Humans, Nonhumans and Personhood[*]

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Are chimpanzees, gorillas and orang-utans persons? In this chapter I explore this question, which is obviously relevant to the proposal that these great apes be included in the community of equals and granted some basic rights. I consider the question of personhood from a particular philosophical position in relation to nonhumans in general, and then discuss implications of my findings for the proposal.

In his novel *The Day of the Dolphin,* Robert Merle presents a view of dolphins as persons — that is, as self-conscious beings with some control over their own activities, who reflect (via language) about these activities and have a moral sense.[1] It was this image which initially prompted me to assist on projects to teach dolphins (and a parrot) language-like communication. Although after working with these animals I was at a loss as to whether they were persons, the research led me to try to find in nonhumans evidence of the concomitants of personhood: verbal communication, self-reflection and the knowledge that others are persons. This last kind of knowledge can only come about through some system of communication which allows for expression of self-consciousness.[2]

On one persuasive view of what it is to be a person, that I am a person requires, at some point in the development of personhood, that I recognise that you recognise that I have consciousness. Thus, there seems to be a triple reflection of consciousness necessary for person-hood: 'The ego, the *I,* cannot truly emerge . . . without doubling itself with an *ego in the eyes of the other.*[3]

These and other requirements for personhood[4] are neatly arranged in a conceptual scheme by Dennett.[5] In his analysis, personhood derives first from three mutually interdependent characteristics: being rational, being intentional and being perceived as rational and intentional. Once a being is acknowledged to have these three characteristics, personhood requires that the being reciprocate by perceiving others as rational and intentional; next the being must be capable of verbal communication and finally of self-consciousness. These last three characteristics are hierarchically dependent, building upon the first three.

None of these characteristics (except the last) need be recognised as such by the being, and, as Dennett suggests, most intelligent beings exhibit the first four. Thus, the big problem in discerning whether a being is a person is discerning whether the being communicates verbally and is self-conscious. With most mature human beings, verbal communication and self-consciousness seem obviously present, but with nonhumans and some humans, both characteristics are not obvious. By self-consciousness, Dennett means that one is capable of reflective self-evaluation, that is, of 'adopting toward *oneself* the stance not simply of communicator but of ... reason-asker and persuader'.[6] Dennett bases his definition of verbal communication upon Grice's theory of non-natural meaning, which entails that, by producing some utterance, an utterer intends for another to recognise the utterer's intention for the

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[*] In PAOLA CAVALIERI & PETER SINGER (eds.), *The Great Ape Project* (New York: St. Martin's Griffin, 1993), pp. 237-247.

[1] R. Merle, *The Day of the Dolphin* (Simon and Schuster, New York, 1969).

[2] A. C. Danto, 'Persons', in P. Edwards (ed.), *The Encyclopedia of Philosophy,* vol. 6 (Macmillan and Free Press, New York, 1967), pp. 110-14; W.R. Schwartz, 'The problem of other possible persons: dolphins, primates, and aliens', *Advances in Descriptive Psychology,* vol. 2 (1982) pp. 31-55.

[3] M. Merleau-Ponty, The child's relations with others', in J.M. Edie (ed.), *The Primacy of Perception* (Northwestern University Press, Illinois, 1960/ 1982), pp. 96-155.

[4] Danto, 'Persons'.

[5] D.C. Dennett, 'Conditions of personhood', in *Brainstorms: Philosophical Essays on Mind and Psychology* (Bradford Books, Cambridge, MA, 1976/ 1978), pp. 267-85.

[6] Dennett, 'Conditions of personhood', p. 284.

other to do or believe something as a result of the utterance.[7] Only if there is evidence of verbal communication should we expect evidence of self-consciousness. The question thus becomes, given that nonhumans are without speech, how are we to discern any of their (potentially) verbal communications?

