philosophies

Special Issue Reprint

Is Environmental Virtue Ethics a “Virtuous” Anthropocentrism?

Edited by
Sylvie Pouteau and Gérald Hess

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Guest Editors

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This is a reprint of the Special Issue, published open access by the journal *Philosophies* (ISSN 2409-9287), freely accessible at: https://www.mdpi.com/journal/philosophies/special_issues/VFBOF9122W.

For citation purposes, cite each article independently as indicated on the article page online and as indicated below:

Lastname, A.A.; Lastname, B.B. Article Title. *Journal Name* **Year**, *Volume Number*, Page Range.

ISBN 978-3-7258-3923-0 (Hbk)
ISBN 978-3-7258-3924-7 (PDF)
https://doi.org/10.3390/books978-3-7258-3924-7

Cover image courtesy of Sylvie Pouteau

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About the Editors

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Sylvie Pouteau is a senior research scientist in philosophy at the French National Institute of Research in Agriculture, Food and Environment—INRAE. After leading a career in plant developmental biology, she has specialized in plant philosophy and agricultural ethics with a special emphasis on inter- and transdisciplinary research actions with stakeholders. She has contributed to establishing the growing field of plant ethics and more recently to introducing virtue ethics in the context of agriculture and food production. Besides her publications in plant sciences, the scope of her articles in philosophy covers agricultural and food ethics, plant ethics with regard to genetic engineering and farming, art–science–philosophical frameworks, and agroecological virtue ethics.

Gérald Hess

Gérald Hess is a senior lecturer and researcher in environmental ethics and philosophy at the University of Lausanne in Switzerland. He holds a PhD in Philosophy and a master's degree in Law. His research on ecological issues is based on the intersection of phenomenology, ethics, epistemology, and political philosophy. Gérald Hess is the author of numerous articles on philosophy, particularly in the field of environmental ethics, and is the author and editor of several books in French, including *Éthiques de la nature* (PUF, 2013); (with D. Bourg) *Science, conscience et environnement* (PUF, 2016); and (with C. Pelluchon and J.-P. Pierron) *Humains, animaux, nature. Quelle éthique des vertus pour le monde qui vient?* (Hermann, 2020). His latest book is an essay on the ecological self, entitled *Conscience cosmique. Pour une écologique en première personne* (Dehors, 2023).

Preface

The present global environmental crisis is simultaneously an unprecedented anthropological crisis. The privileged position of human beings in nature has proven to be a curse, thus raising the issue of a sustainable future for both humankind and the Earth. The anthropocentric position is now commonly equated to environmental blindness and egoism. The argument goes so far as to posit that human flourishing is intrinsically opposed to environmental welfare. The emergence of environmental virtue ethics (EVE) is an attempt to address this dichotomy on the basis of virtue ethics (VE). However, trying to bridge the gap between an agent-centered approach and an environmental focus may expose theoretical and practical difficulties and conflicts. The following Special Issue of *Philosophies* endeavors to expand on the anthropological shift underpinned by the interface between EVE and anthropocentrism. The emphasis is placed on the possibility of overcoming moral anthropocentrism: converting vicious anthropocentrism into virtuous anthropocentrism or considering non-anthropocentric virtue ethics. In line with the scope of *Philosophies*, contributions to this Special Issue cross the borders between different scientific and philosophical disciplines—including virtue ethics, environmental ethics, environmental humanities, and epistemology—and combine theoretical and applied issues in major areas—including bioethics, agriculture, climate change, community building, and politics.

This Special Issue is the first comprehensive contribution to the field in the context of European philosophical perspectives and includes articles by authors from France, Germany, Italy, Spain, and Switzerland, in addition to one author from Australia. The involved authors endeavor to disentangle a number of paradoxes, ambiguities, and contradictions related to the following areas:

- The scope of anthropocentrism vs. anthropo-centeredness and non-anthropocentrism;
- The differentiation of the environment (human nature, agriculture, natural ecosystems, living organisms, and climate);
- The various causes of environmental blindness (ontological, ethical, and epistemic);
- The scope of human flourishment in terms of the good life and the ecological self;
- Underlying ethical assumptions (deontological, consequential, and virtue-oriented);
- Human virtues that are relevant for an attitudinal shift in the environmental crisis and climate change.

To harness the breadth of the subject, this Special Issue has been coordinated by two Guest Editors with complementary academic backgrounds:

- Sylvie Pouteau (French National Research Institute for Agriculture, Food and Environment—INRAE, University Paris Saclay, France), who specializes in plant biology, plant ethics, and inter- and transdisciplinary research.
- Gérald Hess (Institute of Geography and Sustainability, University of Lausanne, Switzerland), who specializes in environmental philosophy and ethics.

Sylvie Pouteau and Gérald Hess
Guest Editors

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Editorial

Introduction: Is Environmental Virtue Ethics a 'Virtuous' Anthropocentrism?

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Citation: Pouteau, S.; Hess, G. Introduction: Is Environmental Virtue Ethics a 'Virtuous' Anthropocentrism? *Philosophies* **2024**, *9*, 172. https://doi.org/10.3390/philosophies9060172

Received: 13 October 2024
Accepted: 25 October 2024
Published: 10 November 2024

The field of environmental ethics has been built as a response to environmental blindness. For about half a century, it has continuously worked through the internal contradictions embedded in different ethical traditions throughout history. These include utilitarian or consequentialist ethics, deontological or principalist ethics, and virtue or aretaic ethics. Because of its historical dominance and its close connection to the legal domain, deontology has played a prominent role in shaping the global issues related to the protection of biodiversity and natural ecosystems. For instance, the notion of intrinsic value has now become quite popular beyond the community of ethicists and lawyers and has reached a wider audience. Virtue ethics (VE) has been less influential, which may seem paradoxical. When considering its historical position at the root of all later ethical developments, environmental virtue ethics (EVE) may appear to simply surface an implicit component of environmental ethics that was initially left out. This special issue of *Philosophies* endeavors to clarify whether EVE contradicts the foundational goal of environmental ethics by asking: "Is environmental virtue ethics a 'virtuous' anthropocentrism?" This provocative question underlies two main issues: the relation between EVE and anthropocentrism (Section 1); the political implications of EVE (Section 2).

The criticism of "anthropocentrism" lies at the foundation of environmental ethics and is pivotal for EVE as well. However, according to some analyses, EVE could be doomed with an anthropocentric bias, or worse, it could be a Trojan horse for a dangerous kind of anthropocentrism threatening to undermine the whole endeavor of environmental ethics. For instance, Holmes Rolston [1] (p. 61) considers that EVE is "half the truth but dangerous as a whole". The fact that anthropocentrism, here equated to human egoism and environmental blindness, has had a pervasive influence in every corner of ethical reflection over the last centuries is quite clear. Yet, why should virtue ethics be more affected by this bias than deontology? The reflection on EVE seems to be much concerned with overcoming this bias and possibly even more aware of its hidden fall-traps. In response to the criticism of anthropocentrism, proponents of EVE have argued that it is "non-anthropocentric" [2–4]. Yet, adding the qualification non-anthropocentric to environmental ethics as a whole would certainly be considered by many researchers in environmental ethics to be a pleonasm or even a tautology. So, why should terminological redundancy be necessary in the case of EVE?

The debate on the anthropocentric content of EVE seems to reach beyond environmental issues and stems from deeper theoretical disagreements between virtue ethics and deontology. Interestingly, the global scale of the ecological threats, in particular climate change, makes it difficult to isolate one single issue to be addressed without scrutinizing its systemic or even paradigmatic content. It is necessary not only to conceive norms but also to address the many inequalities that global changes accelerate. In this regard, the distinctive theoretical implications of EVE and deontology also have wider consequences regarding political decision making. Because virtue ethics is grounded in a political understanding of human identity and action, one might expect that EVE would bring the anthropocentric

bias to a transformative threshold apt to meet the challenges of the Anthropocene and to ground environmental virtue politics. So, how do we fill the gap between the singularity of individual biographies and the large or even global scale of environmental challenges?

1. Relations Between Anthropocentrism and EVE

The provocative question behind this special issue of *Philosophies*, "Is environmental virtue ethics a 'virtuous' anthropocentrism?", is related to the presumed anthropocentric trend underlying all forms of VE. Not only does virtue refer to a specifically human character trait, but its moral dimension is also closely tied to the supreme good targeted by VE, namely human flourishing, in other words a good human life. Therefore, one may ask whether EVE is doomed to be morally anthropocentric or whether it can be 'non-anthropocentric', and if so, in what sense. In their diversity, all the articles in this Special Issue address this question—implicitly or explicitly. We suggest that each of them can map onto a specific position within the landscape of EVE, as presented below.

To clarify the diversity of moral anthropocentric and non-anthropocentric positions permitted by EVE, it is useful to first distinguish moral anthropocentrism from other forms of anthropocentrism. Ecological thinking has repeatedly pointed to the paradigm of modernity associated with the rise of the natural sciences from the 17th century onwards. This paradigm has led to what is known in anthropology as the "great divide". On the one hand, nature in all its manifold manifestations (animals, living beings as a whole) is conceived as inert and valueless matter. On the other hand, the human world and culture is seen as a totally different reality, the source and purpose of all values. This ontological separation between two substances—or, at least, between entities (the human and the non-human) with very different properties—one physical (nature), the other mental or psychic (human)[1] defines a type of anthropocentrism that can be described as "ontological".

On the other hand, there is a type of anthropocentrism associated with our representation of the world, which seems difficult to avoid. It is undeniable that the concepts, values, and norms about the human and non-human world that we develop through knowledge and ethics are a product of our psycho-physical make-up. We apprehend the world in a certain way that depends on our bodily constitution (our sensory organs and brain) and our mind. Although there can also be a reality for putative extraterrestrials, these would, without doubt, conceive of reality differently from us. This type of anthropocentrism can be called "epistemic" anthropocentrism.

Finally, "moral anthropocentrism" differs from both ontological anthropocentrism and epistemic anthropocentrism. It expresses the moral position that only humanity or even only part of humanity possesses intrinsic or moral value, i.e., a value that is not merely a means to an end other than itself. In this respect, VE seems to be indisputably moral anthropocentrism, because the excellence that virtues seek is supposed to contribute to and form part of the supreme good, namely human flourishing. In this case, the natural environment would be at most a condition for the realization of this good. However, the good life and intrinsic value are not interchangeable notions. For instance, clean air, nonpolluted water, fertile soil are conditions for the flourishing of all living beings, whether human or non-human. Even if they are considered to have no intrinsic or moral value, it seems difficult to disentangle their flourishing from that of human beings. Thus, the bare argument of moral anthropocentrism does apply to EVE only under a misunderstood concept of flourishing equated with intrinsic value. On the contrary, a sound understanding of flourishing leads to emphasizing its inherently unsaturable and mutualist or synergetic quality (see below).

Four contributions in the collection defend a more or less anthropocentric approach to EVE, with different shades of virtuously relevant arguments. In particular, an important nuance needs to be introduced depending on whether or not EVE relies on an ontological anthropocentrism, as described above. There is a "centric" version of EVE that is based on ontological anthropocentrism. In this Special Issue, Nin Kirkham seems to be defending such a conception of EVE. With reference to Aristotle, a virtuous relationship to the

environment must be based, in her view, on a correct conception of human nature, i.e., on certain essential characteristics that define our identity and our vision of what sort of lives we live and what sort of ends we seek. Interestingly, this apparently centric version of EVE seems to reverse the extension of ethics to include nature and to work the other way around by extending the scope of EVE in order to defend a VE approach of bioethics.

This leads to identifying a "centered" form of moral anthropocentrism that EVE can adopt. Sylvie Pouteau and Jean-Philippe Pierron seem to endorse such a stance, which does not separate humans from their environment by assuming a specific essence for the former that would differentiate them ontologically from their environment and epistemologically as an object in itself. Pouteau explicitly claims an anthropo*centered* (but not anthropo*centric*) stance by re-assessing the notion of anthropos and giving pride of place to agriculture and the relationship with plants in the conception of EVE. As for Pierron, his anthropocentered vision of EVE emphasizes the centrality of a biography that, in the Anthropocene era, shapes a lifestyle that cuts across both the private and public spheres and brings to the fore such virtues as humility, temperance, and hospitality.

Marcello Di Paola's paper provides a wide-ranging examination of environmental ethics (which is mostly deontological, as already pointed out) and VE, showing that there are in fact many ways in which these two fields can overlap. These overlaps highlight the fact that EVE can mobilize the intrinsic value of nature as well as existence and instrumental values[2]. It is not necessarily a matter of moral anthropocentrism. However, taking the unprecedented case of climate change, Di Paola observes that EVE does not seem to abandon the idea that the supreme good does indeed lie in human flourishing, with the exception of the possibilities offered by approaches inspired by Spinoza's ontology. In so doing, Di Paola is halfway between anthropocentric and non-anthropocentric EVE.

The five other contributions in the collection defend more openly a non-anthropocentric approach to EVE. By focusing on the capabilities of ecosystems, Cristian Moyano-Fernandez draws on both an in-depth knowledge of ecosystem ecology and a "synergetic" conception of flourishing. By promoting the virtue of ecological justice, the author combines—through the interdependence between one and the other—the human good with the non-human good and thinks that he can thereby resolve potential conflicts between human autonomy and ecosystem autonomy. Moyano-Fernandez's position on EVE illustrates a moral non-anthropocentrism of the "naturalist" type. While rejecting a human/non-human ontological dualism (ontological anthropocentrism) in favor of a relational ontology, it nevertheless presupposes the inevitable subject/object epistemological dualism on which the objectification of scientific knowledge is based. Yet, it is precisely this knowledge that justifies defending the virtue of ecological justice by adding non-human flourishing (that of ecosystems) to human fulfilment.

Another contribution to a naturalist moral non-anthropocentrism of EVE comes from Rémi Beau. His thinking focuses not on ecosystems as such but on ecological human communities. While this approach is also based on ecological knowledge, it also emphasizes the collective and communitarian nature of certain virtues such as solidarity and conviviality. The ecological communities in which such virtues can be developed and nurtured are those that take account of the human and non-human interests of their members.

The paper by Esteban Arcos occupies an intermediate position by supporting a non-anthropocentric EVE that is halfway between a naturalist version and, so to speak, an "anti-naturalist" version. On the one hand, he recognizes the flourishing and autonomy of the non-human world as an ethical end in addition to the end of human flourishing. This is why the purpose of EVE is redefined here as "mutual flourishing" between humans and non-humans. On the other hand, the use of narrative ethics and the predominant place given to the virtue of love steer Arcos's EVE towards an anti-naturalistic form of moral non-anthropocentrism. Here, it seems there is a desire not to rely (or no longer to rely only) on the objective knowledge of science (and ecology in particular) but on a more subjective ecological perspective, which claims lived experience in the first person as a source of knowledge and action.

Finally, the last two contributions venture to explore non-anthropocentric and anti-naturalist forms of EVE. Gérald Hess reflects on human agency and endeavors to identify an anthropocentric bias that leads him to distinguish environmental virtues from ecological virtues. While the latter aim at the flourishing of a properly ecological self, based on the agent's experience of a radical decentering of self and of participation in nature, the former assume the differentiation imposed by human/non-human relations in the meaning of the concept of flourishing. The article by Damien Delorme, Noemi Calidori, and Giovanni Frigo is also based on a conception of the ecological self, inspired in this case by the cosmopsychism of ecofeminist Frey Mathews. This holistic understanding of the ecological self leads the authors to extend the notion of virtue to the non-humans. In their view, there are "functional ecological virtues" of non-human agency. These are not moral virtues practiced by human agents, but they can have a positive practical effect on them.

As we see, the range of moral postures in the field of EVE is vast and opens new avenues to the ongoing criticism of anthropocentrism. It ranges from morally anthropocentric to morally non-anthropocentric variants and from "centric" to "centered" and "anti-naturalist" versions of moral anthropocentrism and of non-anthropocentrism.

2. Political Implications of EVE

What could then be the political implications of EVE with respect to environmental issues? This question underpins the recurrent criticisms of VE that claim that, because it is agent-centered, it is bound to linger in the private sphere and cannot satisfy the requirements at the social and political levels. This criticism is in fact misunderstanding VE, since from the outset Aristotle argued that ethics and politics are tightly linked and should not be thought as external to each other. The virtuous agent should thus be considered to be also a political agent, exerting agency within and for the City. Accordingly, "EVE is also environmental virtue politics" [6] (p. 13). The issue is thus: "How good are virtues that concern individuals and not institutions, local authorities or States?" [7] (p. 11). Two questions can be addressed: (i) are there virtues that have a wider political reach than others?; (ii) how can the scalability of virtues be enforced in society?

To answer the first question, the emphasis can be placed on social virtues, which rely inherently on interdependency and collective action and relate to the functioning of society as a whole. As pointed out by Cristian Moyano-Fernández, the virtue of justice is pivotal for political issues. By encompassing other than human living beings and ecosystems, ecological justice expands the limited scope of anthropocentric justice beyond human beings and provides the grounds to establish EVE as a leading framework to address major environmental issues. Ecological justice is about how to achieve synergetic or mutual flourishing; thus, it is what needs to be assessed by the virtuous political agent. Other virtues have an inherent social and mutualistic scope, in particular, solidarity and hospitality. Rémi Beau reminds us that the structure of society in ancient Greece was very different from that of our time; thus, the intertwinement between virtue and politics needs to be re-examined. Following Val Plumwood and Chaone Mallory's analysis, he reckons that collective virtues such as solidarity can contribute to new forms of politization, where members of an ecological community care for the flourishing of the diversity of living beings within it. Jean-Philippe Pierron also reminds us that we all start our life as foreigners who need to be hosted on the Earth by human and other-than-human communities. Thus, hospitality appears as a foundational, even ontological, social virtue, implying from the beginning a form of mutualism, which later in life is reversed as we turn to be hosts for others, in particular, climate and political migrants. Ecological justice again is underpinned by the social mutualistic virtue of hospitality since we all share a common dwelling.

Apart from social virtues that from the outset rely on mutualistic premises and concerns for others, whether human or other-than-human entities, most virtues eventually have a social reach and do not remain solitary, since their excellence will be demonstrated in practical situations fleshed out with concrete encounters. To emphasize this specificity of VE, one may insist on the fact that there is no theory of virtue, only a practice of virtue.

Marcello Di Paola reminds us that even the strongest deontological framework based on intrinsic value will eventually need to be attended by VE in the encounter with a specific unique context. The meta-virtue of practical wisdom will be indispensable to identify the adequate course of action. The other meta-virtue of fortitude or strength of character will also be needed as a bastion against the akrasia that threatens to undermine any possibility of action. Furthermore, the hierarchy of values will prove to be reversed from the highest to the lowest. Thus, instrumental value will not rank at the bottom anymore, for it is only when agency takes place that the good can be demonstrated. Sylvie Pouteau gives an example of this necessary complementarity between deontology and VE by analyzing the decisions taken at the COP15 in December 2022. The target to protect 30% of the land and sea and water borders tends to demonstrate that deontology cannot reach beyond a no-interaction standpoint. However, for the remaining 70% of the land and waters that will not be under protection, only VE can provide the basis for adapting agency to every single specific situation where human activities happen to be developed.

Along another line of thought, Jean-Philippe Pierron reminds us of the importance of temperance, another cardinal virtue that amounts to having one's whole mind about oneself. This self-knowledge, knowing who one is, can also translate into knowing one's place on Earth—the initial meaning of the word anthropos, as recalled by Sylvie Pouteau. Temperance can only be exerted through the encounter with others, be they human or other-than-human entities. Eventually ecological temperance may be considered to conflate with ecological justice in the quest of mutual flourishing. Finally, the source of virtue itself needs to be social or mutualistic from the outset. Thus, Gérald Hess argues that the kind of self that underlies VE needs to be thought of not as an atomistic egotic self but as an ecological self. With the premise of an ecological self, every virtue eventually translates into mutualistic tenets apt to contribute to a virtue-based politics. One may also recall that in the *Magna Moralia,* Aristotle [8] (1212b, Book II.14) contended that the virtuous agent cannot be said to be selfish: "He is therefore a lover of good, not a lover of self. For, if he does love himself, it is only because he is good. But the bad man is a lover of self".

Even if ecology was not a subject of concern in Aristotle's time, this argument finally rules out any further attempt to equate EVE and, more generally, VE to a vicious kind of environmental ethics, which would be paradoxical of course. This vicious curse is more certainly the one that may affect the unilateral use of deontology. The reason is that the latter may lead to a moral disburdenment of agents simply requested to conform to rules that they have not had an opportunity to adopt by themselves. EVE or ecological virtue ethics is what is currently needed to overcome the growing indifference towards nature. To this end, it is necessary to first overcome the belief that global problems require global solutions, hence coercive regulations. Ecological virtue ethics means a shift in the appraisal of the political decisions that may apply. This does not mean that we do not need norms but rather that we need to balance them with an ecological virtue policy.

To answer the second question concerning the political scalability of EVE, three directions can be inferred from the contributions of this volume: (i) developing empirical education; (ii) deriving alternative models of moral exemplarity; and (iii) mediating collective action initiatives. The empirical education implied by EVE is concerned with learning, not only how to practice in what is presumed to be the "right" way but, more specifically, how to develop a delicate kind of empiricism, apt to support recognizing attitudes. As a first requirement, empiricism implies that concrete encounters with nature are involved, which is the case in the field of agriculture, for instance, or gardening and ecological art practice. Furthermore, Esteban Arcos draws our attention to the syntactic component involved in recognizing other-than-human entities based on attestation and/or ascription. The way we literally ascribe subjectivity or agency to nature should be given more emphasis, since this already conveys awareness and attention to what matters, not merely as commodities but also as genuine others. Attestation moves one step further by actualizing the recognizing attitude in the way we act in practice. Gérald Hess also emphasizes the pivotal need for a phenomenological training that goes beyond behavioral training in superficial eco-gestures

and that may raise the recognizing attitude in order to reach beyond our current scientific objectifying knowledge.

