

ARTIGOS

THE FEELING OF WHAT HAPPENS AND ANIMAL MINDS A CRITICAL ANALYSIS OF HAUSER'S WILD MINDS

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I would like to start by quoting one of the most intriguing episodes from a book of our childhood – *Alice's Adventures in Wonderland*. I am referring to the strange dialogue between Alice and the blue Caterpillar sitting on a mushroom smoking a water pipe (hookah). Alice couldn't control the constant changes in her body and was obsessed with the question “what?” – What should she eat to retrieve her identity? The Caterpillar will give her the solution, but first she has to undergo an interesting questionnaire. “Who are you?”, asked he abruptly. A very embarrassed Alice replied: “I hardly know Sir, just at present – at least I know who I was when I got up this morning, but I think I have changed several times since then... I'm not myself, you see”. Before an astonished Caterpillar, Alice says she cannot be more explicit because “being so many different sizes in a day is very confusing”. Now, the Caterpillar, coming from a butterfly, disagrees with her, finding it the most natural thing on earth. When Alice tells him that he too will be confused when he eventually develops, first into a chrysalis, and after that into a butterfly, he replies that he will not be so, and repeats the question “who are you?”.

This exotic dialogue between Alice and the Caterpillar may seem a typical nonsense dialogue, much like those in the delirious “Mad Tea Party”. I believe, however, that we are in the presence of something different: in this passage, Lewis Carroll wants to call our attention not only to identity issues (in and of themselves quite difficult to solve), but also to the fact that our very understanding of identity *per se* is contingent on our own identity as humans. From the standpoint of a future butterfly,

radical anatomic changes do nothing but to confirm its nature; Alice, on the other hand, feels lost undergoing so many body changes in so short a time. The writer seems to be drawing our attention to the fact that we have an enormous difficulty in understanding questions of identity whenever we are in the presence of beings which self-experience of body and time differs from ours. The Caterpillar is of course a metaphor, a literary symbol; but the quoted dialogue depicts our mind's inability to understand identity experiences different from the human ones. Now, if it is already difficult enough to understand what we are, wouldn't it be a vain task, one condemned to failure, to attempt to understand what others are, particularly others which in anatomy and behaviour are different from us, as is the case with animals?

I intend to dispute Marc Hauser's thesis, sustained in *Wild Minds. What animals Really Think*, that we must abandon the question of whether animals have a feeling of themselves, replacing it for an objective and scientific analysis capable of disclosing the extraordinary similitude between different mental procedures animals undergo when they face common challenges. Hauser's thesis seems to be the repetition of an old debate in Psychology and Philosophy of Mind which opposes those who do not abdicate from an internalist phenomenological position of the human mind and the behaviourists, notably Skinner, who defend that that which cannot be understood must be eliminated.

Marc Hauser's stand may sound very attractive for many people in that it establishes an objective frame of reference which enables us to see that there are several mental functions common to all animals. According to Hauser, reasons connected with survival led some species to develop somewhat specific mental functions. Essentially, though, these functions are identical, differences being found in the expression of distinct degrees of specialisation only.

As to the case we will be discussing, Hauser states that all animals have a mental mechanism which allows them to recognise other animals, but that only very few of them are able to recognise themselves and ultimately, that only human beings have self-consciousness proper. This fact is not a sign of any kind of anthropocentrism and, in Hauser's words, does not make us smarter than other animals – just different. This difference resulted from the specific need of the human species for strengthening social bonds without each member of the species losing his/her sense of individuality. Among the human species, one has to be able, not only to recognise others, but also to know oneself, thus determining this species' place in the animal world as one of unique animals, capable of solidarity.

Let us first analyse Hauser's global vision and then zero in on the specificity of self-consciousness in the human species. "The only way to

understand what animals think and feel is to explore how their minds have been designed to solve specific social and ecological problems. The same is true of the human mind. Some problems are common to all animals. As a result we find that all animals are equipped with a universal toolkit, a set of mental abilities for acquiring knowledge about objects, number, and space. Although humans will navigate to a restaurant to eat French cuisine and then leave a 20 percent tip, while honeybees will navigate to a field of flowers and then return to the hive to waggle out the distance and direction of food, the underlying mental tools are generally similar. (...) Specializations do not make one species “smarter” than the other, but they do make each species wonderfully different from the others.” (2000:317/318).