The best answer was, I think, provided by Bateson[8] in his analysis of metacommunication in nonhuman play.[9] Bateson was concerned with the evolution of verbal communication, and wondered how a non-linguistic being could develop a system of communication that could lead to communication of the human sort. He suggested that the being could simulate its activities, and make the fact of simulation apparent to other beings. Bateson believed, for example, that monkeys playfighting were acting *as if* fighting (that is, were simulating fighting), yet were indicating that they were not fighting by making it evident that they were not fighting. Although Bateson's analysis of playfighting by most monkeys may be inaccurate, his suggestion that recognition of one's own or another's simulation is a way in which nonlinguistic beings could develop verbal communication is intriguing.[10] Is there any evidence that nonhuman beings recognise, create and/or communicate via simulation?

Such evidence generally involves intentional imitation.[11] For example, the sign-taught orangutan Chantek imitated a two-dimensional photograph of a gorilla pointing to her nose.[12] To perform this imitation, Chantek must have known how he would look when he performed the action depicted in the visual image, as well as how it would feel to create this action with his own body. He must have been able to translate from the visual image to his own kinesthetic sensations - that is, to sensations of his own 'bodily position, presence, or movement'.[13] This translation of a visual image to a kinesthetic act which resembles (simulates) the visual image is intriguing in that it implies that Chantek has a cross-modal representation of his body, which itself implies that Chantek has an imaginal representation of himself. Often such cross-modal imitation is in the form of pretence: a rhesus monkey carried and repositioned a coconut shell in direct imitation of a rhesus mother's carrying and repositioning her infant,[14] and the sign-taught chimpanzee Washoe bathed a doll as her human care-givers had bathed her.[15] These pretend imitations again imply that the imitator has a capacity for translation between visual experiences and kinesthetic representations of him/herself, such that the imitator presumably could know how to effect actions based upon a visual mental image of him/herself engaging in an action. The surprising thing about most instances of nonhuman imitation and pretence is that there is no aspect of communication: the animal seems content to be engaged by the simulation without any attempt to engage another in the fact of simulation. Can beings who imitate their visual experiences create visual experiences based on imitation for other beings? That is, can they communicate via simulation?

While there are few instances of cross-modal imitation in nonhumans, there are even fewer instances of communicative imitation, that is, of simulation which one being uses to inform another of its simulativeness and thereby to metacommunicate intentionally and produce non-

[7] H. P. Grice, 'Meaning', *Philosophical Review,* vol. 66 (1957) pp. 377-88.

[8] G. Bateson, 'A theory of play and fantasy', in *Steps to an Ecology of Mind* (Ballantine Books, New York, 1955/1972), pp. 177-93; G. Bateson, The message "This is play"', in B. Schaffner (ed.), *Group Processes: Transactions of the Second Conference* (Josiah Macy Jr. Foundation, Madison, NJ, 1956), pp. 145-242.

[9] R. W. Mitchell, 'Bateson's concept of "metacommunication" in play', *New Ideas in Psychology,* vol. 9 (1991) pp. 73-87; H. P. Grice, 'Meaning revisited', in N. V. Smith (ed.), *Mutual Knowledge* (Academic Press, New York, 1982), pp. 223-43.

[10] Mitchell, 'Bateson's concept', pp. 77-8.

[11] R. W. Mitchell, 'A comparative-developmental approach to understanding imitation', in P. P. G. Bateson and P. H. Klopfer (eds), *Perspectives in Ethology,* vol. 7 (Plenum Press, New York, 1987), pp. 183-215.

[12] H. L. W. Miles, 'The cognitive foundations for reference in a signing orangutan', in S. T. Parker and K. Gibson (eds), *'Language' and Intelligence in Monkeys and Apes: Comparative Developmental Perspectives* (Cambridge University Press, Cambridge, 1990), p. 535.

[13] W. Morris (ed.), *The American Heritage Dictionary of the English Language* (American Heritage and Houghton Mifflin, Boston, 1969), p. 721.

[14] J. A. Breuggeman, 'Parental care in a group of free-ranging rhesus monkeys *(Macaca mulatto)', Folia Primatologica,* vol. 20 (1973) p. 196.

