## Domination and the Human Point of View

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To the extent that it is moralized at all, human domination of nature is readily interpreted as an expression of the anthropocentric attitude that nature is there "for us" as human beings. Historian Lynn White famously framed anthropocentrism as a doctrine that human beings have a moral right to exercise "dominion" over nature, the justification of which he rooted in Judeo-Christian scripture (1967). But there is another ancient text that also seems to justify human domination — Aristotle's remark in the *Politics* about the acquisition of property by households. This passage seems to be of a piece with the "dominion" passage from *Genesis* White discusses.

On its face Aristotle's view seems to be that nature specifically provides plants and animals to human beings:

we must believe that animals are provided for [after their birth] — that plants exist for their sake, and that the other animals exist for the sake of man, tame ones for the use he can make of them as well as for the food they provide; and as for wild animals, most though not all can be used for food or are useful in other ways: clothing and instruments can be made out of them. If then nature makes nothing without some end in view, nothing to no purpose, it must be that nature has made all of them for the sake of man. (*Politics* I.viii 1256b15-20)

Aristotle seems, that is, to invoke a kind of natural teleology, or explanation in terms of innate purposes, that might be seen as justifying human use of other species — which are there precisely "for" that purpose. Presumably this is the kind of justification that is presupposed in the shaping of landscapes, the extraction of materials from the earth, the taking of creatures from the wild for human use, and the multitude of practices by which plants and animals are managed and harvested to serve human interests.

Agriculture is a clear example here. The factory farm is a chilling emblem of the domination of other species by humans: the cruel treatment of animals' bodies begs for that description. But agriculture can be said to involve domination in less overt ways as well. I have in mind plant and animal breeding, through which humans exert control over reproduction to direct, through artificial selection, the evolution of strains or breeds that better suit human desires. Genetic engineering allows for human control at a deeper level of the organism – and though the work in the lab may itself be distant from the fully grown organisms involved, it can be linked to the more manifest control over animals bodies by aiming to "design" animals to be managed more efficiently. The latest manifestation of genetic engineering, the "gene editing" technique known as

CRISPER, seems like the ultimate step in the human domination of nature (Montenegro, 2016). It seems to epitomize anthropocentrism's instrumentalist conception of nature — not only at the macro-level of landscapes we modify and meso-level of individual organisms we consume, but even at the micro-level of the workings of the genome itself.

But further, a familiar line of criticism – initiated forcefully by Horkheimer and Adorno, and developed by others since (Biro, 2016) – associates the domination of nature emblemized by the factory farm with the domination of some humans by others, i.e. with patterns of domination within society. Thus, the domination of the animals in a CAFO must be seen in the same light as the domination of the farm workers by the (frequently corporate) owners of the facility, and indeed of the domination of workers in general under capitalism. In his essay 'The Revolt of Nature'' Horkheimer presents the case that such domination can be seen as a manifestation of particular version of reason: subjective, or instrumental rationality (1974).

Horkheimer criticizes the philosophical tradition for the ways that it has articulated and valorized instrumental rationality. This line of criticism is indeed quite familiar in environmental thinking, one branch of which looks back to such statements as Aristotle's as deep cultural sources of social practices of domination. Hence the moral energy of the critique of material domination as observed in society – e.g. of the factory farm with respect to both the animal suffering and human alienation it contains – can come to be brought to bear on the texts that seem to justify it. As John Meyer indicates, this dynamic can be seen in environmentalist responses to the passage from Aristotle we started with: it has been "frequently panned as extraordinarily anthropocentric by contemporary writers," and seen by some (though not by Meyers himself) as "the central doctrine of his natural philosophy" (2001, p. 90)

In this paper, however, I want to present a different reading of the Aristotle passage. I shall suggest that it should not be read as stating a moral position on the relationship between human beings and the natural world — i.e. as a kind of premise in an argument justifying the human domination of nature. Rather, I believe, it is better read as identifying a *point of view* that human beings more or less inevitably fall into, namely that they are able to take advantage of nature to meet their organic needs. Without question, that is, Aristotle thinks that human beings regard nature from an anthropocentric perspective. But it does not follow that Aristotle thinks that nature is organized anthropocentrically.

