

THE VITAL DOMAIN OF
ANIMALS AND THE RELIGIOUS
WORLD OF MAN

According to Auguste Comte, whose extravagant statements are almost always meaningful, the whole of the physical and mathematical sciences, once integrated into positivist dogma, must become cosmology—or, more properly, he qualifies, geology, in the etymological sense of the word: the study of the earth, of the “human planet,” as the necessary environment “of all the higher functions, vital, social, and moral.”¹ Even astronomy should be no more than “the heavenly study of the human planet, that is to say, the knowledge of our relations with those stars that are liable to affect and destroy our destinies by modifying the conditions of the earth.”² His religion is focused on the world, not on the universe.

One cannot understand religion in general, and religious truth or error, save by stressing at the start the fact that, although it goes beyond the nar-

Translated by Elaine P. Halperin.

1. *Catéchisme positiviste* (Paris: Leroux, 1874), p. 97; English trans.: *The Catechism of Positive Religion* (London: K. Paul, Trench, Trübner, 1891).

2. *Ibid.*, p. 119.

The Vital Domain of Animals and the Religious World of Man

row confines of Comte's positivism, it flows from the cosmos of the world, the historico-geographical domain of man, not of nature, as an ensemble of the non-temporal laws or laws of the universe, devoid of center, which interests science. Religions contradict the positivist and humanist limitations of Comte. But this contradiction, this transcendence, is intelligible only if we define that which is transcended; and, in order to understand this, we must go all the way back to animal psychology.

An animal species cannot be described solely in terms of anatomy and physiology; it is characterized quite as much by the "world" in which it lives. Its anatomy is the result of its formative instincts; its "world" depends, in short, upon those instincts. Moreover, "world" and organic anatomy are strictly linked, just as the formative instincts are linked with those that regulate active life in the environment. Outside its world, outside its ecological niche, the animal cannot live. E. S. Russell cites numerous examples of the extreme specialization in the world of certain species of animals.³ The anteater is typical: it establishes its funnel trap in well-determined places and is unable to devour its habitual prey offered directly. The prey must reach it under specific conditions—sliding along the length of its funnel.⁴

The stimuli that provoke animals must be rigorously defined. The sloth is sensitized to a very definite sound within the range of a half-tone—the sound made by its young when they are hungry. The young of the tinamou react to a particular whistle (the natural note "fa") and are insensitive to sharper whistle sounds. If the animal is artificially removed from its ecological niche, it immediately makes an effort to recover its world. People have taken for reflexes or for mechanical and meaningless tropisms what in reality is an animal's instinctive behavior as it seeks to re-establish its ecological norm. This does not mean, of course, that the animal is clearly aware of this norm but only that its activity has, in fact, an over-all theme. From this point of view, tropisms and reflexes are but products of the laboratory—artificial segmentations of a behavior the meaning of which is immediately apparent if one observes the animal in or near its natural environment, its *Umwelt*, or vital domain.

All animals are not strict "*Lebensspezialists*" like the anteater, but it must be thoroughly understood that even animals that appear to be living in the same world as man, like cats or domesticated dogs, are in reality in

3. *The Behaviour of Animals* (London: Arnold, 1934); French trans.: *Le Comportement des animaux* (Paris: Payot).

4. Bierens de Haan (cited by Russell, *op. cit.*, p. 116 [French ed.]).

their own *Umwelt*. Their interests are so different that they do not perceive the same things at all. There is nothing to prove that a dog, upon entering the same room we do, and one which is as familiar to it as to us, would perceive the tables, chairs, or pictures that we note. It has perceptions and reactions, that is to say, which embrace only those places where it can lie down comfortably, stretch out to the warmth of a fire, find a ball to play with. Other objects are perceived merely as indifferent masses.⁵

As we know, it was Von Uxküll who stressed and systematically studied the animal *Umwelt*, the world of perception being adjusted to the world of action, and the animal perceiving objects only as signals, props of instinctive “gnoses” and evocative of corresponding “praxia.”

In man, temperamental variations—psychic settings, spiritual interests, profound or momentary beliefs and motivations—play the role that specific differences do in animals. When these factors vary, the structure of the world, or, as the Gestaltists say, “the field of behavior,” varies as well.

