

Spirits Dressed in Furs?

ADRIAAN KORTLANDT

In olden times the world was haunted. Mountains, rivers, forests and seas were inhabited by gods, demons and all kinds of spirits which could be friendly or angry, and would cause earthquakes, thunderstorms or a good harvest, just as their moods dictated. Little by little, in the course of time, the picture changed. The world gradually became despirited. Aristotle still attributed a vegetative soul to plants, a sensitive soul to animals and a thinking soul to humans. The idea still survives to some extent in Roman Catholic philosophy. Reformation theology was more stringent and denied the presence of a spirit or soul in animals, though Luther is said to have written that dogs would be admitted to Heaven. (He had a dog, of course, and would not have liked to leave him behind.) In 1649 Descartes made the next step and declared animals to be machines, not only without an immortal soul but even without any mental experiences.¹ More than two hundred and fifty years before Pavlov² he described stimulus conditioning of dogs and stated that 'les bestes n'ayent point de raison, ny peut estre aussi aucune pens e', but nevertheless 'on peut avec un peu d'industrie changer les mouvemens du cerveau dans les animaux depourvus de raison'. (Beasts have neither reason nor perhaps any thought [but] with some ingenuity one can change the brain movements in them.)³ His student Malebranche drew the logical conclusion and flogged his dog savagely. When his neighbours objected he told them that according to Descartes animals are inanimate machines, and asked: do you protest if I beat a drum?

In the follow epoch, Cartesian philosophy set the tone in scientific as well as theological thinking on animal minds, usually called souls: science and religion had not yet divorced.⁴ Eventually, in our century, Pavlovian and Watsonian behaviourists pushed the idea to its limit and developed a human psychology without a mind. Similarly, Lorenzian ethologists declared animal minds, if existing, to be unknowable.⁵ To complete the picture, some theologians proclaimed God to be dead. All the ghosts were leaving. Academic thinking was becoming mindless, on Earth and in Heaven. The legal implication would be that henceforth no one could be liable to conviction for cruelty because suffering could not be proven scientifically, in humans and in animals.

There were other trends. In 1760 a German professor, Hermann Samuel Reimarus, published a bestseller: *Allgemeine Betrachtungen iiber die Triebe der Thiere* (General Considerations on the Instincts of Animals).⁶ In this book he rejected Descartes' concept of animal-machine and argued (translated into modern terminology): (1) animals have sense organs similar to ours which conduct stimuli to the brain; (2) they organise their behaviour according to their perception of the world around them; (3) this proves that they have a mental representation of the world around them; (4) that is, they have a 'Seele' (in German, the psychological concept of mind and the theological concept of soul are homonymous). He also recognised, among other things, that quadrupedal animals have dreams. Thus he was 100 years ahead of his time on the homology argument of Darwinian animal psychology, and 160 years ahead of von Uexkull's

* In PAOLA CAVALIERI & PETER SINGER (eds.), *The Great Ape Project* (New York: St. Martin's Griffin, 1993), pp. 137-144.

¹ R. Descartes, *Les passions de l'dme* (1649; available in several English editions).

² I.P. Pavlov, *Twenty Years of Experiments in the Objective Study of Higher Nervous Activity (Behaviour) of Animals* (in Russian) (1923; English edition: *Conditioned Reflexes* (Oxford University Press, London, 1927)).

³ Descartes, *Les passions de l'ante*.

⁴ For example, A. le Grand, *Dissertatio de carentia sensus et cognitionis in brutis, Londini* (1675; English edition: *An Entire Body of Philosophy, According to the Principles of the Famous Renate Des Cartes, 3, A Dissertation of the Want of Sense and Knowledge in Brute Animals, Giving a Mechanical Account of their Operations* (Blome, London, 1694; and Johnson Reprint Corp., 1972)).

⁵ For example, N. Tinbergen, *The Study of Instinct* (Clarendon Press, Oxford, 1951).

⁶ H.S. Reimarus, *Allgemeine Betrachtungen uber die Triebe der Thiere, hauptsachlich uber ihre Kunsttriebe* (Bohn, Hamburg, 1760; French edition published in 1770).

*Umweltlehre*⁷ (see below).

