AN EXPLORATION OF THE VALUE OF NATURALNESS AND WILD NATURE

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ABSTRACT. The source of the value of naturalness is of considerable relevance for the conservation movement, to philosophers, and to society generally. However, naturalness is a complex quality and resists straightforward definition. Here, two interpretations of what is "natural" are explored. One of these assesses the naturalness of species and ecosystems with reference to a benchmark date, such as the advent of industrialization. The value of naturalness in this case largely reflects prioritization of the value of biodiversity. However, the foundation of our understanding of naturalness is that it describes processes that are free of human intervention. Conflict between the two interpretations of naturalness is apparent in the claim that naturalness can be enhanced by human intervention, in the form of ecological restoration. Although naturalness in its purest form precludes human intervention, some human activities are also apparently more natural than others. This continuum of naturalness relates to the autonomy of the individual from abstract instrumentalism, which describes a particular form of influence ubiquitous in contemporary society. The value of naturalness reflects both dissatisfaction with these threats to personal autonomy, and respect for wild nature as the embodiment of a larger-than-human realm.

KEY WORDS: abstract instrumentalism, autonomy, naturalness, rational agency, values

1. INTRODUCTION

There are few aspects of modern life – outside of that realm governed solely by consideration of utility – that are unimpinged by consideration of naturalness and concern for nature. Much of the work of environmental ethicists concerns clarification of the value of naturalness and the presentation of arguments for protecting such values. Many of the issues of interest to agricultural ethicists, such as organic farming, genetic modification of crops and animals, and sustainable agricultural practice, are also strongly influenced by concern for naturalness and the things that embody this quality. If naturalness had no value, debate on such issues would be greatly reduced. Given the close relationship between the values of naturalness and of nature,

it could be argued that environmental ethics would not exist as a discrete sub-discipline.

But why is naturalness such a significant quality? The overwhelming mass of scholarship that considers this question does so in relation to the value of undisturbed nature, and much of this has focused on its intrinsic value. The primary task of this paper is to explore this question through review of the value attached to the autonomy of nature. However, over half of the text below is concerned with a preliminary issue; that being the definition of naturalness. Although a variety of definitions exist, there are two interpretations of naturalness that are most relevant to agricultural and environmental ethics. These are naturalness as a physical property of species and ecosystems, and naturalness as a quality of processes that are free of human intervention. As will be discussed, inconsistencies arise when assessments of naturalness combine both interpretations without sufficient recognition of their differences. These inconsistencies lie at the heart of the "naturalness versus wildness" debate that has engaged conservation biologists and wilderness managers in recent years (Ridder, 2007). It is only after the distinctions between these two interpretations have been disentangled that the primary task of this paper can be properly considered.

2. THE NATURALNESS OF SPECIES AND ECOSYSTEMS

In conservation biology, the naturalness of species and ecosystems is assessed relative to historical benchmarks. Living entities whose existence within a particular region was well-established prior to the benchmark date are generally referred to as "natural," "native," or "indigenous." Species whose existence within a particular region is the result of human actions that were subsequent to this date are generally described as "unnatural," "exotic," or "introduced." However, despite the strong association between naturalness and the absence of human intervention, these historical benchmarks generally post-date the first wave of human settlement. Czech (2004) suggests that such benchmarks represent a compromise between the view that naturalness precludes all human intervention and the counterargument that all human actions are themselves natural.

¹ The Oxford English Dictionary lists eight categories and sub-categories under this entry (Simpson and Weiner, 1989). Detailed discussion of some of these is provided by Lewis (1967).

² It should be noted that, contrary to popular perceptions, most ecosystems are inherently unstable and difficult to define, thereby rendering assessment of their "naturalness" a problematic exercise (Sagoff, 1997). However, for most people, species naturalness is generally assessed at a regional scale, which allows for considerable ecosystem flexibility without an accompanying change in naturalness.

The selection of benchmark dates is an exercise that has important implications for setting conservation priorities. Yet such dates are potentially arbitrary, particularly in places such as Europe where the impact of society on nature has been relatively gradual. The difficulties involved are made clear by Peterken (1996, pp. 12–13):

Take for example the alder, elm-hornbeam and beach woods around the Schleinsee, Germany, which are the legacy of 6500 years of complex interactions between the native vegetation, natural processes and local people... What is the natural woodland of this region? Is it the mixed woodland of hazel, elm, lime, oak and ash trees which prevailed before people started to influence the structure and composition of the forest, or is it the hypothetical woodland which would develop if the whole catchment were set aside as a non-intervention reserve?