Von Uxküll refers explicitly to Kant, to Kantian criticism and relativism. In the specificity of the *Umwelt*, of the vital domain, he sees a kind of concrete realization, an external exemplification—which is the condition of the mind and human knowledge according to Kant. We cannot attain the things within ourselves, since the forms of our sensible intuitions and the categories of our judgments determine the objects of our knowledge. The animal’s world, the objects that exist for it, are determined by its specific nature. One cannot say that the animal “perceives” the world, if one uses the phrase “to perceive” to mean purely passive receptivity: it constitutes the world. We know that observation of the satellites of Jupiter provided the most striking and expressive confirmation of Copernicus’ theory, which ceased, then, to be a point of view. The pattern it described was literally seen in the system of Jupiter, and it was easy to imagine the sun in the place of the planet and the earth as one of the satellites. Similarly, experiments on the animal *Umwelt* yield a kind of visible pattern for Kant’s “Copernican” theory.

In summary, as we have seen, Auguste Comte wants to bring man back to his biological *Umwelt*, to his vital and social domain of behavior. Religion, for him, must turn away from the universe of an overly speculative science. It perfects the organization of instincts and of human feelings and of that which concerns these in the world. A “religion” of the same order could easily and even logically have been taken from Kantianism,

5. Russell, *op. cit.*, p. 29 (French ed.).

The Vital Domain of Animals and the Religious World of Man

at least from the *Critique of Pure Reason*, since the two philosophers are in agreement in condemning metaphysics and pure speculation.

However, we know that Kant, less narrow than Auguste Comte, condemns only the dreams of visionaries of the Swedenborgian type and childish efforts to portray the Beyond, Paradise, the status of the Soul in its immortality, etc. But he does not attempt to limit man, at least not in the religious order, to the world here below, to a quasi-animal *Umwelt*. Religion "within the limits of pure reason" is not the ritualized humanism of Auguste Comte. Pure reason merely shuns what the Christian dogmas of realist metaphysics inclose. But religion "within the limits of pure reason" is still Christianity, which has simply been purified. After the "purification," Kant turns again to the Fall, Evil, Incarnation, the Trinity.

In general terms, Kant is right in his opposition to Comte's positivism. Man goes beyond his animal *Umwelt*, his vital domain, and he is only a religious animal on this condition. But Kant was greatly lacking in elements of comparison. He thought only of men, and of Western man, of the religion of the West, and of Western values.

Today, after the progress of comparative religion, and also what might be called "comparative humanism," we can make a much closer study of the manner in which the religious visions of the world emerge from the animal *Umwelt*. During the sixteenth century, humanism was the study of the Greeks and the Romans, the contrast between classical antiquity and modern humanity. Historians and ethnologists have broadened comparative research by studying Eastern and Far Eastern peoples as well as the so-called primitive ones. The American school has developed more impartial comparative studies by placing all the "samples of civilization" on the same plane and by attempting to describe Western civilized society in the same way that the ethnologist describes the Zuni, the Comanches, and the natives of the Trobriand Islands. Finally, with Portmann, Tinbergen, Lorenz, and Armstrong, we realize that we must go even further and that authentic comparative studies must deal with a comparison between the habits of men and those of animals.

Even if one were to find in the end that man is essentially different from animals, it is all the more necessary to begin the comparison at the level of zoölogy, for there is nothing to prove that the most advanced human cultures do not retain certain limitations or canalizations that go as far back as zoölogical origins. In his sickly misanthropy, Swift amused himself by imagining a civilization based upon the peaceful and highly socialized instincts of horses. D. H. Lawrence wonders what the metaphysical and

religious intuitions of a superbly solitary being like the shark would be.⁶ In a profound fantasy Clarence Day⁷ speculated on what human civilization would look like if man were related to the felines and not to the simians and if the development of cerebral hemispheres had been superimposed upon the ferocious instincts of the tiger and the panther. Human culture would have been “sublime in the manner of Assyrian art, as gracious as the rompings of young cats.” The value that man attributes to freedom of speech or to freedom of thought is more understandable, he remarks, if we remember that monkeys also, in their forests or in the zoo, “chatter” endlessly. So much importance is attached to words that we preserve them, accumulating them in vast libraries, and that God, for us, is the Logos or the Verb. The feline men would be more likely to claim, first of all, the right of free individual combat, and the Fang, rather than the Logos, would become the supreme God.