[15] R. A. Gardner and B. T. Gardner, 'Teaching sign language to a chimpanzee', *Science,* vol. 165 (1969) p. 666.

natural meaning. Communication of non-natural meaning is, of course, a direct test of verbal communication, and one which usually involves simulation of some sort. An illustration of the complexities which can be presented via simulation is present in an example of a twelve-month-old boy J who gets his father from another room to retrieve a block that landed behind the bookcase when the block had flown off the top of the boy's jack-in-the-box. Because his father does not understand what the boy wants (not having seen the original launching), J recreates the block's trajectory behind the bookcase:

> J . . . takes his father's hand in his own, places them both on top of the jack-in-the-box, makes a kind of explosive noise, and moves his and his father's hand in an arc toward the bookcase. J then reaches his own hand down behind the bookcase, making somewhat conventionalised effort sounds to signal reaching. Still looking at his father, he says something like, 'Block'.[16]

J intends his father to get something which has been shot behind the bookcase, and he also intends his father to recognise this intention, and he realises these intentions by simulating for his father the events which led to the block's current unavailability. Similar re-enactments which create communication via simulation and non-natural meaning are performed by nonhumans. An Indian Ocean bottlenose dolphin, after attempting to get the attention of human observers outside a glassed-in area of her tank, used imitation to convey a shared experience: after observing 'a cloud of cigarette smoke', the dolphin 'immediately swam off to [her] mother, returned and released a mouthful of milk which engulfed her head, giving much the same effect as had the cigarette smoke'.[17] Similarly, the orang-utan Chantek eschewed using the sign for *milk* and instead recreated part of his normal milk-getting situation: he 'gave his caregiver two objects needed to prepare his milk formula and stared at the location of the remaining ingredient'.[18] These communications via non-natural meaning required simulation of a previous event. Such communication would become extremely cumbersome if it were the only means of information transfer, and clearly non-natural meanings must give way, and did in the cases of J and Chantek, to conventionalised utterances if there is to be a continuing and extensive communication system.[19] But what is striking about these instances is that the simulator intends for the other to recognise that the simulation is *about* something which resembles, but is other than, the actions themselves. The simulator intends the observer to recognise the resemblance to something, and to recognise that the simulator intends that the observer should recognise the resemblance. The communication of non-natural meaning is part of intentional simulation recognised as such, much as Grice[20] would have it.

Why would beings resort to anything as convoluted as communication of non-natural meaning via simulation? The answer may be that animals had to communicate with two audiences at once: for one audience information was hidden, for the other information was manifested. For example, adult rhesus monkeys appear to use playfighting as a threat to other monkeys when a direct threat would be problematic:[21] they playfight in such a way as to intimate real fighting to one monkey (their 'play partner') while appearing to be merely playfighting to an ally of that monkey (e.g. the monkey's mother) so as to avoid the ally's intervention. A similar deceptive manoeuvre seems present when a simulation is used simultaneously to hide information and present misinformation in relation to the *same* individual. For example, a gorilla acted as

[16] S. Rubin and D. Wolf, 'The development of maybe: the evolution of social roles into narrative roles', in E. Winner and H. Gardner (eds), *New Directions for Child Development,* No. 6: *Fact, Fiction, and Fantasy in Childhood* (Jossey-Bass, San Francisco, 1979), p. 18.

[17] C. K. Tayler and G. S. Saayman, 'Imitative behaviour by Indian Ocean bortlenose dolphins *(Tursiops aduncus]* in captivity', *Behaviour,* vol. 44 (1973) p. 291.

[18] Miles, 'Cognitive foundations for reference', p. 535.

[19] R. G. Millikan, *Language, Thought, and Other Biological Categories: New Foundations for Realism* (Bradford Books, Cambridge, 1984).

[20] Grice, 'Meaning revisited', pp. 233-4.

