## Some Unusual Aspects of Communication

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## THE AUTHOR

Edward Campbell was formerly Literary Editor of the London *Evening News*. He began his journalistic career in the late 1930s with Kemsley Newspapers in Glasgow. At the same time, he was able to pursue a passion for animals by working in a small zoo under Glasgow Central Station. There he demonstrated that animals, in this case three lions and a bear, can be trained to high commercial circus standards without resort to any form of cruelty. He also discovered something of the depth and subtlety of communication possible between men and wild beasts. His monograph draws on that extraordinary experience.

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## Some Unusual Aspects of Communication

I should like to suggest, very tentatively, one or two examples of what could be exceptional forms of communication between man and animals.

It would appear that in certain circumstances animals sometimes have access to forms of behaviour which go beyond what is ordinarily thought to be the upper limit possible for them. It will probably be tempting to accept that this really does happen, but right away I should warn that there may well be other, quite ordinary, explanations of what, on the face of it, looks like some higher form of cognition. It may also be tempting to extrapolate from the animal/human into the human/human situation, perhaps the teacher-pupil situation and deduce parallels. I am certainly not suggesting such a procedure.

Before we look at one or two possible examples, it may be interesting to cast back to what is known – or conjectured – about the animal/human relationship in the remote past. It seems likely that in very early times there were two basic animal/human relationships: the domestic and the magic. If conclusions that are frequently drawn from such things as the Lascaux cave paintings are anything like correct, it would seem that primitive man did relate to animals on a magical level. Primitive man, it is suggested, either discovered or had shown to him, certain procedures which, if correctly carried out, were capable of affecting animal behaviour at a distance. Certain procedures had the effect of vectoring animal herds into an ambush and so making hunting less haphazard and more scientific.

Side by side with this there must have been also a domestic relationship. Some primitive man, woman or child would, almost inevitably, come upon some young animal, an urochs calf or a wolf cub and instead of killing it, would keep it. Now it is almost impossible to be at close quarters with a young wild animal for any length of time without discovering something of what makes it tick. If you approach a ruminant with your arms extended, it will, at a certain point of proximity, raise its head and then wheel either to right or left depending on the angle of your arms and body. If you approach it slowly, your arms behind your back, it will suffer your nearness longer. The first animal trainers on the domestic line must have been those early human beings who first of all noticed and remembered the effect of human physical movements on animal behaviour. As primitive life slowly moved towards more settled agrarian conditions, when agriculture began to replace

hunting, it is reasonable to suppose that the domestic relationship would become more important and the magical line would decrease.

It would seem that this happened, but I shall suggest that both forms survived, now dominant, now recessive, now one, now the other through history, each new emergence of either being always at a better level of sophistication as the spiral of history ascended.

Vast ages passed and the domestication line realized high promise. The horse, elephant, dog, camel, pig and many others were domesticated. Whole cultures grew up, based on one or other of these animals. It is interesting to speculate about why certain animals and not others were selected. Why the wolf and not the baboon, for example? There seems no reason why the baboon should not have been domesticated. It has a higher intelligence than the wolf and it has the enormous advantage of an opposable thumb. Almost certainly a human culture could have been developed with the slave labour of baboons as its basis. Yet this does not seem to have happened. Nature seems to give to each culture, as to each species, the minimum necessary for survival. Perhaps the easy life which a slave state of baboons would have made possible never happened because it would have insulated man from the very efforts necessary for his own progress.

That baboons could have been domesticated seems fairly clear. At the beginning of this century a disabled South African railwayman was given a light job as signalman on a lonely branch railway line. He adopted a young chacma baboon for company and, perhaps because of the lonely situation, a remarkable relationship developed. The baboon acted as an eager and willing helper, doing actual work – like putting on the kettle. Finally he actually trained it to pull signal levers and, if contemporary accounts are not overdrawn, it seems to have done this with something approaching a sense of responsibility. And all that from a single generation.

However, to go back. Although the magical line of relationship declined with the advance of settled cultures and the success of domestication, the magic knowledge may not have been forgotten. It may in some way have been merely submerged, to re-emerge in new forms in later ages.