If one could detect the manner in which the transition from the animal’s “vital domain” to man’s world occurs, one would come quite close to being able to define the essence of religion and, consequently, its truth. Man is “a religious animal,” thanks to the fact that he is an animal without *Umwelt*, or an animal who has extended his vital domain to a total spiritual world. There is an obvious correlation between these two facts. Any rigid positivism will always encounter the objection that the animal is a more orthodox “positivist” than is man. Positivist religion is a contradiction in terms, for it attempts to bring man back to an *Umwelt*, whereas humanity and religion consist in going beyond the *Umwelt*. But in what specific way does man go beyond it?

The difference between the animal’s vital domain and man’s world does not consist in the fact that the animal is strictly limited to its sensations, to the spatial figure or temporal spatiality that these sensations determine. The animal’s “positivist” orthodoxy does not go that far. For animal as well as human awareness always consists in going beyond the brute observable in order to apprehend meanings or what resembles meanings. There is nothing more “metaphysical” in the etymological sense of the word than instinct. The brute sensation is never more, for the instinct, than a key, thanks to which the animal has access to more profound knowledge, to behavior strangely in harmony with the most intimate nature of things.

6. *Kangaroo* (London: Heinemann, 1955).

7. *This Simian World* (New York: Knopf, 1920).

The Vital Domain of Animals and the Religious World of Man

Of all Bergson's theses, none was more criticized than that of the instinct-intuition. It became the ritual among Bergson's commentators to point out the error that he supposedly committed after Fabre concerning the Sphex and the precision of its stings. However, none of these theses is more incontestable; none by and large describes phenomena that are more indisputable. Whether or not the Sphex is a skilful surgeon, it is perfectly clear in any case that any bird that nests or emigrates is a skilful breeder and traveler, for whom the slightest sensorial signs reveal a whole world; it is evident that any bee is a skilful reaper and an even more skilful breeder; that any animal that breeds and hatches demonstrates thus that, in one way or another, it "knows" the embryology of its species and the anatomy and physiology of its partner. In this connection man is an animal, and it is amusing to note that the scholar who ridicules Bergson because the latter considers the Sphex a skilful surgeon knew, for instance, how to have children long before he was able to acquire a complete science of sexuality and embryology.

Of course an animal is not aware of the total meaning of its acts; but such acts would not be possible if the animal's fragmentary awareness did not go beyond crude observation and if the egg, for instance, merely represented a rounded form for the animal and not "an object to hatch" or "an object to take back to the nest." The objects of its *Umwelt* are signals, challenging patterns. They are not the mechanical causes of its behavior. An animal does not function; it acts. Animal psychology has revealed as clearly as possible all that is limited, that is philosophically "overrated" in the principle of causality, that so-called universal and fundamental principle which fails to include so many domains—that of microphysics, that of organic and of instinctual development.

If the animal is just as much a "metaphysician" as man, why then is it not religious? An initial difference between the animal's vital domain and the human world is that the former bears upon instinctive "valences" but not upon "values." The domain is but an organic extension. It comprises either territory, properly speaking—the exclusive property of the individual animal that occupies it and for which the animal feels an instinct of preservation as for its shelter and its own organism—or the home range, that is to say, an area regularly occupied but not safeguarded against others. A characteristic fact demonstrates this very well: the markings made by bark peelings, excretions, secretions, sometimes even by special organs, thanks to which the animal spreads its own organisms over its vital do-

main.⁸ The domain of animals contains neither pure stimuli nor meanings or values, properly speaking, but only psychobiological valences, that is to say, signal-aspects or challenging characteristics of vitally important acts. The animal aims at organic final conditions rather than ends, as we understand the term. The valences of an animal are closely linked to its organic type and even to a precise phase of its typical development and behavior. For the seagull the egg is successively (a) an object to hatch, (b) an object to take back to the nest, and (c) an object to eat. "If the seagull could formulate concepts and use words, it would have not one term to denote the egg but several to be used in accordance with different situations: 'to eat,' 'to take back,' 'to hatch'—in short, it would have word-signals and not word-symbols."⁹ Linguists used to believe they could discern analogous developments among the "primitive" peoples and in the so-called primitive languages. To denote very important things and beings—game of major importance, for example—a great number of specialized words designate the "squatting" animal, the animal "on guard," the "attacking" animal, the "fleeing" animal, etc. But this is actually an entirely different thing. In the eyes of the Eskimo, the seal always remains the seal, despite the variety of its names. It has an identity, a status, and even a mythical history quite independent of the concrete ups and downs of the hunt and the capture, and these dominate the happenings.