The reading I follow is offered by the Aristotle scholar Mariska Leunissen. Drawing primarily on the *Physics, On the Parts of Animals,* and *On Generation and Destruction,* she offers a more comprehensive reading of Aristotle which suggests that we are mistaken if, on the basis of the *Politics* passage alone, we take him to imply that humanity is nature's *telos.* That deeply anthropocentric view would imply, for example, that the

physiological processes by which a plant produces its fruit are "aimed at" human nutrition. On the contrary, Leunissen insists, Aristotle holds that the purpose those processes serve is intrinsic to the plant – their *telos* is the plant's own reproduction. This – the plant's own flourishing – is a matter of what Leunissen calls "primary teleology." However, in practicing agriculture, human beings make use of the plant's physiological processes for *their* own purpose of feeding themselves. Thus, they impose a "secondary teleology," in virtue of which we can say that the plants come to serve the (secondary) purpose of feeding human beings.

The issue here is to do with explanation; teleology is, of course, invoked to explain some phenomenon in terms of the purpose it serves. The distinction between primary and secondary teleology is meant to distinguish two explanatory strategies, implicating two distinct accounts of the way the world is. Thus, Leunissen characterizes secondary teleology as "*external*" to the entity being put to use, meaning that the factor explaining that use is not a feature of the entity itself. In the agricultural example there is indeed a goal-directed material process that explains the presence and features of a field of crops – but that "cause is represented by *external* agents, that is, by human performers of the art of agriculture" (Leunissen, p. 38). The goal that is causally explanatory here is the good of those external agents, the agriculturalists. But this is to say that Aristotle denies that the goal of benefiting humans is somehow present *in the crops themselves*. "The structures and uses we impose upon natural things through the application of art are always . . . secondary to their own proper natural ends. Nature is not itself anthropocentric; we just *use* natural things to our own benefit" (p. 39).

This distinction between primary and secondary teleology is the basis for Leunissen's reinterpretation of the passage from Aristotle quoted above. Rather than revealing Aristotle's belief that nature in some fundamental sense is "made for" human consumption, she holds, the passage reveals Aristotle's articulation of a specifically human *outlook*. "The teleology that accounts for the use human beings make of other living beings is therefore secondary: *it reveals the perspective of the user*, who makes use of what is provided by nature for his or her own good" (op. cit., p. 41, emphasis added). Nature is not anthropocentric in the sense of having been "made for" human beings — it only looks that way from the human point of view.

For that matter, the imposition of secondary teleology is not a uniquely human phenomenon. Leunissen observes that "The causal pattern underlying secondary teleology can also be extended to include what has been called 'inter-species' teleology, [which] describes the causal pattern of any agent . . . making use of things available by nature for its own good, such as living things using each other as food" (p. 25). The *telos* of a mouse is internal to that animal – but insofar as it happens that the mouse can nourish an owl, the owl can put it to that use, imposing a distinct secondary *telos* on the mouse, internal to the owl. And of course the phenomenon is not restricted to predation. To use the example deployed by Steven Vogel (2011), the beaver

constructing its lodge, and the pond that surrounds it, imposes a secondary teleology (its own flourishing) on the materials it finds around it that suit the needs it has. The fact that beavers have the capacity to act in this way suggests that, from the castorean point of view, it must seem as if nature is made for beavers.

I will return in a moment to this idea that secondary teleology is perspectival. First, though, let me note two ways Leunissen's reading of Aristotle connects with an idea I find extremely useful, niche construction. Niche construction, let me explain, is the set of activities by which a species modifies its environment to fashion conditions it needs to survive, thereby influencing the pathway of its own evolution. Biologists argue that this phenomenon is pervasive in nature; I myself interpret the notion that human beings are "embedded in nature" in terms of this concept, in two ways. Niche construction captures the recursive, dialectical relationship that conjoins organisms (indeed species) and their environments. Human beings are embedded in nature in the sense that they participate in that relationship — but also in the sense that they are akin to other forms of life *in just that respect* (though of course through different means and with wider impact).