In the great pre-Classical cultures of antiquity where religious forms often centred upon a sacred animal there may be a hint of the magical line re-emerging. Early in the first millennium B.C. Assurnasirpal II (883–859) seems to have kept a quite extensive collection of wild animals in a semi-domestic condition, perhaps peripheral to the central religious observance. In Egypt, Ptolemy Philometer in the middle of the first millennium B.C. had a religious procession in which a statue of the god was pulled by elephants, lions, oxen, ostriches, bears, camels, a giraffe and a rhino!

Now it is just possible to bring together animals of this degree of diversity and make them pull a chariot. There would have to be present people who were genuinely knowledgeable about animal behaviour. Here perhaps we meet the first hint of a certain remarkable idea. It is that an oral and, it may even be, an initiatory tradition, exists preserving from remotest times some special knowledge about communicating with animals. To the present day, hints of this claim can be found in some of the traditional European mountebank families and I personally know of an instance in which an orphan boy was told of his own family's tradition when he was of an age to understand it.

This idea of a secret tradition of animal handlers, a sort of guild of people inheriting secrets of controlling animals, was taken very seriously by Henri Thetard, a modem historian of the circus. He took a further daring leap into speculation and equated this hereditary order with the gypsies. My own view is that there is some reason for believing that the tradition idea has a basis in fact, but I don't think it would be equated with the gypsies.

In Roman times the domestication line found a new level of sophistication – the training of animals for entertainment. Aside from the combat spectacles in the Roman arenas which were the province of the *bestiarii* there seems to have been a guild of trainers, the *mansuetari*, who were animal handlers, knowledgeable about communicating with wild beasts and having even degrees of ability. The ability to harness a lion and train it to pull a chariot seems to have been one of their trade tests. They are also said to have trained lions to retrieve like game dogs, a feat seemingly duplicated with Siberian tigers at the court of Kublai Khan.

Some of these feats of training have generally been thought of as semi-mythical or at any rate as artistic or literary extravagances. But in 1922 a German trainer, Alfred Kaden of the Hagenbeck school thought he would like to discover whether lions pulling chariots was a practical undertaking. He discovered that it was and trained two lions to pull a chariot in tandem. This was actually shown in London in Earls Court in 1926.

Another European trainer, a very remarkable little man called Hans Brick, was fascinated by legends of lions trained to retrieve game in the chase. He trained his own lion Habibi to shoot a dart from a spring gun, then to seek it out, retrieve it and bring it back and drop it at his feet. I have watched this perhaps fifty times. So it would seem that some of the *mansuetari* feats, long thought to be apocryphal, have been validated in recent times.

If training for entertainment was an extension of the domestication enterprise in a new form, are there any traces of the magical line showing a similar revival in a more sophisticated guise? Perhaps. In Greece there appears to have been an ambulant caste of people combining the functions of priest and performer. The *agyrtes* apparently practised some form of hypnotic healing to the accompaniment of trained animal performances to music. Here a 'magical' component seems fairly evident.

Let us now look more closely at this tradition of a hereditary caste preserving from very ancient times some secret knowledge about animals. The gypsies, as we shall see presently, would certainly appear to have claims in this direction, but it may be possible to see some wider grouping by looking at the history of magic rather than of animal relationships.

Some anthropologists believe that all magic lore in the world dispersed originally from a single centre in Asia. This Turanian people, speaking an agglutinative Ural-Altaic language, spread westwards from the Asiatic Highlands, founding Assyria and Babylonia. They disseminated magical knowledge. A branch of this migration moved north and west, giving rise to the Finn-Lapp complex and also the Eskimo-Amerindian cultures. In all the areas which these peoples touched or influenced, traces of magic in relationship to animals can be found to this day. The reindeer-magic of the Lapps, the seal-hunting mystique of the Eskimos and the bear and bison magic of the Amerindians spring to mind.

Now the gypsies are believed to have originated in India. Is it possible that one wave of the original Central Asian dispersal came in contact with the Indian ancestors of the gypsies? Perhaps the gypsies' ancestors were by some psychological accident naturally attuned to knowledge of this kind and, having a predisposition to be true migrants rather than merely nomads moving over one continent, they took the original knowledge with them and were identified with it. It seems quite certain that they preserve a magical animal knowledge to this day, though almost certainly it is now much degenerated.