As explained by Czech (2004, pp. 1123–1124), the advent of industrialization is generally deemed to be more significant than other potential benchmark dates:

All preceding human economy paled in scale and ecological significance... to that engendered by industrial technology in the eighteenth and nineteenth centuries. Industrialization was characterized by a rapid increase in economic production and consumption to a level several orders of magnitude higher than pre-industrial levels. This economic transformation constitutes a non-arbitrary, fundamental shift in the relationship of humans to their environment and is therefore a logical selection for an endpoint of natural conditions.

However, despite Czech's confident assertion, there does not seem to be any objective reason for choosing industrialization over other significant breaks in ecological history. Although the ecological impact of industrial technology has been considerable, it has not always been unprecedented; for many species and ecosystems the influence of earlier episodes of human activity was more influential. It is more likely that the choice of particular historical benchmarks is a reflection of the desire of many to conserve biodiversity, and particularly to prevent species extinctions (Ridder, 2007). The influence of conservation biology is especially significant in this regard.

The conservation of biodiversity is the core objective of conservation biology, and the intrinsic value of biodiversity its foundational value (Soulé, 1985). Although many conservation biologists might dispute the notion that their work has an ultimately subjective basis, this notion is regularly reiterated (Barry and Oelschlaeger, 1996; Roebuck and Phifer, 1999; Hull et al., 2003; Wallington and Moore, 2005). In his interviews with 23 prominent conservation biologists, Takacs (1996) found that over half believed the value of biodiversity to be independent of human valuation.

With this in mind, it is apparent that conservation biologists would find unacceptable the selection of benchmark conditions earlier than the first

wave of human migration if they were to result in conservation strategies that paid no heed to the fate of species and ecosystems that had adapted to the practices of pre-industrial societies.

Although evolution in nature has continued since the 18th century (Stockwell et al., 2003), the selection of the onset of industrialization as the "endpoint of natural conditions" is more likely to result in the protection of existing biodiversity. Hence, concern for biodiversity emerges as a significant motivating factor for the selection of relatively recent historical benchmarks for naturalness. In an influential paper on the role of naturalness in conservation, Angermeier (2000, p. 379) states that "naturalness provides an objective standard by which to judge the permissibility of ecosystem alteration and the appropriateness of conservation efforts." Yet from this discussion it is apparent that, although naturalness defined relative to historical benchmarks is quantifiable, it is certainly not objective.

3 THE NATURALNESS OF PROCESSES

Naturalness as a description of processes is quite dissimilar from naturalness assessed relative to historical biodiversity, particularly as it allows many human artifacts and activities to be considered natural, or relatively so, without any reference to nature whatsoever. Naturalness of this kind can encompass natural foods and medicines, the natural birth of children, and natural mental or physical abilities, and is highly valued within contemporary Western societies (e.g., Rozin et al., 2004; Price, 1995).

There are two main reasons for why such things might be described as "natural." One is that they are more in harmony with nature than their less-natural counterparts. This factor, for example, was found by Verhoog et al. (2003) to inform people's perceptions of the naturalness of organic farming. Similarly, it appears to reflect the criteria suggested by Tybirk et al. (2004) for assessing "nature quality" on organic farms. Rozin et al. (2004) also suggest that the preference for natural foods is partly determined by the belief that their production is less damaging to nature. However, this approach to naturalness is quite restricted in scope. Harmony with nature derives its significance from the value attached to nature, which is not relevant in all situations to which the term "naturalness" can be applied. The naturalness of "natural" birth, for example, does not relate to its lower impact on nature, and few would consider the artificial production of vegetable protein in a laboratory to be more natural than organically-grown vegetables simply because it had less impact on nature.

³ These criteria include "biodiversity," "habitat diversity, extent, and structure," and "functional integrity of agro-ecosystems."

A more widely applicable approach to the question of naturalness within the human realm is that this term describes a relative lack of human intervention. Mathews (2005, p. 27) observes that "nature" can be defined with reference to:

the distinction between what happens when things are allowed to unfold in their own way, or run their own course, and what happens when, under the direction of abstract thought, agents intentionally intervene in a course of events to superimpose on it a set of abstractly conceived ends of their own.