What is the nature of this universal mental toolkit common to different animal species? First, we have the mental capacity, the mental tool, “that allows all animals to recognize objects and predict their behaviour”; second, we have the “mental tool that allows all animals to assess the number of objects or events, be they seeds, bananas, (...) or coins” (54); “the third, and final, instalment in the universal toolkit is a mental tool that allows to navigate” (78), thus making all of us “space travellers” (79). Recognising the presence of someone else, a partner or a predator, esteeming what one possesses, and navigating through space are the main features of the animal mind – human and nonhuman. But then we have the differences: The ability to recognise another does not necessarily imply self-recognition (110); the capacity for evaluating what one has determines that all animals possess “mechanisms for learning” that range from imitation to deduction (140); the faculty of recognising another enables the construction of tools of deceit that range from deliberate falsification to the simple gesture of being quiet (172). Also, all animals have systems of communication – at least as a form of self-defence; such systems differ, however, in the way they represent what others are saying. Although all animals, particularly the social ones, have a certain number of behaviour rules, only a few are able to inhibit their “selfish tendencies”. According to Hauser, there exists thus a global frame of mental functions that may or may not require different levels of representation, and which degree of sophistication depends solely on the required specialisation – in his very words, “in the struggle to survive, nature is the only arbiter of intelligence” (318).

Enticing as it may sound, this understanding of the animal mind calls for further analysis. I have some doubts concerning the way the author deals with the problem of self-recognition. My thesis differs from Hauser’s: I will argue that many different animal species have actual self-consciousness and that stemming from such common denominator there are different ways by which self-recognition manifests itself. I will

challenge Marc Hauser's thesis that the ability to recognise another is the common denominator of the animal mind.

Obviously, the main difficulty concerns the issue known in the philosophical jargon as "privacy of conscious state". There are, of course, many public events in our life, *i.e.* events that can be seen and described by anyone. But there is also a sphere in our lives which is absolutely private, *i.e.* the sphere of consciousness, which direct experience is only accessible to oneself. Even authors who support the need of having a "science of consciousness" – and science always implies neutral and nonpersonal observation – are unanimous in acknowledging the private character of conscious mental states. As to this difficulty, Hauser attempts to overcome it by putting it in a very high level.

For this purpose he resorts to a story of our childhood, *Snow White and the Seven Dwarfs*. "The queen of the castle is wicked and vain. Every day she stands in front of her mirror waiting for the usual answer to her rhetorical question about beauty. But now think of about the cognitive steps required for the reader to appreciate those famous words: 'Mirror, mirror on the wall, who is the fairest of them all?' The first step is to see that the queen wants the mirror to render a verdict on her beauty. For this to work, the queen must appreciate her own beauty relative to that of others. She thereby must have some understanding of self – a subjective view of herself as an individual in the world, distinct from other individuals. Second, the queen thinks that the mirror has a reasonable understanding of beauty, and uses such intuition to evaluate the beauties in the land. Third, when the mirror states that the queen is the fairest of them all, she is satisfied, because this of course matches her own beliefs. One day the mirror proclaims Snow White the fairest. Not only is the queen furious, driven by jealousy, she is enraged to discover that she had harboured a false belief.(...) At the root of each step is an understanding of self-awareness, an appreciation of who we are and how we come to know our inner selves, what we believe, desire, and want." (Hauser 2000:111/112).

Briefly, Marc Hauser claims the wicked witch is able to accomplish three essential tasks that reveal self-recognition proper, allowing us to speak of true "self-awareness". She recognises herself in the mirror, distinguishing her body from others; at the same time, she has inner consciousness of her supposed beauty, *i.e.* she possesses the inner belief that she is beautiful; and lastly, using her magical mirror she is capable of comparing her beauty with that of her equals, becoming furious when the mirror tells her that Snow White is more beautiful than she is.