Now human niche construction activities can readily be construed as the human imposition of secondary teleology on natural processes. In Leunissen's words, "human beings are often beneficiaries of natural processes . . . [in virtue of] *human art* that appropriates those natural processes to serve human ends" (p. 43). As Aristotle certainly recognized, a human art that exemplifies this dynamic is agriculture – which indeed is perhaps humanity's central mode of niche construction. Agriculture, among other things, makes use of the natural processes involved in organic reproduction to modify plant or animal species to make them contribute more readily to human survival. Among the earliest steps in the domestication of wild species apparently included intervention in animals reproduction, e.g. selection (or culling) of offspring (Scott 2017, pp. 76 ff.). Conventional breeding is further down this path – with genetic engineering even further still. CRISPR seems like the final stage of domestication: it seems to promise the relatively fast and inexpensive modification of species to meet human specifications.

But from the first steps to the last, "human art" relies on humans' cognitive capacity to discern the workings of primary teleology: people must come to understand what happens in reproduction in order to take advantage of those processes for their own purposes. CRISPR makes this manifest; its application in agriculture, for example, rests on the ability to *understand* the fundamental biological, indeed biochemical, processes through which organisms attain their purposes, so that those "primary" processes can be made to serve humans' "secondary" purposes. The deployment of this cognitive capacity for grasping biological processes to attain human goals seems to illustrate Steven Pinker's (2010) argument that cognition defines the very character of the niche humans construct. Though Pinker associates cognition with social cooperation and

grammatical language as well as technology, his outlook seems to suggest that instrumental rationality is intrinsic to humans' capacity to construct their niche.

But let me make a further observation, based on CRISPR. That technique demonstrates that human niche construction can, so to speak, go "deeper into nature" than the primary/secondary teleology distinction initially suggests. For, it can involve more than the diversion of the products of primary teleology from their "natural" ends to human ends – e.g. harvesting the fruit from a tree. Beyond that, CRISPR makes more feasible than ever before the reengineering of primary teleological processes themselves, to make their products conform to human ends. It is not just that humans harvest the fruit – they can now, it seems, more easily "program" the tree to produce fruit according to their specifications. In a sense, then, human beings are able to do more than simply use the products of independent nature for their own benefit; they can, in a sense, *make* nature anthropocentric. Or at least some of it – the part incorporated into the niche they construct. For that is what niche construction involves: a niche is engineered by a given species to yield what that species requires.

But let me conclude by going back to the perspectival understanding of secondary teleology. For even if we think of secondary teleology as something like the replacement of natural ends with human ends, the lesson Leunissen draws is still important. Again, she holds that secondary teleology is not a feature of nature itself, but instead reveals a perspective on nature, taken by human beings as users of nature (either of natural products or processes). Nature is not in a fundamental sense "for humans," except from a peculiarly human point of view.

What is morally discomforting about the passage from the *Politics*, then, is not that Aristotle articulates an anthropocentric metaphysical conception of nature in terms of which human beings are entitled to dominate it. What is discomforting is that he has identified as natural an anthropocentric feature of human psychology by which, in light of their needs and capacities, humans regard themselves as entitled to use the latter to satisfy the former. Part of what grounds that sense of entitlement is a conception of what is natural: humans see their use of what nature affords as in keeping with a broad pattern of natural affordances.

The problem we can use Aristotle to articulate, then, is not that to reject domination we must refute a metaphysical argument; we can stipulate a rejection of anthropocentrism as a claim about *nature* that justifies its domination by human beings. Instead, I think the problem Aristotle helps us articulate is harder: what do we do with the anthropocentrism of the human point of view?

It seems unpromising to suggest that we try to *abandon* that human point of view. For what would it mean to reject anthropocentrism as the way human beings see nature? In particular, what other way do human beings have of seeing it? Can we cast off our

perspective, and adopt a kind of non-specific (non-species-based) "view from nowhere?" But could *that* view be the view of a creature *embedded* in nature – a creature that survives in virtue of its metabolic interactions with a material environment? If that's indeed what human beings are, can they sustain a point of view that does not represent nature as useable? And if a way of characterizing human beings as natural is to note the status they share with other organisms as niche constructors, can they do other than to materialize that point of view by re-making nature, to make it more useful to themselves?

