but it has been thought well to indicate here the source and nature of the power underlying occult phenomena of this kind, and the "why and wherefore" of its manifestation.

The Plane of Elemental Consciousness, like all the great Planes of Consciousness, contains seven subplanes, and each of these seven minor planes, and so on until the multiplication has been made seven times. The sub-plane we have just briefly considered is but one of the seven, and the remaining six are equally important. In these unmentioned subplanes there are manifestations utterly unknown to modern science and to the uninformed person, but of which the occult masters have made a careful and thorough study.

II. The Plane of the Minerals

On this Plane of Consciousness are manifested the actions and reactions of the molecules of which the minerals are composed, and of the masses of mineral matter as well. Just as the atoms of matter manifest attraction and repulsion, arising from "like and dislike" of consciousness, so do the molecules of matter manifest a similar "like and dislike," resulting in the attraction and repulsion between molecules and masses of matter. The molecules or particles of which a piece of steel, for instance, is composed, hold together by reason of the attractive power of "cohesion," and not because they are "fastened together" by any mechanical means employed by nature. In the same way, gravitation manifests its attractive force.

Moreover, on some of the higher minor planes of this Plane of the Minerals, there is manifested the crystallization of the mineral particles according to a definite principle of design embedded in the
consciousness of its particles. The crystal is built upon a definite plane, just as truly as is the acorn or the oak—and in all of these cases the pattern is but an "idea" in the consciousness of the combined particles. The Universal Builder works through the consciousness of the mineral particles just as truly and as wonderfully as through the particles of humanity which we call individual men. The study of crystals, and their formation will open up a new world of thought to the average person, and will give him a peep into the workshop of the Universal Builder in which he will see things heretofore unsuspected and undreamt.

The common opinion is that crystals are formed by mechanical causes, such as outside pressure, etc., but the careful student of science, as well as the occultist, knows that the formation of a crystal is a growth, and is as much the result of stored-up psychical ideas in the particles, as is the growth of plant substance or animal bodies. The student of crystallography soon becomes convinced of the presence of Life and Consciousness in the world of crystals.

In the contemplation of the Plane of Mineral Consciousness, the student must remember that there are forms of minerals far more gross than those visible to us on this earth; and also, that there are forms and phases of mineral life far finer and higher than those with which we are familiar here. The occult teachings contain some very interesting information concerning (these to us) unknown mineral forms and manifestation.

It may be mentioned here that the ancient alchemists (and some of the true modern alchemists) have found in the fact of mineral consciousness the missing-link of their science. The occultist having a comprehensive understanding of the consciousness of a metal or mineral will be able to work transformations upon and through it which would be impossible by means of chemistry or mechanical methods of treating metals. Here again, is given a passing hint regarding a subject of tremendous importance.

III. The Plane of the Plants

On this plane of Consciousness are manifested the actions and reactions of the protoplasmic cells of which the plants are composed. And on this plane, as all the other planes of Consciousness, there are to be found high and low sub-planes and subdivisions of the latter.

At the lower pole of this plane we find plant-life which is scarcely distinguishable from the higher forms of mineral life—in fact, as we have seen previously, it is almost impossible to draw a fixed line separating the two great plane-divisions, for all planes blend into each other and are linked one with the other on the lower and higher poles of their activity. We have mentioned the Diatoms, or "living crystals" which the best authorities regard as the "missing link" between the two great kingdoms of Life and Consciousness, but which really are plants rather than minerals. The Diatoms belong to an order of flowerless plants, a genus of the Algols. They are covered by a siliceous covering which gives them a crystalline appearance. They present the appearance of crystalline fragmentary particles, generally bounded by right lines, flat, stiff and brittle, usually nesting in slime in which they unite into various forms and combinations, and from which they often again separate. They multiply and reproduce themselves by division and conjugation.

In 1866, Professor Van Schrom, of Naples, Italy, was experimenting with the bacilli of the Asiatic cholera, and was examining the same under his high-power microscope. He was attracted by the formation of double pyramids of bacilli in the shape and general appearance of true crystals. These "living crystals" manifested growth and movement, and seemed to be alive and conscious. From these experiments he arrived at the conclusions that all bacteria produce living crystals, and his continued experiments seemed to verify his contention. These bacteria-crystals are composed of homogeneous albuminous matter, which at first is colorless and structureless, and which at a certain stage of their life history seem to lose their life qualities and to become, to all intents and purposes, "dead" crystals. These living crystals seem to be impelled by some inherent force akin to vital action to assume a geometrical figure. And while possessing these indications of elementary vegetable life they also exhibit the characteristic qualities of crystals, viz.,
refraction, inclusion, absorption, and polarization. Later investigations have revealed the presence of similar living crystals in the secretions of living organisms.