As this passage suggests, it is not merely the physical effect of intervention that characterizes a decline in naturalness, as many of the effects of human actions can also be generated by processes that are not anthropogenic. It is the "character" of the intervention that is significant, and the key factor that causes the "naturalness character" to be diminished is deliberate human intervention.

That naturalness is diminished solely by human actions reflects a fundamental distinction between human and nonhuman consciousness, explained by Carruthers's (1992, pp. 133–134) definition of a "rational agent," which must,

be capable of representing in thought a variety of long-term futures, and of making rational choices between those futures. So to count as a rational agent, an animal must not only be capable of acting to satisfy its immediate desires, but also of constructing and following a long term plan... It might be said, then, that plenty of animals should be counted as rational agents. Think of squirrels who store nuts in the autumn, birds who migrate south for the winter or build elaborate nests for the protection of their young... Surely these are all cases of long-term planning? But in fact, to say that an animal engages in behaviour adapted to meet a predictable future eventuality is not to say that the animal has itself predicted that future, or arrived at its behaviour as a result of a plan... For it is left open that the behaviour in question may be merely an acquired habit, or that it may be innately determined.

Carruthers (1992, p. 139) concludes that humans are unique in their capacity to be rational agents, conceding only that although some monkeys (chimpanzees) are capable of "second-order beliefs about the beliefs and desires of others... this is only a necessary condition of rational agency. It is by no means sufficient." Carruthers's view encapsulates the dualist perspective that humans are fundamentally distinct from other life. This perspective has been associated with the belief that humans are the only entities deserving of ethical consideration, and is frequently challenged on this and other grounds (Soper, 1995). However, as explained by Rolston (1991), not only is it entirely appropriate to identify a radical difference between our own capacity for rational thought and that apparent in other life forms, but recognition of

this difference does not preclude ethical consideration of nature. This is reminiscent of Reed's (1989, p. 56) position that "it is our very *separateness* from the Earth, the gulf between the human and the natural, that makes us want to do right by the Earth."

The naturalness of processes is defined along a continuum; not all processes influenced by humans are unnatural to the same extent. While this continuum might be defined relative to the degree to which the processes are in harmony with nature, a "non-physical" continuum can be defined relative to the relationship between the individual and society. This is apparent in the suggestion that the actions of an individual rational agent in relative isolation from society are more natural than the actions of collective entities. Clearing all the trees on a block of land in order to create a paddock is not a natural process because it is a product of human intention, yet the naturalness of this process can be seen to vary depending on the provenance of the intentions. In one case, the individual felling the trees intends to work the land himself. In another case, the same actions are carried out by an employee of a multinational meat production firm. Although the ecological impact of both might be the same, it is possible to characterize the latter as less-natural. Just as the rational agency exhibited by the average human is of a different order to that apparent in chimpanzees, so is the rational agency exhibited by collective entities such as corporations and government bureaucracies of a different order to that apparent in an individual. The naturalness of technology can be considered in much the same way, with those devices that enable the individual to function relatively autonomously from contemporary society perceived as more natural than those that require the individual to remain highly integrated into society. As suggested by Stephens (2000, p. 284), naturalness is diminished by our perception of "abstract instrumentalisation."

Lewis (1967, p. 48) observes that naturalness can be explained by the contrast between "what a man wants simply in virtue of being the *kind* of organism he is – and what this or that man learns to want by being luxurious, fanciful, or fashionable." The latter describes people whose wants have been conditioned to a greater extent by the influence of society. The former, who is considered more natural, retains a greater degree of autonomy from the influence of society. As noted by Lindley (1986, p. 50):

Autonomy requires not just that people rationally pursue their not-irrational goals as best they can, but that they actually not be deluded about the nature of their goals, and the consequences of their actions... those in positions of power have strong other-than-truth-centred motives for promoting conformity... There is thus a danger that people will adopt life styles not because they represent truly their best options, but because they have not properly considered alternatives, and are carried along by

the force of public opinion, or at least the opinions of influential individuals or groups.

Again, abstract instrumentalism, introduced by the influential actors within society, plays a significant role in undermining the autonomy of the individual. The influence of abstract instrumentalism on contemporary life is ubiquitous, through such features of society as centralized decision-making, corporate dominance, ease of information processing, the mass media, and so on. By undermining the autonomy of the individual, these processes all appear highly unnatural.