I am dubious, therefore, about the prospects of *abandoning* the point of view Aristotle identifies. The more salient question, to my mind, is can it be *moralized*? That is, *from within the point of view itself*, can the likelihood that making use of nature devolves into dominating it be mitigated? I close by merely gesturing at some possibilities.

Most simply, moralizing might involve a shift in emphasis, as follows. We might take domination to express the view that "nature is there only for human use." The emphasis in this statement might be on the "only;" nature having no other value or purpose, there are no restraints on the uses humans can pursue. But what if we shift the emphasis to "human?" As the account of secondary teleology makes clear, this interpretation of the statement is straightforwardly false: nature is in fact a system in which *all* creatures make use of features of their environment. Countering domination can therefore be seen as the mitigation of humans claim to *exclusive* use of nature — notwithstanding that a claim to *some* use remains.

How much? It is clearly not difficult to propose *external* limitations on human use of nature – external, that is to the point of view of the human agents whose use of nature is in question. Such limitations might appeal to rights (human or non-human) that might be violated or to harmful consequences (to humans or non-humans, in the present or the future) that might result from the ways humans make use of nature. There are familiar debates about all these kinds of appeals. And, as external constraints, they all pose the moral psychological problem of *motivation*, a problem that is highlighted by the idea that the point of view under examination is organized around the fulfillment of the agents' own needs.

Can we, however, imagine limitations *internal* to the human point of view? That is, can we imagine limitations that agents acting from that point of view would accept both as consistent with the goal that motivates the use of nature and as appealing reasons for restraining themselves in that use? I believe that Aristotle in fact provides a kind of model for this approach, by way of an ethics built on an account of human flourishing. Many scholars have explored implications of Aristotelian (or Aristotle-inspired) ethics in the environmental context; as Paul Knights and John O'Neill put it, "the claim that there are limits to the goods required for the good life was articulated by Aristotle," and influential contemporary theories "descend" from his view (2016, p. 434). Aristotle

regards human flourishing as the primary *telos* of human action—it seems appropriate, therefore, to use that idea to moralize the point of view from which the rest of nature can be seen as serving that purpose.

## References

Aristotle. (1981) *The Politics*. Tr. T.A. Sinclair, rev. T.J. Saunders. Harmondsworth: Penguin.

Biro, A. (2016) Human Nature, Non-human Nature, and Needs: Environmental Political Theory and Critical Theory. In T. Gabrielson, et al. (2016) *The Oxford Handbook of Environmental Political Theory*. Oxford: Oxford University Press.

Horkheimer, M. (1974) The Eclipse of Reason. New York: Continuum.

Knights, P. and O'Neill, J. (2016) "Consumption and Well-being." In Gabrielson, et al. (2016) *The Oxford Handbook of Environmental Political Theory*. Oxford: Oxford University Press.

Leunissen , M. (2010) *Explanation and Teleology in Aristotle's Science of Nature.* Cambridge: Cambridge University Press.

Meyers, J.M. (2001) *Political Nature: Environmentalism and the Interpretation of Western Thought*. Cambridge, MA: MIT Press.

Montenegro, M. (2016) "CRISPR Is Coming to Agriculture – With Big Implications for Food, Farmers, Consumers, and Nature." Ensia (https://ensia.com/voices/crispr-is-coming-to-agriculture-with-big-implications-for-food-farmers-consumers-and-nature/).

Pinker, S. (2010) "The cognitive niche: Coevolution of intelligence, sociality, and language." *PNAS*, vol. 107, suppl. 2, pp. 8993–8999.

Scott, J.C. (2017) *Against the Grain: A Deep History of the Earliest States*. New Haven: Yale University Press.

Vogel, S. (2011) Why 'Nature' Has No Place in Environmental Philosophy." In *The Ideal of Nature: Debates About Biotechnology and the Environment,* ed. Gregory E. Kaebnick, Baltimore: Johns Hopkins University Press.

White, L. Jr. (1967) "The Historical Roots of Our Ecologic Crisis." *Science*, Vol. 155, No. 3767, pp. 1203-7.