The human standard of good action implied by EVE is neither an absolute model to be imitated, i.e., a practical norm, nor a mere particular case to be considered, only one among many others. It is based on a consistent conception of moral exemplarity in which the wise person is the "measure" (*metron*) of moral conduct [9]. This means that virtuous models are to be found not in discursive theories but in fleshed out recognizing attitudes based on individual, yet universal, golden means. According to this conception of moral exemplarity, the virtuous person will not remain isolated neither be merely imitated, s-he will stand as a catalyst of change for others, so that they also become the measure of their own moral conduct. This moral conception also provides a rule of thumb regarding the emergence of social movements, such as degrowth movements or initial organic and agroecological movements.

Finally, the political scope of EVE may be further appreciated through its unique "metrology" of the good action, reflected in the propensity to self-organization demonstrated by various eco-social movements. This new understanding of collective action may lead to support spontaneous initiatives from the ground, not only top-down public policies that involve heavy multi-scalar institutional tools. Since virtuous and normative strategies may conflate at times but also enter into conflict, e.g., hospitality with regard to migration policies, mediation of collective action will be needed. Regarding the major issue of global climate change, Marcello Di Paola considers that EVE might be a few steps ahead compared to normative environmental ethics as it provides ground for climate-wise environmentally virtuous experiments in living. These may include networked food-producing urban gardening or the creation of non-institutional potential institutions such as a river parliament or folk assembly, social initiatives that are currently being explored in different countries [10].

Interestingly, none of the contributions to the volume has ventured to defend a strong position regarding the initial question as to whether a virtuous anthropocentrism can make sense. Most of the contributions bear potential arguments to defend this position, but their focus is elsewhere, surfacing still unexplored avenues of EVE. This conclusion can be mitigated by two exceptions, which both expand on major domains of applied ethics, domains in which anthropic effects on the environment cannot be bypassed because they concern our most immediate vital needs: (i) agriculture; (ii) bioethics, hence medicine.

In the 70% of the planet that will not be under ecological protection in 2030, including farmlands and production forests, different visions will have to cooperate, so that conformation by institutional norms does not preclude transformation by social movements, which have been the pioneers of agroecology in different parts of the world. Thus, Sylvie Pouteau proposes that EVE could expand into agroecological virtue ethics by developing a "metrology" of the good action in the field of agriculture, thus implying a shift towards "anthropo-centeredness", a more sophisticated kind of anthropocentrism based on plant-centered topology. Along another line of thought, Nin Kirkham argues that the "argument from nature" could provide the basis for a "virtuously anthropocentric" EVE, meaning that the reach of EVE could also cover bioethical issues, e.g., extended human longevity, which links environmental and human issues—and more generally, euthanasia, abortion, and transhumanism. Drawing on this argument, one may also speculate that EVE could be applied to our internal ecosystems, by considering the billions of microorganisms that constitute our human microbiota—these being continuously connected to the wider environmental microbiota, including those coming from food production systems.

Finally, the notion of "virtuous anthropocentrism" might appear too provocative, and yet, it may be apt to trigger a renewal in the field of environmental ethics at large, including EVE as one of its most promising strains. Further to the initial question at the origin of this volume, one may ask whether EVE could be better defined as a political virtue framework in which the human egotic self is turned into an ecological self. This would imply that the anthropos is no longer seen as an atomized entity but also encompasses its

surroundings, leading to a re-appraisal of what is meant by the notions of anthropocentrism and anthropo-centeredness and, by the same token, the meaning of non-anthropocentrism. No doubt further refinements will need to be added to this contribution to the field.

Author Contributions: Writing—original draft preparation, review and editing by S.P. and G.H. All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest: The authors declare no conflict of interest.

Notes

[1] Today, there is little disagreement about the fact that animals too possess a psychic condition. According to a number of scientists, even plants are thought to have a mental condition. Nevertheless, if we follow Étienne Bimbenet [5], we can speak of an ontological continuity between humans and non-humans defined in terms of biology, theory of evolution, ecology, etc., and of an anthropological difference between them through the self-understanding that humans have of themselves as cultural beings. In some respects, this difference is also, we might say, *in fine* ontological, but it arises not from a scientific perspective but from a subjective first-person approach. It defines a weak form of ontological anthropocentrism, which in ethical terms implies a "centered" rather than a "centric" version of moral anthropocentrism.

[2] Instrumental values are those attributed to nature (or certain aspects of it) when it is understood as a means to human ends, for example, when a forest is seen as a resource for firewood. Existence values are those that value nature as existing, for example, an endangered species or a culturally significant landscape. Existence values can lead to decisions aimed at preserving the endangered species or the culturally significant landscape. Intrinsic or moral value is that which attributes a moral status to nature on the basis of some of its properties (for example, the capacity to experience pain or pleasure or the property of being alive, etc.). In principle, intrinsic or moral value implies a certain attitude (responsibility, virtues) or even duties towards nature.

References

1. Rolston, H., III. Environmental Virtue Ethics: Half the Truth but Dangerous as a Whole. In *Environmental Virtue Ethics*; Sandler, R., Cafaro, P., Eds.; Rowman & Littlefield: Lanham, MA, USA, 2005; pp. 61–78.
2. Sandler, R. *Character and Environment. A Virtue-Oriented Approach to Environmental Ethics*; Columbia University Press: New York, NY, USA, 2007.
3. Sandler, R.D.; Cafaro, P. (Eds.) *Environmental Virtue Ethics*; Rowman & Littlefield: Lanham, MD, USA, 2004.
4. Dzwonkovska, D. Is environmental virtue ethics anthropocentric? *J Agric. Environ. Ethics* **2018**, *31*, 723–738. [CrossRef]
5. Bimbenet, E. *Le Complexe des Trois Singes. Essai sur L'animalité Humaine*; Seuil: Paris, France, 2017.
6. Di Paola, M. Virtue, Environmental Ethics, Nonhuman Values, and Anthropocentrism. *Philosophies* **2024**, *9*, 15. [CrossRef]
7. Pierron, J.-P. Temperance, Humility and Hospitality: Three Virtues for the Anthropocene Moment? *Philosophies* **2024**, *9*, 5. [CrossRef]
8. Aristotle. Magnia Moralia. In *The Works of Aristotle*; Ross, W.D., Ed.; St. Stock, G.W.J., Translator; Oxford Clarendon Press: Oxford, UK, 1915; pp. 1–97. Available online: https://archive.org/details/p2workstranslat09aris/page/n3/mode/2up?view=theater (accessed on 21 August 2024).
9. Morel, P.M. La mesure et l'exemple: L'exemplarité morale dans l'éthique d'Aristote. *Riv. Stor. Della Filos.* **2023**, *78*, 11–24. [CrossRef]
10. Gosselin, S.; Bartoli, D.G. *La condition Terrestre. Habiter la Terre en Communs*; Seuil: Paris, France, 2022.

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Article

A Virtue Ethics Interpretation of the 'Argument from Nature' for Both Humans and the Environment

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Abstract: Appeals to the moral value of nature and naturalness are commonly used in debates about technology and the environment and to inform our approach to the ethics of technology and the environment more generally. In this paper, I will argue, firstly, that arguments from nature, as they are used in debates about new technologies and about the environment, are misinterpreted when they are understood as attempting to put forward categorical objections to certain human activities and, consequently, their real significance is often overlooked. Secondly, arguments from nature, particularly as they are used in the context of debates over the use of new technologies, can be understood as appealing to human nature as a way to determine human limitations. Thirdly, arguments from nature can inform our discussion of what it is to be a human being or a person, and this kind of discussion can, in turn, inform our ethical deliberations in such areas of bioethics as euthanasia, abortion, etc. Finally, I conclude that a proper understanding of these arguments can help in establishing which virtues and which vices relate to our relationship with the non-human world—that is, which character dispositions are relevant to an environmental virtue ethics, with human nature as its foundation. A proper understanding of the argument from nature provides the basis for a 'virtuously anthropocentric' environmental ethics.

Keywords: argument from nature; environmental virtue ethics; human nature; ethics of technology; naturalness

Citation: Kirkham, N. A Virtue Ethics Interpretation of the 'Argument from Nature' for Both Humans and the Environment. *Philosophies* **2024**, *9*, 19. https://doi.org/10.3390/philosophies9010019

Academic Editors: Sylvie Pouteau, Gérald Hess and Soraj Hongladarom

Received: 10 September 2023
Revised: 15 January 2024
Accepted: 18 January 2024
Published: 22 January 2024

1. Introduction

Popular expressions of environmental concern often appeal to nature or naturalness as a kind of ethical guide or arbiter for human activity. Likewise, new advances in technology often elicit popular ethical responses that involve some appeal to the moral value of nature or naturalness But, unlike the pressing global environmental issues and the bourgeoning technological advancement that characterise the 21st century, this kind of ethical appeal to nature is not a recent development. Technological advances and environmental concerns have, for centuries, provoked questions concerning naturalness, and proposals to limit human manipulation of the natural world [1] (pp. 70–80). Claims about the connection between appropriate human behaviour and naturalness can be seen to have their roots in Aristotle's virtue ethics, where he claims that '. . . for every being that is best and pleasantest which is naturally proper to it' [2] (p. 341). And appeals to nature remain a significant intuitive response to considerations about our relationship with the environment and with technology, particularly in popular conceptions of ethical issues surrounding the use of various technologies. But arguments from nature are as much maligned as they are popular. It is a commonplace to point out that appeals to nature, or to naturalness, do not straightforwardly give us defensible categorical arguments for or against various technological activities—naturalness uninterpreted, it seems, is no ethical guide. The appeal to nature, when understood from within a virtue ethics context, does not provide straightforward grounds to specify some set of actions in preference to all others, just as virtue ethics, more generally, does not attempt to prescribe right, or proscribe wrong, actions in advance. This is at least partly because

such a prescription is not seen as being immediately derivable from the appeal to nature in isolation from other ethical commitments.

But if we accept that arguments from nature are neither coherent nor defensible, the question remains as to why they are still so common as a response to various technologies, and as a foundation for environmental caution. Is the role of the appeal to nature limited to being the first untutored attempt at argument by the Luddite or dogmatic environmentalist, or is there a way to understand the ongoing appeal of arguments from nature that grants them some coherence and defensibility? Here, I argue that if the appeal to nature is understood from within the context of Aristotelian virtue ethics (the tradition from whence it springs) it can be given a far more serious and interesting interpretation.

In this paper, I will take a departure from the standard definition of Environmental Virtue Ethics (EVE), which relies on the notion that nature provides an ethical guide for action. My argument is, in some sense, conceptually prior to the development of EVE and aims to understand how a kind of tacit version of EVE already operates in the way that many people intuitively think about the relationship between humans and the natural world and technological interventions. Because the argument from nature relates to human nature and not only 'environmental' nature, I propose that EVE should be based on an understanding of what it is to be a human being; thus, it can only be human-centered. In this sense, the scope of EVE could be extended to areas of bioethics such as euthanasia, abortion, and transhumanism.

2. The Argument from Nature as a Foundation for Important Ethical Debate

2.1. Arguments from Nature and Their Problems

Issues concerning the value of naturalness regularly arise in debates on the ethics of both biotechnology and the environment. Claims that certain technological processes or their products are 'unnatural' feature strongly in the social responses to, and philosophical debates over, IVF (in vitro fertilisation), stem cell research, genetic modification and many other biotechnologies. Such responses to new technologies are so common that they have been dubbed the 'argument from nature' [3] (p. 223) or 'the argument from what is or isn't natural' [4] (p. 19). In these debates, the objections to various technologies based on appeals to the value of naturalness tend to take the general form of 'if x is unnatural therefore x is wrong, or bad, or unadvisable'. Such reasoning has been characterised by de Sousa, in his article entitled 'Arguments from Nature', as the '*negative* argument from nature' [5] (p. 169). A version of the *negative* argument from nature has also arisen in religious responses to such things as homosexuality, and abortion.[1] On the other hand, in debates concerning the protection of the environment, reasons used to support the preservation of the wilderness often appeal to the notion that it is best to allow natural creation to proceed unhindered. De Sousa characterises the general form of this kind of argument, the '*positive* argument from nature', as the following: 'if x is natural therefore x is right, or good, or advisable' [5] (p.169).[2] And something akin to this argument is found in the aforementioned quote from Aristotle's ethics: '. . . for every being that is best and pleasantest which is naturally proper to it' [2] (p. 341). We must, however, be careful not to assume that these latter two arguments are exactly equivalent and thus that criticisms of one immediately apply to the other. While de Sousa runs these two arguments together, there appear to be good reasons to think that the 'positive naturalist argument', as he calls and characterises it, is not coherent or defensible, while not thinking that the Aristotelian argument falls prey to the same criticisms so straightforwardly. To some extent, the recent development of EVE may seem to tackle the issue by reintroducing Aristotelian virtue ethics. However, the notion of environment is mostly addressed under a positive naturalist argument (see, e.g., Pouteau, in this issue) [6]. While EVE may provide an adequate basis to make sense of the argument from nature, a first requirement is to unravel the intricate threads of the appeal to 'nature', considering that nature is not summed up by the term environment.

A variety of versions of the negative argument from nature regularly arise in debates over the ethics of new technologies, and such arguments are often dismissed on the grounds that 'nature', on its own, does not provide us with any set of objective moral standards that we can use to decide between legitimate and illegitimate uses of technology. The argument from nature, when viewed as a method to deduce from objective premises uncontroversial conclusions about what we should or should not do, or what is or is not good, is clearly invalid. It is on these grounds that the argument from nature is almost universally rejected in bioethics. Concealed in this rejection of the argument from nature as a reasonable and meaningful response to ethical issues concerning technology, is the assumption that the argument from nature is *always* invoked in order to generate categorical and definitive ethical boundaries and, therefore, invoked in attempts to bring ethical discussion to a close. However, I would argue that the use of the argument from nature in these contexts is intended to have—and, furthermore, should have—the opposite effect, that is, to invite and encourage the discussion of fundamental issues beyond merely rights and consequences, in particular issues that might, arguably, be best addressed from within the framework of virtue ethics.

To use the argument from nature (or even the 'playing God' objection to technology [7]), as if it were a categorical objection, or to interpret objections of this kind in this way, can have a further negative consequence. Apart from closing down the debate, an argument from nature when interpreted as making a categorical objection to a certain course of action based on some concept of a nature apart from human, not only expresses a deep and troubling conceptual (and perhaps material) alienation from the environment but, most importantly, expresses a failure of ethical understanding. That is, a failure to understand ourselves as the kinds of beings that we are, and a failure to consider that a proper understanding of ourselves is pivotal to our ethical deliberations. To understand the argument from nature in its virtue ethics context is to re-engage with our most fundamental ethical concerns in the terms that capture a true understanding of ourselves, our place in the world, and the essential elements of our nature. The most fundamental ethical imperative is fundamentally anthropocentric—ultimately, *we* must decide what to do.[3] Humans must decide what to do with an open acknowledgment and clear understanding of our own nature: as limited and capable; as, at the same time, one species among many and different from other species; as autochthonous and technological; as rational and ethical; and as mortal. The proper role of the argument from nature, then, is not to settle or end ethical debate over the environment and new technology by appealing to a categorical limit to human action imposed by nature, but rather to encourage the consideration of deeper ethical issues concerning how we understand ourselves, how we understand technology, and how we conceive of our relationship with the environment.

2.2. Reasons for the Marginalisation of Ethical Consideration of the Relationship between Humans and the Natural World

In response to the suggestion above, one might ask, firstly, why consideration of these 'deeper ethical issues' that arise within a virtue ethics approach to technology and the environment is so important and, secondly, why, if these issues are so important, they have been marginalised in contemporary ethical debate? Answering the second question may give us some insight into how to respond to the first.

One reason that discussion of how we make sense of the role of human technology and of our relationship with the environment has been marginalised is that contemporary debate has focussed on the discourses of rights and utility, to the almost complete exclusion of all other ethical discourse. The rise of contemporary virtue ethics can be understood partly as a response to the fact that, while the theories of deontology and utilitarianism dominated the field of ethics, they did not seem able or willing to account for certain important moral issues. As virtue ethics illuminated certain of these important marginalised moral issues, deontologists and utilitarians sought to address them in the terms of their own theories. However, for certain of these issues, their natural home is undeniably virtue ethics. This is

particularly the case with issues about how we, *as human beings*, orient ourselves towards nature, and how we understand and make sense of our place in the world, and our use of technology—these issues, which are so central to our ethical self-understanding, are a crucial aspect of a proper virtue theory, but of only marginal importance in deontology or utilitarianism, if of any importance at all.

An objection might be made to the above claim that, rather than being unable to address the question of what we consider to be fundamental to the nature of human beings, deontology and utilitarianism intentionally set this question aside, because attempts to answer it are notoriously contentious and may act as a barrier to ethical agreement at a higher level. Without question, deeper ethical issues concerning the specification of human nature are difficult, controversial, and permit a measure of disagreement. In light of this, one of the great virtues of deontology and utilitarianism is that their specification of right action does not rely on a specification of human nature and, thus, they are libertarian on the topic of how humans (as humans) should live. However, the pervasive use of 'arguments from nature' in response to ethical issues concerning the environment and technology indicates that there is a widespread desire (and, by extension, a need) to engage in discussion of issues about how we, as human beings, orient ourselves towards nature, and how we understand and make sense of our place in the world and of our use of technology. Even if it is unlikely that a complete consensus can be reached on these questions, debating them is an important aspect of our ethical understanding in general, and of our ethical understanding of our relationship to the environment and technology, more specifically. Accepting virtue ethics does not mean we have to deny the significance and usefulness of deontology and utilitarianism. It means that, in addition to these ethical frameworks, we can affirm the importance of foundational discourse regarding the relationship between what we judge to be essential to human nature—by which I mean the most fundamental and universal experiences shared by all human beings—and the general specification of what constitutes a good human life. It is important to note here, firstly, that, while there may be some disagreement and difference across cultures and historical periods, it is undeniable that there is significant continuity at the level of the most fundamental human experiences, and it is from these that our specification of human nature is to be drawn and, secondly, that in virtue theory the specification of human nature is only intended to determine a way of life peculiar to humans at the most general level, and to act as a foundation for our attempts to determine the dispositions that we should cultivate in order to live a good human life.

A second reason that contemporary debate has marginalised these deeper ethical issues about how we collectively conceive of ourselves, and conceive of our relationship to the environment and to technology, might be found in the ascendancy of the claims of cultural and ethical relativism. One might argue that debate over human place and purpose within the non-human world has been marginalised as a result of the post-modern tendency to privatise value and to claim that all, or at least most, values are relative in some sense. This ethical climate has made it very difficult to engage in open debate about what is good for humans as a whole, or even for specific human cultures as a whole. When philosophers, anthropologists and sociologists claim that what is 'good for me' might not be 'good for you', any discussion of what is good for us as members of a species, culture or society, or what is good for society as whole, becomes problematic. The tendency to privatise values in this way has impoverished the debate over human ends and purposes and human flourishing, but this debate is essential for any proper assessment and understanding of human technology and of the place and purpose of humans in relation to the non-human world. It may be that there is no definitive or 'objective' answer to the question of what human purpose or flourishing might be. It might be that these things are to be decided on rather than discovered. It is, however, certain that the discussion of rights and consequences in any ethics relating to technology, whether environmental ethics or bioethics, would make much better sense against a background of serious discussion of the proper orientation humans should have towards technology and towards the non-human world.

One might claim that there is an inconsistency between the above claim for the negative effect of ethical or cultural relativism and the notion that the role of the appeal to human nature in virtue ethics proceeds from a concept of human nature that is not external or objective, but rather internal (or relative) to human culture, and they are easily shown to be consistent. In the case of the latter claim, one might interpret this as a kind of cultural relativism itself, or at least compatible with the claims of the cultural relativist. Certainly, as Nussbaum has argued in her article 'Non-relative Virtues: An Aristotelian Approach', the use of the appeal to human nature to support a theory of human virtues founded upon the most fundamental and universal experiences of human life can incorporate the claim of the cultural relativist that even these most fundamental human experiences may be constructed differently, at least to some extent, in different cultures [8]. However, such an insight, she argues, only takes us so far. It is undeniable that there are significant parallels and similarities between different cultures, and across diverse historical periods, at the level of the most fundamental human experiences [9].[4] There is always something fundamentally and universally human that we can relate to in the accounts of the experiences of even the most seemingly 'alien' cultures—what Aristotle called a 'sense of recognition and affiliation that links every human being to every other' [10] (p. 121). The appeal to human nature is not an appeal to an external, scientifically objective and determinate notion, but neither is it a vindication of an extreme version of ethical or cultural relativism. The appeal to human nature enters our ethical deliberation as a concept derived from the human experience of the context and content of human lives; it may evolve over time, but remains relatively constant across cultures and historical periods [10] (p. 121). The importance of the appeal to human nature as a foundation for ethical deliberation is that, while it can incorporate whatever is true in cultural relativism, it does not, by doing this, abandon the task of determining generally applicable human characteristics and values. Consequently, it does not collapse into an extreme privatisation of values where ethical decision-making becomes a private and discrete activity disconnected from a broader and democratically conceived conception of social ends and human flourishing.