All Hell broke loose with this blasphemous postulating of an animal '*Seele*'. However, Cartesianism retained the upper hand until 1859, when Darwin's *Origin of Species* appeared. Then the recognition of evolutionary homology, including humans, led to the tripartite distinction: comparative anatomy studied the structures; comparative physiology the functions; and comparative psychology the minds of animals, including humans. This was the heyday of subjectivistic interpretation of animal behaviour, and it was carried out *ad absurdum*.⁸ The Deutsche Gesellschaft für Tierpsychologie officially endorsed the calculating horses and thinking dogs, including a dog who at Christmas time told his mistress by paw-spelling that he believed the infant Jesus was coming.⁹ After the unmasking of the affair, the embarrassment of such eminent believers as von Buttel-Reepen, Edinger, Haeckel, Plate, Sara-sin and Ziegler made the term 'Tierpsychologie' unspeakable in Germany. Ethology was created instead and eventually was exported all over the world.

Another development was equally undermining for subjectivist animal psychology. The American philosopher William James (1890) had defined psychology as 'the science of mental life, i.e. 'the study of the stream of thought', or 'of consciousness'.¹⁰ Freud, however, produced evidence indicating that many, or even most, of our psychological processes proceeded unconsciously.¹¹ To find out which processes worked consciously and which unconsciously one had to interview the subject and, by means of ingenious procedures, analyse the hidden meanings behind his or her dreams, blunders, symbols, etc. The unconscious had become accessible, that is, in humans. Animals, however, might very well behave unconsciously too.

Psychoanalytical psychology inspired, to some extent, work on animal behaviour (e.g. in the discovery of displacement activities). Interviewing animals, however, remained impossible. At that time, apes' ability to use sign language had not yet been discovered. Ethologists continued to assert that the mental life of animals was unknowable. Scientifically the word 'unknowable' is, of course, disastrous because it blocks research into the unknown. No one can predict, for instance, whether it will *forever* remain impossible to link an animal nervous system to a human one.

Should we *for the time being* continue to believe that the inner experiences of animals remain inaccessible to us, except perhaps by means of ape sign language? The consequences would be considerable. A conviction for cruelty to animals based on expert testimony would be legally impossible, except where apes were involved. The general public, and dog and cat owners particularly, would not accept such expertise. Ethologists themselves would be extremely unhappy too. Small wonder that Griffin made a desperate attempt to revive scientifically the animal mind.¹² His endeavour was, however, naive and epistemologically untenable. For instance, Freud was not mentioned, nor were such phenomena as subliminal perception.

Besides objectivistic and subjectivistic interpretation of animal behaviour, there is a third way. When we humans are happy, or sad, or in love, or angry, we are not just happy, sad, in love or angry *per se*: we are happy or sad *about* something, and we are in love or angry *with* someone. When we see colours we do not simply see them as images on our retina but as colours of flowers, leaves and other things *around us*. When we think, we do not think *in vacua* but we

⁷ J. von Ueskill, *Theoretische Biologie* (Paetel, Berlin, 1920; revised edition: Springer, Berlin, 1928; imperfect English edition: *Theoretical Biology* (Paul, London, 1926)).

⁸ See, for example, G.J. Romanes, *Mental Evolution in Animals* (Kegan Paul, London, 1883).

⁹ K. Gruber, 'Vom denkenden Hunde Rolf', in H.E. Ziegler (ed.), *Die Seele des Tieres* (Junk, Berlin, 1916), pp. 87-99; H.E. Ziegler, 'Mitarbeiter der Gesellschaft für Tierpsychologie', *Mitteilungen der Gesellschaft für Tierpsychologie*, vol. 1 (1913) pp. 3-4.

¹⁰ W. James, *The Principles of Psychology* (Holt, New York; Macmillan, London, 1890).

¹¹ S. Freud, *Die Traumdeutung* (Deuticke, Vienna, 1900; available in several English editions); S. Freud, *Zur Psychopathologie des Alltagslebens* (Karger, Berlin, 1901; available in several English editions).