The significance of individual autonomy recalls the Aristotelian notion of *telos*, which describes the fundamental nature of a thing. As suggested by Burgess and Walsh (1998, p. 400), "we act unnaturally if we violate the *telos* of animals and plants of other species. We violate their natures." However, it must be recognized that awareness of abstract instrumentalism and *telos* violation is an unavoidably anthropocentric process. The processes used to manufacture a particular brand of breakfast cereal, for example, are not considered "unnatural" because of a belief that they violate the *telos* of the wheat that comprises the cereal. The process can be considered unnatural, independent of its effect on the wheat, because it is characterized by such things as mass production, advanced technologies, non-local trading networks, corporate efficiency, sophisticated marketing, and the use of the mass media. These instrumental processes are deemed unnatural because they are perceived to violate our own *telos*.

That the naturalness of processes can be considered independent of their physical effects helps to explain why some things can be considered natural without reference to their effect on external nature. For example, the naturalness of "natural" birth has nothing to do with impacts on nature and everything to do with the relative autonomy of the pregnant woman, and the newborn baby, from doctors, invasive surgery, industrially-manufactured pharmaceuticals, and other mediations of industrial society (Brennan, 1988, p. 91).

This independence from the physical effects also helps to explain the tendency to view human lifestyles as having been more natural in previous eras, and in other less-developed contemporary societies, for they seem to be less-subject to the abstract instrumentalism that prevails in our own society. This is, of course, a highly idealized view insofar as the autonomy of individuals in these other societies is, in most cases, likely to be far less than that experienced by ourselves. However, an important distinction is that a greater proportion of the forces serving to undermine their autonomy will be natural or accidental, and consequently "naturalness" is less likely to be valued in such societies.

4 CLASH OF INTERPRETATIONS

The two interpretations of naturalness described above can both compliment and conflict with one another. A complimentary relationship is seen in the influence that perception of natural processes has on the definition of historical benchmarks for assessing the naturalness of biodiversity. For example, contrary to Czech, the choice of industrialization as the benchmark for naturalness might not reflect an objective assessment of the increased ecological impact of industrial societies, but instead the perception that human lifestyles were more natural prior to the Enlightenment. Here, the naturalness of external nature is linked to consideration of factors that conflict with our own inner nature, or *telos*.

Complimentary interaction between the two interpretations is also seen in the belief that the most appropriate strategies for managing native biodiversity are those that encourage natural processes. This belief is even expressed by William Jordan, a prominent advocate of human intervention in natural processes to restore historic ecosystems. He notes that the intent of restorationists is "to do what has -has - to be done to ensure the survival and well-being of the system, while at the same time *not* controlling it, *not* violating its autonomy, but rather turning it back into itself, into its 'original' freedom and wildness" (Jordan, 2005, p. 203).

The interpretations come into conflict when the conservation of native biodiversity is prioritized over protecting the autonomy of nature from societal forces, in other words, when the naturalness of the biota is protected through unnatural means. One example is the use of genetically modified organisms for conservation purposes. As related by Turner (2001, p. 121), "some conservation groups, conservation biologists, and government bureaucracies are already considering, or actively pursuing, cloning and gene transfer, believing them to be necessary to achieve conservation goals." He cites the director of the Yellowstone Center for Resources who stated in 2001 that "there is no doubt in my mind that in the next ten to twenty years we will have genetically modified organisms that we can use as tools against non-native species" (Turner, 2001, p. 122).

Ecological restoration provides another example of the protection of naturalness by unnatural means. Those who advocate restoration have attracted considerable criticism on this basis (see, for example, Turner, 1996; Glover, 2000; Cole, 2005). In this vein, Rolston (1994, p. 92) suggests that an ecological restoration "is an artifact at the moment that it is deliberately arranged, but it gradually ceases to be so as spontaneous nature returns – but if, and only if, humans back off and let nature take its course." Similarly, Mathews (2005, p. 31) states that "to 'return to nature' is not to restore a set of lost things or attributes, but rather to allow a certain process to

begin anew. This is the process that takes over when we step back, when we cease intervening and making things over in accordance with our own... designs."