2.3. The Importance of Virtue Ethics to Foundational Ethical Debate

When looked at together, the dominance of deontology and utilitarianism in both bioethics and environmental ethics and the post-modern tendency towards ethical relativism can suggest why consideration of these 'deeper ethical issues' that arise within a virtue ethics approach is important. Together, these two problems have the practical consequence of making it appear as if each type and each instance of transformative technological and environmental practice that we engage in can be assessed in isolation from other instances of the same, and from other social, political, and ethical commitments. But our experience of environmental catastrophes such as global warming must show us, if nothing else, that our transformative practices inevitably have future consequences beyond those that we are both able and willing to foresee. More importantly, the global environmental problems characteristic of the Anthropocene should remind us that the world is one we all share and, thus, that all our decisions affect the environment and other people, now and in the future. Failure to engage in this foundational ethical discourse results in our interactions with the environment, and our development and use of technology, being nothing more than the unplanned outcome of a series of individual decisions made on the basis of individual desires. The ethical assessment of technology and the environment must be embedded in collective deliberations over what kind of lives we want to live and what kind of ends we are seeking, and must be clearly connected to our judgments regarding the proper orientation humans should have towards the environment and technology. Questions about whether the sorts of practices we engage in are the sorts of practices we want to engage in, or whether they are the sorts of practices that we should engage in, are rarely asked and, if they are, they are usually disregarded, or not subjected to open and democratic debate. Likewise, questions about what sort of world we want to live in, and what sort of environment we want to create, are rarely asked, answered or even

discussed. But these questions are central to any serious engagement with environmental and technological ethical issues.

The argument from nature, as it is characteristically employed in debates over the use of technologies, is best seen as a starting point for ethical deliberation, rather than as an ethical conclusion—invoking a version of the argument from nature invites debate rather than settles it. Arguments from nature can provide a background or foundation for debates over what we should and should not do—a background against which questions that we have traditionally addressed using deontological or utilitarian modes of ethical thinking can be answered. Deliberations about what we can and cannot do, or should and should not do, make better sense when answered against a background of serious consideration of the questions of how we should, as human beings, orient ourselves towards nature and how we should understand and make sense of our place in the world, and of our use of technology.

3. The Argument from Nature as an Appeal to Human Nature

3.1. Human Nature as the Limiting Factor

The second way that the appeal to nature (and, more generally, the virtue ethics context in which I have argued it makes proper sense) can be useful in debates about the ethics of technology is to provide a cogent interpretation of the objections to technology that attempt to place limits upon the kinds of ends we should seek, by appealing to human nature as the limiting factor. Arguments of this particular kind have been used for centuries in debates over new technologies and over modifications to the natural environment. These arguments are best understood from within the virtue ethics tradition and, in particular, in relation to the Aristotelian function argument. In what follows, I use Nussbaum's interpretation of the general approach taken by Aristotle towards deriving limitations on our ethical aspirations by appealing to human nature, in her article 'Aristotle on Human Nature and the Foundations of Ethics', to suggest how such an argument might be fruitfully employed to inform our evaluations of new technologies [10].

As Nussbaum explains, Aristotle provides us with important insights about how we divide ourselves from the beasts and from the immortal, divine and self-sufficient beings (not necessarily real; they can be merely conceptual beings), and the way we use concepts of personal identity and kind membership to guide our normative evaluations and develop boundaries for our ethical aspirations.[5] Aristotle's discussion of friendship (*philia*), in a series of passages of the *Nicomachean Ethics* Book VIII, gives us a picture of his general approach to such issues. Friends, Aristotle notes, generally wish for each other great goods; however, he observes, friends tend to confine their well-wishing to certain ways. One would not, for instance, wish one's friends to be transformed into gods, because the achievement of this wish would render them so different from what they are, that they could no longer be one's friends. The condition, then, of well-wishing for one's friends, Aristotle claims, is that 'that person will have to remain the type of being he is' [10] (p. 90). It is, thus, 'to him as a human being [or: on condition of his remaining a human being]' that one may wish their friend the greatest goods [10] (p. 90). Here, Nussbaum explains, we see Aristotle asserting a connection between kind membership and notional limitations upon ethical well-wishing. In a passage that occurs shortly afterwards, concerning well-wishing for oneself, rather than for one's friends, Aristotle asserts a similar connection:

> Everyone wishes his own good—nobody would choose to have all good things in the world at the price of becoming somebody else (for as it is the gods possess the good), but *only while remaining himself*, whatever he *is* [11]. [my emphasis]

In this instance, the restrictions upon ethical aspirations relate not only to kind membership but also, more specifically, to continued personal identity.

Nussbaum demonstrates that we can derive an understanding of the general strategy Aristotle is using to affirm a connection between ethical well-wishing (the aspiration for the achievement of eudaimonia for oneself or one's friends) and the conditions of one's (or of one's friends' continued existence [10] (pp. 90–92). Aristotle is inviting us to reflect on the

question of whether this supposedly valuable life that we are wishing for ourselves, and for our friends, is a life that could belong to beings such as we are; beings, that is, who possess all those characteristics and dispositions that we believe constitute our identities. When we give this question due consideration, it might be that the life that we envisage for ourselves (or for our friends) would be so distant and different from the life we (or they) have, that we could not honestly envision achieving that life and at the same time remaining who we were before. Aristotle's central claim here is that there are changes that make someone a better person, or give them a better life, which are compatible with that person's continuing to be who they are (as an individual and as a human being) and there are some changes that, while they might appear to be very desirable, would bring into existence a new being that we would not consider to be the same as the original person to whom the changes occurred. It is from this kind of reflection—reflection upon the connection between what we deem to be our essential characteristics and what possible changes we could undergo whilst continuing to be ourselves—that we can derive limits upon what we should wish for and what kind of 'technological' changes to the human being our ethical theories can commend, and which they can censure, or discourage.

A criticism that can be made against this kind of argument is to ask why we should accept the claim that we should not try to change ourselves into something that we are not. Why, the sceptic asks, should we not try to transcend our limitations as human beings? Why do we have to accept these allegedly essential characteristics of ourselves, rather than rail against them or rise above them? An example of this is human mortality, both because it is a clear candidate for being deemed an essential characteristic of human beings and because it is something that some people (perhaps without due thought) consider to be an undesirable characteristic of human life.

Aristotle's argument might proceed along the following lines: to be the kinds of being that we are, we must continue to be mortal and, perhaps, our lives even have to have a certain kind of temporal trajectory; to desire for ourselves, or for our friends, that we are no longer mortal would be to want our friends to be other than they are and we would be wishing them, or ourselves, into non-existence; what we wished for would be some kind of being, but it would no longer be the kind of being that it was; and, therefore, it could no longer be that friend that we wished that good for.

Aristotle's argument is, admittedly, based upon an intuition that some people do not immediately accept—some people, it seems, do not consider mortality to be an essential feature of what it is to be a human being. One way to justify or support the moral intuition about the limitations on the kinds of ends that humans can seek is to appeal to cultural tradition. History and mythology is replete with cautionary tales about the human vice of attempting to go beyond, or transcend, our essential nature—not only the undesirable consequences that can result from this (Icarus, Prometheus, Dr Frankenstein's monster, etc.), but also the vice, hubris, that gives rise to it. Such stories provoke us to consider how much of what we truly value as essential to our characteristic way of being in the world is inseparable from our mortality, our finitude and our transience. An infinite life, as Nussbaum notes, would not contain opportunities (or would contain far fewer opportunities) for struggle, risk and sacrifice—features of finite and characteristically human lives that, in turn, produce love, friendship, accomplishment and virtue. Our limits, just as much as our capabilities, define who and what we are, and are to be cherished for the reason that these limits give rise to the practices and values that make our lives truly human [10] (p. 96).

Granted, for some people the restriction Aristotle places on ethical well-wishing—that it is directed towards someone only in so far as they remain the same individual and the same kind of being that they are—is also not intuitively acceptable. Why, one might ask, should I not wish my friend to become immortal, for instance? If my friend is truly my friend, then I surely want the very best for them. Is not my wanting my friend to remain the same individual, and the same kind of being, that they are merely a type of selfishness? If they became sufficiently different, I might no longer be able to be friends with them, and

that would constitute a loss to me, but would to take that as a sufficient reason not to want them to change appear to be selfish, if the change would be much better *for them*? The answer to this is 'no'. There is, in fact, no person in existence for whom the change would be better. Aristotle's argument is not against wishing oneself or one's friends to succeed, advance or change. It is rather against the rationality of wishing for a good for someone who does not exist. The ethical intuition that is being expressed here is very much like that captured by what has come to be known in population ethics as 'the slogan', or the 'person-affecting restriction'. The 'person-affecting restriction' in population ethics states that 'one situation cannot be worse (or better) than another if there is no one for whom it is worse (or better)'; that is, the claim is that we cannot make assessments about well-being in the absence of an actual person about whom we are making the assessment [12] (p. 14).[6] When we wish our friend be transformed into a god or made immortal, the future 'better' state that we are wishing for is one in which our friend, as an individual and as a human being, no longer exists and, thus, there is no one for whom this wished-for state is better.

3.2. Limits on Changes to Human Nature

It might appear that this argument is more intuitively attractive on the level of the maintenance of personal identity than on the level of kind membership. Does the argument also work when we consider whether it is coherent for us to wish that human beings as a kind be transformed into a different kind of being? Human beings might, for instance, be better off if we were, even just a little bit, less aggressive or warlike or dogmatic, and a little more compassionate and generous. Whether these little changes to a universal human nature are consistent with our remaining human, is open for debate. However, there is good reason to suppose that, because all the aforementioned characteristics are existing characteristics of humans, such changes are consistent with our remaining the kinds of beings that we are. But when we consider an extreme case, such as whether we should wish for human beings to become immortal, it is far less clear that we, as a kind, could possess such an attribute while remaining the sort of beings that we are. Mortality is an integral part of human self-understanding. It may be that the world would be, in some sense, a better place if there were no humans and, instead, there was in our place a species of immortal beings, but in what sense could it be better? Here again, 'the slogan' is instructive—our ethical aspirations are restricted to those that affect persons. A possible world cannot be a better (or worse) place when it is not a better (or worse) place for anyone who, or any kind of being which, actually exists.

Aristotle is instructive on the subject of the connection between personal identity, kind membership, and those characteristics of our lives that we judge to be fundamental or essential. Nussbaum explains that the way our practical reasoning operates and the way that we seek a life of *eudaimonia* is, for Aristotle, incomprehensible without reference to a clear understanding of the particular conditions of human being-in-the-world, of our specific nature as human beings, of our abilities and of our limitations. These 'facts' about human beings—our appetites and desires, our pains and pleasures, our needs, our mortality, our physicality—are, for Aristotle, more than 'external'; they are, rather, inferred from the internal perspective common to all human beings and they bear directly upon ethical questions concerning the limitations of our capabilities within the world [10] (p. 120).

Reflection upon these core aspects of our nature can contribute to debates over possible limits on certain ends we, as human beings, should seek. For instance, debates over the ethical aspects of the possible achievement of immortality, or greatly extended longevity, through human cloning or stem-cell technology. Aristotle would argue that the achievement of immortality is not a possible goal for us, as humans. Why not? Because in achieving that goal we would alter our very nature—the aspiration to become immortal is not one that humans can rationally hold, as, by achieving immortality, we would cease to be identified as humans. Nussbaum claims that this kind of argument strategy is self-validating at a deep level; Aristotle's strategy is to make clear the idea that certain ethical choices do not

fit with our deep beliefs about identity. By reflecting seriously upon the choice of a life in which we are, for instance, no longer mortal, or the choice of a life which has a temporal trajectory so remote from our own as to make us unidentifiable with human beings, Aristotle demonstrates that, in choosing such a life, we would cease to be identifiable as ourselves individually or as members of our kind. Because questions of personal identity were not matters of fact for Aristotle, but rather matters of choice and judgment, the question of whether *I* survive in a life is intimately related to, and not easily distinguishable from, the question of whether *I* consider that life to be one worth living. Our answer to the question of whether a life in which we are no longer mortal or in which our life-span is significantly altered is a life we should seek, depends not only on whether we judge mortality to be so important to human life that its lack would render life no longer choice-worthy, but also on whether we deem that the lack of mortality would cause its possessor to cease to be what they are [10] (pp. 90–95).[7]

It is worth considering further how this kind of argument would apply to significantly extended human longevity, rather than immortality. The former is a real and present possibility (in fact, to some extent, it is already occurring) afforded by our advances in medical biotechnology, whereas the latter continues to remain unlikely. When we consider the case of extended longevity, as opposed to immortality, the conclusion of this kind of argument is less easily settled. The claim that mortality is an essential characteristic of human nature is more easily maintained than a claim that the current maximum lifespan of human beings is an essential characteristic. However, the extension of human life might reach a point where a life is of such a length that we judge it to be no longer consistent with human beings remaining the kinds of beings that they are. In debating this question, we would have to consider the effects such extended longevity would have on reproduction, child-rearing, population, and quality of life. Importantly, in the context of EVE, the myriad possible effects of extended human longevity on the natural/non-human environment would also require serious consideration. Other matters, such as whether the temporal trajectory and guiding narrative of a life of greatly extended length would be consistent with a life we would deem human, would also come into the debate. In deciding whether longevity, within a specific range, is an essential characteristic of human nature, we must focus on what we consider to be the most crucial and fundamental aspects of our lives. Most importantly, the question of whether there are, or should be, limits to the extension of human life must be open to debate. This debate should be of guiding significance in our deliberations about the kinds of ends we should seek for humans through technological innovation.

3.3. An Evaluative Process to Debate Human Limitations

That there might be ethical disagreement over such a topic would, I suggest, have been of minimal concern for Aristotle. A key feature of this kind of ethical evaluation is that the role of ethical disagreement is a central part of the process. There is no 'external' arbiter to whom we can appeal, because resolving ethical disagreements of this kind requires our evaluation of what we judge to be the most important features of human lives. Nussbaum points out that an agreement, if there is to be one, will come from one party's convincing the other that the internal view he holds of what is important in his life, and which drives his mode of acting in the world, is inconsistent with his theoretical claim about the possibility of having a significantly extended life (for instance) while remaining both a human being and the person he is [10] (p. 94). The process of deriving conceptions of human limitations from an account of the human experience of human life is fundamentally evaluative, and it requires ethical argument and deliberation. Limits to the kinds of ends we seek, as human beings, are not to be discovered; they are to be established by reference to an evaluative account of what we judge to be the truly fundamental features of human experience and human life.

Arguments from nature (and the 'playing God' objections to technology and environmental interventions) which attempt to place limits upon the kinds of ends we should

seek through technology, by appealing to a conception of essential human nature, can play a critical role in debates about the use of technology. Such arguments should not be understood as attempts to close down ethical discussion by an appeal to an 'externally' discovered limit upon human aspiration. Rather, they are properly employed when they encourage us to reflect upon what we truly consider to be the central features of good, fitting, or worthwhile human lives—lives that we judge to be choice-worthy and lives that we, as individuals and as human beings, could survive in. These arguments encourage us to recognise that certain possibilities are open to us, while others are not. There are ends that we should hope and strive for, and there are ends for which, were we to achieve them, we would have to forgo aspects of our lives that we truly deem to be constitutive of our being human and being ourselves.

3.4. From Nature to Environment and Technology—Related Virtues and Vices

Virtue ethics gives us the proper framework in which to debate questions regarding what we consider to be the essential properties of human beings. The appeal to human nature as a normative criterion for our ethical deliberations about the good life for humans requires that we make judgments about what we deem human nature to be. These judgements must be informed by our consideration of the question of which aspects of our lives, and the lives of human beings more generally, are so essential and significant that without them we would judge that the human being, human life, or individual person no longer existed. These are exactly the sorts of evaluative questions we are faced with in ethical discussion of bioethics, stem-cell research, abortion, and euthanasia, etc. Answering questions of this kind is always going to be, at its foundation, a matter of internal evaluation, rather than objective or scientific fact. When debated from within the virtue ethics framework, these questions are properly located, and clearly tied to their ethical conclusions. In debating these questions, such as where human life ends and begins (individually and as a kind or species), we are working in the Aristotelian tradition. What human nature is, and what makes a person a person, is an ethical question, not a purely scientific question. That certain lives are not the lives of human beings, or the lives proper to human beings, is an evaluative judgement. Further, questions such as these are matters for communal deliberation and judgment and not matters for independent, quantitative investigation and discovery. These questions cannot be taken as settled. Even if there is no clear answer to be discovered, or no ultimately definitive answer to be hoped for, these questions must be debated. Otherwise, our ethical understanding of human life, of technology, and of our relationship with the environment, will be severely impoverished.

Finally, the argument from nature, and virtue ethics more generally, can be of use in technological and environmental ethical debates by encouraging us to consider what kind of virtues might be relevant to our relationship with the environment, rather than our relationship with other people. What sort of dispositions can we cultivate towards the environment in order to achieve a life of flourishing and happiness? In what way might we orient ourselves towards the natural world in order to live a life in which we achieve *eudaimonia*? By reflection upon human nature, and upon those characteristics of humans which are so fundamental and important that by lacking them we would cease to be identifiable as human beings, we can begin to determine what kind of life (on a very general level) we lead as human beings, what central human characteristics we organise our lives by, and what character dispositions or virtues we promote in order to live flourishing lives. By focusing on questions about what kind of character traits we should develop and how we should live, environmental virtue ethics can help us to determine the proper orientation that humans should have toward both technology and the lifeworld [16]. Environmental virtue ethics can also provide for us a deep structure for discussing human flourishing in the salient context of a complicated and increasingly unstable and degraded ecosystem, rather than simply prescribing right or wrong actions in relation to a narrow conception of human concern [16,17]. The relatively recent and rapid development of virtue ethical approaches to the ethics of the environment provides clear support for this

claim—there now exists an extensive body of literature explicating EVE [18–21]. While the question of what particular character dispositions might be established as environmental virtues is beyond the scope of this paper, an increasingly rich literature on this topic is being developed in this area and, indeed, on the question of how we might best cultivate such virtues [16,22–24].

So, virtue ethics is, perhaps, the ideal moral framework in which to tackle ethical issues concerning environmental behaviour and existential threat. However, it is important not to disconnect the issue of environmental nature and that of human nature. Instead of claiming that we first need to recognize values in nature, I believe that our first requirement is to come to terms with the recognition of values and limitations in human life. In this sense, environmental and technological issues would rely on the same essential core, so that environment and humans are not considered as separate issues. Thus, EVE may represent an appropriate framework for the consideration of bioethical issues, too.

4. Conclusions

The argument from nature, as it is commonly employed in bioethical and environmental contexts, makes proper sense only when understood as proceeding from a virtue ethics framework. The virtue ethics interpretation of the argument from nature can account for and make sense of moral intuitions about the value of nature and the place and purpose of humans in the natural environment. While the argument from nature (in any of its forms) does not allow us to deduce categorical ethical distinctions between technological acts or types of acts, the appeal to nature, as understood within a virtue ethics framework, can have a different and more foundational role in our ethical thinking about the relationship between humans, technology, and the natural world. While arguments from nature may not give us a method for making clear ethical distinctions between technological acts, they can inspire us to consider the role of human technology more generally—the place and purpose of humanity in the natural world, and the role of technology in helping us achieve our purpose and understand our place. It is fundamental to any ethics of human technology and the environment that before we try to develop a theory that prescribes or prohibits particular technological or environmental acts, we engage in debate about what sort of lives we live and what sort of ends we seek. That debate can, and should, appeal to an evaluative concept of human nature.

Understanding the argument from nature in its virtue ethics context, and as an appeal to 'human nature', allows us to ground ethics not in something 'other than' human, such as a notion of nature defined in opposition to the human, but, rather, to ground it in the human—that is, to put humans at the centre of our ethical deliberations—to be 'virtuously anthropocentric'. It allows us to ground both environmental ethics and bioethics in an understanding of the human as human, and in an understanding of the normative implications of a deep (and debatable) conception of human nature; and to ground it in a conception of human nature that is already interpreted and evaluated, rather than sitting outside or external to human concerns. A proper understanding of arguments from nature can help in establishing which virtues and which vices relate to our relationship with the non-human world—which character dispositions are relevant to an environmental virtue ethics, with human nature as its foundation. And so, a proper understanding of the argument from nature provides the basis for a 'virtuously anthropocentric' environmental ethics. It is ultimately up to us to decide which environmental and technological practices to pursue, and which to eschew—and the best way to do this is by reference to an understanding of ourselves which recognises not only those aspects of our lives which we deem to be most important, but also our capabilities and our limitations, and the responsibility engendered by our unavoidable and constant engagement in making and re-making the world in which we find ourselves.

Funding: This research received no external funding.

Conflicts of Interest: The author declares no conflict of interest.

Notes

1 However, in such uses it is important to see that the term 'unnatural' is specifically defined as according to God's will or law, and thus this version of the *negative* 'argument from nature' does not fall prey to the problem of distinguishing between what is natural and what is not, in the way that secular versions of the argument do.

2 My exposition in this paragraph of the various versions of the 'argument from nature' was informed by §1 of de Sousa's article.

3 This argument is slightly orthogonal to much of the work in EVE that endeavors to develop non-anthropocentric environmental ethics and to the work specifically on anthropocentrism.