According to the American ethologist, some animals, particularly some big primates, are capable of recognising themselves in the mirror. Marc Hauser tells us that Darwin, in 1870, was the first scientist to use

mirrors to conduct experiments with animals. A century later, the psychologist Gordon Gallup created a test model currently accepted by the scientific community. It begins with a mirror being presented to an animal. A few moments later, the animal is anaesthetised so it is now aware of an odourless red mark being placed in its forehead. Once the effect of the anaesthesia subsides, the mirror is once again placed before the animal. If it not only shows interest in the mark but is also able to remove it, watching itself in the mirror afterwards, we can talk not only of self-recognition in the mirror, but also of self-awareness. Why? Because even when the animal is no longer looking in the mirror, it shows a perplexity-like behaviour towards the mark in the face; this seems to suggest that there is an inner image of itself that remains, a reaction which is to be credited as a sign of belief in physical identity. Following Hauser, adult chimpanzees are the only animals capable of successfully performing this double test. Gorillas, for instance, are usually not interested in their reflected images: they show no aggression towards them (a clear indication of absence of recognition, in that an aggressive behaviour would imply the gorilla to have identified its own image with another animal), only a complete lack of interest.

Hauser mentions an experiment with a gorilla which is, at the very least, intriguing. This experiment was conducted with the mediatic Koko, the female gorilla whose linguistic and mental capacities have now been for thirty five years an object of study at the *California Gorilla Foundation*. She communicates regularly with human beings through “American Sign Language” (*Ameslan*), having by now mastered a vocabulary of more than 800 words. Hauser himself tells us: “An experimenter patted Koko on the head with a damp cloth while another experimenter carried a large mirror in front of her. Koko showed no interest in the mirror. One day, the experimenter patted Koko on the head with a nontoxic, odourless color mark. When she saw herself in the mirror, she did a double take and wiped off the mark while looking in the mirror! This intriguing observation is complemented by another tantalizing one: while Koko was looking in the mirror, a trainer asked what she saw. She signed «Me Koko»“ (2000:124). Other experiments with Koko show that she does manifest the three criteria Hauser equates with self-awareness.

Jeffrey Masson and Susan McCarthy (*When Elephants Weep. The Emotional Lives of Animals*), speaking about Koko, describe a feeling that we usually associate – and for good reasons – to self-consciousness, namely shame: “Among her toys are a number of puppets and dolls. She was once seen signing ‘kiss’ to her alligator puppet. On another occasion Koko signed ‘kiss’ to her blue gorilla doll and ‘bad bad’ to her pink gorilla doll. Then she signed ‘chase tickle’, slammed the dolls together,

made them wrestle, and signed ‘good gorilla good good’. On each occasion, and other similar occasions, the moment she saw that she was being watched, she stopped playing”. (Masson/McCarthy 1995:182-183). In my opinion the authors are right when they conclude, “the essence of shame is the unpleasant feeling that one appears badly – weak, stupid, dirty, helpless, or inadequate – and the dread of appearing this way.” (183).