A degree of compromise between the two positions can be seen in the opinion of some authors that "good" ecological restorations are those that have been organized and carried out by the local community for the benefit of nature rather than by corporations seeking trade-offs for securing development approval (Jordan, 1994; Higgs, 2003). Because they attempt to diminish the influence of abstract instrumentalism, such "grass roots" restoration activities can be viewed as less-unnatural than the corporate alternative. However, even for community restoration projects, the guiding objective of the exercise is the conservation of global biodiversity, which carries with it an inherently high degree of abstraction and instrumental direction (Turner 1996).

Some conservation biologists suggest that the conflict between the interpretations is a product of the ecologically outmoded view that humans and nature are separate. Redefining naturalness to include human actions can give rise to the view, expressed by Povilitis (2002, p. 71), that "areas with human influence merit the label "natural" when people do the right things in terms of biodiversity, ecological health, and environmental sustainability." Other conservation biologists acknowledge the connection between naturalness and human action, but then continue to define naturalness with respect to historical benchmarks and other physical criteria. Yet by reinterpreting the process-oriented view of naturalness as a quality defined by physical criteria, human actions compatible with these criteria can themselves be viewed as natural, no matter the degree to which they embody abstract instrumentalism.

Angermeier is one such author who falls into this trap. He proposes four criteria for distinguishing between natural and anthropogenic changes to ecosystems, as follows: "(1) degree of change, (2) degree of sustained control, (3) spatial extent of change, and (4) abruptness of change; each criterion is inversely related to naturalness" (Angermeier, 2000, p. 375). The absence of explicit reference to human intentions implies that natural and anthropogenic changes can be distinguished solely on the basis of ecological effect rather than the degree of human intention. Czech's (2004) choice of industrialization as the "endpoint of natural conditions" reflects the same reasoning. Yet, although human intentions can give rise to impacts on nature that could not have been generated by natural processes, this is not the case in all instances and in all locations. Even those impacts that can be linked to industrialization are not necessarily any more damaging to local biodiversity than those that might have occurred in an earlier age, or even naturally (Haila, 1997). The logical outcome of the reasoning employed by

Angermeier and Czech is that human impacts are somehow unique, in the same way that the human capacity for rational agency is unique. As Sagoff (2000, p. 74) explains, this notion is deeply flawed:

The idea that Nature possesses intrinsic ordering principles that human beings can disrupt, moreover, deeply divides ecology from other natural sciences. By analogy, imagine that certain Newtonian laws of motion held only to the extent to which a system had not been impacted by human beings. Suppose, for example, that the gravitational constant applied in pristine places but not to sites debauched by multinational corporations. Suppose raindrops obeyed the Poisson distribution when they fell into naturally occurring cisterns but not into humanmade buckets. We might then speak meaningfully of integrative patterns and principles that account for the direction or tendencies of motion, say, in pristine forests but not in factory farms. In effect, this is how theoretical ecology asks us to think about the biological world.

For these reasons it is not surprising that Angermeier's criteria face difficulties in distinguishing between natural and anthropogenic change.⁴ Although he admits that "no single criterion is infallible" as a means of distinguishing between the two, he wrongly implies that the satisfaction of two or more of his criteria would be sufficient to do so. As an example, he explains why the effect of tidal waves would not be classed as an anthropogenic change: "tidal waves can cause large-scale, sudden, and dramatic ecological changes, but they exercise no sustained control over the changes" (Angermeier, 2000, p. 375). This claim hinges on the phrase "sustained control," which appears in his second criteria. "Control" could be taken to imply human intention, yet he makes it clear that this criterion can include the effects of "dams, introduced species, and severe pollution," which are generally not intentional. Hence he implies that some natural processes can be construed as exercising "sustained control," and while this might not include tidal waves, it could include such "large-scale, sudden, and dramatic" natural processes as volcanic eruptions and meteor impacts that can cause changes in climate for thousands of years.

The inconsistencies associated with Angermeier's criteria could have been avoided if his stated goal was not to distinguish natural from anthropogenic change, but to identify changes likely to be detrimental to the survival of native species and historic ecosystems. That he has suggested a flawed approach to assessing naturalness reflects a desire to support both interpretations simultaneously without acknowledging the inevitable conflicts that will arise from attempting to reinterpret the process-oriented view of naturalness as a quality defined by physical criteria.