4 See [9] for an argument of this kind made from the point of view of socio-biology.

5 The content of this paragraph is informed by Nussbaum's discussion of Aristotle's general argument strategy in [10] (pp. 90–91).

6 See also [13] (pp. 62–72) and [14] (*ad. loc.*). 'The slogan' is, of course, not uncontroversial, however it is generally accepted in ethics, probably because it captures a widely held moral intuition regarding the attribution of the terms 'good' and 'better'. See [15] (pp. 93–116) for a defence of the slogan against some of the more common objections to it.

7 This paragraph is informed by Nussbaum's characterisation of Aristotle's strategy of argumentation in [10] (pp. 90–95).

References

1. Kirkham, G. Is biotechnology the new alchemy? *Stud. Hist. Philos. Sci.* **2008**, *40*, 70–80. [CrossRef] [PubMed]
2. Aristotle. Nicomachean Ethics [Book X, 7, 9]. In *The Nicomachean Ethics of Aristotle*; Trench, K.P., Ed.; Trübner & Co.: London, UK, 1909.
3. De Wert, G. The Post-Menopause: Playground for Reproductive Technology? Some Ethical Reflection. In *The Future of Human Reproduction: Ethics, Choice and Regulation*; Harris, J., Holm, S., Eds.; Clarendon Press: Oxford, UK, 2000; pp. 221–237.
4. Harris, J. Rights and Reproductive Choice. In *The Future of Human Reproduction: Ethics, Choice and Regulation*; Harris, J., Holm, S., Eds.; Clarendon Press: Oxford, UK, 2000; pp. 5–37.
5. De Sousa, R. Arguments from Nature. *Zygon* **1980**, *15*, 169–191. [CrossRef]
6. Pouteau, S. Plant-Centered Virtue Ethics: A Cross-Talk between Agroecology and Ecosophy. *Philosophies* **2023**, *8*, 97. [CrossRef]
7. Kirkham, G. "Playing God" and "Vexing Nature": A Cultural Perspective. *Environ. Values* **2006**, *15*, 173–195.
8. Nussbaum, M. Non-Relative Virtues: An Aristotelian Approach. *Midwest Stud. Philos. XIII* **1988**, *13*, 32–53. [CrossRef]
9. Brown, D.E. *Human Universals*; McGraw-Hill: New York, NY, USA, 1991.
10. Nussbaum, M. Aristotle on Human Nature and the Foundations of Ethics. In *World, Mind and Ethics: Essays on the Ethical Philosophy of Bernard Williams*; Altham, J.E.J., Harrison, R., Eds.; Cambridge University Press: Cambridge, UK, 1995; pp. 86–131.
11. Aristotle. *The Nicomachean Ethics Book VIII*; 1166a 19–22; Penguin: London, UK, 2004.
12. Temkin, L.S. *Inequality*; Oxford University Press: New York, NY, USA, 1993.
13. Narveson, J. Utilitarianism and New Generations. *Mind* **1967**, *76*, 62–72. [CrossRef]
14. Glover, J. *Causing Death and Saving Lives*; Penguin Books: London, UK, 1977.
15. Ramsay, M. Teleological Egalitarianism vs the Slogan. *Utilitas* **2005**, *17*, 93–116. [CrossRef]
16. Jordan, K.; Kristjánsson, K. Sustainability, virtue ethics, and the virtue of harmony with nature. *Environ. Educ. Res.* **2017**, *23*, 1205–1229. [CrossRef]
17. Hursthouse, R. Human nature and Aristotelian virtue ethics. *R. Inst. Philos. Suppl.* **2012**, *70*, 169–188. [CrossRef]
18. Cafaro, P. Environmental Virtue Ethics Special Issue: Introduction. *J. Agric. Environ. Ethics* **2010**, *23*, 3–7. [CrossRef]
19. Hursthouse, R. Environmental virtue ethics. In *Working Virtue*; Ivanhoe, P.J.A., Walker, R.L., Eds.; Oxford University Press: Oxford, UK, 2006; p. 157.
20. Sandler, R.L. Environmental Virtue Ethics. In *International Encyclopedia of Ethics*; Lafollette, H., Ed.; Wiley-Blackwell: West Sussex, UK, 2013.
21. Treanor, B. *Emplotting Virtue: A Narrative Approach to Environmental Virtue Ethics*; State University of New York Press: Albany, NY, USA, 2014.
22. Kirkham, N.; Letheby, C. Psychedelics and environmental virtues. *Philos. Psychol.* **2022**, *25*. [CrossRef]
23. Sandler, R.L. *Character and Environment: A Virtue-Oriented Approach to Environmental Ethics*; Columbia University Press: New York, NY, USA, 2007.
24. Swanton, C. Heideggerian environmental ethics. *J. Agric. Environ. Ethics* **2010**, *23*, 145–166. [CrossRef]

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Article

Temperance, Humility and Hospitality: Three Virtues for the Anthropocene Moment?

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Abstract: As social and ecological transition and climate change raise issues that go far beyond individual responses, how can these challenges be balanced with ethical and political responses? This article intends to show that the strength of virtue ethics lies in the fact that it translates these abstract issues into concrete biographical events that shape lifestyles. The search for the good life in these matters then finds in temperance, humility and hospitality three virtues, private and social, to operate this translation. Humility makes explicit the deep interdependencies between the living, while temperance calls for practices that are attentive to these relationships, in the knowledge that our ways of life here have far-reaching consequences on the other side of the globe. This in turn invites us to restore hospitality to its cosmopolitical dimension.

Keywords: ethics; virtue; temperance; humility; hospitality; Anthropocene; ecology

Citation: Pierron, J.-P. Temperance, Humility and Hospitality: Three Virtues for the Anthropocene Moment? *Philosophies* **2024**, *9*, 5. https://doi.org/10.3390/philosophies9010005

Academic Editors: Arran Gare, Sylvie Pouteau and Gérald Hess

Received: 30 August 2023
Revised: 5 December 2023
Accepted: 7 December 2023
Published: 28 December 2023

1. Introduction

There is a long list of concrete practices that are being invented today to give body, through the body, to new ecologically sustainable ways of life that support social and ecological transition: eating less meat; eating organic; choosing a bank that supports the local economy and does not fund tax havens; adopting more sustainable modes of mobility; building shared habitats that benefit inter-age and inter-species relationships while also reducing the impact on land use; sorting and recycling waste; recycling clothes. . . All of these are ways of inventing more sober lifestyles and reflect a desire for an ethical life, a quest for the good life or "living well", as Aristotle puts it [1]. By reconnecting us with what is known as virtue ethics, the central challenge is this: to uncover our innate desire—a desire borne by every human being—to change the world, so as to direct this desire into exercises of the self, these being the foundation of a quest for the good life.

Today, people are attempting to achieve full coherence in their lives between what they understand about the ecological situation and what they believe to be necessary, existential choices to preserve sustainable and fair habitable conditions on Earth. But people do not always succeed in this, sometimes even exhausting themselves in a kind of militant burnout common among ecological activists. This calls into question whether this "logical coherence" (i.e., consistency between beliefs and action) is the sole criterion with which to evaluate the good life, or whether the good life can be judged in terms of a balance between a long-term goal, such as the ends sought in the quest for the good life, and the short-term goal of ordinary everyday choices in the context of constraints, which are sometimes contradictory. There is, for example, a temporal conflict between the long-term aim of reducing the use of pesticides in agriculture and the short-term obligation to increase productivity in order to repay loans. There is also a contradiction for a person who wants to reduce their carbon footprint but is forced to travel regularly by air for work.

In the quest for the good life, there is a renewed interest in "wisdoms" (i.e., folk knowledge and practice) that may challenge academic, scientific teachings. The latter are deemed to be too theoretical; thus, specific practices of the self are deployed in the aim of

living in greater harmony with nature. Thus, an ethics conceived as a type of dietetics is formed, relying on new ways of being, such as making ethical food choices or reducing one's ecological footprint. These ways of being activate practices of the self that break with ordinary social practices via diverse radical ecological alternatives within specific ecotopias. This leads us to propose that the Anthropocene moment surfaces a new *civilisation des mœurs* (civilization of morals), as Norbert Elias would say, characterized by a dialectic between ethics and *ethos* [2]. This dialectics is important because an ethics without an *ethos* would be inconsistent: if it does not translate into behaviors, then it would remain a posture of *belle-âme*. Conversely, an *ethos* without an ethics would merely represent a behavioral training in superficial eco-gestures.

In our view, the contemporary quest for the good life renews a broken link with the ancient virtue ethics that sought, in various ways, to live "according to nature" by mobilizing effective practices and exercises of the self. Here, we address the relevance of virtue ethics for the Anthropocene moment. The paper is organized into four sections. First, we will ask how virtue ethics responds to the Anthropocene moment. Second, we will see how virtue ethics can discern and support the desire for the good life in a culture of envy. Third, we will mediate between the concern for logical coherence and the biographical dimension of the ethical aim. Fourth, we will focus on three virtues (temperance, humility and hospitality) and their ethical fecundity for our solidarity and our belonging to the Earth.

2. What Is New in Virtue Ethics for the Anthropocene Moment?

The neutrality and impartiality of ecological knowledge as a scientific issue is matched by its ecobiographical impact on issues of existence, at the psychological level of course (as studied by ecopsychology, e.g., eco-anxiety) and also at the ethical level (operated by virtues). From this perspective, appealing to virtue ethics involves an ecological commitment which is an essential factor in the art of being oneself, also conceived as an art of attention toward our interdependence with living beings and the environment. A central idea is that an ecology addressing environments cannot forgo an inner ecology that relies on subjectivities and practices of the self in the quest for the good life.

We hypothesize that these practices of the self, in being aware of the Anthropocene moment, are much the same as those presented by Pierre Hadot in his work on the spiritual exercises of Greek ethics, in particular his work on the "conversion du souci" [conversion of attention]. He writes thus: "In principle, we give value to that which we care about. To change the object of attention is to effect a change in values and to change the direction of attention" [3]. In this context, philosophy, in its speculative and practical dimensions, is conceived as a "transformation of one's perception of the world", an effort that requires virtues in order to learn new ways of seeing the world. In the Anthropocene moment, the issue is to turn ecological information into ecobiographical events. Hadot put forward the idea of a kind of ecological and "ethical conversion" encouraged by new exercises of the self in support of social and ecological transition. It is not enough to demonstrate rationally or to deduce logically that other-than-human living beings, or even environments, are important enough for us to care about them. What is required is to practically care for them, for it is in this caring that we give them value. As Gaston Bachelard points out, "(t)o use a magnifying glass is to pay attention, but isn't paying attention in itself a magnifying glass? Attention alone is a magnifying glass" [4] (p. 20).

Care, as the primary virtue of attention, shifts the architectural lines of attention between what matters and what is secondary. This quality of attention is an ethical disposition, and is not the same as vigilance, which is an intellectual attitude. In caring for other-than-human living beings and environments, attention is mobilized intimately, and this creates an ecological conversion of attitudes that resonates with the interdependencies of the world, changing biological information into biographical events.

But how is the good life with and for others—and which others?—possible in the Anthropocene? What level of lifestyle commitment is required to support social and ecological transition in the Anthropocene moment? The unique challenge for virtue ethics

is to succeed in aligning the temporal and geological forces of the Anthropocene with the unique biographical time of being oneself and with the social time of being together. In the Anthropocene moment, the issue at stake is the *anthropos*: a specific conception of the self and the future of the self. "In my everyday striving, what kind of man or woman am I trying to be?" This question underlies the idea of the self and is central to conceiving a type of life—a good life as implied by virtue ethics. The renewed interest in virtue ethics comes after a long hiatus, which found its strongest justification in the Kantian tradition. For Kant, the search for the good life was so multifaceted and disordered that it was necessary, in order to guide one's actions, to replace it with the pursuit of a principle: a morality of duty. Thus, virtue gave way to duty [5] and the good life was replaced by the timeless, universal, but also impersonal Good.

However, our late modernity has brought to light the limits of such an ethical approach when faced with "hard cases", as Ronald Dworkin [6] would say, and has countered it with ethical pluralism. Furthermore, our post-traditional situation has replaced statutory morals that defined what which actions were appropriate with a demand for authenticity, which calls for an art of being oneself, of exercising the self. Our societies are, from an ethical point of view, mentally exhausting, precisely because it is up to each individual to work out what type of human they want to be. As Thomasset states:

> (t)he current return to virtue ethics is partly explained by this desire for a broader moral vision, which takes into account the history of the subject and the issue of education. Virtues, these inner dispositions of freedom which guide us towards the good that can be achieved, tackle these issues of learning desire, personal experience, and progression in a unique story, all while inserting the subject within an already existing tradition that aims at a common good. Today, answering the question "what should I do?" also involves (undoubtedly first and foremost) asking questions about the constitution of the subject and the construction of their identity: "What kind of person do I want to become?". [7]

The unique event in the Anthropocene moment is the fact that virtue ethics becomes an issue for each of us and no longer just for a small number of privileged philosophers and citizens. This means that everyone needs to work out what a good life implies in one's own biography and not as a general rule. But how good is good for me here and now?

3. Discerning the Desire for a Good Life within a Culture of Want

Virtue ethics does not enter the moral question via principles, rules or duties but via a "desire" for a good life. The long history of virtue ethics since Aristotle has already emphasized the importance of the good life, living well and the desire for a happy life:

> All art (*tekhne*) and all investigation (*methodos*) and similarly all action (*praxis*) and all preferential choice (*prohairesis*) tend towards some good, it seems. So it has been rightly stated that the Good is what all things tend towards. [1] (p. 31)

Why is it important to reconsider this simple idea in the context of environmental ethics? Because most of them intend to be non-anthropocentric. At first glance, the terms used by Aristotle seem to be at odds with the ultra-contemporary issue of the environment. However, this holds true only when accepting, without discussing them, two distinctions inherited from analytical philosophy: the distinction between aretaic, deontological and consequentialist ethics; and the distinction between anthropocentric, ecocentric and biocentric ethics. These distinctions are enlightening from a didactic point of view. But from a practical point of view, they are not easily mobilized and tend to remain a casuistry. Furthermore, ordinarily, moral life traverses and dialectizes, rather than dichotomizes, virtue and duty, situation and principle, intention and consequences. However, we will leave this issue open, even if it seems to us that practical wisdom resists an analytical division and refers instead to a rhythm that works intimately on moral life throughout a person's existence.

The contemporary culture of technical mastery and commercial domination of nature creates confusion between the desire for the good life and the desire to have. The latter is a form of anthropocentrism that exalts the self while also, and paradoxically, concealing the deep aspirations of this self. It is necessary to distinguish between *amour de soi* (self-love) and *amour propre* (self-appreciation) of the type that we find in Rousseau [8]. The widespread expansion of an extractivist culture that depletes natural resources as well as emotional resources—from the burning Earth to exhausted or burnt-out psyches—is due in large part to this confusion between desire and want. The subjects, uprooted from their desire for a good life, anaesthetized by technical mediations (from screens to the various ways of controlling and directing the world and living beings), reify their relationship with themselves, others and the environment, and find themselves alienated. A way out of this alienation would involve working on the internal consistency of the subject of the good life, on their self-capacities and capabilities, in order to develop a critical outer resistance to anything that prevents or prohibits the good life, based on a sense of what is right ethically, legally or politically. But in this context, how can a desire for the good life to be clarified and brought to the light? How do we clarify our desire for the good life so that it is critical of a deleterious anthropocentrism?

First, we need to set about discerning how the quest for the good life can be supported—or impeded. For that, it is crucial to differentiate between two types of finality: the pursuit of the good life driven by desire; and the finality of the "extractivist" socio-economic environment in which this desire unfolds. Indeed, as Paul Ricoeur comments:

> In Aristotelian ethics, it can only be a question of what's good for us. This relativity to us does not prevent it from being contained in any particular good. Rather, it is what is missing from all types of good. All ethics presupposes this non-saturable use of the predicate "good". [9]

We must focus on this non-saturable dimension of the predicate "good" in order to explain why an ethical life is both a goal and a striving of the self over the course of a lifetime, discerning between the possible forms of good in contrast with the idea that there is a void to be filled, a want to be satisfied, a saturated good presented as a market offering or an individualized notification in a consumerist ideology that pretends to "fulfill the expectations of a good life".

In stressing the tension between art, investigation, action and preferential choice, Aristotle already identified the non-saturation of the good as the central challenge of ethical discernment. Indeed, it is important to differentiate between ends relating to techniques and ends relating to action, especially because our time is so marked by an administrative colonization of the lived world, leading to confusion between needs, wants and desire. For virtue ethics, there is a critical opportunity to distinguish between human superiority and the critical and evaluative role of practices (*tekhne*). Ethical discernment is all about learning to coordinate and prioritize between the many ends pursued when we act or agitate.

Today, unlike in Aristotle's time, the need for discernment is ever-increasing because the desire for the good life (*praxis*) is dramatically disrupted by commercial and digital incentives or notifications (*tekhne*), and because economic success depends on the equivocation between the analog self and the digital self. But how does the force of the "new spirit of capitalism", as Boltanski puts it—i.e., the Capitalocene—shuffle the cards between priorities by promoting a commodification of the intimate which individualizes without individuating? What happens when this force crosses the border, not between needs (natural and necessary pleasures) and desire (non-necessary natural pleasures)—a distinction developed by the Greek philosophers—but between want and desire?

The ecological crisis is an abstract scientific fact. But it is turned into a biographical event according to continuous ethical choices. Thus, the social and ecological transition goes through us. This transition is not only intimate but also present in sober, temperate and attentive lifestyles. The latter need not be confused with the austerity of an ascetic renunciation, nor with instinctual exaltation of orgiastic excess lured by abundance. The ethical issue becomes a critical discourse of a political economy that encourages an acosmic

way of "making the world", i.e., of profiling collective attitudes and behaviors. This criticism is summed up in the slogan *moins de biens*, *plus de liens* [less goods, more connections]. It questions, discusses and disputes the type of world that invites excess and addiction to easy lifestyles based on the depredation of fossil fuels.

In the *Discours de la Méthode* (*Discourse on Method*), inspired by the Stoic tradition, emphasizing the values of a relatively peaceful life in a society marked by turbulence, Descartes gave himself a maxim of action: to "endeavour always to conquer myself rather than fortune, and to change my desires rather than the order of the world" [10]. This demanding proposal needs to be kept in mind by learning to distinguish between when we are right and when we misconceive our capacity to influence what is not within our reach. However, it is based on an insular conception of the self, neither porous nor buffered, and not on its relational interdependencies with its living environment. It is politically very prudent as it aims at a reform of the self, but not a reform of the world as it is. Today, the stakes may have shifted for us. We are in an age where the new spirit of capitalism is characterized by the capacity to absorb anything opposed to the market and make it the object of a new market. The search for well-being, for gentler ways of life, the quest for proximity to nature and the desire to find oases of deceleration in which to slow down in a society marked by exhausting speed seem to contradict the market society. And yet, these are also very marketable in an economy of attention. Therefore, should we not take stock of our desire to be, in order to resist the tyranny of these lifestyles which contribute to instilling in us a confusion between the desire to be and the want to have? Is it not time to identify where our desire lies in order to reform the world as it is, especially its culture of excess?

The ability to differentiate between our needs, our desires and our wants is a very powerful critical device. It involves an epistemic reconquest of lifestyles which otherwise maintain a confusion between want and desire and stop humans from distinguishing between illusions and what they really desire. While the need to eat, drink or sleep is an objective fact which can be easily identified—although it is often distorted in advertising—the distinction between want and desire is less clear. This is because the commodification of the intimate by the market fosters confusion and disorder. Is having a want synonymous to having a genuine desire? Is the gap between desire and the product suggested to me by my smartphone's artificial intelligence, which takes my "tastes" into account, also a gap between the individuating and the individualized person? How can I clearly draw a line between a personalized market offering and my deep personal aspirations? How far can we resist all the suggestions that channel our attention and make us want to have things that we do not truly desire? To discern one's desire is to work on one's internal consistency in order to develop an outer resistance to the alienating, reifying and ecologically unsustainable ways in which our societies operate, because desire is not a kind of void to be filled but a powerful call to exist. In contrast, want leads us to only one particular end: to fill a void. Desire calls us to seek experience of what really makes us tick and to unfold our own unique way of being. But confusion and trickery reduce desire to want and redirect it into its most passive form, that of envy, dependent on comparison with what other people have. Therefore, it is vital to challenge the advertising, managerial and digital devices which control and direct our desires and prevent us from experiencing the "time of desire" [11]. The time of desire is a school of freedom, so it will not be without liberation for each and every one of us.

Ethical discernment between need, want and desire to achieve a good life unfolds over the course of a lifetime. According to Aristotle, the repetitions and routines that make up the rhythms of our lives tend to establish in us a "second nature". The kind of lifestyle that is called for in a time of social and ecological transition is an ecobiographical issue. In the course of a lifetime aiming at a good life, one learns to make use, in one's own way of acting, of what has been understood about the Anthropocene moment. It conditions the future of a self expanded by the awareness of its interdependencies with human and "more-than-human" or "other-than-human" beings, and begins to ask how these may be

recognized as valid interlocutors with whom humans can co-exist. In this way, a first step is to refuse the expression "non-human living beings", which erases the plethoric diversity of life in its singularity, and denies the identities of the other.

