

## **Diversity on human difference: Unanimity on human responsibility**

Response II to Commentary on [Chapman & Huffman](#) on *Human Difference*

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**Abstract:** Further commentaries on our original target article add important new points and expand our understanding of the differences between animals, particularly between non-human and human primates. But whether they affirm or deny that humans are unique, all commentators agree that our special abilities mean we should be taking responsibility for the care of nature and the plants and animals it supports. We ask: is humankind doing this?

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We would once again like to thank all the fifty commentators to date for engaging so thoughtfully with the question of whether humans are fundamentally different from non-human animals. We respond here to two new commentaries (**Atran; Jung**). We also respond to five commentators to whom we failed to respond in the first round (**Ball & Sachs; Juergens; Rogers; Simon; Wilson & Lehman**) and we elaborate our response to some of the prior commentators.

**Atran** contends that we “like Darwin, appeal to a seemingly unique moral aptitude that enables humans to be kind to conspecific strangers and other species.” He goes on to reflect on whether we consider self-sacrifice to be a unique trait, and then presents his own perspective. We do not think self-sacrifice is a trait unique to humans. We believe that — as with language and tool use — the precursors of self-sacrifice can be seen in non-human animals [cf. Peña-Guzmán, 2017 — ed.]. These precursors are particularly easily observed in non-human primates (hereafter “primates”). Humans build cars and computers, but when chimpanzees use tools or use tools to modify other tools (Matsuzawa, 1991), we view such behaviors as precursors to more advanced tool use. Regarding self-sacrifice: primates will engage in potentially dangerous activities to protect others, including non-kin. Here are two examples from our own observations of wild primates.

In Kibale National Park, Uganda, a young female chimpanzee (*Pan troglodytes*) had been captured by poachers and was being kept as a pet (Treves and Naughton-Treves, 1997). When she was confiscated by the parks service and an attempt was made to reintroduce her into a wild group of chimpanzees, the males repeatedly charged the person bringing her to the group: a potentially dangerous activity, as the person could have meant them harm. As soon as the infant moved away from the person, the dominant male of the group ran up to within a meter of the human, grabbed her, brought her to his belly — like a female would carry such an infant — and took her to what the male likely perceived as a safer situation; away from the human. The males then cared for and groomed the young female for weeks afterward. Does this not represent self-sacrifice?

A second example involves Cebus monkeys (*Cebus spp.*), a species that lives in social groups with many males and females; males move between social groups and participate in group defense against predators (Tórrrez et al., 2012; Janson, 1986; van Schaik and van Noordwijk, 1989). Even males that have only recently immigrated into the group (hence do not have infants in the group) will vigorously attack predators who are attempting to kill other, often weaker, group members. Does this not represent self-sacrifice? **Atran** writes that “Humans are above all moral animals because they are creatures who can love their (kin or non-kin) group even more than they love themselves.” We leave it to the reader to assess how primates defending the group, as the Cebus monkey example illustrates, bears on Atran’s observation. We also ask the reader to ponder how a researcher could verify the feeling of love in animals — perhaps in the light of how dogs often treat a caring owner [cf. Cook et al., 2018 — ed.].

**Atran** goes on to suggest that “sacred” values lead to very different types of behaviors, including self-sacrifice for no one or no group in particular, adding: “This does not appear to have the faintest echo in the rest of the animal world.” What is a sacred value to a chimpanzee? If sacred values cannot be identified, it is not possible to evaluate Atran’s assertion. (And are sacred values something of which humans should be proud or ashamed?)

**Jung**, like earlier commentators (**Bar-Hen-Schweiger and Henik; Monsó; Ng; Blystad; Hood and Giddens; McGrew; Juergens; Ball & Sachs**), suggests that differences among species should not be used to imply moral ranking. (We agree.) He goes on to consider that quantity and quality should not be considered different categories; rather, there is a transition between the two. We did not mention quantity vs. quality in our target article, discussing only whether any trait was unique. Comparing tool use in chimpanzees and humans, Jung suggests that somewhere in the evolutionary process that led to humans, there was a leap from quantity to quality in using and making tools. We agree, but this was indeed

a transition; both species have the trait of tool use. Thus, humans are not unique in possessing the trait; the difference is only in the degree of expression. Humans make tools more. Many animals are now recognized as able to do things we thought only humans could do; future research may reveal more (**Rogers**).

**Jung**, again like earlier commentators (**Wilson & Lehman; Schoof and L'Allier; Fischer; Rollin**) — as well as us in the target article — agree that people have superior abilities to think and use tools, but that we will only have a future if we treat non-human living beings and their environment with “respect and real care.” We should keep in mind the skepticism of **Simon**, who expressed the idea that even if the continuity between species is recognized, knowing that may not be enough to change how we treat them.

Is humankind making advances in caring for animals and their environment? The United States has lately legalized (Lewis, 2019) — then withdrawn (U.S. Environmental Protection Agency (EPA) (2019), then...? — the use of cyanide bombs to kill animals as well as allowed greater contamination of the planet’s waterways (Mufson, 2019). Tropical forests are being lost at an accelerating rate (Hansen et al., 2013; Chapman et al., 2018); Brazil’s current policies are only accelerating the loss even more (Phillips, 2019). The world’s response to climate change is patchy and fundamentally inadequate (Chapman et al., 2019). Scholars need to do more to make their thoughts heard by policy makers and the public.