The gypsies believe that it is possible to influence a dog against its owner by a magical spell. They believe – contrary to genetic theory – that it is possible to breed skewbald horses 'true'. This is achieved by a magical operation which is very close to the procedure given in Leviticus in connection with the straked cattle of Jacob and Laban. They believe that it is possible to fix a dog permanently to one master. The procedure involves irradiating a piece of bread in a certain way with body vapours and feeding this sop to the animal. They believe that something intangible is thereby transmitted to the dog and that this forms a link which connects the man and the animal for all time. The correspondence here with another magical operation which is one of the bases of the Christian religion, is indeed remarkable.

In the Kludski family of menagerists in the Austro-Hungarian area, no young member of the clan is allowed to begin training a wild animal until it has been 'hexed' and rendered safe. This operation – a kind of benign witchcraft – has to be performed by an older, knowledgeable and female member of the family. Some say the Kludskis may be of gypsy origin.

I once saw a Spanish lion tamer (a gypsy) make a very definite hand movement at the moment when he had to change the direction of a lion and sweep it on to a pedestal. Years later, I verified – partially at least – that this movement seems to have a predictable and repeatable effect, simultaneously arousing and subjugating, upon a lion.

At another time while watching the Czech trainer, Jan Doksanski, working with lions, I noticed that he made use of this hand 'pass' at exactly the same moment and with just the same effect. I always meant to ask him if he regarded this as just a gesture of showmanship or whether it had a definite purpose. The occasion never came up and Doksanski is now dead.

Whether Doksanski received this trick from whoever taught him or whether he uncovered it himself from some subconscious source, the gesture seems to suggest the transmission of 'something'. Certain hand movements by an adept are among the traditional secrets of Hermetic practice. Many gestures, from religious benediction to the Hitler salute, are probably 'remaindered' material from an original corpus of religious and magical knowledge.

This same trainer used to make a certain sound while performing with wild animals. Trainers, like I suppose bullfighters, develop an instinct for safe distances. This is not just an estimated limit of paw-swipe but is a kind of instinctively calculated equilibrant of many factors: the emotional state of the animal, its paw range, the balance of its body at any instant, and so on. If Doksanski had to pass between two animals and the space available was inside the safe distance he would make a certain sound as he went through. There was no physical result, but it seemed as though the man had in some way momentarily enlarged the extent of his own field and compressed the fields surrounding the bodies of the animals. A fanciful suggestion no doubt. Yet *something* happened when Doksanski employed this little trick. In Sufic literature there are references to a claim that certain sounds may produce precise effects – not perhaps physically observable.

These examples would seem to suggest that certain secrets of dealing with animals do indeed survive and that they are transmitted. I think they are degenerated fragments of some magico-religious corpus dating back a very long way. I do not think that this tradition is exclusive to the gypsies, though they certainly have a share of it.

For many years I was in close touch with Hans Brick, already mentioned, whose family was traditionally associated with handling and training wild animals. Brick's father was killed while performing with tigers in the Nouma Hava menagerie in Italy in 1889. Brick's mother gave birth prematurely, dying herself in childbirth.

Brick, who was partly German, partly Red Indian, spent a lifetime observing, trapping and training animals. As an orphan he had been brought up by another family of mountebanks and when he was six his foster father took him aside and told him: "If your father had lived, he would have told you this when you were of an age to understand. You belong to people who understand about animals. This goes back, son to father, back and back. There is another thing you would have been told. The training of wild animals goes back before history. Originally it had to do with religion."

If this incident is true and I have no reason to doubt it, there is certainly evidence here for the hereditary transmission of specialised knowledge. There is also evidence that the tradition is not peculiarly gypsy.

All that has been mentioned so far involves a very limited and perhaps primitive form of communication with animals. What I should like to suggest is a range of activity which involves something beyond the purely reactive, beyond the motor-instinctive level. But I should say in advance that there may be other explanations of any such apparent instances.

Early this century a showman in Germany produced a counting horse. When its owner asked it to add three and three, it pawed the ground six times. Asked to take five away from nine, it pawed the ground four times. This surprising genius for mathematics created quite a stir and a committee, which included a journalist, a veterinary surgeon and the current professor of physiology at Berlin, went along to investigate. Scientific credulity must have been pretty high in those days because this committee came out with an entirely favourable report. They seriously concluded that this horse could count – admittedly to a limited extent.