[21] J. A. Breuggeman, 'The function of adult play in free-ranging *Macaca mulatto",* in E. O. Smith (ed.), *Social Play in Primates* (Academic Press, New York, 1978), pp. 169-91.

though foraging to get near an infant whose mother was very protective;[22] a chimpanzee imitated friendly facial expressions and gestures to lure another chimp near enough to be able to attack her easily, and another chimpanzee imitated play to distract others from aggressive acts toward himself.[23] In all of these instances of deception, the being had to retain one interpretation for him/herself and present saliently another interpretation for another - *the same action came under two descriptions for the animal.* With such dual-description, the being is able 'to recognise that the other individual's and its own signals are only signals, which can be trusted, distrusted, falsified, denied, amplified, corrected, and so forth'.[24] This dual-description has significant consequences for morality, because

> *If I am to be held responsible for an action* (a bit of behavior of mine under a particular description), I must have been *aware* of that action under that description. Why? Because only if I am aware of the action can I *say* what I was about, and participate from a privileged position in the question-and-answer game of giving reasons for my actions.[25]

So with intentional deception via simulation comes the capacity for dual-description, and from communication of non-natural meaning via simulation comes a sharing of perspective. Given that some animals can satisfy criteria for verbal communication, we can now look for evidence of self-consciousness in these animals, with its attendant sense of moral responsibility.

Clearly the instances of intentional deception, imitative pretence, and communication of non-natural meaning suggest that the imitator has some sort of internal representation of self, and/or some sort of internal representation of the other's psychology, both or either of which are used to guide behaviour. But these activities do not seem to evidence the sort of self-consciousness we are concerned with, in which the being evinces reflective self-evaluation. Are there other sources of evidence which might indicate such reflective self-consciousness?

One traditional avenue for discerning self-consciousness is recognition of oneself in a mirror. Mirror self-recognition is present in many humans, chimpanzees and orang-utans, and in a few gorillas, and is commonly taken to be a sign of pre-existing self-consciousness.[26] Recognising oneself in a mirror implies recognising a simulation of one's own body, which suggests a capacity to understand simulation as such, as well as its relation to one's own body. Once achieved, mirror self-recognition entails that the being recognises that an action the being experiences kinesthetically is identical to the visual display of that action in the mirror,[27] a capacity which is already evidenced in imitative pretence. Indeed, it is likely that this ability to recognise simulation in a mirror is based, in part, upon a previous ability to imitate activities of other beings via kinesthetic-visual matching.[28]

Note, however, that the mere fact of recognising oneself in a mirror would not be indicative of self-consciousness in the sense of thoughtful self-evaluation.[29] Knowing that one looks like one's image in the mirror does not mean that one has capacities for reflecting about one's situation in life or evaluating oneself. But some responses to mirrors *do* indicate some sense of critical self-evaluation, in that the observer uses the mirrored image of self to create an image of self

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[22] R. W. Mitchell, 'Deception in captive lowland gorillas', *Primates,* vol. 32 (1991) pp. 523-7.

[23] F. de Waal, 'Deception in the natural communication of chimpanzees', in R. W. Mitchell and N. S. Thompson (eds), *Deceptions: Perspectives on Human and Nonhuman Deceit* (SUNY Press, Albany, 1986), pp. 221-44.

[24] Bateson, 'A theory of play and fantasy', p. 178; see also Grice, 'Meaning revisted', pp. 233-4.

[25] Dennett, 'Conditions of personhood', pp. 282-3.

[26] G. G. Gallup, Jr, 'Self-awareness and the emergence of mind in primates', *American journal of Primatology,* vol. 2 (1982) pp. 237—48; F. Patterson, 'Self-recognition in gorillas', Paper presented at symposium on *Gorilla Cognition and Behavior* (American Society of Primatologists meeting, Davis, California, 1990); but see R. W. Mitchell, 'Mental models of mirror self-recognition: two theories', *New Ideas in Psychology,* vol. 11 (1993, forthcoming).

[27] Mitchell, 'Mental models'.

[28] P. Guillaume, *Imitation in Children,* 2nd edn (University of Chicago Press, Chicago, 1926/1971); see also Mitchell, 'Mental models'.

[29] Mitchell, 'Mental models'.

which is aesthetically or culturally satisfying to others or oneself. In humans, a 'reflective self-awareness' which takes into account our awareness of how others perceive us is utilised in making such an ideal image of ourselves.[30] Such reflective self-awareness seems absent in the other great apes. Reflective self-awareness differs from the self-awareness present in the examples of imitative pretence, intentional deception and communication of non-natural meaning in that it incorporates awareness of another's awareness into one's awareness of self: a final condition of personhood. The term 'reflective' is used to imply both that one's self-image is experienced through others' perspectives (i.e. the self-image is 'reflected back' from the other) and that one is capable of self-examination (i.e. one can 'reflect on' and evaluate one's thoughts).