But perhaps the most impressive report about Koko is related with her perception of death. If a being has the perception of its own mortality, it means that it is able to project itself in the future and that it is able of imagining a world without its existence, which naturally implies a very strong identity feeling. One day Koko’s trainers asked her what she would like to have as a birthday present and she replied making the symbol of cat. They brought her three kittens that had been abandoned at birth for her to choose one. She chose the greyest one and called him “All Ball”. One day, the kitten managed to get out of the grounds of the *Gorilla Foundation* and was run over by a car. When Koko was told about the accident, she acted at first as nothing had happened. But suddenly she began sobbing. For a week she cried the cat’s death, constantly showing the sign of “sadness”. One day, Maureen Sheehan, of the *Gorilla Foundation*, spoke with Koko asking her the following questions: “Where do gorillas go when they die?” Koko made the sign of “Farewell kiss”. Maureen questioned her again: “When do Gorillas die?” Koko answered with two signs: “Problems” and “Old Age”. Maureen then asked her the last question: “What do gorillas feel when they die? Joy, sadness, fear?” Koko answered: “Sleep” (Patterson, F./Linden, E., 1981:190-191) Also, Cynthia Moss, one of the greatest researchers on elephant behaviour, stresses that we shouldn’t see the strange relation between pachyderms and death as a myth. “Elephants may not have a graveyard but they seem to have some concept of death.”(Moss, C. 1988:270). A female elephant was dying. Immediately, two elephant females, “Teresia and Trista became frantic and knelt down and tried to lift her up. They worked their tusks under her back and under her head. At one point they succeeded to lifting her to a sitting position but her body flopped back down. Her family tried everything to rouse her [...] One of them even went off and collected a trunkful of grass and tried to stuff it into her mouth.” (73). When it becomes evident that an elephant is dead, the elephant community usually performs a ritual in which “[they] broke branches and palm fronds and brought them back and placed them on the carcass.” (270).

In Hauser’s opinion, Koko’s unusual behaviour (self-recognition, shame, perception of death) can be explained by her familiarity with human beings, and also by her being highly familiar with the use of a

formal language. Although this author clearly explains that symbolic language is not a determining condition for mental activity – *i.e.*, the mind does not need double articulated language for its perfect functioning – he appears to assume that language is indeed a requirement if the three established criteria of consciousness are to be completely fulfilled. I think that there is no doubt as to the role of language in the mental development of personality; it does seem doubtful, however, that language would depend, not so much on the mind, but on one's own consciousness.

In fact, António Damásio's work supports a different point of view. "When I was in medical school and in neurology training, I remember asking some of the wisest people around me how we produced the *conscious mind*. Curiously, I always got the same answer: language did it. I was told that creatures without language were limited to their uncognizant existence but not we fortunate humans because language made us know. Consciousness was verbal interpretation of ongoing mental processes [...]. The answer sounded too easy, far too simple [...] and also implausible, given what I saw when I went to the zoo. I never believed it and I am glad I did not." (Damásio 1999:107).

Damásio tell us that, instead of confirming that consciousness depends on those areas of the brain usually linked with language, neurological research show us that facts occur otherwise: "Consciousness does depend most critically on regions that are evolutionary older, rather than more recent, and are located in the depth of the brain [...] Let me note that is a fact, not a hypothesis – whether my hypotheses turn out to be correct or not, the fact remains that damage to these sites impairs consciousness, while damage elsewhere does not". (275). Clinical situations with human patients have established that it is erroneous to attribute a crucial role to language in the determination of self-consciousness. Damásio adds: "The best evidence, in this regard, comes from patients with what is known as global aphasia. This is a major breakdown of all language function. Patients are unable to comprehend language whether auditory or visually. In other words, they understand no speech when spoken to and they cannot read a single word or letter (...) There is no evidence that, in their awake and attentive minds, any words or sentences are being formed. On the contrary, there is much to suggest that theirs is a wordless thought process." (109).

In my opinion, Hauser's three criteria for identifying the presence of self-awareness meet several objections. As above mentioned, Hauser claims that, in order to acknowledge an individual as possessing self-awareness, it does not suffice that such individual recognises its own image in the mirror; for it to have self-awareness, it is necessary that it is able to maintain an inner belief of its body identity, constantly comparing it to other beings. Although admitting that his second criteria could

possibly be inferred in the case of adult chimpanzees, what Hauser is in fact telling us is that we can only speak of self-awareness when, besides an objective behaviour, we are also certain of the existence of inner experiences appropriate to that behaviour.

I am convinced that Hauser is surreptitiously postulating subjective dimensions (*e.g.*, the witch's inner image of her own beauty) to cast a doubt on the existence of such dimensions in animals which objectively recognise themselves in the mirror.