That Life is present in plant-life scarcely anyone is disposed to question, though there seems to be a desire to deny Consciousness and intelligent activity in the case on the part of the orthodox scientist. But the more advanced of the workers in the ranks of modern science do not hesitate to positively assert the presence of conscious intelligent activity in plant-life, and vigorously support their contention by logical argument backed up by incontrovertible facts gleaned in their laboratory experiments. These scientists hold that the presence of the phenomena of nutrition, reproduction, and of physical and chemical change due to adaptation is proof positive of the presence of vital intelligence within the organism in which the former are manifested.

Professor Bieser says: "Adaptation, after all, is the best evidence of the presence of intelligence or life in forms or units of matter. Adaptation, also called 'physiological adaptation,' but best called 'psychological adaptation,' is the one weapon by which living organisms fight against the destructive forces of conditions of nature. In all its forms, adaptation is the more or less successful co-operation of living organisms with the laws of nature—it is not the disregard of natural laws. In taking adaptation as our criterion by which the presence of intelligence is determined, we find no difficulty in settling the question of the presence of life. The most perfect automatic machinery has no life, because it cannot adapt itself in the least to the changing environmental conditions and thus save itself from annihilation, when necessity arises, by the performance of simple intelligent acts."

In their consideration of the question of the presence of consciousness in the kingdom of plant-life, the writers divide the manifestations of intelligence into three classes, namely: Trophoses, or acts pertaining to nutrition; Neuroses, or acts pertaining to the nervous system; and Psychoses, or acts pertaining to thought processes.

The manifestation of Trophoses, or acts pertaining to nutrition, is apparent even in the case of the lowest forms of plant-life. Even the lowliest vegetable cell takes nourishment and replaces the waste products of its system by fresh material taken into its system. These activities require a very simple nervous system, often practically no nervous system at all. But, nevertheless, in every act of nutrition there is manifested not only the presence of Life, but also conscious activity of a certain degree. Even the lowest forms of plants are able to distinguish perfectly between nutritive and non-nutritive particles of matter. Most plants possess no nervous system, at least none yet discovered by science, but, nevertheless, they manifest characteristic Trophoses corresponding in degree with their necessities, but seldom exceeding those necessities.

Other plants, however, have a comparatively highly developed nervous system, or something corresponding to it, and manifest Neuroses, or acts pertaining to the nervous system, of a comparatively high degree. This is true of the "sensitive plants," and certain other plants of a high development in this direction. Some of the orchids, and a few other plants, manifest Neuroses indicating clearly the presence of consciousness and a degree of intelligent activity.

Still higher in the scale we find certain species of plants manifesting true Psychoses, or acts pertaining to thought processes, although the latter are of a comparatively low order as compared to those manifested by the higher forms of animal life. With this class of manifestation the average student is not so well informed, and, therefore, it has been thought well to direct your attention in the following pages to these fascinating phenomena of plant-life. We think that a careful consideration of the facts now about to be presented to the student will bring to him a clear realization of the presence of actual conscious activity in the kingdom of the plants, and will cause him to accept the statement of that eminent authority, Professor Bieser, who has said: "While we believe that the intelligence of man, animals and plants is essentially the same in kind, we know that it differs enormously in degree and form. Even among men this degree of intelligence varies, but this is because some individuals by nature see but a little more clearly their needs than others, and live under more favorable circumstances—that is all!"
Dr. J. E. Taylor, an authority on the subject of plant-psychology says: "Perhaps one reason why plants are usually denied consciousness and intelligence is because in the structure of even the highest developed species we find no specialized nervous track along which sensations may travel, or where they can be registered as in the case of the ganglia and brains of the higher animals. But it should be remembered that none of the creatures sub-kingdom of the Protozoa (the lowest of the grand divisions of the animal kingdom) possess nervous structures, whilst many of the next more highly organized animal sub-kingdom, the Coelenterata, have no trace, and the rest but a feeble development. Yet we do not deny these lowly organized animals a dim and diffused consciousness, or even the possibility of their structures being so modified that they can profit by experience, and thus develop that accumulated experience of their kind that we call 'instinct.'"