This discussion of the clash between the two interpretations of naturalness supports the earlier claim that the historical benchmarks interpretation

⁴ The inability of different conceptions of naturalness to distinguish between the effects of conservation management strategies of varying intrusiveness is discussed by Siipi (2004).

of naturalness reflects prioritization of the value of biodiversity. It also suggests that the process-oriented interpretation provides the foundation for our understanding of naturalness, while the historical benchmarks interpretation is subsidiary, being grounded in the perception that human influences on nature were more natural in past ages. With these two interpretations of naturalness disentangled to some degree, it is now possible to address the primary task of this paper, being to explore why naturalness is valued. With the historical benchmarks interpretation of naturalness largely an expression of the value of biodiversity, and with this value apparently derived in part from the value attached to the process-oriented interpretation, it emerges that the focus of this exploration must be on the latter.

5. THE VALUE OF NATURAL PROCESSES

Consideration of the value of naturalness generally takes the form of consideration of the value of pristine nature, defined by the absence of human intervention. Yet, as discussed above, a more widely applicable view of naturalness is that it is defined along a continuum, and diminishes with increasing abstract instrumentalism. Reviewed in this section is the range of opinion on the value of undisturbed nature, while in the following section we will explore the values associated with abstract instrumentalism.

One approach to the value of undisturbed nature is to hold that humans should respect the autonomy of nature as a moral imperative, much as they should respect the autonomy of other humans. This is exemplified by Katz (1997, p. 115), who states that the loss of value resulting from human intervention in nature results from denial of "the autonomy, the self-realization, of natural nonhuman entities"; freedoms they deserve on the basis of their intrinsic moral considerability. Similar ideas are expressed by Heyd (2005, pp. 5–6), who claims that "when we do hold something as valuable for itself, and consequently as a candidate for moral consideration, we are doing it, among other things, in virtue of our recognition of its autonomy." It can be inferred from such a perspective that an absence of human intervention has value as an expression of the appropriate human relationship with nature. Without denying the moral considerability of nature, explaining the value of naturalness in this way seems unsatisfactory as it precludes consideration of human motivations and requires that the explanation be founded instead on values independent of human feelings. As suggested by Weston (1992, p. 117):

Values form a system, perhaps even a 'wild' system, and the task of environmental ethics is to learn our way around the system: precisely to explore and rediscover the connections, the layered contexts from personal to geological, that the traditional search for 'intrinsic values' disconnects.

In any event, to focus on the moral considerability of nature as the ultimate source of the value of naturalness is of little help in explaining the naturalness of things, such as natural childbirth and medicines, that bear no relation to external nature.

Of those who do consider human motivations, the dominant approach has been to associate the value of nature with its embodiment of some larger-than-human context. Within the Enlightenment tradition, an early articulation of this view was expressed by the 19th century philosopher, John Stuart Mill (1969, p. 26),⁵ who described a feeling of:

astonishment, rising into awe, which is inspired... by any of the greater natural phenomena. A hurricane; a mountain precipice; the desert; the ocean, either agitated or at rest; the solar system, and the great cosmic forces which hold it together; the boundless firmament, and to an educated mind any single star; excite feelings which make all human enterprises and powers appear so insignificant...⁶

More recently, in one of the early issues of *Environmental Ethics*, Simonsen (1981, p. 259) posed the question: "What is inherently valuable about wild nature? Why should wildness elicit delight, astonishment, and awe?" His answer was directed specifically to the atheist/non-believer, who

is confronted with a natural world which has come into existence on its own, and not in accordance with the design of an intelligent creature. He cannot enter into this world, as he can the world of human fabrication. There is, therefore, something astonishing in this world which has been brought into being by obscure if not blind forces (pp. 262–263).

Similarly, both Hargrove and Elliot assert that humans have a duty to preserve nature, by which they mean the autonomy of nature, because of its aesthetic value. This value they justify on the basis of "positive aesthetics;" the notion that all natural objects have aesthetic value by virtue of having been created by forces independent of human intention. Hargrove (1989) observes that in the Western tradition, the love of nature was historically associated with love for God, and suggests that current attitudes toward the aesthetic value of nature are grounded in these theistic roots. Elliot (1997, p. 68) notes that:

Humans create artefacts and create their value, and the value of those artefacts disappears when humans disappear. This is not so, however, with nature's aesthetic value. And that it is enduring provides the differentiation that allows us to say that

⁵ Mill's essay on nature was written some time during the 1850s.