The strength of virtue ethics therefore lies in its continuist approach to existence over the course of a lifetime even though, in the context of ecological crisis, we also need to be aware of a "threatened future", according to Hans Jonas' ethics of the future [12]. While the morality of duty is focused on the daily conflict of duty, virtue ethics sets this drama within the continuous course of a life, with all of its tensions and contradictions. Morality is discontinuous; virtue ethics is continuous. It is due to the persistent obstinacy of the virtues, which embody attention and vigilance over the course of time, that a socially and ecologically sustainable way of acting is clarified and grounded.

4. Logical Coherence and Biographical Obstinacy

Insisting on the long term of a modality that develops over time invites dialectization. How do the logical concern for internal coherence and persisting ethical obstinacy come together in terms of ethics? To start with, does ethical determination call for other resources than the sole formal criterion of logical coherence? Thus, one of the ethical challenges raised by the Anthropocene moment raises is the concurrence and discordance between timescales, the emergency of climate change and of an ecological crisis and the short length of a life. To respond to this challenge, one may claim the demand for logical coherence as the (sole) criterion and summit of moral life. Disregarding how this plays out over time, this claim imposes the achronicity of the logical decree onto the temporal dimension of ethics. An incoherent good life would be inconsistent. This idea translates into a radical, demanding and generous call for the synchronization of words and actions, theory and practice and ecologically ethical thought and the personal ecology of such thought. Indeed, how can one grasp the earnestness of social and ecological transition without achieving coherence with, and entering into, that transition? The ways of being oneself mentioned earlier become expressions of the self calling for coherence—e.g., deciding not to travel by aeroplane because of CO_2 emissions; reducing meat consumption; refusing to use laptops made by big extractive companies, in order to resist a consumption of the world which is also a consumption of the self; or distancing oneself from the logics of the market and its normalization.

But these radical ways of life demand profound self-reform by seeking logical coherence and are simultaneously stimulating, energizing and disturbing: stimulating, because they show that it is possible to initiate radically new ways of life, where it may previously have been thought impossible. They demonstrate a form of practical inventiveness and a salutary and promising poetic and ethical innovation. Energizing, because the testimonial scope of these ways of life set in motion attests to the viable and desirable nature of such life choices. Disturbing, too, in two ways: they disturb individuals by drawing them out of their comfort zone so as to take part in the transition, and they threaten those who refuse this logical coherence out of indifference or selfishness. In the name of coherence, one may refuse any ethical compromise on the basis that to accept a compromise would be to compromise oneself. In this context, one can exhaust oneself in trying to achieve the impossible task of being coherent, an ethical exhaustion marked by the enormous discrepancy between self-reform and the gigantic powers against which one needs to fight in order to bring about change. This intransigent call for logical coherence crushes the temporal dimension of the moral life and its work of internalizing issues over the course of a lifetime. It neglects the fact that, in matters of ethics, presenting a problem from a rational and logical point of view is not the same as resolving it. Deciding to live a good life is not a logical solution but an ethical determination that commits an individual for a lifetime.

The primacy of the logical over the biographical can be enforced in the name of a very violent ethical purity conceived as logical coherence. Conversely, the purpose of ethical discernment, because of the situated nature of our ethical positions, is to distinguish between the ethical demand for a radically good life and ethical intransigence, which can

be brutal. To put it another way, the ethical challenge consists in asking oneself how to be radical without being marginal.

Alasdair MacIntyre insists that lives and ethical self-narratives do not exist in a vacuum [13]. They unfold in the context of belonging to living environments which oppose our "aspirations to be" with other competing, dominant, supporting or contradictory narratives. Discernment and ethical deliberation do not operate as logical deductions, even if the rigorous path of reasoning and the orderliness linked to coherence appear prestigious and refined. MacIntyre prevents the temptation to lapse into ethical solipsism by highlighting that a moral subject is constructed in connection to the traditions of meaning provided by living communities. He warns against overvaluing the criterion of logical coherence as the sole and definitive criterion of the good life.

Authentic ethical conduct and moral judgement become defined and formulated in and due to learning the practices, *ethos* and habits of a given historical community, including ways of relating to other-than-human beings and to the environment. This narrative approach to human identity reiterates that identity is constructed and recounted via a self-narrative, which may be a counter-narrative to the major dominant ideological narratives. This recognition could illustrate what history emphasizes and MacIntyre questions: "I cannot answer the question, 'what should I do?'" he said, "until I answer the question that precedes it: 'Of what story or stories do I find myself a part?'" Achieving a good, meaningful and unified life takes time. This unity is not given but conquered. It is developed in a way that one situates oneself with regard to social practices, inscribing one's life story as part of a living tradition, via practical inventiveness: "I cannot answer the question, 'what should I do?'" he said, "until I answer the question that precedes it: 'what histories am I part of?'" [13] (p. 210).

For Anthropocene biographies, it will therefore be a question of breaking away from the major dominant narratives (economic growth, the market, nature) and inventing other minor narratives, other metaphors. It is important to learn to discern in order to position oneself among the trials of friction, tension and equivocality with which one must live. The human world is multifaceted, and it would be an illusion to believe that the great clarity of the criterion of logical coherence could on its own eliminate the equivocality and confusion which make a world of ethical action, in the world of humans and their relationships with their environment.

The world of logic cannot on its own create the logic of the ecological world. This is why there will be controversy and conflict in the interpretations provided and motivated by an ecological democracy. It will be possible to oppose the ordinary pace of the world, in various ways, in various types of ethical life. This may happen by withdrawing into oneself and forming a type of inter-self (as seen in the radicality of utopias of withdrawal in forms of autarkic community practices among neo-rural populations). This may also lead to violent rejection and even to revolution, as seen in the revolutionary radicality of utopias of protest that oppose neoliberal logics in ecotopias (e.g., the "Zone to Defend") which attempt to spatially situate struggles against neoliberalism. To be able to choose and position itself, the ethical self of ecological consciousness needs to learn, not using deduction but deliberation, to discover and] adopt the appropriate attitudes in order to succeed in meeting the demands of that self. In the next section, we will shed light on this demand by focusing on three virtues (temperance, humility and hospitality) and reflect on the transition from self to more than self by being aware of our belonging to the Earth.

4.1. Three Virtues towards the Decentring of Self in the Anthropocene: Temperance, Humility and Hospitality

4.1.1. Temperance and H.-D. Thoreau

How to define sobriety and temperance with regard to the "new spirit of capitalism" [14]? Temperance is one of the cardinal virtues of Greek ethics and is often discussed in the context of virtue ethics. Within the framework of ecological transition, it is often termed "moderation", "happy sobriety" [15] or "voluntary frugality". Temperance is char-

acterized by a sense of moderation in contrast to its opposite, excess or hubris, i.e., refusing to be constrained. This virtue is particularly relevant in societies marked by abundance, excess, food wastage, etc., where the excess of intemperance seems to be the baseline of ordinary action. Today, hubris is encouraged by the technological solutionism of transhumanism and can be seen in the never-ending economic activity of Western society: infinite growth in a finite world supported by unbridled economic growth based on a cult of want.

Sōphrosunē, the Greek word for temperance, means "to have one's whole mind about oneself", or, in other words, to have a level of self-knowledge that, in turn, enables self-control. For rational people who do not take themselves for gods, excess or hubris can be seen as a pathology: losing one's mindful awareness concerning oneself, blurring the boundaries between the mortal world and the realm of divinity. Today, in our secularized societies, where religion no longer imposes rules and transgressions are no longer sacrilege, any limitation in the name of temperance can only be a self-imposition. The issue is not to "live according to nature" conceived as a cosmos since this would represent only an order for things. It is about rediscovering an intimate sense of moderation as something desirable in an authentic experience of the self.

In the next section, we will shed light on this demand by focusing on three virtues (temperance, humility and hospitality) and reflect on the transition from self to more than self by being aware of our belonging to the Earth.

For Henry-David Thoreau, one figurehead of ecological thinking, an intimate sense of moderation is characterized by two traits: a form of self-knowledge which preserves the wild part of oneself; and performing exercises of the self in the practice of voluntary simplicity and sobriety [16]. The first of these traits is characterized by understanding and self-concern about what it really means to live in meditation and solitude. The thrust of this trait concerns the experience of the wilderness as a test of solitude. It is not an experience of isolation or loneliness but rather a condition of deepening oneself and a revery in communion with all beings, both human and other-than-human, who populate the world and bring it to life. With regard to the stimulation of technical societies, the practice of solitude and moderation is not about disdaining these stimulations: it is about mastering them. The issue is to be aware of the often sterilizing norms of social life, and therefore, a contrario, to strive to sensitize ourselves using moderation and to replenish our imagination and our inner life using soothing or invigorating physical contact with the elements. The self-disposition of moderation can be stimulated using specific ecotopic devices such as "Operation Walden". Ecotopia can be related to what Foucault, in line with Bachelard in *La poétique de l'espace* (*The Poetics of Space*), designated a "heterotopia", a proposal for a liberating "counter-location". Eco-heterotopia opposes the negative impact of modern society's delineated spaces of control. It also aims to counter the worldly solicitations that subject our bodies and lives to the injunctions of the market and, now, to digital hyper-connection—which is another type of biopolitics. Bachelard, a learned reader of Thoreau, the philosopher in the woods, invited us to live and dream the experience of solitude as that of an experience lived in the full presence of our earthly dwelling. The etymology of the verb "to dwell" embodies the profound assurance of our "being there", of our "ecological self". While the ecological crisis can be seen as a crisis of dwelling, the experience of moderation found in the solitude of Walden's hut invites us to recover an intensity of presence in the joy of complicity.

> The hut is centred solitude. (. . .) The hut cannot receive any of the wealth 'of this world'. It has a happy intensity of poverty. The hermit's hut is a glory of poverty. From one stripping to the next, it grants us access to absolute refuge. [4] (p. 88)

The stripping away of temperance is not impoverishment but a pruning that brings new life.

The second trait translates the call for moderation into a call for a simple life and implies a type of ethical self-reform. The desire for simplification and moderation targets the excesses of modern societies in terms of luxury and excessive consumption. These excesses obliterate the self since they create a confusion between self-love (which takes

authentic account of one's true desires) and self-appreciation (a biased look at oneself mediated by the mirrors constructed by societies)—a confusion pointed out by Rousseau (see above). In *Walden ou la vie dans les bois* (*Walden*), Thoreau exemplifies the prototype of what is being sought today in terms of temperance. An experience of the self leads to freeing oneself from the masks and ambiguities caused by the commodification of the intimate and the confusion between desire and want. This perspective has inspired an appreciation of the "wilderness" in environmental ethics. One can clearly see here that care for the "wild" concerns both the protection of the wild fauna and flora outside of oneself (the outer wilderness) and desire, which is the wild part of the self inside oneself: the "inner wilderness". Thus, Thoreau writes,

> Before arranging our homes with objects that we find beautiful, we must strip the walls, just as we must strip our lives.
>
> Simplicity, simplicity, simplicity! Let your belongings, I tell you, number only two or three, and not one hundred or one thousand (. . .). Simplify, simplify. Instead of three meals a day, if necessary, have only one; instead of a hundred dishes, five; and reduce the rest accordingly. [17] (pp. 121–197)

Economy is far from being a secondary concern for Thoreau. By giving the heading *Economy* to the first chapter of *Walden*, he rearticulates economics and ecology using an ethical minimalism. Moderation is essential to living well, freeing oneself, if not extricating oneself, from worldly affairs with their superfluity, their luxury and the call for self-diversion. Thus, it is in the here and now of the situation that the ethical elevation of the subject takes place. Our first waste is always a waste of life. The virtue of temperance therefore operates a reversal, an ecological conversion, of the meaning and value of the experience of responsible and equitable consumption. Perceived as economic poverty by those who feel excluded from the market system, it becomes ethical simplicity for those who transvalue its meaning. Moderation or sobriety are not ways of escaping in order to forget oneself, but on the contrary, experiences of a deepening of the self. Whereas civilization distances us from ourselves by interposing its veils, virtue is a return *into* oneself, which is a return *to* oneself.

> I would go into the woods because I wanted to live deliberately and face up to the essential facts of life, to find out what it had to teach me, so that I wouldn't feel, at the time of my death, that I had not lived. [17] (pp. 195–197)

With moderation, temperance simplifies ordinary life in order to intensify life in one's desire to be. Striving to eliminate the superfluous and to have less, of letting one's actions be guided by calculations of ecological or carbon footprint (e.g., with reference to a climate map), is not quantitative. It is qualitative: not living less but living better by changing the meaning of what it is to live. Whereas the culture of want sees all sobriety as a loss, as less, as a devaluation, the culture of desire in the simplification of moderation aims for a more intense life. The care of desire in moderation as a remedy for ecological crises is not an austere cure of abstinence. By intensifying our relationships with others and with our living environment, it is more a matter of desiring better than desiring less.

4.1.2. Humility and A. Leopold

Is ecologism an antihumanism, a human humiliation or the best way to understand humans? Humility is a virtue that attempts to understand rightly who we are and that resists any form of excess or hubris. The idea of humility is close to an understanding of what Arne Naess called the "ecological self", as a form of otherness in oneself which is greater than the self [18]. The ecological self goes beyond the limits of the individuality (ego) of our socio-political affiliations and is open to our interdependencies with other-than-human beings and environments. The emphasis in contemporary ecological thought on the idea of the human as an "earthling" or "terrestrial" being is echoed by the etymological link between humanitas and humus in Latin. The same Latin root is shared by the words "humus", referring to the soil and the "living quality of the soil"; "humanity", understood

in terms of its links to the Earth and "humility", which sees these links as interdependencies and not as alienations. Accordingly, humility is the ecological virtue that responds to the excessiveness of our uprooting from the Earth, characterized by a culture of domination and extraction. Humility rightly resists a position of domination and responds to it by adopting a more modest position in which one is aware of one's incompleteness or insufficiency.

One should not confuse humility with its caricature, humiliation. The social and ecological transition does not aim to inflict a humiliation on humanity. By calling a form of humility, it seeks to give back to humans their right place, a place that is neither excessive nor ridiculous. Humility is not the experience of abasement or inferiority. It is daring to stop thinking of and envisaging oneself in terms of superiority. Only then can humility serve as a critique of anthropocentrism—and not by fostering a kind of hatred of humans. To think better, hence in humility, of humans is not to think less of them in a form of humiliation. Along this line, in *L'Almanach d'un comté des sables* (*A Sand County Almanach*), Aldo Leopold formulated a very humble call to "learn to think like a mountain". This call implies that one necessarily undergoes an inner/internal displacement, a decentering of oneself. This leads to seeing oneself, in one's own way of making the world, from the perspective of a mountain. One needs to consider our ways of belonging to the Earth since it began, not from the point of view of our anthropic domination. To this end, humble practices need to be exercised.

For example, how do we address the fields of architecture and urbanism whose extractivist practices in the search for materials and the establishment of building sites have a major impact on social and ecological systems, and how could they be made more humble? We are not unaware of the excessiveness of the mega-towers and the technological solutionism which make the gray cement of our cities and depletes resources. Neither do we ignore the prestigious unilateral gesture of the architect's signature responding to this uninhibited anthropocentrism. But the transition from urban development practices to those of resource management by recycling should put the emphasis on relationships and life habits, promoting space maintenance and renovation practices. This opens up humble options to take care of ecosystems and to increase the sustainability of places and environments. Along this line, we may consider other rural, peasant and indigenous lifestyles around the world. The lifestyles preponderant in urban cultures are unknown in other cultures around the world. To recognize diverse cosmovisions of the "good life", e.g., the "buenos vivires" of Andean and Amazonian people, could be epistemologically crucial to shift the way architecture and urbanism are promoted.

> For the urban factory, the world. . .is not a generic space, but a preliminary and inextricable fabric of intertwined vital forms. . . .In view of all these interwoven dynamics, it is clearly better to maintain and care for [these forms], rather than decomposing and recomposing [them]. [19]

Without feeling diminished, the builder or architect can become the one who joins together and works with those relationships (both human and other-than-human) that they know, that they can listen to. Decisions about which projects to work on, the choice of construction techniques and the use of recycled materials (industrial ecology) or materials with short production chains—or, to the contrary, the use of harmful extractivist practices (involving, for example, sand and cement)—engender a process by which the professional identity of an architect or urban planner is shaped in continuous choices which are never neutral. The shaping of the self reverberates on the architecture, because the sustainability of the materials dictates the duration of the projects. Building gives a "semblance of eternity to the fragility of human affairs" says Arendt, since it sketches a very specific and stabilized type of common world [20]. It transcribes into materials what enables and nourishes relationships between humans, more-than-humans and environments, or which can, to the contrary, destroy or prevent those relationships—e.g., the impermeable city which addresses water as a problem versus the "sponge city" which creates relationships with water.

4.1.3. Hospitality and Climate Migrants

How can we guide globalization ethically and politically so that it takes care of nature and humans, that is, how to exert the virtue of hospitality? Virtue ethics applied to ecology could certainly provide a fruitful context for thinking about care of the self and supporting a form of self-esteem. But the centering on the self may be seen as an ethical comfort and a form of self-centered—if not narcissistic—complacency. The concern of achieving a good life for oneself, leaving aside the affairs of the world, its possible collapse and extinction, may be a complacent form of enjoyment of one's self-assured inner citadel. How do we avoid ethical self-concern that leads us to turn only to ourselves? What might be the political implications of promoting virtues while their contribution to ecological transition may seem marginal? Although they may raise concern for beings other than oneself, including other-than-humans, the latter will never be visages ("faces"), to use Levinas's term [21]. How good, in short, are virtues that concern individuals, but not institutions, local authorities or States?

In response to these criticisms, we point to a virtue which lies at the border between ethics and politics, and has gained central importance as part of the new cosmopolitanism called for by the Anthropocene moment. This is the virtue of hospitality. Following in the wake of MacIntyre, the philosopher Alain Thomasset defines hospitality as a "social virtue":

> By social virtues, I mean the virtues that are at stake in relationships with others, and more specifically, in the functioning of society as a whole. The virtues, in fact, do not concern only the conformation of an individual to a personal morality (for example in their family life), but also the behaviour of every person in their contribution to common life. [22]

In line with one's concern for a common world, social virtues such as justice, solidarity and hospitality, therefore, are to be found in the space between the self and the more than self, between oneself and others (human and other-than-human). They sustain the pursuit of a good life as the long-term goal of our ways of making the world, which need to be translated into socially and ecologically sustainable institutions within the common world.

How does the virtue of hospitality fit into a framework of ecological thought? Hospitality meets what Kant called the "sphericity" of the Earth and the global mobility it calls for. This sphericity has generated a globalization of our technical systems and also of economic exchanges. Global humanization is an ethical issue. How can we guide globalization ethically and politically so that it takes care of nature and humans? How can the goals of a good life lived with and for all beings be added from the outside to a culture that controls and directs our relationships with nature? Like it or not, our global, technical and economic interdependencies are such that we are contemporaries of all human and more-than-human beings on the planet. Thus, our excessive ways of life are too often linked to impoverished ways of life elsewhere.

Hospitality resonates in the space between the self and the more-than-self due to the two-sided meaning of its root name hostis: hospitality and hostility toward the other. We believe that hospitality will probably be challenged when confronted with those who are forced to migrate from inhabitable life environments, as this will likely disturb and destabilize our lifestyles, which so heavily depend on the resources of others. Such is the challenge of hospitality. Openness to alterity can alter us. The arrival of a stranger can prompt in us hostilities that disturb us, especially when we are open to welcoming that stranger. The ethical challenge will be to ask why others are forced, as refugees or migrants, to leave their homelands and in what ways our lifestyles contribute to this.

The ethics of hospitality contributes to reterritorializing within our lives migratory issues that seem pre-destined or out of our control. Indeed, the loss of people's home may be in part caused by us—whether they no longer have a home (landless peasants) or their land has been devastated, is submerged under rising waters or has become unfertile. This presupposes, first of all, that we are able to see in the foreigner that we too are a foreigner and also a fellow human on Earth. Hospitality, as an ethical virtue, reminds us that we

are, on some level, a guest passing through even in the very place that we believe to be our own. This reminder links together hospitality and humility. It helps us to remember that we are the foreigner who at some point has been the recipient of hospitality offered by others and by the Earth. The massive international mobilities inherent to forced migrations pose an ethical and political challenge concerning the sustainability of our ways of making the world. Many of the military conflicts that have led to the displacement of people have ecological causes: water wars in particular. It will be necessary to move from the de facto solidarity of all humanity that arises from shared problems (the Anthropocene, climate change, species extinctions, erosion) to a deliberate solidarity that gives ethical and political significance to an awareness of our mutual interdependencies. The virtue of hospitality becomes the figure of a new cosmopolitanism in a post-Kantian sense as it recognizes the other in its standing as an earthly being, as a "citizen of the world". On a territorial scale, it opposes the practices of an inhospitable necro-capitalism that generates environmental and social injustices in the destruction of habitats. It also responds, at a global scale, to the ecosystemic effects of climate change, such as the impact of ecological disasters on social environments, generating mass migration and climate refugees. Yet, what attitude should we adopt toward the "other" who migrates? This question is both intimate—as it refers to a personal invitation extended to someone nearby—and at the same time very public, hence challenging a State, or even a continent, in terms of how it conceives of hospitable cosmopolitics. Hospitality is a virtue that makes it possible to consider the arrival of people from climatic migrations in a different light, clearing a path between welcome and worry, availability and mistrust, the ethical generosity of openness and a realpolitik that asserts that a "State cannot accommodate all the misery of the world" [23]. To be hospitable means to experience an amazement at the life journey of a migrant who has come to us (e.g., by crossing the Mediterranean sea or the entire South American continent) so as to act hospitably. The actions of charities that welcome migrants are all, in different ways, examples of the virtue of hospitality, see Cimade (https://www.lacimade.org, accessed on 5 December 2023), the Welcome Network (https://www.jrsfrance.org, accessed on 5 December 2023), L'auberge des Migrants à Calais (https://www.laubergedesmigrants.fr, accessed on 5 December 2023), etc.