Darwin, speaking of the wonderful sensitiveness of the root-tip of plants says: "It is hardly an exaggeration to say that the tip of the radicle thus endowed, and having the power of directing the movements of the adjoining parts, acts like the brain of one of the lower animals; the brain being seated within the anterior end of the body, receiving impressions from the sense organs, and directing the general movements." Professor Cope says: "We can understand how by parasitism, or other means of getting a livelihood without exertion, the adoption of new and skilful movements would become unnecessary, and consciousness itself would be seldom aroused. Continued repose would be followed by subconsciousness, and later by unconsciousness [paragraph continues] Such appears to be the history of the entire vegetable kingdom."

Dr. J. C. Arthur, in his interesting work entitled "The Sagacity and Morality of Plants," says: "I have tried to show that all organisms, even to the very simplest, whether plant or animal, from the very nature of life and the struggle for its maintenance, must be endowed with conscious feeling, pleasure and pain being its simplest expression. I have been told in Java, as one walks through a tangle of sensitive plants, they will drop down in their deprecating way for yards on either side, as if suddenly aroused into life, only to be again transformed into lifeless sticks by some unseen power. * * * The physical basis of life, Protoplasm, is the same for plants as for animals. The first differentiated or modified form of this we meet is the curious animalcule called Amoeba. As we watch its movements we cannot refrain from ascribing to it some dim consciousness of the life it leads. But amoeboid structure is common even in the lowest kinds of plants, and amoeboid movements can be seen in some of its tissues. Witness also the habits and intelligent movements of the zoospores of sea-weed and many other Algae, and the locomotion of the antherozoa of mosses, ferns, etc. Not many years ago these objects were classed as animals, and nobody doubted these so-called animals behaved consciously and intelligently. * * * Nothing can be more marked than the likes and dislikes of plants. Human beings can hardly express the same feelings more decidedly. There is perhaps even a 'messmateship' among plants, which inclines species to prefer to grow in company. Hosts of common plants perform actions which, if they were done by human beings, would at once be brought into the category of right and wrong. There is hardly a virtue or a vice which has not its counterpart in the actions of the vegetable kingdom. As regards conduct in this respect, there is small difference between the lower animals and plants."

One of the most elementary manifestations of consciousness, and conscious action, in plant life is what has been called "the gravity sense," or the sense by which the plant recognizes the "up and down" direction of growth. The germinating seed always sends its roots downward, no matter how the seed may be placed in the ground. This cannot be held to result merely from the action of gravitation, for the sprouts move upward and away from the centre of gravity just as truly as the roots move downward and toward it. Experiments have proven that this "sense of direction" is as much a true sense as that of any of the special senses of the lowly animal life-forms. The experiment has been tried of turning around a sprouting seed, the result being that in a day or so the roots will be again found to be turning downward and the sprouts turning upward. A French botanist, named Duhamel, once placed some beans in a cylinder filled with moist earth. After they had begun to sprout, he turned the cylinder a little to one side. The next day he turned it a little further in the same direction. Each day he would turn it a little more, until finally it had described several full circles. Then he took out the plant, and shaking off the clinging earth, he found that the beans' roots and sprouts had described circles—two perfectly formed spirals being shown, one of the tiny roots and the other of the tiny sprouts. The roots in their constant endeavor to move downward had
formed one perfect spiral, while the sprouts in the constant effort to rise upward had described another perfect spiral. No amount of effort will cause the roots of a plant to grow upward, or its sprouts to grow downward. Each, root and sprout, has its own "sense of direction" to which it faithfully and invariably responds. In the same way, and from a similar cause, the tendrils of climbing plants will faithfully move toward the nearby support, and if they are untwined they will return during the next night to the old support, if possible. Moving pictures, carefully prepared, and taken over a long period, show that the movements of these tendrils to be akin to the movements of the limbs of an animal—the feelers and graspers of the octopus for example.