¹² D.R. Griffin, *The Question of Animal Awareness* (Rockefeller University Press, New York, 1976).

think *of* things or people. That is, our mind is not located in our brain but in the world around us. The nervous system is only a tool for creating a picture of the world. This subjective world *is* our mind. Similarly, animal behaviour should not be seen as an outcrop of inner experiences or driving forces inside the animal, but as the fabric of meanings which are projected into the outer world by the animal. This includes what von Frisch incorrectly called sense physiology¹³ (it is not physiology), what von Uexküll called *Umweltforschung* or *Umweltlehre*¹⁴ (which I tried to translate as 'animal cosmology') and a part of what is today called cognitive psychology. It is a kind of science that is rather alien to classically trained comparative psychologists and ethologists. Neither von Frisch nor von Uexküll, nor I myself, met with much response among behaviourists and ethologists when we presented these ideas, and cognitive psychologists working on animals do not, as a rule, publish their findings in ethological journals. Yet I think that research on the subjective worlds of animals holds the epistemological clue to the most fundamental problem of understanding animals.¹⁵

At this point we may consider the problem of human perception of differently disposed human beings. In medieval times, the mentally disturbed were chained and kept in cages or prison-like madhouses. They were thought to be possessed by demons. On holidays they were displayed to the public for entertainment and to be teased. After the French Revolution of 1789 had proclaimed *liberte, egalite et fraternite*, the Parisian asylum director Pinel started in 1792 a programme of unchaining his patients, treating them humanely, giving them (restricted) liberty and applying verbal therapies.¹⁶ Humanisation of the 'subhumans' had begun. Yet these ideas permeated very slowly into society. When I was young, elderly people told me that in their youth it was quite common to deride and to tease mentally and physically handicapped people openly in the streets and in public places. The popularisation of psychiatry by the media started only in the 1920s, after Freud's writings became common reading among the educated.

Even then, class society and colonialism maintained ideas about genetic, racial and cultural superiority/inferiority. In 1928, when I was a schoolboy, 'Negroes' and Amerindians were still dressed up and trained to behave as savages to be shown at an official exhibition of industry in Holland. General awareness of what was wrong came to Europe and the United States only after six million so-called *Untermenschen* (sub-humans) had been killed in concentration camps, and after colonialism had broken down. Publicly expressing racism became forbidden by law in some Western countries. However, teasing the apes, monkeys and large carnivores in zoos remained commonplace. It was the last outlet for instinctual inter(sub)specific anti-competitor and anti-predator behaviour among humans; a similar instinct to that causing dogs to chase cats.

It may be significant that soon afterwards general attitudes towards primates began to change. Large-scale primate behaviour research in zoos and in the wild started around 1959, i.e. after the Darwin centennial commemoration at the International Congress of Zoology in London in 1958. (Kohler and Yerkes had remained lonely voices in the wilderness.)¹⁷ Later, in the 1960s, a young colleague told me that he had seen two leading elderly colleagues in the behavioural and

¹³ K. von Frisch, 'Der Farbensinn und Formensinn der Bienen', *Zoologische Jahrbucher, Abteilung fur allgemeine Zoologie und Physiologie der Tiere*, vol. 35 (1915) pp. 1-182.

¹⁴ Uexküll, *Theoretische Biologie*.

¹⁵ H. Hediger, *Wildtiere in Gefangenschaft* (Schwabe, Basel, 1942; English edition: *Wild Animals in Captivity* (Butterworth, London, 1950)); I. Kant, *Critik der reinen Vernunft* (Hartknoch, Riga, 1781; available in several English editions); A. Kortlandt, 'Cosmologie der tieren', *Vakblad voor Biologen*, vol. 34 (1954) pp. 1-14 (English translation in preparation); K. Lorenz, *Die Rückseite des Spiegels* (Piper, Munich, 1973; English edition: *Behind the Mirror* (Methuen, London, 1977)); Uexküll, *Theoretische Biologie*.

¹⁶ P. Pinel (1792), in S. Pinel, 'Bicetre en 1792. De l'abolition des chaines', *Memoires de l'Academie Royale de Medicine*, vol. 5, no. 2 (1836) pp. 31-40.