⁶ However, Mill dismisses this feeling as just that. He believes it to be a purely emotive response and therefore has no bearing on the consideration of morality.

natural aesthetic value is a basis for intrinsic moral value, whereas the aesthetic value of artefacts is not

For each author it is apparent that the autonomy of nature confers value because it represents something that is above and beyond the human realm, something more ancient and more enduring. This explanation for the value of autonomous nature is consistent with the "green theory of value" proposed by Goodin (1992). His explanation is as follows:

- (1) People want to see some sense and pattern to their lives.
- (2) That requires, in turn, that their lives be set in some larger context.
- (3) The products of natural processes, untouched as they are by human hands, provides precisely that desired context (p. 37).

Rolston (2001, p. 275) also emphasizes a human need "to see their lives in a larger context, as embedded in, surrounded by, evolved out of a sphere of natural creativity that is bigger than we are."

Despite the support that can be marshaled for this approach to the value of naturalness, it provides only a partial explanation for the value of naturalness in the human realm. As noted above, a more widely applicable view holds naturalness to be a quality undermined by abstract instrumentalism, allowing us to account for the value attached to human activities that bear little relation to external nature.

6. NATURALNESS, AUTONOMY, AND WILD NATURE

With the naturalness continuum defined by the influence of abstract instrumentalism, it would seem to suggest a relatively straightforward answer to the question of why naturalness is valued; the reason being that abstract instrumentalism, and the associated challenge to individual autonomy, is disvalued. Dissatisfaction with the abstract, instrumental processes of contemporary society instills a prejudice against such processes, and consequently we seek to experience things that limit their contribution. Perhaps most significantly, this manifests in a desire to protect nature not from all human intervention, but from interventions directed by the forces of abstract instrumentalism. Recognition of the connection between abstract instrumentalism, and the value of individual autonomy, naturalness, and wild nature, is largely absent from the environmental ethics literature. However, as discussed below, a number of sources are available that provide support for elements of this view, although the full picture has remained elusive.

As noted by Ridder (2005), Drew and Stephens have made important contributions to the discourse linking human autonomy with the value of naturalness through their consideration of the role of nature in dystopian

literature. Drew (1986)⁷ observes that in each of three famous dystopian novels,⁸ nature is presented in symbolic opposition to centrally organized propaganda and authoritarian repression. In this subversive role, nature can inspire human freedom. He proceeds to describe the relevance of nature for contemporary society:

wilderness assumes an awesome importance, for it is the sole index by which we can measure the extent of our own subjugation to unnatural forces... Only in wilderness is it possible to escape this tyranny... In wilderness a man or woman has physically left behind the milieu of conditioning... He has bypassed the mass of alternatives posed by the assumptions of the technological society and glimpsed a possibility which his society will tell him is reactionary, archaic, and impossible, but which his body and his spirit tell him is absolutely correct (pp. 20–21).

Stephens (2004, p. 94) emphasizes similar themes:

Nature... experientially supports liberty as a counterpoint to the arbitrariness of human will, providing the vital context of spontaneous independence for loosening narrow dogmatism, enabling human faculties and prospects to be broadened beyond mere power hunger.

Perhaps the most explicit articulation of this value is provided by Budiansky (1995, p. 37) who, ironically, is wholeheartedly dismissive of this source of value:

For Thoreau, nature's chief value was that it was not the town. The woods were an escape from social corruption, or, more to the point, people... It was the freedom that nature had to offer that was its chief attraction. Thoreau went to live at Walden Pond, he said, "to conduct some private business with the fewest obstacles..." What Thoreau disliked about man's presence was not that it would interfere with or degrade critical biological processes; what he disliked about man's presence was its presence... The link between environmentalism and escapism is an enduring one, and Thoreau's admiration of the wild as a place to turn one's back on the town can be heard in the words of David Brower, Bill McKibben, and other nature writers of our day.

As related by Cérézuelle (2004, p. 322), another author who deserves mention in this context is the French philosopher, Bernard Charbonneau:

In a world that tends to become totally organized according to impersonal logics, the protection of nature is a vital necessity – not only for avoiding ecological disasters, but also for preserving freedom. It is one of the originalities of Charbonneau's thought that he reminds environmentalism of its duty to act in view of two values: Nature and Freedom.⁹

⁷ Drew (1986) was originally published in the *Ontario Naturalist*, September 1972.