Not only have the roots of plants the general "sense of direction" which causes them to grow downward in spite of all attempts to prevent them, but they have also the "sense of moisture," which causes them to seek the direction of water. Many plants also turn their leaves and blossoms to the light, no matter how often they are turned in the opposite direction. Potatoes in dark cellars will often send forth their sprouts twenty or thirty feet in the direction of light which shows through a tiny crack in the wall. Likewise, plants possess the "sense of taste" to a very high degree in some cases. By means of this sense they are able to detect differences in substances, and to choose those substances which are conducive to their nutrition. They are able to distinguish between poor and rich soil, and also between different chemicals of differing nutritive values. They always move their roots in the direction of the best food supply, and also toward moisture. Not only do the roots of plants move in the direction of water, but instances have been cited in which the leaves of plants will bend over during the night and dip themselves in a vessel of water several inches away. Insect-eating plants recognize the difference between living animal substance and bits of inorganic matter or vegetable substance, casting off the latter two as if in disgust. Experiments have been made of placing a bit of cheese in the reach of such plants, when, though cheese is of course unfamiliar to them, they will seem to recognize its nitrogenous nature and will devour it as readily as they will a piece of flesh or the body of an insect.

Many students are doubtless familiar with the instance of the "sensitive plants" which exhibit a marked degree of sensibility to touch. Many insect-eating plants manifest an equally high degree of sensitiveness, though of course in a different direction. The leaves of the Venus' Fly Trap fold upon each other and thus capture the unfortunate insect which has been tempted into the trap by the sweet juice which appears upon the leaf as a dainty bait. The folding of the leaves follows the alarm given by the three sensitive bristles or hairs which act as feelers which sense the presence of the insects. Bits of earth, or raindrops, are recognized as "not-food" by these feelers, and no closing of leaves result from their presence on the leaves. Other plants are very sensitive to degrees of light, and they close at certain hours, the time varying according to the species of the plant. It was formerly held that this sensitiveness to light was merely a chemical response to the presence of light, but recent experiments have shown that such plants, when placed in a dark room, will continue this closing for several days, in a gradually lessening degree, thus indicating the presence of a [paragraph continues]"habit" within their consciousness, which "habit" indicates the presence of "mind" even more forcibly than does the closing itself. Certain ferns will wither if their fronds are touched too often.

In the case of seeds, the presence of consciousness and mental operations are manifested. Not only in the process of sprouting, but also in other processes, does the seed show signs of life and mind. Certain seeds are carried to their future abode by means of running streams along which they work their way to congenial soil by means of tiny projecting filaments which they move as legs, and thus propel themselves to shore. A botanist has said regarding a certain species of these "swimming seeds:" "So curiously lifelike are their movements that it is almost impossible to believe that these tiny objects, make good progress through the water, are really seeds and not insects."

Certain plants prey upon other plants, twining bands around another plant or tree, which bands work their way through the outer covering of the bark and thus act as suckers through which the parasitic plant draws nourishment from the larger plant, the latter succumbing in time and being literally killed for food by the clinging plant. In South America there are varieties of these climbers which will mount to the top of a tall tree in this way, and after killing their support they will wave long tendrils in the breeze until they fasten hold of another tree which in turn is depleted of its vitality and nourishment, and so on until the parasite is
surrounded by a large circle of ruined victims. Other parasites content themselves with boring into a tree trunk and then absorbing enough of the sap of the latter to enable them to live without other work on their own part. In some species, the habit of parasitism is known to have been acquired during the history of the plant, just as some animals (and human beings) have acquired similar habits.

Other plants prey upon animals, and are equipped with mental faculties enabling them to efficiently capture their prey. We have typical illustrations of the adaptation of means to end in the case of the insect-eating plants previously referred to, but there are certain forms of plant-life which trap and devour much large animals; which forms are found principally in tropical countries. Dunstan, the naturalist, reported finding on the banks of Lake Nicaragua a particularly vicious plant of this class which by the natives is called the Devil's Noose. This bush-like plant is equipped with long tendrils, or whip-like feelers, flexible, strong, black, polished, and without leaves, which secrete a viscid fluid. These tendrils are employed by the plant to entangle small animals passing under its bush, and to then drain their blood and absorb their flesh. The naturalist one day passing along the banks of this lake was aroused by the shrieks and cries of his small dog. Pushing forward through the underbrush he found the little animal tightly enmeshed in a number of these black, slimy, bandlike tendrils which were cutting into its flesh by chafing and rubbing, the bleeding-point have been reached in a number of places. He found that these bands were the tendrils or branches of this particularly carnivorous plant, which he described as virtually "a land octopus." The natives of the tropics have weird legends of man-eating plants or trees of this kind, but so far science has not discovered an actual specimen of this kind, though it is admitted that the same is not beyond the bounds of possibility [paragraph continues]. Other plants have roots which capture and kill small burrowing animals like moles, and then slowly absorb the nourishment from their blood and flesh. The plant kingdom has its Thugs and stranglers, as well as its vampires, according to the best authorities.