It is possible that what occurs is that, for the civilized hunter quite as much as for the primitive, a kind of momentary regression abolishes, in the heat of action, the customary structure of the human world, and that a sort of vital fellow feeling is established between the hunter and his game. Most hunters claim that they "love" the animal they kill more than do the members of a society for the protection of animals. And this fellow feeling is spontaneously stylized by magic. The Eskimo ritually sings to the seal he is about to kill, and probably in all sincerity: "I am the friend of the seals." At the end of his account of an afternoon of trout fishing in the Canadian forest, White adds enthusiastically that he spent his day "with the gods." Magic and mythology are certainly closer, as we shall see, to that which the animal *Umwelt* must contain than are philosophy and philosophic religion.

But the decisive step is taken with the passage from signal to symbol,

8. Cf. Sourlière, *Vie et mœurs des mammifères* (Paris: Payot); English trans.: *The Natural History of Mammals* (New York: Knopf, 1954); and Hédiger, "Instinkt und Territorium," in Masson, *L'Instinct*.

9. Russell, *op. cit.*, p. 221 (translated from French ed.).

The Vital Domain of Animals and the Religious World of Man

as Cassirer has shown, or from valence to value. We are in the human world from the moment that meaning and stable values, detached from human physiology, appear. Then all that is needed is a facile and almost instantaneously achieved intellectualization for the world of stable values to denote a God, a supreme Being as a correlative. Ethnography shows that it is probably through mythology, in the broad sense of the word, that is to say, through a personification of values detached from organic valences, that man made the transition from the metaphysics of animal perception to religious metaphysics.

One could describe this transition more precisely as an inversion of the role of the consciousness and—correlatively—of the brain. Man has a larger brain than even the most intelligent of animals. But size and even cerebral improvement in themselves explain nothing. It is easy to conceive of an animal more intelligent than man, that is to say, capable of more ingenious inventions in order to achieve its final conditions, to act according to valences in its vital domain—but remaining, nonetheless, in a vital domain, without acceding to the world of values and meanings, i.e., to the human level. The perfecting of the brain would intervene only as an occasional cause of inversion, in the way that dissolution of the immersed part of an iceberg, which normally should determine only a progressive sinking of the whole, sometimes causes a sudden reversal. In all living beings, in men as well as in animals, consciousness—or the brain—plays the role of intermediary between the rest of the organism and the external world. In the animal this intermediary is at the exclusive service of the organism; thereafter, the external world is but an *Umwelt*, a place of signals and of organic valences. In man the direction of the circulation is inverse; if we make an exception of the cases, actually rare, in which the human conscience is subordinated to a very powerful organic instinct—grave danger, extreme hunger or thirst—the values seem to him to dominate the world. His consciousness apprehends and recognizes them as independent realities; and his organic acts are spontaneously subordinated to them. The ritualism of the instinct, or that which can be thus designated, is merely a pseudo-ritualism. Man alone respects the world and its suggested meanings, which he upsets at his own risk and peril. He asks permission of the game to kill it; he asks the sea permission to navigate it, the earth permission to cultivate it. Neither animal nor man is limited to the visible world. But for the animal what lies behind the visible world is still the totality of the specific themes of its organic life. For man it is a Power, an autonomous Meaning.