This seems to have been too much for other earnest investigators because a second committee was prompted to have another look and they saw quite quickly that the horse was merely trained to start pawing the ground when it received a signal from the showman and to stop pawing when it got another signal. In other words, simply the old Joey pony routine which has been a circus stand-by for untold years.

Counting horses were however in the air, so to speak. Most rich men of the time had stables and various people with time on their hands began training their favourite horses to learn simple arithmetic. Some remarkable discoveries were made. In one case the trainer experimented with reducing the stop signal almost to vanishing point. The horse still obeyed. He then took a real header into uncharted country. He did not give the signal at all. He merely thought about giving it. The horse responded as before. This horse even transferred its conditioning from the trainer to visitors. It was discovered that the trainer could leave the room. A committee of visitors would agree on a small arithmetical problem, ask the horse for the answer and when the correct number of scrapes with the hoof had been reached the horse duly stopped. Was the horse receiving, by some sort of telepathy from the people watching it, the correct answer? If so, it would appear that by association with humans, a conditioned reflex had led to such a refinement of ordinary perception that a new, wholly unsuspected modality began to operate.

If this was really the explanation, the counting horse vogue may have uncovered a principle which is not normally suspected: that if an ordinary sense is refined to its ultimate, something begins to happen in a higher range.

This may however not be the explanation of the telepathic horse. There are other possibilities. In the early 1930s Hanusen, a professional cabaret clairvoyant who became the oracle of the early Nazi Party, used to perform a 'thought reading' experiment at Society parties. While he was out of the room the company would choose an object in the room, an ornament or a book, or even a word on a particular page in a book. On his return, Hanusen would choose someone in the company, generally a young woman, and taking her hand would begin to walk slowly round the room. Presently he would stop at one general area, then seemingly eliminate inch by inch until he finally decided on the object chosen. The rationale of this was that he had trained himself to such a degree of sensitivity that unconscious giveaway contractions of muscles in the girl's hand acted as an infallible indication and enabled him to arrive at something which had all the appearance of telepathy.

But if he could interpret minute unconscious muscular contractions in another person and give the illusion of telepathy thereby, perhaps a horse could do the same. The telepathic horse – or horses: there were several of them – may have developed merely an ability to react to involuntary changes in audience tension as the correct total was drawing close. On the other hand animals *may* have latent capacities for cognition in areas which so far we have only just begun to suspect.

I have one personal example of this and I have not been able to find a 'rational' explanation for it. Shortly before the war I trained a lion, two lionesses and a brown bear to perform in an indoor menagerie. I was a young newspaper reporter then and I did this because I was interested in the subject and also because I wanted to see if the allegations of the anti-circus

societies – that no wild animal act could be trained to professional standard without cruelty – had any basis in fact.

I was on very good terms indeed with the two lionesses and would often go into the cage and simply play with them. There was a great deal of crude horseplay – or lionplay – but I was never injured in these romps and we had great fun. Early in 1940 I went away on military service and it was about six months, if I recall correctly, before I got my first leave. Even before I went home, I had to pay a visit to the zoo to see the lions. The zoo was on the first floor of a large building and the approach was through a turnstile set in a wall across the entrance. It was impossible to see into the premises until one had paid admission and gone through the turnstile. There was however a small spy-hole for the use of the staff so that it was possible to see in and get a rough impression of how many visitors were present.

I had a look and could see that on this Saturday afternoon the place was packed. At the far end I could see the wild animal cages and could catch a glimpse of the lions intermittently between the heads and shoulders of the people who were standing or strolling about. After a few moments I saw that the lions had stopped pacing and were facing in my general direction in an attitude of extreme alertness. I remained where I was and after a few minutes more the two lionesses suddenly went into frenzy. They ran from end to end of the cage, leaping over each other on the way. This performance was so alarming that I could see that the spectators who happened to be at the far end, nearest the lion cages, were moving away and making tracks for the exit.