Professor Bieser says: "Another plant showing irritability when touched, and possessing the faculty of finding and raising water by means of a long, slender, flat stem or tube, is a variety of orchid discovered by E. A. Suverkrop, of Philadelphia, several years ago. This plant grows upon the trunks of trees hanging over swampy places along the bank of the Rio de la Plata and streams of the neighborhood. When this orchid is in want of water, the slender stem gradually unwinds until it dips into the water. Then the stem slowly coils around and winds up to discharge upon the part of the plant from which the roots spring the water which it has sucked up into its hollow space or tube within its interior. Sometimes when water is absent from directly under this plant, the stem moves first in this direction and then in another, in its search for water, and finally finding the water it performs the process above described. If this plant is touched while the stem is extended it acts much like the sensitive plant (mimosa), and the stem coils up into a spiral more rapidly than when it is lifting water."

The experiments of that wizard of plant-life, Luther Burbank, give us many illustrations of the manner in which the "mind" in the plant will respond to changed environment, and to take advantage of improved conditions thereof in the direction of adapting itself thereto. No one can study the works of modern botanists, or work long among plants, without discovering for himself many facts serving to prove that there is not only Life among the plants, but also sufficient mind to serve the purposes and needs of the existence of the plant. Some scientists have thought it possible that by changing the environment of the plant sufficiently, in the direction of calling out latent possibilities of mental action, it is probable that plants may be evolved which would approach in their mental activity that of the lower forms of animal life, if not indeed exceed the latter.

IV. The Plane of the Animals

Here, once more, we discover that there is no fixed dividing line between the adjoining Planes of Consciousness. Just as the Mineral Consciousness is closely blended into the Plant Consciousness, as we have seen, so is the Plant Consciousness closely blended into the Animal Consciousness. In fact, in the lowly forms of animal life it is almost impossible, at times, to state positively whether the particular form under consideration is a plant or an animal. Forms which science formerly considered "animal" are not placed in the category of "plant-life;" and other forms which science once held to belong to the plant-
Consciousness in animal-life varies from the first faint glimmerings in the single-cell creatures in the slime of the ocean bed to the full dawn in the highest forms of animal-life like the horse, the dog, the elephant, etc. In each and every case, however, it will be found that each creature is endowed with a sufficient degree of intelligence to meet its needs and requirements—to adapt it to its environment. As the environment increases in complexity, the form of animal life has either adapted its consciousness to meet the requirements, or else has perished in the course of evolution.

Both science, and the occult teachings, inform us that animal life had its origin in the slime of the primeval ocean beds, and took the form of the "single cell" creatures. The best known form of single-cell animal is the Moneron (plural, monera), which is composed of but a single cell, and is like a tiny drop of glue. It belongs to the lowest class of animal-life, known as the Protozoa. The Moneron lives in water, and is a very minute shapeless, colorless, slimy, sticky, drop of protoplasmic substance. It has no organs of any kind, and all of its parts are similar—it lacks the separate organs or parts with which to perform the offices of the living creature as found in the higher forms of life. And yet this organless creature performs the processes of like known, respectively, as nutrition, reproduction, sensation, and will-action. Every part of the Moneron is capable of absorbing food and oxygen—it is all stomach and all lungs. Moreover, it is all reproductive organism. It envelops its prey by enclosing the latter as a drop of glue encloses a tiny gnat; and it then absorbs the nourishment from its food through every portion of its surface coming in contact with the food. It moves by prolonging a portion of itself outward, like a tiny tail or finger—this constitutes the "false foot" by which it propels, pushes, or pulls itself forward or backward, or sidewise. When it gets ready, it pulls back the "false foot" into its general substance, and is the same as before. It has no distinction of sex, but reproduces itself by simply growing larger and then dividing itself into two—and the process is over, there being two Monera where only one Moneron was the moment before. And yet this simple creature receives impressions from outside, and responds thereto. It seeks its food, and escapes its enemies. It has all the mind it needs.

Next in the rising scale of animal life we find the Amoeba. This creature also is a one-celled animal. It progresses by a continuous projection of "false feet" and a subsequent drawing-in of the same, which gives it the appearance of a many-fingered, or many-footed thing. This creature has the beginning of "parts" and "organs." In the first place it has a "nucleus" at its centre, and also an expanding and contracting cavity within itself which it uses for holding, digesting, and distributing its food—a rudimentary stomach, so to speak. It also has something like a "skin" on its surface, and it cannot be turned "inside out" like its brother the Moneron without disturbing its life.