⁸ These are We, by Zamyatin, Brave New World, by Huxley, and 1984, by Orwell.

⁹ Unfortunately, there are no English translations available of Charbonneau's work. He is little known outside of Europe, and even in France his work went largely unrecognised until the 1970s when it attracted the attention of the emerging French environment movement. See Clark (2002) and Cérézuelle (2004).

It thus emerges that an important source of the value of wild nature is that it symbolizes autonomy from the abstract, instrumental interventions characteristic of contemporary society. Although the proportion of people in Western countries who actually retreat from the modern world to the sanctuary provided by remote wilderness, rural isolation, and other cultures is quite small, rare is the person who has not entertained the romantic thought that they might escape the demands of society by returning to a simpler mode of existence. This cultural tendency to link nature to autonomy from society has a long history, stretching back to the ancient cultures of Greece and China. As noted by Fox (2002, p. 123), for example, "Lao-tse, the Chinese philosopher of the 6th century B.C., had advised the court to find relief from the artificiality of its experience in the bamboo groves." Associated with these sentiments is the interest many have in the ruined monuments of past civilizations (Woodward, 2002) and popular fascination with dystopian visions of apocalypse (Davis, 2002, pp. 361–386), particularly evident in groups such as Earth First! (Ellis, 1998; Taylor, 1999).

Recognition of this source of value within the more mainstream environmental ethics literature is limited to brief statements that lack any reflection on its significance. For example, among their reasons for protecting wilderness both Sessions (1992, p. 97) and Fox (1995, p. 156) highlight the value of the nonhuman world for its capacity to provide symbolic value, the principal example being as a symbol of human freedom. Both deploy the following quote from Norton (1986, p. 13): "other species, which struggle to survive in living, unmanaged ecosystems [ought to be preserved because they are our most powerful symbols of human freedom." Sessions (1992, p. 97) also includes reference to Drew (1986), cited earlier, in his acknowledgement of the "importance of wilderness as a standard for freedom and autonomous behavior, and as a refuge from totalitarianism." Rolston (1994, pp. 130-131, 137) similarly acknowledges the capacity of nature to evoke feelings of human freedom as a "cultural symbolization value." However, this capacity is only mentioned in relation to creatures that particularly evoke freedom, such as the bald eagle, rather than nature as a whole.

Given the possibility that the human desire for autonomy from the abstractions of contemporary society might be one of the underlying foundations of the value attached to wild nature, it is surprising that it has such a low profile among environmental philosophers. An explanation for this apparent neglect can perhaps be found in Kirkman's (2002, p. 144) comment that "all that is needed to discredit any ethical theory in the eyes of

¹⁰ Even Norton seems unconvinced of the significance of this value, including no mention of it in a later book (Norton, 1991) despite the inclusion of most of the other arguments contained within the original article cited above.

most environmental philosophers is to label it as anthropocentric." It may be that it is the anthropocentrism inherent in the notion that nature has symbolic value that has resulted in its relative obscurity.

7. CONCLUSION

Naturalness emerges from this exercise as an extremely complex quality. One interpretation defines it as a property of species and ecosystems whose existence within a particular region predates specified historical benchmarks. Another interpretation defines it as a quality of processes that are in harmony with nature, that lack human intervention, or can be defined relative to the degree of abstract instrumentalism. It is the last that is the most widely applicable, as it holds naturalness to be independent of the physical effects of the process. It can therefore help to explain why some things are considered "natural," like natural birth, despite having no real relevance for the health of the natural environment, and despite unavoidably involving humans. The use of historical benchmarks is to some extent subsidiary to the process-oriented interpretation, as the choice of such benchmarks partly reflects the perception that less-developed societies are more natural because individuals have/had greater autonomy from the impositions of broader society.

There appears to be some consensus that the value of naturalness as a quality of processes that lack all human intervention, as found in wild nature, relates to their evocation of forces larger than humanity. However, given that this view of naturalness is limited to consideration of our harmony with external nature, this explanation of its value is also limited. Of wider relevance is the prospect that naturalness is valued because individual autonomy from abstract instrumentalism is valued. The resulting prejudice against such forces as centralized decision-making and corporate dominance gives rise to a desire to limit the influence of such processes. It is also associated with a respect for wild nature, which is free of abstract instrumentalism and can therefore symbolize human freedom from the control exerted by society.

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