One of the challenges is to understand the issue of hospitality for climate migrants based neither on a vague, general or administrative idea of migrants—of the kind that would separate them into categories like "political", "economic", "social", etc.—nor on a form of compassion fatigue. The virtue of hospitality fights against the inhospitable stereotypes about migrants by daring to open up to the call of the other. It keeps in mind the fact that behind the ready-made and generalizing imagery of the "Migrant" or "Foreigner", there is a unique life story that has unfolded against the backdrop of a socio-ecological disaster. Hospitality questions how a society treats the lives of those that it places in its margins, in the land of exile. The virtue of hospitality works to document these lives, which have been hidden by public policies shirking responsibility, and this documentation in itself is a form of welcome. By fostering exposure to the other, hospitality fights against a culture of collective anesthesia, testifying precarious lives and the conditions that are created for them. In this, this virtue of hospitality discovers its full ethical potential as a critique of migration policies. This is shown by analyzing the commitment of volunteers who, seeing that such policies are placing migrants in danger, choose to rescue them at the border. The sociologist Anne-Claire Defossez studied this in the ethical and political clashes at the Italian–French border in Briançon in 2020 [24]. These clashes were in stark contrast to the hospitality of volunteers providing first aid to migrants harmed by the cold. They revealed the "realism" of the police force who prevented the volunteers from this action, in order to avoid setting a "precedent" that might attract more migrants in the future. The border is where the tension between hostility and hospitality materializes. There, the ethical dilemma between turning migrants away or rescuing them is developed, experienced and established, pushing "nationals" to oppose "foreigners", toward whom empathy is

prevented or even prohibited. In this context, the hospitality shown by volunteers is treated by the police and far-right activists in the same way as the practices of smugglers.

There is no hospitality without concrete practices of hospitality by which—necessarily—one can be affected, disturbed and changed by the other in order to also ethically guide and support the ecological transition.

The migration histories put together by charities to help with asylum applications is both a translation exercise and an exercise of hospitality, and brings into focus the critical and political nature of this virtue. The use of subjective and itinerary maps [25], which allow oneself to be affected by the other's story, embodies, within the context of a narrative ethic, the hospitality of listening. The maps help to recover a life story that cannot be recounted in terms of measurable displacements. This exercise of hospitality aims to strip away stereotypes in order to discover incredible, and often horrifying, life stories. The political virtue of hospitality therefore resists clichéd ways of speaking about influxes of migrants and opposes ideologies that stir up abstract imageries of invasion or widespread replacement by "hordes of climatic migrants", to instead pinpoint and question the ecological logic, the deadly social practices and ecocides at the root of this mobility. The virtue of hospitality is an opportunity for everyone to remember having once been a foreigner subject to displacement. It maintains a *visage* (face) of exteriority that resists any institutional or political ideology in which the history of the other is instrumentalized [21]. The virtue of hospitality reveals what is specific, where ideology generalizes.

> When we show our care by welcoming them, we can in return gain a better understanding of their situation, of the causes of their distress and of their unique experience. And then the movement is reversed again: the recognition that we are able to give becomes a new gift, more profound than that of food or shelter. Hospitality to strangers, the needy and the poor, gives us a direct emotional contact that deepens our understanding of the social changes needed and inspires actions of solidarity that can lead to a global transformation. When we welcome the foreigner, we are invited to discover other worlds. The initial animosity becomes a fruitful friendship. [26]

A social virtue, hospitality maintains the ethical demand for welcome at the heart of the constrained, pragmatic, supposedly realistic and often cynical demands of the "ethics of responsibility". Remembering our history as human migrants temporarily passing through the Earth humanizes us. It invites public policies to protect the rights of refugees and migrants. Human rights are also social and environmental rights shared by all humans who are inhabitants of the Earth.

5. Conclusions

Putting into practice the virtues of temperance, humility and hospitality helps us to discern between need, want and desire; between consumerist excess and moderation; between a healthy self-esteem and an anthropocentric self-exaltation and between fear and vulnerability in hospitality. This discernment contributes to the process of shifting from a lifestyle centered on the self to one that takes care of and even changes the world. The virtues of temperance, humility and hospitality are not the only ones that need to be mobilized in the process. There are other virtues: justice, attention, solidarity, love, friendship, etc., all of which help us to develop discernment in our complex and confusing way of life. In this paper, we have focused on these three abovementioned virtues because, first, they allow us to move from the personal to the public dimension, and together they form a system. Humility clarifies our understanding of deep interdependencies; it invites temperate practices that practically and symbolically connect our ways of life with distant lives who may be forced to migrate toward us and that appeal to our hospitality. According to Donna Harraway, the ethical existence of multi-specific and multi-continent biographies in the Anthropocene is initiated within this network of virtues [27]. We recognize that our continued existence is possible only thanks to all the human and more-than-human beings in the world.

Virtue ethics in emphasizing the existential attitudes of individuals helps to raise attention to life stories in well-defined and specific situations and to make sure that debates on social and ecological transition do not remain purely abstract.

Virtues call for a personal, intimate appropriation of what *affects* and *effects* them so that the inner self can be transformed. Because of its disparity with human capacities, the global dimension of planetary forces may encourage a new destiny. Virtue ethics responds by addressing planetary issues in the here and now of a life. From within a fleshed-out, ethical context, it approaches the Anthropocene moment, not in abstracto, but by considering the effects on lives in terms of their environments or habitats, their minds and their relationships. The fecundity of virtue ethics lies in its critical and practical implication to support the ecological self and guide the social and ecological transition. In a culture of the self and exercises of the self, it offers an internal *consistency* understood as being propaedeutic to an outer *resistance*. It is complementary to other ethical approaches that are mostly focused on mitigating or preventing ecological disasters. But much of this disorder will not be prevented and it is crucial to promote virtue ethics, e.g., in education, so that human beings develop the capacity to respond to disturbing events and integrate them into their biographies, their ecobiographies [28].

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The study did not report any data.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Tricot, J. *Éthique à Nicomaque*; Vrin: Paris, France, 1994.
2. Elias, N.; Kamnitzer, P. *La Civilisation des Mœurs*; Calmann-Lévy: Paris, France, 1973.
3. Hadot, P. *La Philosophie Comme Education des Adultes*; Vrin: Paris, France, 2019; p. 280.
4. Bachelard, G. *La Poétique de L'espace*; PUF: Paris, France, 2020; p. 230.
5. Kant, E. *Critique de la Raison Pratique*; Vrin: Paris, France, 1974; pp. L.I.1 and L.I.3.
6. Dworkin, R. *Taking Rights Seriously*; A&C Black: London, UK, 1978.
7. Thomasset, A. L'éducation morale comme apprentissage des vertus. Nécessité et insuffisance. In *Revue D'éthique et de Théologie Morale*; Cerf: Paris, France, 2019; Volume HS, p. 131.
8. Rousseau, J.-J. *Discours Sur L'origine et les Fondements de L'inégalité Parmi les Hommes*; Publishing House Marc-Michel Rey: Amsterdam, The Netherlands, 1755; Note XV.
9. Ricoeur, P. *Soi-Même Comme un Autre*; Seuil: Paris, France, 1990; p. 203.
10. Descartes, R. *Discours de la Méthode*, 3rd ed.; Éditions Adam-Tannery: Paris, France, 2012; Volume VI, p. 25.
11. Vasse, D. *Le Temps du Désir: Essai Sur le Corps et La Parole*; Seuil: Paris, France, 1969.
12. Jonas, H. *Pour une Ethique du Futur*; Rivages Poche: Paris, France, 1998.
13. MacIntyre, A. *After Virtue. Étude de Théorie Morale*; PUF: Paris, France, 1997; (original in English, 1981).
14. Boltansky, L.; Chiapello, E. *Le Nouvel Esprit du Capitalisme*; Gallimard: Paris, France, 1999.
15. Rabhi, P. *Vers la Sobriété Heureuse*; Actes Sud: Arles, France, 2010.
16. Thoreau, H.-D. *Walden, Ou la Vie Dans Les Bois*; Gallimard: Paris, France, 1990.
17. Thoreau, H.-D. *Walden ou la Vie des Bois (1854)*; Aubier: Paris, France, 1967; pp. 121–197.
18. Naess, A. *Écologie, Communauté et Style de Vie*; Éditions MF: Paris, France, 2008.
19. Bonnaud, X.; Clergeau, P. "Qu'est-ce que l'écologie fait à l'urbanisme?" In *Réinventer la Ville par L'écologie: Frottements Interdisciplinaires*; Collection Ecologie Urbaine; Editions Apogée: Rennes, France, 2022; p. 22.
20. Arendt, H. *The Human Condition*; University of Chicago Press: Chicago, IL, USA, 1958.
21. Levinas, E. *Totalité et Infini, Essai Sur L'extériorité (1961)*; Le Livre de Poche; Wolters Kluwer: Alphen aan den Rijn, The Netherlands, 1991.
22. Thomasset, A. *Les Vertus Sociales. Justice, Solidarité, Compassion, Hospitalité, Espérance: Une Éthique Théologique*; Donner Raison, Théologie; Éditions Jésuites–Lessius: Paris, France, 2015; p. 48.
23. Michel Rocard, French Prime Minister, (1988–1991), Formulation, with a Nuance of "We Still Have to Try", Concerning Immigration Issues. Available online: https://www.britannica.com/biography/Michel-Louis-Leon-Rocard (accessed on 5 December 2023).

24. Defossez, A.-C. Exposer des vies ou les secourir à la frontière. In *Didier Fassin (dir.), Vies Invisibles, Morts Indicibles*; Editions du Collège de France: Paris, France, 2022.
25. Lagarde, D. Visualiser des parcours migratoires à partir de récits de migrants, le cas des réfugiés syriens. *Cybergeo Eur. J. Geogr.* **2022**. [CrossRef]
26. Thomasset, A. La vertu de l'hospitalité selon la Bible et le défi de la migration. In *Revue d'Ethique et de Théologie Morale*; Éditions du Cerf: Paris, France, 2022; p. 115.
27. Harraway, D. *When Species Meet*; University of Minnesota Press: Minneapolis, MN, USA, 2008.
28. Pierron, V.J.-P. *Je Est Un Nous: Enquêtes Sur Nos Interdépendances Avec Les Vivants*; Actes Sud: Arles, France, 2021.

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Plant-Centered Virtue Ethics: A Cross-Talk between Agroecology and Ecosophy

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Abstract: The claim that environmental virtue ethics (EVE) is anthropocentric appears inherently aporetic since it implies that either anthropocentrism is virtuous or the whole environmental issue is anthropocentric, thus translating vices into virtues or vice versa. Another interpretation is that *both* the environment and humanity are thought with a vicious conception of centeredness. Conversely, if centeredness is rightly addressed and humanity and its environment are considered as one and the same issue, the focus on anthropocentrism should also be different. By drawing on Felix Guatttari's ecosophy, this paper proposes that EVE needs to be based on a philosophical understanding of agriculture. Thus, agriculture is the organic and epistemic matrix of our relation to the environment and not merely a section of an abstract environment nor one economic area among others. The environmental crisis is primarily a crisis of humanity *within* its agricultural matrix. To be an environmentally virtuous human being, a requirement is to face again the burden of our absolute need for food and for fruitful cooperation between farmers and plants, not only animals. This paper discusses the importance of plant ethics and plant topology to understand the specificities of the agricultural matrix. The emphasis will be placed on plant-centered virtue ethics and reframing anthropocentrism by drawing on transdisciplinary conversation with plant practitioners in the context of a research action project.

Keywords: agroecology; ecosophy; environmental virtue ethics; golden mean; plant topology; plant ethics; sense of place

Citation: Pouteau, S. Plant-Centered Virtue Ethics: A Cross-Talk between Agroecology and Ecosophy. *Philosophies* **2023**, *8*, 97. https://doi.org/10.3390/philosophies8050097

Academic Editor: Soraj Hongladarom

Received: 7 September 2023
Revised: 9 October 2023
Accepted: 9 October 2023
Published: 17 October 2023

1. Introduction

Both Arne Naess and Félix Guattari have proposed the term "ecosophy" to imply a broader than naturalist, scientific approach of ecology [1,2]. Guattari is well known for his long-running collaboration with Gilles Deleuze and for his political commitments to social and ecological issues. According to Guattari, ecosophy underlies three dimensions of ecology: an institutional scientific ecology, a social ecology and an individual, mental ecology [3]. The latter underpins "the flourishing and development of human potential" by changing oneself or one's subjectivity [4] (p. 106). Subjectivity is not conceived as egotic but rather as a counterbalance of the atomized identities generated by capitalistic globalization. A major ecological target should be to de-escalate compulsive drives and mass consumption behaviors by creating more subjectivity. In the ecosophic vision, the subjective individual is part of the definition of ecology: "nothing will be possible without a profound ecological transformation of subjectivities" [5] (p. 85).

Ecosophy expands in *eudemonia* and environmental virtue ethics (EVE) and can be interpreted as an ecology of the self or a spiritual ecology. Its vision goes beyond the categories of environment and atomized individuals as it encompasses both inhabited and mental or existential territories. A major cause of concern is that: "The contemporary human being is fundamentally deterritorialized" [6] (p. 354). Existential territories, i.e., the relationship between subjectivity and exteriority (social, animal, plant, cosmic), tend to collapse. This means that most of us have lost a proper sense of our place on Earth and no

longer understand the meaning of our subjective centeredness. It is crucial to reconsider human beings in the light of their existential territories and to address their place in the ecology of the Earth. This lends to a reappraisal of the notion of human centeredness beyond mainstream anthropocentrism.

While a number of authors like Val Plumwood believe that centrism in itself is a problem [7], Guattari's ecosophic vision supports the notion that a lack of centeredness might be an even greater problem. The issue at stake would thus be how to turn anthropocentrism into an "anthropo-centeredness". The conversation between EVE and anthropocentrism is an opportunity to address this issue. Both expand on the notions of *anthropos* and centeredness, hence the place of humanity on Earth, though in different ways and with contrasting conceptions of nature. At first glance, EVE may seem a paradoxical assemblage because it endeavors to link the flourishing of the environment with that of human beings and may be equated to a kind of anthropocentrism [8]. One way to address this ambiguous intertwining is to introduce the notion of pattern or matrix in which humanity is embedded and develops virtues and vices. In Guattari's terms, the aim is to envision a "re-territorialization" of humanity.

At least three underlying common patterns are to be considered in the conversation between EVE and anthropocentrism.

1. The agrarian common pattern inherited since the Neolithic. The invention of agriculture has changed radically the place of the human being in nature, and the agrarian pattern has been the corner stone of all other cultural developments to date.
2. The common philosophical pattern inherited since antiquity. The momentum issue was the emergence of philosophy, but in spite of its urban and political focus the environmental mindset of the ancient world was probably closer to an agrarian mindset than it is today. Agrarian life and the domesticated were still part of nature.
3. The naturalist, scientific common pattern inherited since the Copernican revolution. Everything we know about the category of "environment", its complexity and dramatic changes over earthly times of evolution happens to be seen through the lens of natural sciences, this being referred to as the "naturalist episteme".

From the beginning, the field of environmental ethics (EE) has been shaped by naturalist, scientific premises and analyses. In particular, EE incorporates the recount of a newly discovered, pristine nature that is inherent to the naturalist, scientific enquiry and inventory of kinds and traits. Meanwhile, the two other common patterns, the agrarian and the virtue-oriented philosophical, have been neglected. For this reason, the ongoing criticism of anthropocentrism keeps using anthropocentric arguments and is doomed to be inherently aporetic. The hybrid agency of EVE takes a departure from this general trend and provides a magnifying lens to reveal the complex entanglement of different worldviews or common patterns. This can be best understood if one brings the issue of agriculture centerstage rather than keeping it in the background as if it was merely a degraded part of the environment. Against the notion that "the domesticated is the degraded" [9] (p. 9), one needs to acknowledge that "environmental philosophy does need to quit seeing agriculture and domestication as "polluted" or "unnatural" and so not their concern" [10] (p. 259).

In his bright "Agrarian vision" [11], Paul Thompson proposed that an agrarian way of understanding ourselves and our place in the world could lead to a more sustainable way of life. His vision prompted a number of comments applauding his timely contribution and raised new questions in return. It was argued that the nurturing of an agrarian imaginary is not unambiguous, especially in urban contexts. The narrative of virtue can be overemphasized so as to hide the adverse effects and vices linked to agrarian history and to the evolution of contemporary agriculture as a technological system [12,13]. However, virtue is not a natural output of a lifestyle. It works the other way round; a lifestyle provides a basis or a matrix in which one can habituate and develop virtues. This paper aims to address the virtues of the "*Anthropos*" in its agrarian matrix, whether these virtues are directly linked to an agrarian lifestyle or not. The root name *Anthropos* is used as a concept to emphasize the place of humanity and the individual human being on Earth. The running thread of the paper is that a re-imagination of the "environment" depends on a re-imagination of the "*Anthropos*". Its

argument will draw on interdisciplinary and transdisciplinary interactions. It will elaborate on case studies, one being the conclusions of the COP15 and the other one consisting of conversation with plant practitioners in an agronomic research action project. Phrasing by these plant practitioners will be used to discuss the pivotal role of plant-centered virtue ethics in moving towards "anthropo-centeredness", a more sophisticated kind of anthropocentrism based on plant-centered topology.

The paper is structured in four sections. First, it will depict the naturalist, scientific common pattern which currently prevails for decision making on environmental issues. Second, it will undertake a re-imagination of the environment by showing how different meanings of the term *Anthropos* reverberate in the understanding of its centeredness. Third, it will propose to reassess the agrarian common pattern based on the notion of "agroecosophy" by combining the terms agroecology and ecosophy. Fourth, it will distinguish three types of agroecosophic virtues, those related to:

- Agrarian virtues aimed at right agroecological practice.
- Food-centered virtues aimed at developing awareness of food reburdenment.
- Plant-centered virtues aimed at developing awareness of plant otherness.

2. The Category of Environment According to the Naturalist, Scientific Common Pattern

For the naturalist, scientific episteme, the environment is something that surrounds us, in which we human beings are embedded [1]. Its definition encompasses nature insofar as it is distinct from us but also as we live in it and have reciprocal influences on each other at different levels, from local to global. Beyond this, the environment also includes the second nature created by human labor, including agriculture and urban development. In the Anthropocene, an additional definition is that the environment is an issue, the issue of our right place on Earth and action on it, this issue being the subject of both EE and environmental humanities. Underlying this wide range of definitions is the implicit notion that the environment is something that requires new awareness and informed knowledge, hence science-based recording and analyses. Addressing environmental issues, especially at a planetary level, implies that there is a common interpretative framework. Debates on the anthropogenic origin of global warming and climate change have provided a clear demonstration that the environment is a naturalist science-based concept. Although this provision may seem common sense, from the perspective of critically addressing anthropocentrism, one also needs to recognize that the notion of environment perpetuates an anthropocentric bias in decision-making. To explore this issue, the case of the 15th Conference of Parties (COP15) to the UN Convention on Biological Diversity (UN-CBD) held in Montreal in December 2022 will be examined.

2.1. The Case of the COP15, Setting Humanity in the Right Direction

On 19 December 2022, the COP15 adopted the "Kunming-Montreal Global Biodiversity Framework" (GBF), including four goals and 23 targets for achievement by 2030. A breakthrough was the decision to bring one third of the environment (Earth's lands, oceans, coastal areas and inland waters) under protection by 2030 with the goal "to arrest the ongoing loss of terrestrial and marine biodiversity and set humanity in the direction of a sustainable relationship with nature"[2]. By 2050, it is expected that: "The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems" and "Human induced extinction of known threatened species is halted"[3]. No doubt, the achievement of this target would constitute a major turn in the environmental crisis.

When examining the documents released by the UN-CBD, one can observe the interweaving of two different visions or patterns. One is based on "Mother Earth centric actions"[4] and is implicitly guided by an eco-centric approach. The aim is to foster a sustainable relationship with nature for the "benefit of all people and nature"[5] in order that "all people (to) live well in harmony with Mother Earth"[6]. It also recognizes "traditional knowledge"[7] and "customary

sustainable use by indigenous peoples and local communities"[8] acknowledging the "link between biological and cultural diversity" as demonstrated by the "decline in global diversity of both nature and culture"[9]. This vision underlies an implicit criticism of the colonial and utilitarian attitude toward both nature and culture and a call to recognize "natural and cultural heritage and diversity as enablers and drivers of the economic, social and environmental dimensions of sustainable development"[10]. However, the Mother-centric vision may also suggest an ambiguous naturalization of indigenous peoples and local communities, e.g., by addressing both natural and cultural diversity with the same terms. This is implicit in the recommendation to "Compile, protect, maintain and promote traditional knowledge, innovations and sustainable practices of indigenous peoples and local communities"[11]. Furthermore, the Mother-centric vision incorporates the notion that the issue at stake is "to minimize human-wildlife conflict for coexistence"[12], potentially lending to a neo-Darwinian interpretation of coexistence. These naturalist, scientific premises are conducive to a deontological approach since one may conclude that coercive measures are needed to curb human predatory trends and protect 30% of Mother Earth.