Let us pause here for a moment, before passing on to the consideration of the higher forms of animal-life. The purpose of the pause is to call your attention to the resemblance of the Monera and the Amoebae to the cells of which the human body is composed. The ordinary cells of the higher animal, and mankind, closely resemble the Monera in many ways, while the white corpuscles of the blood of animals and men bear a striking resemblance to the Amoebae, so far as is concerned their size, general structure, and movements—in fact, science classes them as "amoeboids." The white corpuscles of our blood—these "amoeboids"—change their shape, take food in an intelligent manner, and live an apparently independent life, with movements showing undoubted "thought" and "will."

The cells of which the bodies of animals and men are composed are really independent living creatures, each of which is possessed of sufficient "mind" to enable it to perform its necessary life-work and offices. By means of the operation of what occultists know as the "group mind" by which a number of independent cells coordinate their activities, these cells perform the coordinated work of the organism. Each of these cell-minds manifests a perfect adaptation for its particular work. The work of those cells, in extracting from the blood the exact amount of nourishment needed by it, is but a minor evidence of the presence of such mind in them. The process of digestion, assimilation, etc., is another instance of the intelligence of the
cells and cell-groups. In the healing of wounds, in which the cells rush to the points at which their services are needed, we have a striking instance of the selective intelligence of the cells. The cells of the body are constantly at work, performing the multitudinous offices of the organism, working separately, in small groups, and in great groups, according to the nature of the work to be done.

Some of the cells of the body are active workers, manufacturing the secretions and fluids needed in the varied work of the system. Others belong to "the reserves," and are kept under "waiting orders" awaiting the call to duty in the case of an accident or other emergency. Some are stationary, others remain stationary until they are called into motion to meet some requirement, others are constantly moving about, some making regular trips and others being rovers. Some of the moving cells perform the work of carriers, some move from place to place doing odd jobs, others perform scavenger work, and a large number are employed on the police-force of the body, or else constitute the cell-army.

The carrier cells—the red-corpuscles of the blood—travel in the arteries and veins, carrying a load of oxygen on the outward arterial trip, and bringing back a return cargo of the waste products of the system to be burned up in the lungs. Other cells force their way through the walls of the arteries and veins, and through the tissues of the body, on repair work. The police cells, and the soldier-cells, in the blood protect the system from the attacks of germs, bacteria, and other harmful visitors or invaders. One of the protecting cells coming in contact with an intruder of this kind will enmesh it, and then proceed to devour it; if the task be too heavy for one cell it will call the assistance of others, and the combined force will seize the intruder and try to eject it from the system.

The work of the cells in repairing a wound furnishes one of the most striking in illustrations of the presence of intelligence in the cells. When a portion of the body is wounded, it is found that the tissues, lymphatic and blood vessels, glands, muscles, nerves, and sometimes even the bone are severed. The alarm is sounded by the nervous system, and the repair-cells rush to the spot in great numbers. The flowing blood washes away the dirt and foreign substances—or at least endeavors to do so. Then the blood coagulates and forms a scab to protect the wound. By this time millions of blood cells have arrived on the scene, and the repair work begins at once. The cells display the most wonderful activity and intelligence in this work. The cells of the tissues, nerves, blood-vessels, etc., on each side of the wound begin to reproduce themselves very rapidly, and gradually form a bridge over the space between the two sides of the wound, bringing each side together. In this bridge work they display intelligence, purpose and system. The cells of the blood-vessels connect with the same kind of cells on the opposite side of the wound, forming new tubes through which the blood may flow. The cells of the connective tissues do likewise, and so do the cells of each of the other kinds of bodily substance. Then after the "inside work" is complete, new epidermis cells form a new skin over the healed wound. The above gives you but a passing glimpse of the wonderful intelligent work of the cells in performing their offices in the body—what has not been told is equally as wonderful. To all intents and purposes the cells of the body are like the individual bees in the hive, i.e., intelligent, independent living creatures working together for the common good.

The above digression was made in order to acquaint you with the wonderful intelligence which is possible of manifestation by the counterparts of the Monera and the Amoebae—those lowly forms of one-cell life which we have been considering on the preceding pages. An understanding of the facts above related will bring home to each student the full perception and appreciation of the truth of the statement previously made, i.e., that each living creature, from highest to lowest, is endowed with a degree of consciousness and intelligence proportionate to its requirements in its life-work and activities.