Although true for both humans and apes that 'By means of the image in the mirror [one] becomes capable of being a spectator of himself, it may be true only for humans (and not even for all humans) that with one's self-image 'appears the possibility of an ideal image of oneself — in psychoanalytic terms, the possibility of a super-ego'.[31] Because of reflective self-awareness, the ideals of morality are possible. But along with such reflective self-awareness comes the ability to make a deliberate argument in support of one's moral vision.[32]

So far it is clear that nonhuman beings, including the great apes, are not persons, in that they lack full self-consciousness, or what I am here calling reflective self-awareness. It would appear that humans, but not apes, because of reflective self-awareness 'can ponder past and future and weigh alternative courses of action in the light of some vision of a whole life well lived'.[33] But the great apes seem to differ from human beings in this way by degree rather than in kind, in that their self-awareness and perspective-taking provide them with mental images which represent themselves and others, and they can use these images to plan their activities.[34] To plan is not merely to have a prospective image, but to imagine oneself *within* a prospective image. Thus, the simulator can imagine different scenarios by which he or she can choose to live, and in this sense has the beginnings of reflective self-awareness. Chimpanzees (and other great apes) may not be able to 'formulate a general plan of life',[35] but can formulate a general plan for (at least) a day or a night: for example, a chimp can select and carry a tool which will assist in obtaining food at a distant location, or carry clumps of hay for warmth when moving from her inside enclosure to the outside which she had experienced as cold the day before.[36] These plans for the day can include plans for their offspring, for example that the youngster should learn manual skills through imitation of a parent's demonstration.[37] Thus, great apes can ponder past and future and weigh alternative courses of action in the light of some vision of a whole day or night well lived.

In many ways, the capacities great apes show in relation to awareness of themselves, awareness of others' psychology and reflective self-awareness indicate that they (at least in our present state of knowledge) are much like young children. In the same way that we would protect children from torture, provide them with (a restrained) freedom, and guarantee their right to life, we must provide the same conditions for the great apes.[38] It is true that apes

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[30] Ibid.

[31] Merleau-Ponty, 'The child's relations with others', p. 136.

[32] L. Arnhart, 'Aristotle, chimpanzees, and other political animals', *Social Science Information,* vol. 29 (1990) pp. 477-557.

[33] Ibid.

[34] R. W. Mitchell, 'A framework for discussing deception', in R. W. Mitchell and N. S. Thompson (eds), *Deception: perspectives on Human and Nonhuman Deceit* (SUNY Press, Albany, 1986), pp. 3^0; R. W. Mitchell, 'A theory of play', in M. Bekoff and D. Jamieson (eds), *Interpretation and Explanation in the Study of Animal Behavior,* Vol. 1: *Interpretation, Intentionality, and Communication* (Westview Press, Boulder, CO, 1990), pp. 197-227.

[35] Arnhart, 'Aristotle, chimpanzees, and other political animals'.

[36] J. Goodall, *The Chimpanzees ofGombe: Patterns of Behavior* (The Belknap Press of Harvard University Press, Cambridge, MA, 1986), pp. 31, 587-8.

[37] C. Boesch, 'Teaching among wild chimpanzees', *Animal Behaviour,* vol. 41 (1991) pp. 530-2.

[38] Mitchell, 'A framework for discussing deception', p. 30.

cannot make a deliberate argument for their rights,[39] but neither can young children or oppressed people whose oppressors refuse to learn their language; yet morally we protect their rights, at least in principle.