We are here in the presence of a catch 22, particularly if we bear in mind the essay by the North-American philosopher Thomas Nagel "What is it like to be a bat?" – an essay Marc Hauser himself is well familiar with. Hauser's work is about an experience he had not with a bat but with a female spider monkey. "I noticed that a female spider monkey in one cage appeared to be looking intensely at me. I approached the cage. The female monkey approached as well. While sitting in front of me, she cocked her head to one side, then to the other, and then reached through the cage and slowly wrapped both of her arms around my neck. She looked into my eyes and cooed several times. What was she thinking? What was she feeling? (...) I was puzzled. Was this female spider monkey attracted to humans? Or even more worrying, attracted to me?" (Hauser 2000: xiii) Later, he learned that she displayed a similar behaviour with all her trainers, which seem to eliminate the romantic aspect of the story. In the end of his book, Hauser quotes Thomas Nagel and tells his story once again, this time under the suggestive title "What it's like to be a spider monkey" (315). In the epilogue, Hauser is right in recognising that one can never seize the inner experience of the spider monkey just as one can never seize the inner experience of any human being. "We will never know, exactly, what the female spider monkey felt when she embraced me, looked into my eyes, and cooed" (317). This being the case, my objection ensues: why does he begin by introducing subjective dimensions – namely, one's inner image – in his argumentation, only to deny it afterwards with the argument that we do not have any objective evidence of their existence?

Let us briefly recall Nagel's central question. May we seize objectively and neutrally in the third person subjective dimensions, either human or animal, that only direct experience can perceive? To illustrate his thesis, Nagel wrote an article with an incisive title which became a classic in philosophical studies about the mind – "What is it like to be a bat?". In Nagel's words, consciousness is "a widespread phenomenon. It occurs at many levels of animal life, though we cannot be sure of its presence in the simpler organisms, and it is very difficult to say in general what provides evidence of it." (166). Following Nagel, any living form that has consciousness necessarily has an experience of being the

organism that it is or, if we prefer it in Damásio's words, such living form has the feeling of being this, rather than other, organism. Moreover, if an organism has consciousness, it possesses a *point of view* from which it observes the world, that point of view being an expression of a private and subjective experience of the self – the sentiment of itself. To illustrate the thesis that we cannot objectively and mentally describe the experience of being another organism, Nagel chose as an example the order of bats. It was not an accidental choice. "I assume we all believe that bats have experience. After all, they are mammals, and there is no more doubt that they have experience than mice or pigeons or whales have experiences." (168). To say that a bat has consciousness is to say that there is an experience of being a bat. The difficulty raised by Nagel lies in the fact that everything points to the reality of these animals being able to draw a mental cartography of their surrounding space, of the different objects in such space, and of the objects' form and location, using their auditory system. Metaphorically, we could say that they are able to "see" via hearing, undergoing an inner experience that we can but imagine. In Nagel's opinion this extreme situation proves the impossibility of seizing objectively and neutrally ("a view from nowhere") that which is given in the inner experience of an organism. Nagel's thesis expresses an epistemological difficulty – shared by animals and persons alike – without contradicting the fact that mammals and birds *do* have states of consciousness. The problem lies in fact in our inability to seize the specific nature of experiences – be it human or animal – performed, as one usually says, in the first person.

That said, my chief objection is related with the fact that the term 'self-consciousness' is used in technical and philosophic language, having two complete different meanings. One of these, the more commonly used one, is, essentially, the meaning assumed by Marc Hauser. In this sense, self-consciousness comprehends at least a more or less clear representation of self-identity, and encompasses the notion of a self-reflexive attitude on one's own nature. For purposes of discussion, we will call this type of self-consciousness 'Socratic attitude', for it implies a continuing search concerning one's identity. Obviously enough, this Socratic attitude is non-existent in animals and – why not admit it? – in most human beings.