Some of the Amoebae—the Diatoms, for instance—secrete solid matter from the water, and build themselves tiny houses or shells to protect themselves from their enemies. These shells have tiny openings through which the creature may project its "false feet" for purposes of movement, and for securing food. The skeletons of these minute creatures form the deposits of chalk found in many parts of the world.
Next higher in the scale come the Infusoria, which are distinguished by having tiny vibrating filaments, or thread-like appendages, which they employ for purposes of motion and grasping their food. These filaments are permanent, and are the beginning of the manifestation of permanent limbs in the animal world. These elementary creatures have also evolved rudimentary mouth-openings, and also a short gullet which is a rudimentary throat, windpipe, and food-passage.

Then come the Sponges, slimy creatures employing a spongy, soft skeleton (the latter being what we commonly call "sponges"). This creature also employs whip-like filaments with which to gather its food. Then come the Polyps, which fasten themselves to floating objects, mouth downward, with tentacles serving to seize their food. The Jellyfishes which belong to this family also have rudimentary muscles, the contraction of which enables the creature to "swim." They also possess a rudimentary nervous system, and rudimentary eyes and ears. Next in the ascending scale come the Star-Fish, Sea-Urchin, and their kind, some of which possess a well defined nervous system, a true stomach, and eyes. Then come the Annuolosa, or jointed creatures, comprising the various families of Worms, Crabs, Spiders, Ants, etc. This great family of creatures comprises nearly four-fifths of the known life-forms of the animal kingdom. Their bodies are well formed, and they have quite well-developed nervous systems, eyes, and other sense organs, and in some of the higher forms a circulatory system distributing a fluid akin to blood, which distributes the blood and oxygen to all parts of the body of the creature. Highest in the scale of this great family are the Insects, with their many varieties, the characteristics of which need not be described here, all being familiar with them. The wonders of spider-life, of ant-life, of bee-life, have been depicted by great naturalists, and the student will need no additional assurance of the presence of intelligence within the being of these tiny creatures and their relations in the insect world. Darwin once said that "the brain of the ant, although not much larger than a pin-point, is one of the most marvelous atoms of matter in the world, perhaps more so than the brain of man." Then come the Mollusca, which group includes the oyster, clam, snail, etc. Some of the higher forms of this family show signs of a rudimentary vertebra, and may be considered as possibly the "connecting link" between the invertebrates and the Vertebrates.

Next in the ascending scale come the Vertebrates, so called by reason of the presence in them of a vertebra or spinal column, or "backbone," and an internal skeleton as contrasted with the external skeleton of the lower forms of life. At the lowest end of the scale of the vertebrates are found the great family of Fishes, with high and low species. Then come the Reptiles, with its species of snakes, lizards, turtles, crocodiles, etc. There are many "connecting links" between the family of Fishes and that of the Reptiles; and also many between the family of Reptiles, and the family of Birds which is next highest in the scale. Among the birds, particularly in the Crow family, we find examples of a high degree of intelligence.

Next above the Birds come the Mammals, which is connected with the family of Birds by several strange "connecting links"—for instance the Australian Duck-Bill, which strange creature lays eggs, and then when her eggs are hatched nourishes them with milk from her breast. In the great family of Mammals, are the following sub-families of animals, viz.: The Monotremes, or half-bird, half-mammal creatures; the Marsupials, or milk-giving, pouched animals, which carry their imperfectly developed young in an extended pouch until maturity—such as the opossum and kangaroo; the Placentals, or creatures having the placenta or appendage through which the young is nourished in the womb before birth—that is the Royal Line through which the higher forms of the Mammals proceeded.

Among the Placentals, are found the following sub-families: The Edentata, or toothless creatures, such as the sloths, ant-eaters, armadillos, etc.; the Sirena, or sea cows, manatees, dugongs, etc.; the Cetacea, or whales, dolphins, porpoises, etc., which resemble fishes but which are true mammals, bringing forth matured young which are nourished at the breast; the Ungulata, or hoofed animals, such as the horse, the cow, the rhinoceros, the hippopotamus, the pig, the camel, the deer, the sheep, etc.; the Hyracoidea, or family of the coney, rock, rabbit, etc.; the Proboscidea, or trunked animals, such as the elephants; the Carnivora, or flesh-eaters, including the seal, the bear, the dog, the wolf, the lion, the tiger, the leopard, etc. The wolf and similar animals belong to the sub-family of dogs; while the lion, tiger, and similar animals belong to the sub-family of cats; the Rodentia, or gnawers, including the rat, the hare, the beaver, the squirrel, the mouse, etc.; the Insectivora, or insect-feeders, such as the mole, the shrew, the hedgehog, etc.; the Cheiroptera, or wing-fingered animals, including the great families of bats, etc.;
the Lemuroidea, or Lemur family, the individuals of which resemble a monkey in general appearance, but have in addition a long bushy tail and a sharp muzzle like a fox—they are like a small fox having hands and feet like a monkey; the Primates, or family of creatures like the monkey, baboon, man-apes, gibbons, gorillas, chimpanzees, orang-outang, and finally, the "connecting links" between the apish forms and Man.