The other vision or pattern is a typical Western utilitarian and functional approach in which the basic goal is to "Restore, maintain and enhance nature's contributions to people"[13] where nature represents resources, functions and services. Especially when it comes to agricultural issues, this means to "ultimately increase crop production" and to "invest in biodiversity"[14] also "considering the potential to develop new products and medicines"[15] and "promote access to the latest technologies and molecular tools for modern soilless agriculture"[16]. Recurrently is expressed the objective to "promote knowledge dialogues" and cross scientific and traditional knowledge. However, from the perspective of agriculture and related areas of activities, naturalist, scientific methods are expected to guide decision making and action. Thus, it is also claimed that "assessing and monitoring [. . .] is fundamental to inform adaptive management and to guarantee the functioning of all terrestrial ecosystems"[17]. This means to "Encourage the development of harmonized definitions, standard baselines, indicators and national and subnational-level monitoring activities of soil biodiversity"[18] and to develop "standard protocols", "large data sets", "mapping capabilities" and "digital technologies" in order to work at "all levels", in "all sectors" and "all regions". Here, the naturalist, scientific premises lend support to the utilitarian vision, reinforcing the dualistic divide between means and ends, the environment and human beings.

2.2. The Naturalist, Scientific Target: Instating Two Planetary Realms?

One can be struck by the decision to protect 30% of Earth's lands and waters as if this percentage represented a strong symbolic threshold. Although the overall purpose is easy to understand, the background assumptions that underlie the calculation of this ratio need to be deciphered. Because background assumptions are embedded in the prevailing scientific paradigm, they are usually ignored, and many people would claim that they have no background assumption. Thus, these assumptions can only be tentatively uttered.

As already mentioned, a first assumption is rooted in the modern dichotomy between mankind and nature. Accordingly, to protect nature means to leave it on its own. On the one hand, this implies that nature has its "own", but the quality of this own needs to be specified. One interpretation is that nature has its own agency or even that it has a *telos* of its own that deserves to be respected [14]. On the other hand, this own should be left alone as far as possible. Thus, human interaction is mostly conceived as a degradation, and the environment is implicitly granted an essential standing whose integrity depends on the possibility of remaining wild, as expressed by the notions of wilderness and wildlife.

A second assumption is that minimal interaction with human beings should be achieved by spatial segregation in separate units of land, those that are under protection and those that are not. Accordingly, protecting biodiversity will mostly depend on territorial management and the possibility of sanctuarizing land and coastal areas. This

also means that access to wide areas of land will be restricted and that human societies will be confined to more limited areas. Within a territorial management framework, migration flows between different units will necessarily be an issue, especially with regard to pests that may commute from one to another, e.g., avian flu.

A third assumption is that two different realms of the eco-biosphere can be kept separate and have their own course, at least to a significant degree. Accordingly, static conservation strategies rather than dynamic co-evolutionary strategies will be favored; thus, the importance of both positive and negative interactions might be overlooked. However, only soil can be conceived as properly local, whilst the other natural elements, water, air and warmth, act at a more global level, e.g., climate change and air and water pollution. Furthermore, protected areas are scattered all over the Earth and interwoven with areas that are not protected. In the same way as patches of land in which organic farming is practiced, the borders of these areas will remain exposed to dissemination of pollutants and genetically modified organisms (GMOs) coming from the unprotected units. Conversely, human–wildlife interaction can also be beneficial. For instance, gathering and foraging activities play an important role in regenerating and enhancing wildlife flourishing [15]. Some small-scale, eco-systemic farming systems also promote regenerative strategies which tolerate small levels of unwanted spontaneous biodiversity within cultivation plots [16].

Finally, a fourth assumption is that a utilitarian, functionalist approach is needed to "manage" the environment as implied by the mechanistic notions of planetary boundaries and Earth system. If nature should be left on its own; this is not (only) for its own sake. Protection applies to resources, functions and services. Although the quantitative measurement of biodiversity is useful for estimating general trends, it is also conducive to an abstract calculation in which the sense of proportion is obscured. Thus, the ratio of 30%, about one third of the planet may be an arbitrary threshold taken to symbolically indicate that the ecological footprint (currently estimated to be approximately three planets) will be mitigated. In the meantime, the remaining two thirds of the planet would have to provide the equivalent of three planets. Thus, within the new boundaries of this "smaller planet", so to speak, the ecological footprint would become 4.5 "smaller planets"[19] Of course, this interpretation would be true only if 100% of the planet was currently used homogeneously, which is not the case. Furthermore, biodiversity and vulnerability of ecosystems are not equally distributed around the world. However, implementing the protection of one third of the planet implies some restriction of use and might increase pressure on the remaining two thirds of the planet. In turn, this might exacerbate urban densification and agriculture artificialization, raise environmental justice issues and possibly generate more environmental problems.

Agriculture is one of the areas where biodiversity is most affected, partly indirectly because of deforestation, uprooting of hedges, etc., and partly directly due to chemical and pesticide application, seed surface sterilization, crop standardization and more generally uniformization at all levels. It is difficult to foresee how the loss of biodiversity could be halted unless a truly eco-systemic agriculture is promoted in wide areas of the planet. One may ask whether it is possible for "all people to live well in harmony with Mother Earth" whilst dividing Mother Earth into highly protected and poorly protected areas. This would not only perpetuate the naturalist, scientific dichotomy between mankind and nature but eventually implement this dichotomy in real life. At its extreme, this would result in two separate, though partially overlapping, planetary realms, one dedicated only to the environment and one handled by human beings. Although this vision might seem over-simplistic and speculative, it is worth asking what the outcome would be if a division between the two halves of Mother Earth could actually be complete. Could the environment still be an "environment" if human beings can no longer have a genuine experience of nature? Could human beings still be "human" if they are not surrounded by nature?

At this point, the environmental issue appears clearly twofold: what *is* the environment and what *is* a human being are two sides of the same coin and need to be addressed simultaneously. What needs to be protected is not only dedicated areas hosting charismatic

pieces of the environment and their native peoples; it is basically what makes the whole of mankind and nature hold in one piece. In Guattari's ecosophy, this issue is embedded in the notion of existential territories, territories that are severely undermined by capitalistic anthropocentrism and need to be sustained. In the next section, this issue will be addressed by considering how the lack of qualification of the root name *Anthropos* conveys a vision of humanity without a place, deprived of existential territories. To re-imagine "the environment", it is important to also re-imagine "the *Anthropos*".

3. The Place of the *Anthropos*: The Human Being in the Light of Its Topological Center(s)

The two planetary realms depicted above are fictional at this stage, but their picturing can help understand how the two visions, the eco-systemic and the utilitarian, are eventually enacted and paradoxically tend to reinforce each other. One perpetuates the romantic longing for pristine immersion into wild nature, whilst the other one keeps heading toward further self-alienation and estrangement from nature. Although they seem to go in radically opposite directions, they share a common disregard of the human sense of place and proportion. It is pivotal to understand that ratio and proportion are not one and the same thing. They correspond to different visions of the *Anthropos* and not only of its environment. As already indicated in the Introduction, the root name *Anthropos* is used to mean that human beings are considered with respect to their place on Earth, of what surrounds them, of their inhabited and existential territories. It is an attempt to uncouple this notion from a narrow understanding of anthropocentrism and contains a criticism of the negative vision of humanity that it conveys. The *Anthropos* is not a species or an essential kind since its definition is broader than the atomized individual and encompasses its existential territories, others and everything that makes up its place on Earth. The *Anthropos* includes both humanity and the individual human being; thus, it is also meant to designate the individual moral agent. It will be a gendered he or she, depending on whether its definition is male-dominated or not.

3.1. The Anthrokos, to Have an In-Between Place on Earth

The enquiry by the linguist Romain Garnier [17] on the etymology of the word *Anthropos* showed that the link with the root name Andros (strong man) does not apply in a straight line. He suggests instead that the word is derived from the prototype *Anthrokos* ("directed downward", whence "earthling, earthman, earthwoman"). The *Anthropos* thus depicts a layman, or laywoman, defined by her position in space ("directed downward, being upon Earth"). She is the earthly being who stands below the gods, who inhabits the Earth and is mortal. She is turned downward, and yet her face is turned upward towards the heavens and the stars. Thus, she stands above the animal whose face is turned only downward towards the ground. Garnier also mentions a remarkable etymon which means "turned backward, who walks backwards".

These etymological findings are of special interest because they correlate the notion of *Anthropos* with a position in space and thus with the notion of place. This low man or woman dominates the animal bound to the earth and yet she stands below higher entities or agencies; thus, she belongs to an in-between kind. Because of her in-between position, she is in a twist, her gaze being directed to an opposite direction from her legs. The *Anthropos* "who has a human face" is also defined by the direction of her gaze. She can be seen as the one who turns her gaze backwards in turning towards the earth. Through finding her place, her "center", her position is now defined topologically in space. But she can also turn backward figuratively; thus, she is the one who can take some distance, who can wonder and reflect upon things, who can behold the heavens higher up.

Interestingly, the origin of agriculture in the Neolithic was contemporary of a symbolic revolution that was characterized by the emergence of the first godly figures and indicated a major psycho-spiritual shift [18,19]. Both events, agrarian life and symbolic figuring, may be taken to depict the birth of the *Anthropos* as an *Anthrokos*, although the notion itself possibly appeared later. Nearer to our days, the ancient *Anthropos* underwent another revolution

by "turning", or "reversing" towards herself in the practice of philosophical thought. The *Anthropos* became stretched between an earthly life bound to mundane activities such as ploughing and growing crops and a quasi-heavenly life expanding into contemplation and thinking. The birth of philosophy also meant that the "vita contemplativa" was then granted a higher standing than the "vita activa" in the words of Hannah Arendt [20]. However, it would be anachronical to equate the emergence of the vita contemplativa with modern anthropocentrism. For instance, Aristotle's philosophy of biology reveals his commitment to a more sophisticated anthropocentric perspective [21]. In the cosmology of antiquity, nature was thought to be part of the immortal realm, the "being forever" of the supralunar world. What was granted a lower standing was not nature as such but labor insofar as it implied to turn one's gaze downward only. As for Archaic cosmology, it was probably even more inclusive and all-embracing and, thus, even more remote from the mechanistic cosmology that has expanded during the Modern era and from what is currently meant by the term anthropocentrism.

3.2. The Andros (or Andropos), to Be a Strong Man Who Dominates the Earth

The adoption of a mechanistic cosmology after the Copernican revolution meant a radical change in the topological understanding of space. The emergence of anthropocentrism cannot be separated from the conception of a void universe, a cosmos that has been emptied of its primeval wholeness. As expressed by Jacques Monod in 1970 [22] (pp. 224–225): "Man finally knows that he is alone in the indifferent vastness of the Universe from which he emerged by chance". In ecosophic terms, this can be summarized by the notion of deterritorialization. As already mentioned in the Introduction: "The contemporary human being is fundamentally deterritorialized" [6] (p. 354).

It is only in a void, abstract universe that human beings can conceive themselves as "masters and possessors of nature", to quote the famous phrasing by René Descartes in 1637 [23]. In adopting this new conception, the *Anthropos* denies part of her specification, which implies turning her gaze upwards to that which stands above or appears higher than herself—be it gods, a starry cosmos, or the wholeness of nature. In this respect, she is not an *Anthrokos* anymore, but he (and not she anymore) has become an *Andros* with the qualification of a strong man, be he a man or a woman. Anthropocentrism becomes an "androcentrism". Most importantly, along with the original *Anthrokos*, the sense of place and of her position in space, her actual centeredness between Earth and heaven, disappears.

This topological change is inherent to the naturalist, scientific episteme and pervades all life sciences. Accordingly, the two visions, the eco-systemic and the utilitarian, suffer from the same topological flaw. Both visions abide by the naturalist episteme in considering that a real knowledge of nature can only be attained by preventing any human interference. This premise has major implications for our relationship with nature, and yet its importance in addressing ecological issues has barely been addressed. Firstly, it imposes an indifferent attitude and assumes that one can adopt a gaze from nowhere, independently from any sphere of reference and from any sense of place and belonging. Thus, the sense of proportions is replaced by bare quantitative measurements and ratios, and relative dimensions are taken to be absolute in an absolutely abstract universe. This is exemplified by the notion of "planetary boundaries", which underlies an object-bound quantification of stocks and fluxes in a purely utilitarian approach to the environment. The spacecraft metaphor further expands on the vision of the planet as a device. Secondly, knowledge should be best approached by relying on sophisticated devices and the building of logical rules between quantitative data. Thus, "true" knowledge should be a knowledge from nowhere, no man, and eventually an absolute knowledge. Thirdly, ethical judgements should be guided by this absolutely universal knowledge so that a large number of our decisions could eventually be delegated to smart devices.

Finally, the kind of anthropocentrism or androcentrism perpetuated by the naturalist, scientific episteme should be called "nullo-centrism" since it erases the notion that there is an environment *to be known* and that the human being is *the knower* of this environment.

The *Anthropos* as an *Andros* or *Andropos* is doomed to wander in the void, having no place but an abstract Euclidian reference. The Euclidian topology is characterized by postulates that cannot be demonstrated [24]. Although it has been challenged by mathematicians since the middle of the 19th century, it remains embedded in every picturing, building, or manufacturing and is inculcated from early schooling on. Its invention coincides with the colonialist expansion of the West and cannot be assumed to be an indifferent mathematical concept. Since the invention of the monofocal perspective in the Quattrocento, it has become the way the world should be seen [25]. In the Euclidian conception of space, centeredness means to be the absolute center of oneself and to replace one's innate sense of proportion with abstract connections. With these premises, one may wonder whether it is possible for the modern *Anthropos* to develop environmental virtues *at all*. To mitigate the naturalist, scientific and androcentric bias that may interfere with a right understanding of EVE, a first requirement is to consider the dramatic consequences of adopting a vision from nowhere, hence no man and no woman. To overcome the topological indifference imposed by an absolute Euclidian system of reference, the next section will bring the common agrarian pattern back into the discussion.

4. Agroecosophy, Virtue Ethics and the Agricultural Common Pattern

Based on the previous section, it is proposed that the virtuous *Anthropos* knows her place on Earth, her in-betweenness. The sense of in-betweenness can be linked to the Aristotelian theory of the golden mean, i.e., the right center or the just middle. Rather than a geometric or arithmetic mean value, an average or a 50% ratio; it is a golden mean between two opposites, excess and deficiency, these fluctuating with the circumstances of each situation. The golden mean is related to the golden proportion; it is a middle in the sense that it implies a right balance. In the *Magnia Moralia*, Aristotle insists: "And generally in each of the feelings, one can see that *what surrounds* the middle is easy, but the mean is difficult, and this is the point for which we are praised; for which reason the good is rare" [26] (1187a1, Book I.9). Every virtue depends on the capacity to find the golden mean when and where it applies as if one was the needle of a scale. The ability to approach the golden mean is a radically anthropocentric virtue. In *His Nicomachean Ethics*, Aristotle writes: "Thus a master of any art avoids excess and defect, but seeks the intermediate and chooses this—the intermediate not in the object but *relatively to us*" [27] (1106b8, Book II.6). Accordingly, it would not make sense to delegate this appraisal to any kind of digital sensor. Although no ethicist would defend such an evaluation of the golden mean, the current development of farm robots and smart agriculture suggests that this vision will gradually be implemented in real life.

Place is not a location. The sense of place can be experienced anywhere, even in a plane or a spacecraft. Place is not a location and yet it implies a sense of space and centeredness. There is probably no better way to inquire about place than to consider plant farming—here considered to encompass plant gathering and crop growing [28]. Plant bodies overtly bridge below and above, and everything around, everything that surrounds [29]. When interacting with them, one needs to accommodate this in-betweenness. Plants provide a yardstick to approach a virtuous agroecology, this incorporating an ecosophic account of the golden mean, i.e., an agricultural ecosophy or an "agroecosophy". Agrarian farmers and gatherers who continuously work and interact with plants on a daily basis also represent a yardstick to conceive our agroecological future wherever we live, even in densely urbanized areas. They are the keepers of the land, not only Euclidian territories geolocated on a map but also non-Euclidian, existential territories that afford in-betweenness and underlie our ability to experience the golden mean. This preliminary introduction to "agroecosophic virtues" will be developed further in the next sections based on transdisciplinary discussions conducted in the context of the PlantCoopLab, a research action project[20].

4.1. The PlantCoopLab Project, Plant Labor and Food Agentivity

The PlantCoopLab project aims to challenge the lack of concern for plants in an agricultural context where plant–human qualitative relationships are usually ignored. Its working hypothesis is that raising concern for the standing of plants can be a catalyst of change towards more sustainable food production and consumption. Its approach is framed by the perspective of environmental humanities and is based on three methodological axes. First, interdisciplinary cooperation in the field of the humanities (anthropology, ethnography, philosophy, semiotics, sociology) with invited contributions from other disciplines (e.g., agronomy, ecology, ecophysiology, history, medicine, zootechnics). Second, transdisciplinary interactions with plant practitioners (e.g., agrarian farmers, seed craftsmen, herbalists, artists) during seminars and workshops. Third, an emphasis on real-life experience encountered in professional practice, in the context of both research and productive activities.

The project addresses the issue of plant–human cooperation "in the field of labor" [30]. This issue is especially relevant in the context of food production where the purpose is use and sale of plants, whereas it does not apply in a recreational context. Production is the very issue, so there is no point in opposing a relational agriculture to a production agriculture [31]. The emphasis is put on the notion of "plant labor"—whatever this means—in order to cast new light on both plant activities or "agentivity" and the different plant-centered occupations of practitioners. The use of an agentive, performative lens reverberates on the whole process of food production which can also be described in terms of agentivity, food being agentive in its own way [32]. Examples of questions that have been discussed so far are: Are plants something or "someone"? Do they "collaborate"? Are they fully domesticated or do they retain some degree of "wildness"? The objective is not to conduct an opinion survey but rather to set a participative process and seek interactions on a research action basis. The quotations in the following sections are taken from the records of a two-day workshop that was organized in a farm in Sologne in 2022 with about 30 participants. The place was chosen for its extensive expertise in several areas: agroecology and professional education in agrarian farming, seed collection and reproduction of old and native crop varieties and the more recent creation of an agrarian university.

Most practitioners who have participated in the project so far already had specialized in agroecologically oriented practices, including a wide diversity of approaches: organic farming, biodynamic farming, eco-systemic agriculture, regenerative agriculture, conservation agriculture and permaculture. Most of those who attended the workshop in Sologne had also been involved for many years in professional farming education, so they were quite prepared to discuss their specific orientation in round-table conversation. On the whole, they tended to be critical of the scientific framing of the questions because these seemed artificial and too intellectual to them. Some of the attendees even thought that the notion of labor does not apply because their work is tightly intertwined with their private life. Work was not seen as a job or a business: "working, the notion of work, for me it's life". To the extreme, one argued that his whole life should be viewed as labor or else his labor would amount to life: "I start working on Monday mornings when I wake up. And I stop on Sunday night when I fall asleep. You can't be a peasant if you're not a peasant all the time". An important distinction was between "dead labor" and "living labor" which also pointed to an opposition between industrial agriculture and agrarian farming. The qualification of living labor helped to draw a parallel between plant labor and human work, even though this was by using metaphors. Thus spoke one of the practitioners: "My relationship with plants is a question that does not arise since I bathe in them, I live with them and my work, it is theirs and vice versa". He later added: "You can't dream, as energy doesn't come from oil, it has to come from the man. . . 4000 h of work is something I can manage!". He recognized that he had been lucky for when started he had no money and encountered health problems; thus, he had to turn to another way of growing crops. Another one pointed to the volunteer aspect of his work: "I do a service to society. I'm sorry, it's not to say...but I don't make a living. But I do it to evolve our food systems".

Overall, the notion of labor triggered an emphasis on individual striving toward a way of life more attuned to ecological values. For a number of the attendees, this meant less money and more work in addition to a lower social standing. Some had left their previous occupations, e.g., a singer in a popular music band or an employee in a well-paid computer engineering company. One practitioner described his professional occupation as a landless peasant, another one had chosen to work and live on site where he had built a positive energy hut and another works in a 0.6 Planet estate that aims to reduce the human footprint from three planets to only 0.6 planets. For all practitioners, agroecology was implicitly linked to the pursuit of *eudaimonia* through caring for agrarian nature: "I work rather to flourish, to create, to exist, to forge my identity". The striving for the good life was interpreted as having others in view, i.e., fellow (wo)men who need food, non-human living beings and more generally everything that surrounds: "[my work with plants] is a commitment, I think about the commitment I feel to the seeds I care for or am in charge of". Flourishing was more or less explicitly linked to a responsibility: "For me it is the expression of our freedom to respect or not to respect the living". This meant developing a sense of belonging through "complete connection" and gaining a more sensitive perception of plants and their surroundings; integrating respect, gratefulness, wonder and love in training and education and sharing an ecological awareness through participative projects and community building—e.g., with students, children, persons in social reintegration. Overall, the conversation on the issue of plant labor and cooperation allows virtue-oriented principles to surface and emphasizes the importance of VE in order to understand the diverse approaches of the notion of agroecology.