This is why the diverse human consciousnesses, born in distinct and

separate organisms, nevertheless meet again in a hyperbiological world. This is why we can speak, converse, exchange ideas, even with men of another race and culture. This is why we can understand their sciences, arts, religions, and philosophies with difficulties that are merely superficial. These difficulties are due to the physiological, psychological, and social canalizations of a unique spiritual world. Social animals, on the contrary, can come together and understand each other only according to their specific *Umwelt* and because of the rigorous adjustment of the stimuli-signals that they emit. They correspond to each other only in the way that the outline of the crystalline lens corresponds to the optic cup, in the way that gastrulation corresponds with the formation of the neural plate or the male and female organs. The unity of the animal world is correlative with the unity of instincts. The swallow's instincts do not belong to the individual swallow; it merely shares them. In the same way, the swallow embryo is developed through participation in the memory of the swallow species. To the extent that man is still an animal, his instincts do not belong to him either but to the human species. What Kant was willing to say of ethics alone, we can also say of values and of all spiritual meanings—that they belong to “reasonable” beings and consequently can be shared by all. As Max Scheler rashly but truthfully remarked, this social intercourse would occur even if man were to find himself one day in the presence of a parrot or an elephant that not only was intelligent in its specific world but that had achieved reason, that is to say, the perception of values and not valences in the world.

It is true that the diverse cultures of humanity constitute a kind of intermediary stage. They seem to attempt to re-establish a limited *Umwelt* in the social order. Every culture has its stereotypes, its rituals, its basic personalities, its particularized values, as arbitrary as instinctive valences. One observes the closest connection between the description of animal instincts made by psychologists who study comparative animal ethology and the description of cultures by anthropologists and sociologists. Beliefs and social attitudes play the role of instincts; stereotypes and myths play the role of gnoses and of instinctual valences. But, since human cultures are always evolving and are constantly borrowing from each other, and since they are more or less chosen as much as they are endured, they rarely hinder a vision of the universal world that goes beyond the particular social worlds, the importance of which the sociologists, moreover, tend to exaggerate.

The transition of the valence to the value of the signal in the sense of symbol is the essential moment which explains the inversion of the role of the consciousness. From a tool at the service of the organism, which it was,

The Vital Domain of Animals and the Religious World of Man

it becomes the perception of a truly external world and, through it, of a transcendental world. From organic art, from the instinctive aesthetics of animals to the art of human culture; from implicit anatomical knowledge manifested by the instinct to scientific knowledge; from the parental instinct to maternal love; from organic technique to conscious technique; from the pseudo-ritual of specific behavior to the authentic ritual of human behavior; from the vital domain to the universal world—the transition is always the same, and it is possible to define with precision the nature of this transition or this inversion.

It is more difficult to know what has been its moving power. It is not improbable that the inversion began thanks to technique. The experiments made by Guillaume and Meyerson proved that this inversion was already taking place in the chimpanzee, at least under experimental conditions. For the chimpanzee the stick is not merely an organic extension; it is not only an “outstretched arm” but already an autonomous technical tool. Indeed, the animal is capable of using correctly a square stick attached at the top and making it swing in order to reach out toward a fruit. When it accomplishes this action, its consciousness is dual: subordinate to the organism that covets the bait but also subordinate to the very nature of the tool. If the animal, however, remains an animal, this is doubtless because it does not know how to gather together and capitalize on its occasional techniques by piling up a reserve of sticks—above all, by accumulating them in the memory and affixing a name to them. Perhaps all that would be required would be an entirely quantitative increase of cerebral energy or perhaps certain modifications of social life. In any case, once the accumulation of techniques has begun, and once it is fixed by the fundamental technique of linguistic symbols, inversion in other categories is easily conceivable.

To prove this, all one has to do is to imagine *a contrario* the almost immediate universal regression that the disappearance of all technique would produce among civilized men. Maternal love itself is only possible—going beyond the level of parental instinct and extending it—because even children who are distant in space remain present in the minds of their parents through the technique of communication, the mail, for instance, and because the distant countries where they reside are described daily by newspapers and radio. From the placental feeding to the infant’s suckling it is possible not to go beyond biology and the *Umwelt*. To cable a child in America while continuing to think of him and to love him presupposes the notion of an external world structured by a technique that is independent of biology. Similarly, without accumulated technique, art immediately

becomes once again pure and vital: dance or spontaneous song, scarcely discernible from the dances and songs of birds.