There is, however, another meaning for the term 'self-consciousness'; it refers to something that happens in us when we watch external events. According to Damásio, consciousness, even in its simplest form, produces self-awareness, or feeling of itself: "In short, core consciousness is a simple biological phenomenon; it has one single level of organization; it is stable across the lifetime of the organism, it is not exclusively human; and it is not dependent on conventional memory, working memory,

reasoning, or language. On the other hand, extended consciousness is a complex biological phenomenon; it has levels of organization; and it evolves across the lifetime of the organism. Although I believe extended consciousness is also present in some nonhumans, at simple levels, it only attains its highest reaches in humans. It depends on conventional memory and working memory. When it attains its human peak, it is also enhanced by language.” (Damásio 2000:16). The problem is not to identify consciousness and self but to show that we are in the presence of two inseparable phenomena. “The sense of self which emerges in core consciousness is the *core self*, a transient entity, ceaselessly re-created for each and every object with which the brain interacts. Our traditional notion of self, however, is linked to the idea of identity, and corresponds to a no transient collection of unique facts and ways of being which characterize a person. My term for that entity is the *autobiographical self*.” (17)

To sum up, there is no consciousness without self-consciousness, diffuse as it may be, because the act of building a core consciousness inherently entails the formation of the core self. If we acknowledge the presence of emotions, memory, and learning skills in animals then, if Damásio’s hypothesis is correct, these animals have to have self-consciousness, notwithstanding only very few among them being able to recognise themselves in a mirror. Would it be better to follow Marc Hauser in his use of a language centred in the mind rather than consciousness? From the point of view of an objective description of the world, I would have to say yes; but this world we live in is like a coin with two sides, an outer side and an inner one – one neutral, the other experiential. If we admit that certain animals have emotional experiences, memories, learning skills and the ability to project into the future, then we know for certain that, like us, they have internal experiences of the world and of themselves, making them, as Tom Regan puts it, “subjects-of-a-life” (Regan 1988:243), and therefore due our ethical and moral respect.

Suggested Readings

- CARROLL, Lewis, 1961 (1865¹). *Alice’s Adventures in Wonderland*, London: The Folio Society.
- DAMÁSIO, António, 2000 (1999¹). *The Feeling of What Happens. Body, Emotion and the Making of Consciousness*, London: Vintage.
- DAWKINS, Marian Stamp, 1998 (1993¹). *Through our Eyes only? The search for animal consciousness*, Oxford et al: Oxford University Press.
- HAUSER, Marc D., 2000. *Wild Minds. What animals Really Think*, London: Penguin Books.

- HAUSER, Marc D., 2006. *Moral Minds: how Nature designed our Universal Sense of Right and Wrong*, New York: Ecco.
- KOWALSKI, Gary A., 1991. *The Souls of Animals*, Walpole, NH: Stillpoint Publishing.
- MASSON, Jeffrey Moussaieff/McCarthy, Susan, 1995. *When Elephants Weep. The Emotional Lives of Animals*, New York: Delacorte Press.
- MOSS, Cynthia, 2000 (1988¹). *Elephants Memories. Thirteen Years in the Life of an Elephant Family*, Chicago/London: The University of Chicago Press.
- NAGEL, Thomas, 1979. *Mortal Questions*, New York: Cambridge University Press.
- PATTERSON, Francine/Linden, Eugene, 1981. *The Education of Koko*, New York: Holt Rinehart & Winston.
- PATTERSON, Francine, 1985. *Koko's Kitten*, New York: Scholastic.
- REGAN, Tom, 1988 (1983¹). *The Case for Animal Rights*, London/New York: Routledge.

ABSTRACT

In this paper, I intend to dispute Marc Hauser's thesis, sustained in *Wild Minds. What animals Really Think* (2000), that we must abandon the question of whether animals have a feeling of themselves, replacing it for an objective and scientific analysis capable of disclosing the extraordinary similitude between different mental procedures animals undergo when they face common challenges.

Keywords: mind, self, anthropology, ethology

RESUMO

Neste ensaio, discutir-se-á a tese do antropólogo e etólogo Marc Hauser, defendida em *Wild Minds. What animals Really Think* (2000), segundo a qual devemos abandonar a questão de saber se os animais têm um sentimento de si próprios, procurando antes obter uma análise objectiva e científica capaz de sublinhar a extraordinária similitude entre os diferentes procedimentos mentais quando os animais enfrentam desafios comuns.

Palavras-chave: mente, sentimento de si, antropologia, etologia