Still, there are problems. One has only to read Hearne's[40] analysis of social interaction between the chimpanzee Washoe and her human care-givers to recognise that even sign-taught chimpanzees are unlikely to become as integrated as do human children and dogs into a human-centred culture (although see Patterson and Linden's[41] presentation of apparently easy social interactions with the sign-taught gorilla Koko). If apes are to be considered persons, it is unclear whose standards are to be applied in correcting apes' behaviour, given that they do not appear to have their own moral standards and are unlikely to accept or understand fully those of any given human culture. Even if, given appropriate human counsel, apes began to develop the morality of a given human culture (as some might argue occurs when signing apes use the signs BAD and DIRTY in particular situations), it seems inappropriate to induce them to form such moral judgements. Apes, unlike children, do not require contact with human beings to develop naturally and to live their lives in accord with their daily plans. Thus, our ethic toward apes might allow them to be free to live within specified boundaries. Yet problems are likely to occur over such boundaries when apes and humans encroach upon each other's territories, much as boundary disputes occur among humans. As with conflicts between humans, conflicts between apes and humans (or among apes) can lead to murder. Given that chimpanzees, for example, hunt and eat both humans and other chimpanzees,[42] it is unclear how one is to settle disputes: should a chimpanzee be held responsible for the murder of another chimp, or of a human, whom the chimpanzee has killed for food? If so, how is such responsibility to be accounted for legally? Among humans,

> those who desire to rule over others must give justifying reasons for their rule, which allows critics … to analyze the reasons and expose any flaws. For chimpanzees no such rhetorical deliberation is necessary, and thus there is no ground for moral criticism [of chimpanzees].[43]

Unfortunately, any 'moral vision' or sense of 'justice' which is possible within the constraints of ape mentality is egocentric and pragmatic,[44] and does not involve argumentation and deliberate debate. The fact that criticism of the behaviour of chimpanzees and other apes on moral grounds is impossible has serious consequences, in that apes cannot be held accountable for their actions. (I am a bit disturbed here with the parallels between claims of apes' incapacities for moral action, and assumptions of learned eighteenth- and nineteenth-century white men that non-white and/or non-male persons were inferior and thus should not be given equal political power.[45] However, the differences between apes and humans in linguistic skill are, and were, clearly not found between white males and other humans, and these skills - or similar ones - seem necessary for reflective self-awareness. Still, one powerful result of the present proposal to include apes in the community of equals is to make quite salient apes' similarities to humans and especially, in our current state of knowledge, to human children.)

Clearly, the fact that great apes are not fully persons creates difficulties in our treatment of them: although it is easy and reasonable to grant the right to life and protection from torture to these apes, the right to liberty is more ethically cumbersome. Human beings murder other

[39] Arnhart, 'Aristotle, chimpanzees, and other political animals', p. 526.
[40] V. Hearne, 'A walk with Washoe: how far can we go?' in *Adam's Task: Calling Animals by Name* (Knopf, New York, 1986), pp. 18-41.
[41] F. Patterson and E. Linden, *The Education of Koko* (Holt, Rinehart and Winston, New York, 1981).
[42] Goodall, *The Chimpanzees ofGombe,* pp. 282—5.
[43] Arnhart, 'Aristotle, chimpanzees, and other political animals', pp. 526-7.
[44] F. B. M. de Waal, The chimpanzee's sense of social regularity and its relation to the human sense of justice', *American Behavioral Scientist,* vol. 34 (1991) pp. 334-9.
[45] See P. Singer, *Animal Liberation: A New Ethics for Our Treatment of Animals* (Avon Books, New York, 1977), pp. 1-4; S. J. Gould, *The Mismea-sure of Man* (W. W. Norton, New York, 1981), pp. 32-5.

human beings, and can be held accountable because they have chosen to violate the liberty of another - a moral transgression. Because apes have no rules against murder, any curtailing of their liberty as a result of their murdering another — or even to prevent a potential murder of another — creates moral difficulties if apes have the status of persons without the responsibilities. We can hold a person responsible for his or her actions because he or she can recognise the (legal and moral) consequences of these actions and give reasons for the goodness of these actions. Because apes are not persons in this full sense of the term, they cannot be held accountable because they cannot understand morality and give reasons for their actions. Thus, some restrictions upon their liberty with the effect of avoiding their death or curtailing murder of them can be morally defensible because we humans value our own and their lives. (Such curtailment is also practised, of course, toward children and some intellectually disabled, immoral or amoral older human beings.) Although great apes are not persons in the full sense of the term, they have psychological capacities which make them ends-in-themselves deserving of our protection.