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## References

- Atran, S. (2019) [Superior or inferior, human uniqueness is manifold](#). *Animal Sentience* 23(50).
- Ball, D. & Sachs, B. (2019) [Scepticism about moral superiority](#). *Animal Sentience* 23(46).
- Bar-Hen-Schweiger, M. & Henik, A. (2019) [Intelligence as mental manipulation in humans and nonhuman animals](#). *Animal Sentience* 23(31).
- Blystad, M. H. (2018) [Human-like behavior and cognition: Not a good starting point](#). *Animal Sentience* 23(11).
- Chapman, C. A., Hou, R. & Kalbitzer, U. (2019) What will climate change mean for primates?. *Primateology, Bio-cultural Diversity and Sustainable Development in Tropical Forests. A Global Perspective*. pp. 137-151. UNESCO, Mexico City, Mexico.
- Chapman, C. A., Omeja, P. A., Kalbitzer, U., Fan, P. & Lawes, M. J. (2018) Restoration provides hope for faunal recovery: Changes in primate abundance over 45 Years in Kibale National Park, Uganda. *Tropical Conservation Science*, **11**, 1940082918787376.
- Cook, P., Prichard, A., Spivak, M. & Berns, G. S. (2018) [Jealousy in dogs? Evidence from brain imaging](#). *Animal Sentience* 22(1).
- Fischer, B. (2018) [Individuals in the wild](#). *Animal Sentience* 23(8).
- Hansen, M. C., Potapov, P. V., Moore, R., Hancher, M., Turubanova, S. A., Tyukavina, A., Thau, D., Stehman, S. V., Goetz, S. J., Loveland, T. R., Kommareddy, A., Egorov, A., Chini, L.,

- Justice, C. O. & Townshend, J. R. G. (2013) High-resolution global maps of 21st-century forest cover change. *Science*, **342**, 850-853.
- Hood, S. B. & Giddens, S. (2019) [Phenotypic similarity and moral consideration](#). *Animal Sentience* 23(35).
- Janson, C. (1986) The mating system as a determinant of social evolution in capuchin monkeys (*Cebus*). *Primate Ecology and Conservation*, **2**, 169-179.
- Juergens, U. M. (2018) [Human and nonhuman animals: Equals in uniqueness](#). *Animal Sentience* 23(2).
- Jung, C. (2019) [Why cod don't like to sunbathe: Quantity and quality in the animal kingdom](#). *Animal Sentience* 23(49).
- Lewis, S. (2019) Trump administration reauthorizes use of "cyanide bombs" to kill wild animals. August 19, 2019. CBC News.
- Matsuzawa, T. (1991) Nesting cups and metatools in chimpanzees. *Behavioral and Brain Sciences*, **14**, 570-571.
- McGrew, W. C. (2019) [Humans have always been unique!](#) *Animal Sentience* 23(28).
- Monsó, S. (2019) [Humans are superior—by human standards](#). *Animal Sentience* 23(17).
- Mufson, S. (2019) Fifteen AGs slam Trump move to limit federal authority under Clean Water Act. *Washington Post*. Washington.
- Ng, Y.-K. (2019) [Human superiority is obvious but does not justify cruelty](#). *Animal Sentience* 23(36).
- Peña-Guzmán, D. M. (2017) [Can nonhuman animals commit suicide?](#) *Animal Sentience* 20(1).
- Phillips, T. (2019) Bolsonaro rejects 'Captain Chainsaw' label as data shows deforestation 'exploded'. *The Guardian*.
- Rogers, L. J. (2019) [More evidence of complex cognition in nonhuman species](#). *Animal Sentience* 23(20).
- Rollin, B. (2018) [Human superiority?](#) *Animal Sentience* 23(5).
- Schoof, V. A. & L'Allier, S. (2019) [Mobilizing heads and hearts for wildlife conservation](#). *Animal Sentience* 23(42).
- Simon, C. (2019) [Taking Darwinism seriously](#). *Animal Sentience* 23(47).
- Tórrez, L., Robles, N., González, A. & Crofoot, M. C. (2012) Risky business? Lethal attack by a jaguar sheds light on the costs of predator mobbing for capuchins (*Cebus capucinus*). *International Journal of Primatology*, **33**, 440-446.
- Treves, A. & Naughton-Treves, L. (1997) Case study of a chimpanzee recovered from poachers and temporarily released with wild conspecifics. *Primates*, **38**, 315-324.
- U.S. Environmental Protection Agency (EPA). (2019) [Statement by EPA Administrator Wheeler on M-44, Predator Control Devices](#).
- van Schaik, C. P. & van Noordwijk, M. A. (1989) The special role of male *Cebus* monkeys in predation avoidance and its effect of group composition. *Behavioral Ecology and Sociobiology*, **24**, 265-276.
- Wilson, M. L. & Lehman, C. L. (2019) [Humans: Uniquely responsible for causing conservation problems, uniquely capable of solving them](#). *Animal Sentience* 23(19).