¹⁷ W. Kohler, *Intelligenzprüfungen an Anthropoiden, I. (Einzelausgabe)* (Königliche Akademie der Wissenschaften, Berlin, 1917; English edition: *The Mentality of Apes* (Harcourt, New York, 1925)) (note that the English translation understates his point on mental representations (*Vorstellungen*)); R.M. Yerkes, *Chimpanzees* (Yale University Press, New Haven, CT, 1943).

evolutionary sciences in front of the chimpanzee cages at London Zoo: they were acting just like the visitors at a madhouse before the French Revolution. He felt deeply shocked and ashamed. I must admit that on hearing his story, I was also shocked because I realised that I was halfway between the grandfather and grandson scientific generations, and could empathise with both. How could I? I had been lucky enough in May 1960 to be the first human being to observe chimpanzees at close quarters in the wild. These were not the dirty and neurotic creatures whom I knew from zoos and laboratories. These alert and animated, but insecure and unsettled, free-living creatures were interested in anything unusual or remarkable – from a beautiful sunset to a piece of barbed wire. They continuously varied their habits and behaviour. They always hesitated before deciding which direction to take or which fruit to eat. They came to my hide and their piercing brown eyes met my grey ones: scratching themselves with wonder, they then walked away without having solved the mystery. They seemed to have lost the certainty of instinct but not gained the certainty of knowledge. These were not animals, nor humans either, but eerie souls in animal furs. A cold shiver went down my spine. And then they occasionally signed to one another by means of a hand or arm gesture. Again a shiver went down my spine. It was the greatest experience of my professional life.

Established attitudes and habits die off very, very slowly. Until the late 1960s at least, apes and monkeys were still frequently branded by scientists as subhuman or inhuman primates - *Untermenschen* - rather than as nonhuman primates. They were, and still are, often treated accordingly. In our present time, chimpanzees and orang-utans are still regularly abused as clowns in TV advertisements apparently without raising a public outcry. When Bert Haanstra's film *Ape and Super Ape* or Hugo van Lawick's film *People of the Forest* are shown, even an audience of professional primatologists will roar with laughter when chimpanzee behaviour is shown. Yet these people know very well that these free-living chimpanzees behave quite naturally and are adapted to their environment. There is nothing funny about this, except when the chimps themselves make fun. These human laughers still perceive chimpanzees as silly idiots and circus clowns dressed in animal furs, impersonating human follies, rather than as creatures in their own right.

Our scientific image of the great apes in general, and of chimpanzees in particular, has taken on a new dimension in recent years. In the past, chimpanzees were depicted as peaceful fruit-pickers hanging and swinging by their long arms in the forest canopy.¹⁸ We now know that many of them inhabit open savannah landscapes (a fact scientifically known since 1930 but mostly ignored for about half a century), that they regularly walk bipedally in the wild, and that they hunt and consume fairly large prey. They also use tools for various purposes, and primitive weapons against natural enemies. Furthermore they deceive one another, rape females, practise power politics, occasionally kill and cannibalise, make war against alien groups and (in one case observed in captivity) castrate the bullying boss.¹⁹ Similar data are beginning to emerge on the gorilla and the orang-utan. It is a very grim picture. As grim as prehistory, cultural anthropology and world history. Our ape science is no longer beyond good and evil.

I, for one, have always believed that the real chasm between 'animals' and 'humans' was between, on the one hand, the great apes and, on the other hand, the lesser apes, baboons and monkeys. Recent research has suggested that we should perhaps locate the gulf below the baboons.²⁰ To be conservative, for the time being it seems proper to accord at least the great apes the status of less-gifted humans and to treat them accordingly.

I am aware, of course, that living and sometimes non-anaesthetised subjects are needed in certain medical experimentation aiming to alleviate the suffering of humans. Those who have

¹⁸ For example, W.E. Le Gros Clark, *History of the Primates*, 1st to 10th editions (British Museum (Natural History), London, 1949-70).

¹⁹ See, for example, A. Kortlandt, 'Marginal habitats of chimpanzees', *Journal of Human Evolution*, vol. 12 (1983) pp. 231-78.

²⁰ R. Byrne and A. Whiten (eds), *Machiavellian Intelligence* (Clarendon Press, Oxford, 1988).

seen what is going on inside a hospital, and those who have lost a loved one owing to the impotence of medical science, will understand what I mean. I myself have seen some heart-breaking research in primate centres, particularly in the psychological and psychiatric field. However, as a student of psychology I have also seen enough in mental wards to appreciate the value of such research. On the other hand, how can we justify such research with our innocent ape cousins, while doing so is not allowed even with those humans who are guilty of the most horrifying crimes against humanity?