In this ascending scale of animal life the student will perceive countless varieties and species, subspecies and variations among species. And in each there will be perceived some slight difference in the degree and quality of the intelligence manifested by the creature. Even among the individuals of the same species there is found a great variation in such manifestations. But throughout it all, there is perceived to be a certain general plane of consciousness which may be called "The Animal Plane" as distinguished from "The Mineral Plane" on the one hand, and "The Human Plane" on the other hand.

The Plane of the Human

Passing from the Plane of Animal Consciousness to that of the Plane of Human Consciousness, we soon become cognizant of the presence of a new element of consciousness. This element is known as "Self Consciousness," or the consciousness which enables Man to say, knowingly, of himself "I am [paragraph continues]"—to identify himself as the Thinker, apart from the thoughts; the Actor apart from the action; the Feeler, apart from the feelings; the Willer, apart from the voluntary activities; the Conscious Subject, apart from the phenomena of the senses. It is true that in the primitive forms of human life this new consciousness exists but as a faint dawn, but it is latent there; and as the ascent of Man progresses this new conscious flames out in higher and still higher forms. What this new element of Self-Consciousness is, we shall see presently.

In thinking of Man, we must remember that primitive human beings—little removed from the apes—are as much Man as is the highest individual of the race today, or as will be his still higher descendant of tomorrow. And we must not forget that the Plane of Human Consciousness is closely linked to, and blended with, the Plane of Animal Consciousness, at one of its sides. The best scientific, and the best occult teaching hold that the man and the ape descended from some common ancestral form in the long ages past; the common ancestor was the trunk from which the Man branch sprung on one side and the ape branch sprung on the other.

It must not be forgotten that the lowest races of Man known to us today are as far removed in degree of intelligence from the highest known types of mankind as from the highest apes or man-apes. In fact, many think that evolution from the highest apes to the Kaffir, Hottentot, or Digger Indian is no more difficult than would be the evolution of those lowly types of human life up to the types of Emerson, Shakespeare, Huxley, Darwin, Edison and other high types of cultured man. Huxley has shown us that the brain structure of Man as compared with the [paragraph continues]Chimpanzee shows differences but slight as compared to the differences between that of the Chimpanzee and that of the Lemur. He also shows us that in the important feature of the deeper brain-furrows, and intricate convolutions, the chasm between the highest civilized man and the lowest savage is far greater than between the lowest savage and the highest man-ape. Darwin, in his description of the very low type of human beings found among the Fuegian savages, says: "Their very signs and expressions are less intelligible to us than those of the domesticated animal. They are men who do not possess the instinct of those animals, nor yet appear to boast of human reason, or at least of the arts consequent upon that reason."

Professor Clodd, in his description of the Primitive Man says: "Doubtless he was lower than the lowest of the savages of today—a powerful, cunning biped, with keen sense organs always sharper, by virtue of constant exercise, in the savage than in the civilized man (who supplements them by science), strong instincts, uncontrolled and fitful emotions, small faculty of wonder, and nascent reasoning power; unable to forecast tomorrow, or to comprehend yesterday, living from hand to mouth on the wild products of Nature, clothed in skin and bark, or daubed with clay, and finding shelter in trees and caves; ignorant of the simplest arts, save to chip a stone missile, and perhaps to produce fire; strong in his needs of life and vague sense of right to it and to what he could get, but slowly impelled by common perils and passions to
form ties, loose and haphazard at the outset, with his kind, the power of combination with them depending on sounds, signs and gestures."

The consideration of that characteristic phase of Consciousness known as the Self-Consciousness of Man will be pursued further in the succeeding chapter, in which chapter will also be taken up the consideration of the two still higher Planes of Consciousness known as "The Plane of the Demi-Gods," and "The Plane of the Gods," respectively.