I went through a staff pass-door and mingled with the visitors – perhaps 100 to 150 people. At the moment I did this, the lions stopped their leaping and bounding and came into the caution position with heads outstretched, backs deeply arched down, but with tails mobile. They seemed to be scanning the whole space between the bars of their cage and the far end of the building where I had just entered. Final recognition was, I am sure, by sight. As I walked towards the lion cage, elbowing my way through the crowd, they finally identified me to their satisfaction and with one accord went into the leaping and bounding performance of a few minutes ago. I went up the two steps to the cage door, went through the safety cage and in beside them. If you can imagine the sort of welcome you get from a favourite Labrador who hasn't seen you for six months and pulls out all the stops to assure you he remembers – and then multiply that by several hundredweight you will have some idea of what I was treated to. Finally they lay down panting, rolled over on their tummies and insisted on being slapped and petted.

Some facts should be noted. When I first peered through the spy-hole something communicated itself to two lionesses. They could not see me or hear me and I discount the possible use of the sense of smell because there were at least a hundred people in a tight mass between the cages and where I stood. Yet there seems little doubt that they knew. When I finally came into the building and mingled with the spectators they went quite clearly through a period of elimination and uncertainty before they finally decided that identification had been made. Yet I was one of 100 people and I was dressed in RAF uniform which they had never seen before.

I am convinced that these two animals knew I was there, but that neither sight sound or smell was responsible for whatever communication was in operation. What then? I do not know.

One of these lionesses was extremely intelligent and learned a number of 'feature' tricks quite effortlessly, tricks which are often cited by antiperforming animal societies as being obtainable only by cruelty. She learned for example to walk twin parallel tightropes like a leonine *fil-de feriste*. If I did a performance in the morning, largely for the fun of it and there were only a few people in the zoo to watch, she would do her 16 foot walk along the ropes, reach the far end and without hesitation, jump down: trick over. If however it was a Saturday evening show and there were many spectators and she got a 'good hand', she would turn round at the far end and walk back again! I am not suggesting that egoism and vanity are animal latencies which should be developed but I am quite sure they *do* develop even in wild animals as a consequence of their relationship with humans.

Hans Brick had a quite extraordinary relationship with his own lion Habibi. They busked together across Europe and on one occasion when times were very bad, Brick prised out the gold crowns from his own teeth to buy meat for the lion.

Their relationship was quite extraordinary. Certain boundaries were laid down by tacit agreement. One of them was that Habibi was entitled to kill Brick if he could find a moment when his trainer's attention was less than continuous. Provided he could maintain this, the lion *never made the attempt*. On several occasions over many years Brick momentarily lapsed and attack came instantly. Brick was seriously injured several times. Always Brick insisted that the fault was his. "I know the rules" he would say, "so does he".

Yet at certain times and in certain conditions Brick could require from this lion certain concessions. He could, as it were, ask for an *ex-gratia* suspension of treaty, and could call upon something very much like understanding. Brick was interned in the Isle of Man during the war as an alien and his lion never saw him for several years. When he was released,

Brick was asked to do wild animal sequences for the film *The Dark Tower* at Pinewood studios. The owner of the zoo where Habibi had been kept all through Brick's internment felt that he was entitled to some recompense for providing the lion with bed and board and flatly refused to release either Brick or lion.

Habibi had been housed on the first floor of the same building already mentioned in connection with my lions. Brick had no tunnelling to take his lion from its cage on the first floor to a travelling cage at street level. He had no 'shifting den' (a very large barred packing case) which might have sufficed to get the lion out and away. Yet when the zoo was opened one Monday morning, Brick and his lion had flown. I was sure I knew how the trick had been done and some years later I confirmed it exactly. At six o'clock on a Sunday morning, Brick opened the cage in which Habibi had spent the war, called him out and 'made his pact'. He looped his whiplash loosely round the lion's neck like a dog lead and led him through the zoo, down a flight of stairs into the main street of a large city. He walked him – a 12-year-old male lion that had once killed and totally eaten a man – along a city street, round a corner and up a lane where Brick's wagon-cage was stored. He opened this and the lion jumped in. A few minutes later they were off to Pinewood studios.