It is often said that the animal adapts itself to the world, whereas man subdues the world and adapts it to his needs. This is factually true, particularly if one considers the general results. But this factual truth disguises a grave error of law, or perhaps even a basic error. In reality it is man and not the animal who yields to the world, who recognizes the very truth of the world.

Moreover, despite certain appearances, religion is no more a vital tool than is science. The values and meanings are more objective than the valences and the stimuli-signals of the instinct. Man has escaped the tyranny of his biological nature because he has complied with nature and has taken the time to acknowledge natural laws. It is precisely because man has complied with the norms of visible and invisible nature that he has been able to create culture in all the orders of values.

The animal is capable of learning, and any apprenticeship implies modifications in the vision of the *Umwelt*. Psychological experiments on animals have definitively demonstrated this. The animal becomes acquainted with a labyrinth. It learns to realize its biological purpose by passing through obstacles, by emphasizing the important, the valence of such and such a detail which it had overlooked at first. Its success or partial success, whether or not it is achieved accidentally, fixes its attention upon an object in stressing it as means in the field of end-means. The *Umwelt* is momentarily modified by virtue of the animal's needs, but it remains an *Umwelt*. The animal's apprenticeship modifies it only temporarily, because of the animal's physiological and psychic state and its temporary and fortuitous conditionings. The stable nucleus of the animal world is provided by its physiology and its instincts; the variable part depends upon its needs, on the one hand, and, on the other, on the fortuitous configuration of the environment which it is obliged to take into account in order to achieve its ends. For man, the stable nucleus of the world is provided, on the contrary, by the world itself, by the very meaning and value of objects and beings. The modulations and the distorted perspectives of human needs are never more than modulations. And this is the reason why man does not easily understand that the animal is not simply in the world as he himself is. This is why the notion of the *Umwelt* is a scholarly one, elaborated by specialists in animal psychology.

Let us imagine man in a very unusual situation—carried off by accident, for instance, in a stratospheric plane or an aerobus, without knowing how to pilot. He would seem as bewildered and awkward as an animal

The Vital Domain of Animals and the Religious World of Man

outside its ecological niche. His gestures would be ridiculously unadapted to the real situation, because they have been adjusted to the phantom of his customary world. Science and technology have had to accustom us very gradually to an enlargement of our world in order for the cabin of an airplane to become a familiar object to us. But we must not conclude from this that the difference between man and the animal is merely one of degree. Despite the ineptitude of a bewildered man, and despite his state of emotional regression, he remains spiritually within the universe, or within a universal world, even if he is psychologically faced with a situation that does not correspond to his habits. And for him even a state of bewilderment is an occasion to ponder the totality of the world. It is the essence of a world of values, as distinguished from a world of valences, to be, in principle, one and total, even if it is in fact partial. The eye of a mammal actually sees the stars, the Milky Way, the nebula of Andromeda, as well as the human eye, but man alone is concerned with the stars and names them, because he sees them as the basis of the world's unity and totality.

Hence, whether he imagines stars as gods or as dead souls, whether he visualizes the Milky Way as a mythological goddess or as the Saint James's passage, whether he studies the planets by scientific and astronomical methods, or whether, as idealist philosophy, he sees in them well-founded phenomena or the ideas of an absolute intelligence—the difference is not an essential one, provided that, at the same time, he ponders the totality of the world. It is hard to believe that there can exist religious adepts, scholars or philosophers stupid enough to perform the prescribed rites, calculate or make technical deductions without vaguely possessing the meaning of the actual universe in its entirety. Such stupidity could only be momentary; from this standpoint, if there is a difference between the scholar and the religious man, it is the scholar who tends to run the risk of regression. Positivism is a more natural temptation—or less antinatural—in matters of science than in the religious domain.

Auguste Comte was mad to think that his absurd interdictions would stop the scholars or prevent them from concerning themselves with stellar physics. But he was still more deluded to believe seriously that he could restrict the religious spirit to the closed domain of human life and that he could make men run indefinitely like rats within the confines of the closed labyrinth of his "subjective synthesis." In humanity religion is precisely the sign that man possesses a total vision of the world. Its subjectivity can never be truly acknowledged. And rightly so, for despite the puerility of its particular forms, religion is more objective, more true, than the experienced "positivism" of the animal.