One has to look very carefully at this incident to see just what was involved. When Brick opened the lion's cage in the zoo and called him out, every other animal must have gone berserk. There were lion cages and a cage containing a leopard close by. Adjoining there was a stall with shetland ponies. Monkeys, in netted enclosures, must have been screaming. Across the floor of the building rabbits were allowed free range at the weekend and so was a peacock. Through this bedlam Brick walked a maneating lion. In some way Brick could make a claim upon this beast, involving the exercise of some capacity never normally associated with a wild animal and could count upon the lion's tolerance for a certain period. I should be hard put to it to name what it was that Brick could invoke in this animal or the means of communication he used. But something quite extraordinary had been developed in a wild beast by association with a very remarkable man.

At the moment we are trying to find examples of unusual communication between man and beast that go beyond the motor-instinctive, or conditioned level. The next example may appear to be at bottom storey level but it would seem to include also a 'certain something' at a better level.

Knights in the Middle Ages, engaged in combats of chivalry, developed certain tricks in their chargers. A horse would be trained to lash out with hind hooves at a certain moment and so secure the knight's rear. Or it would

rear up, swing round and paw the air, so as to discourage an opponent engaging from the front. With the end of knightly combat the functional aspect of this vanished, but the horse movements seem to have become stylised and elaborated as 'Haute Ecole' riding. In the last century the centre of this fine-art horse-training was the Spanische Reitschule at Vienna, associated with the high and palmy days of the Austro-Hungarian Empire. There, high school riding reached very great standards of refinement, but there were other places where the same — or perhaps even a superior — standard was achieved.

Therese Renz, a member of a famous European circus dynasty, seems to have taken school-riding to an exceptional pitch. She was still riding when she was over 80 and could produce even then a remarkable effect on audiences. A German publicist, Dr Kober made some interesting observations of Therese Renz's effect. In brief the theory is that at a certain pitch of high school training and a certain degree of rapport between horse and rider, 'something else' switches in. The brain of the horse goes into abeyance and the rider's brain takes charge of two motor-instinctive circuits – the horse's and the rider's own. Dr Kober noticed that when this 'something' happened it was communicated instantly to an audience, whether it was an audience of farmers in Bavaria or a sophisticated Society audience in Berlin. The phenomenon communicated itself. People felt they were in the presence of something in an unfamiliar area and, though they could not rationalise it, they could not fail to notice it.

Again the explanation offered may be fanciful. It may merely be possible to reduce the 'aids' (muscular contractions) from the rider's hands and thighs to vanishing point yet leave an unconscious minimum, adequate to convey instruction to a horse whose sensitivity has been very highly developed. Or it may be that when ordinary sensory communication is enhanced to the ultimate, other modalities of cognition do move from the potential into the actual.

The dog would seem to provide many examples of a 'higher area' being switched in as the result of long association with a higher intelligence. There are many examples of a dog running back for help when its master has been injured. I think the significance of this is often lost in the usual 'shows how intelligent a dog can be'. The capacity for reasoned initiative in a dog must be minute, at best. The behaviourists would say that it is non-existent. Yet here is a situation in which no conditioned response (running for help) has been trained in as the consequence of a stimulus (an unconscious owner). Yet the dog appears to show a rational initiative. Again, is it possible that something of man's intelligence can be imparted by some sort of emanation as the result of long association?

Man and animal have been associated almost from the start of human evolution. There appears to have been a magic relationship and a domestic relationship. Maybe the two lines sometimes overlap. Could it be that the man-animal relationship is one of reciprocal advantage at some level not easily seen? That man – though unconsciously – is contributing something to an animal evolution? Some of the suggestions I have made are no doubt fanciful and they are clearly to be labelled with a very big question mark. Here, to conclude is a final suggestion, more fanciful still.

Suppose man's destiny requires that in future time he should encounter other intelligences in the universe. It seems unlikely that with the means at present available to him he would be able to communicate. Some new technique, some radically different grammar of communication would be necessary. The Sufi, Idries Shah, has suggested that the human population of planet Earth is now living in 'the eighth day of the week'. He has also hinted at the difficulties (and dangers) of a first encounter with another order of Being. Perhaps we should be applying ourselves seriously to the fundamentals of communication against the time when communication becomes a necessity rather than an option. The animal world may offer us a place in an invaluable kindergarten.