4.2. Agroecosophy, a Philosophical Turn

Agroecology is not one but many and it encompasses more or less subtle approaches and different farming visions. Giraldo and Rosset see it as a "territory in dispute" between two trends, one that "conforms" and one that "transforms" [33]. Conformation agroecology aims to make industrial agriculture less unsustainable by adding technical options to its toolbox. Transformation agroecology consists of changing the underlying agricultural pattern by promoting a sustainable human–nature relationship. The dichotomy exposed by Giraldo and Rosset shows that institutional science tends to perpetuate a dominant pattern, whilst actual change in this pattern can only emerge from social movements. This dichotomy can also be understood as a polarity between two driving forces that need to be balanced. Thus, the issue of scalability will eventually raise the need for some degree of institutionality—e.g., to obtain scientific recognition, public subsidies, product or process qualification and trade standards. Reciprocally, ongoing social and ecological problems will keep challenging the institutional mainstream and call for more radical changes and breakthrough innovations.

Beyond the dichotomy that opposes conformation and transformation, in other words scientific ecology and social ecology, VE introduces a third component that may have been overlooked so far. This leads to propose that agroecology is three-fold rather than two-fold, in line with Guattari's concept of ecosophy (see Introduction). In integrating both concepts of ecosophy and agroecology, the notion of "agroecosophy" elaborates on a threefold understanding of agroecology. The forgotten, third component of agroecology emphasizes the position of the *Anthropos* within her agricultural matrix and her actual striving to mitigate the territorial dispute between conformation and transformation, institutionality and social movement, form and life, two opposites in a polarity. Agroecosophy is conceived as a virtue-oriented agroecology that aims to establish the golden mean between conformation and transformation. Because of its threefold understanding, it can expand in a proper philosophy of agroecology and not merely "about" agroecology. Accordingly, plant cultivation should also be given an ecosophic account.

The standing of plants has become an important issue since the notion of dignity of living beings was introduced in the Swiss federal Constitution [29,34]. This prompted the emergence of a field devoted to plant ethics, as reported in the recently published volume by

Angela Kallhoff's group in Vienna [35]. In particular, Kallhoff proposes to use the Aristotelian notion of flourishing to assess the good life of plants [36,37]. Other authors envision plant ethics in light of animism [38]. Ethical attention to plants supports a relational account of the virtues of gardening and of "growing one's own" in a garden [39,40]. Yet, some authors seem skeptical about the application of VE beyond wild and ornamental plants, considering that it will necessarily be limited in the case of agriculture, e.g., [41]. It can be argued that, in the context of food production, the good life of plants does not mean that they should be left out but rather that they need to be eaten by humans, animals or micro-organisms. Being eaten does not imply being degraded, provided that plant flourishing is an important issue for the food system. Because productive occupations cannot be uncoupled from an instrumental purpose, the role of EVE appears even more crucial in this case than for other interactions with plants. Examples such as organic farming in Europe and peasant movements in South America show that it is essential to distinguish between global driving forces at work in society as a whole and agent-centered motivations of individuals. Virtue is not a social output but an individual input. The history of organic agriculture is not built on institutional grounds nor on social movements but on the conversion and commitment of individuals [42]. There is no science of virtue but only a natural history of virtue. Virtue needs to be first uncovered and then recreated again through a continuous flow of individual transformation. Virtue can never conform, otherwise it would become merely an automatic response, a habit or implicit compliance to external norms. Likewise, a philosophy of organic transformation cannot be institutionalized, otherwise it would become a philosophy of organic conformation, hence an aporia. A philosophy of organic transformation needs to be experienced ever and again. Only then can it stream in social movements and eventually settle in institutional norms. But these norms can only be useful insofar as a right balance is found between conformation and transformation. To some extent, external rules may help find a provisional balance. However, in line with Aristotle's virtue ethics, the balance will be right only if the golden mean is recurrently assessed by moral agents. In practice, EVE will always be needed to adjust decisions to concrete situations.

One may argue that the number of farmers is decreasing in developed countries, especially small farmers. This was clearly pointed out by a practitioner: "I have watched the destruction of agriculture for decades. In fact, today the aim is to achieve an agriculture without farmers. That is why we are now only 2% while we were still 37% in the 1970s! [. . .] Before insects and animals and plants and biodiversity had disappeared, farmers themselves had to disappear". Here, the issue is not to propose a romantic vision of agrarian life and to claim that it is inherently conducive to virtue. Most of those who have left the land during the last two centuries were expecting to find better conditions of living in the cities and will probably not go back to farming occupations. Thus, the importance of agroecosophic virtues in agriculture may appear to be only marginal in addressing major ecologic challenges. This is undisputable. However, norms and rules are usually not the fact of the majority. Most of the time, they occur as a generalization of marginal cases which have been praised for their virtue. If we want to secure the future of agriculture and food production, this marginal, empirical contribution needs to be encouraged so as to continuously recreate and embody a human sense of place and centeredness on Earth. Furthermore, it is crucial to also enable urban dwellers to embark on this agroecosophic turn. In the case of organic agriculture, not only have individual farmers had to undergo a conversion. Individual consumers living in urban estates have also had to convert to this agroecological orientation and bring their support. The PlantCoopLab conversation with practitioners led to distinguish three types of agroecosophic virtues:

- Agrarian virtues acquired by those who actually work and interact with plants and need to attune their way of life to plant in-betweenness.
- Food-centered virtues developed by those who actually recall what their life owes to plant growth and farming.
- Plant-centered virtues exerted by those who actually undergo a non-Euclidian conversion in their perception of nature and of their own human condition.

This distinction will be further examined in the next sections.

5. Agroecosophic Virtue Ethics and the Golden Mean

5.1. Farming-Centered Virtue Ethics

In addition to the virtues that practitioners in the PlantCoopLab enquiry have linked to an agrarian good life (see above), the virtue of honesty, truthfulness or being true to oneself and to others appeared to describe quite explicitly the pursuit of the golden mean. As mentioned by one practitioner: "we are faced with a cheating agriculture. How does it cheat? It cheats with all the tricks of petrochemicals and heavy industry, which poison us and destroy the environment. [. . .] To get back to an agriculture that does not cheat, we have to get back to a sufficient number of farmers who maintain the environment". Trickery means that any attempt to reach the golden mean is doomed to fail and that a faked balance will be used instead: "[The farmer]'s gonna put a little bit of "perlinpimpin" powder here and there. That approach has led us to huge dead ends. I make an environment that I produce and then I explain that nature works in that way. And here, it's all fake!" In contrast to this vicious trend, the virtue of being true to oneself implies to have the capacity to discriminate the right *metis*, i.e., the kind of skill that acknowledges in-betweenness, from mere trickery that ignores and obscures the sense of place. Trickery seeks a "transformation of life into a machine" whereas a truthful *metis* requires an ongoing process of attunement: "We are always in tensions, which are never resolved, so it is not comfortable [. . .] it's a bit like walking on water, so how to inhabit the "milieu", in both senses of the word?". Attunement implies that one needs to work with polarities. This was compared to the dynamic relationship in a couple of dancers. One cannot fake dancing and instead use ready-made fixes. The latter may hide a problem for a while but will eventually lead to larger problems.

It is only through enacted partnership in real life that truthfulness will be revealed as a virtue. The virtue of truthfulness does not require a specific degree of knowledge or professional experience. From the most unexperienced people to the most expert practitioners, truthfulness can be trained so as to encompass the sense of place, even in the case of urban dwellers and people who live away from agrarian surroundings. Each individual situation has its own specific requirement depending on the skills and experience of a person: "we must not say that it is right for everyone at every moment, no, in that moment, where is the rightness of action?" In the case of practitioners, there is "plenty of time to contemplate animals and plants. To wait. To listen". There is time to gain an embodied knowledge: "our daily empiricism gives us the feeling that these things produce certain effects. Even if this cannot be scientifically demonstrated or even will be contested, the fact remains that on a daily basis it leads us into action". Yet, in order to know what "the right actions" are, one also needs to make use of one's individual compass. This led the landless peasant to ask "What is our potential to have an opinion, to judge the thing we're talking about, which for me is more of the sacred order?" Here, the issue is not only to gain more knowledge or more information. It is also to develop a sense of rightfulness, this being tightly linked to the virtue of truthfulness.

5.2. Food-Centered Agroecosophic Virtues

Most city dwellers have left their former peasant conditions over the last two centuries and have undergone a gradual conversion to land and food agnosticism. Today, most farmers do not know who they feed: "I realized that when I plant potatoes or cabbages, or when I produce seeds, I don't even know who's going to eat that one day, I don't know. So somehow it's an altruistic act". Reciprocally, urban people often do not know how food is produced: "it is not fair that we have a few mercenaries with big machines, robots, genetics, digital technology etc. who produce food for crowds who don't even know what they eat and who no longer make any contribution, not only in the production of their food, but also in the upkeep and care of the environment in which they live". It is a fact that most of us would rather ignore how "stones be made bread"[21] and that their most pressing need is

food. We want to live not only by bread, and most of us nurture the dream of a pristine nature emancipated from labor while having the possibility to simply click and collect our food. This common pattern of food disburdenment is built on ignorance of one's own absolute vulnerability and of what agriculture is about. Of course, some urban dwellers are willing to raise their awareness of agricultural issues, to gain information about what they eat and change their food habits. But this striving alone cannot amount to virtue because most of the time the aim is to conform to a representation of what it is to be a good person rather than to actually have a practice of reburdenment and share the pursuit of a sense of place and of the golden mean.

One example is the adoption of a vegan diet which is often focused only on animal suffering while the radical difference between husbandry and industrial agriculture is obscured [43,44]. Although ethical concerns about suffering and ending an animal's life are well founded, erasing the whole history of animal domestication and companionship does not seem to be a better option. Thus, in a strictly vegan society, farm animals might appear unnecessary and eventually become extinct: "if we think of food without animals, it doesn't make sense. There are no plants without animals. I can't imagine doing without animals for food, because that would mean doing without them for life". Furthermore, this would further undermine the carbon to nitrogen balance that has already been drastically disturbed by the uncoupling between plant and animal productions, hence accelerating soil degradation and the artificialization of agriculture, and this would also ignore the environmental footprint of the replacement of animal products by plant products (e.g., chemical inputs, building and energy costs and food processing). Although most vegans do not think about animals as material but as sentient living beings, they implicitly accept the notion that plant food and animal food are equivalent according to their substance and can be interchanged. In the PlantCoopLab conversation, it was argued that we cannot be animal moralists on the one hand and plant predators on the other hand: "what's also quite central for me is the relationship to life and the relationship to death [. . .] in the end, what's at stake is taking life, be it animal or vegetable. It's part of life". But taking life cannot be uncoupled from the issue of labor: "is working with domestic plants at the service of life or at the service of multinationals?".

Two food-oriented virtues surfaced in the discussions, humility and gratefulness. First, we need to approach food in the perspective of living and dying. We need to take life, "to slit a lettuce", in order to keep alive: "it's something that disappears, it's something that we've seen evolve, we would like it to remain because it's a great moment of affect, emotion and connection". We have looked after it, cared for it and eventually we will go and pull it out. We have to do so because our human condition is mortal, and hunger is our primal experience of this condition [45]. To recall this fact ever and again amounts to the virtue of humility versus the hubris of the strong man who behaves as if he could turn any piece of stone into bread: "our Western attitude is to deny our vulnerability and be in hyper control. So not to be hyper-vulnerable instead, but to admit that this is our condition". Humility in this case also calls forth the virtue of hope since we need to trust that life will actually keep going and rebuild what has been torn away to make our food.

Second, we need to raise our awareness that life keeps going because farmers and plants cooperate to make that food. We should be grateful because thanks to this cooperation we have something to eat: "When I harvest the lettuce, I put myself in the place of the lettuce I've been growing for so long, [. . .] If then I land on a plate and someone eats me gratefully, I've fulfilled my goal". The virtue of gratefulness is needed to mitigate the predatory drives of the *Andros*. It is needed to recall ever and again that plant-based food is not more environmentally virtuous than animal-based food if it is considered to be mere stuff that comes from the ground. For both plant and animal food, one should be grateful for the life given [46]. Any urban dweller who wants to undergo a genuine agroecosophic turn could start with the virtues of humility and gratefulness. This could help make sense of something more conspicuous like veganism and other possible commitments and actions.

5.3. Plant-Centered Agroecosophic Virtues

Most city dwellers probably have a very faint notion of what it means to grow food. They possibly also have little knowledge of what it is to be a plant, although they see plants around in their daily life. Even in a very concrete area, one can encounter trees, bushes or weeds. Yet, there is a long way to go from a weed in the city to a crop in the field and the understanding of what plant-centered virtues might imply. The otherness of plants is paradoxically fascinating and difficult to address in ethical terms [47,48]. In the PlantCoopLab conversation, this otherness was often described by the notions of "cosmos" and "life", which underlie the undisrupted continuity of plants with the wholeness of the world depicted as a spatial globality and an evolutionary process. The plant was seen as a "revelation" in this global integration: "Does the plant have a will, or is it merely subject to laws? I'd like to say that the plant is a revelation of cosmic laws that manifest themselves". Cosmic laws appear in seasonal rhythms by which life and death alternate through growth, blooming, dormancy, etc.: "life, it lies between expansion and contraction". This expressive specificity was linked to its verticality: the plant is anchored in the earth, in a place and in a geographic location, and it is "sucked up" and suspended in the larger space where it unfolds. This integration in the wholeness of the world was described as a "total connection", a symbiosis in a "being-together", or an "ecosystem". This feeling could be intensified in exceptional moments: "At one point, late in June, I saw a tiny green dot appear on the neck of the verbena plant. There I was, on my knees, lying down, my eye on that bud, the blue sky already warm and the earth still fresh, and I no longer existed. I was part of the earth, part of the sky, part of the plant".

The otherness of plants contrasted with our atomized androcentric condition: "In the end, the only being no longer connected is us. Everything else is connected". We human beings in our modern technological societies are "disconnected", we have lost something. We keep striving to extract "something else" through our work because our experience is that of scarcity and need. We need relation, interaction and exchange to reach beyond the limits of our human individuation and isolation and to gain an experience of unity with the living, earthly, cosmic basis in which we are founded and which indigenous cultures still nurture. Finally: "Are plants something or someone? Actually, neither. It's a commitment, I'm thinking to the commitment I feel towards the seeds I care for or look after. It's not someone either, because a plant is very diffuse. Visually it has an outline, but when you understand the plant, when you see it develop, you understand how it relates to its environment, its contours become very, very diffuse".

Altogether, the otherness of plants invites us to think again the place of the human being on earth. We gain "a growing curiosity about soil, what is below, water, flows, temperature, I don't know... I imagine this opens up to the essence, to knowledge, but above all to this relationship with oneself, to what place one gives oneself in this living world". While the animal arises as a partner and companion of life, the wholeness of the plant invites us to perceive everything that surrounds in a cosmological topology: "We've talked a lot about space. What are the limits... this interaction [with plants] it can be limited to an individual, but then immediately we moved on to the collective, and to the cosmos. It's as if the plant draws us back to everything, to life". The plant cosmological topology challenges the common Euclidian pattern linked to our androcentric condition. Perception needs to be refined: "If you come right out and do it, it doesn't work because you don't have the right glasses. In the West today, we need to deconstruct the way we see plants". Some practitioners go as far as to design their plots according to geometric proportions found in nature or used in sacred architecture: "In my garden—I'm also inspired by notions such as sacred geography—I've made connections with the golden proportion between the cultivation beds and the size of the gardens. I've put up standing stones... I say to myself, I make cultivation beds but not just to be functional. I also add elements".

Besides inviting us to think again about the place of the human being on earth, the otherness of plants also raises the issue as to what kind of knowledge, or rather which way of knowing is needed. Plant-centered virtues do not depend only on information,

although this can be useful in any case [49]. To gain an adequate insight into plant otherness, one needs to raise attention to one's own perceptive activity, which can be physical (e.g., sense of touch), vital (vibration, energy) or more contemplative, aesthetic or even artistic and to one's intuition and introspective vision as a means of relating to the cosmological dimension of plants. This does not preclude the need for objectification and knowledge. But reductionist science is not sufficient because it approaches plants only as machines [29,50]. To reach beyond this science "from below", one also needs to introduce a science "from above". The latter "is that which is in the macrocosm, in the qualitative compared to the quantitative. Observing the synthesis of the global, what surrounds. . . surrounds the life forces around the earth". At least for some attendees, these "subtle agroecologies" [51] seemed to imply more than an embodied knowledge and revealed an intentional pursuit of a wise connection to the whole cosmos. Practical wisdom appears unsurprisingly a core agroecosophic virtue. In the attempt to address the wholeness of plants, this virtue can be further specified as the ability to grasp something all-embracing, a way of presencing the cosmological wholeness of plants. This ability is not a direct result of farming or gardening although the position of the gardener or farmer is obviously quite advantageous. One can start with awakening and nurturing an awareness of the wholeness of plants. This awakening can be trained even in the city; thus, agroecosophic wisdom is not limited to rural contexts.

With an agroecosophic perspective, what it is to be a plant can be grasped even in the middle of nowhere. Especially when what surrounds does not stimulate our perceptive activity, the presencing of plantness will represent a most needed virtue. Wherever there is a tree, one can raise attention to the cosmological wholeness of plants and reach beyond Euclidian bounds. Furthermore, wherever there is a seed, one can develop a subtle perception of plant potentiality. We all know that seed potentiality can expand in the cosmos although we cannot see it with our eyes until it actually happens: "we'll not be able to keep seeds in a conservatory, or in this hyper-technical environment [. . .] because we'll have to sow it again. If we do not do so within a certain timeframe, potentiality will eventually fade away". Human creation needs always to be attuned to spontaneous, wild expression of potentiality [52]. This leads to the question "to get rid of the guilt we almost all feel when we talk about plant domestication, do we really degrade plants by doing this to them, or do we raise them?" To this question another one was added: "or do we not rise ourselves along with them?" What is raised is not an ingredient coming from the ground but something imperceptible at first, a plant potentiality which has the capacity to flourish and expand into space. Thus, the sense of space is changed because the plant does not fit a Euclidian pattern like a concrete building but elaborates its own non-Euclidian pattern, its own golden proportions. To perceive this subtle way of weaving forms into space can change radically our appraisal of what surrounds, i.e., the "environment". From home plants to the co-creation process of breeding, agroecosophic virtues may reverberate through the whole of the agricultural matrix by changing our perception of space, our aesthetic matrix and turning the *Andros* into an *Anthrokos*.

6. Conclusions—The Non-Euclidian Pattern, Recasting the Epistemic Grounds of EVE

Under a naturalist, scientific premise, science and ethics should be kept separate. In line with this assumption, one may ban ethical anthropocentrism while adopting an epistemological anthropocentrism [8]. However, insofar as the naturalist episteme incorporates an anthropocentric bias, the distinction between ethical and epistemological anthropocentrism appears artificial. Under an agroecosophic premise, science and ethics should not be kept separate because agriculture is not a percentage of land areas but an all-embracing matrix. This leads to shifting the emphasis put on anthropocentrism seen as a curse to anthropo-centeredness, an "ecosophic anthropocentrism" that reveals the wholeness of the agricultural matrix. An ecosophic anthropocentrism also means that the notion of *Anthropos* and her virtues need to be thought on new grounds. A strong ecosophic requirement is to undertake a deep ecological transformation of one's subjectivity. The golden mean is

not to be found in statistics or in social norms; it arises as a singularity and needs to be experienced at once by a moral agent. As long as VE is bound to a naturalist, scientific premise, its environmental contribution will remain intrinsically limited. Recasting the epistemic grounds of VE with a new "aesthetic paradigm" [3,53] may have wide-reaching consequences and encourage further agroecosophic research and initiatives. To develop agroecosophic VE, one needs to approach the otherness of plants especially in a highly domesticated context. The attention to the wholeness of plants will only be raised by shifting from a Euclidian animal-based pattern to a non-Euclidian plant-based pattern. "Thinking in aesthetic terms therefore requires us to totally reformulate our relationship to the world, as Naess and Guattari unambiguously propose" [53] (p. 321).

Funding: The PlantCoopLab research project was funded by the Fondation Daniel et Nina Carasso (2021-2024) via the Fondation de France, grant number 00110655.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the PlantCoopLab conversation.

Data Availability Statement: Not applicable.

Acknowledgments: I thank the members of the PlantCoopLab project (https://plantcooplab.hypotheses.org/) for their collaboration in organizing the transdisciplinary conversation with practitioners and scientists. I am also grateful to Christine Roberts for personal comments on the manuscript.

Conflicts of Interest: The author declares no conflict of interest.

Notes

1 The definition of the term environment was drawn from the the Oxford English Dictionary and a summary provided by the WordReference dictionary: "(i) the aggregate of surrounding things, conditions or influences; millieu; (ii) the air, water, minerals, organisms and all other external factors surrounding and affecting a given organism at any time; (iii) the social and cultural forces that shape the life of a person or a population", available online at: https://www.wordreference.com/definition/environment. (accessed on 26 September 2023).

2 PR: Press Release by UN-CBD on 19 December 2022, https://www.cbd.int/article/cop15-cbd-press-release-final-19dec2022 (accessed on 9 October 2023), p. 3.

3 PR, Goal A.

4 PR, target 19.

5 PR, target 11.

6 PR, target 16.

7 PR, Goal C, targets 11 and 21.

8 PR, target 5.

9 NC: Draft on Nature and culture, https://www.cbd.int/conferences/2021-2022/cop-15/documents (accessed on 9 October 2023), decision 1.

10 NC, Annex Goal.

11 BA: Draft on Biodiversity and agriculture, https://www.cbd.int/conferences/2021-2022/cop-15/documents (accessed on 9 October 2023), 3.8.

12 PR, target 4.

13 PR, target 11.

14 PR, target 19.

15 BA, 4.7.

16 BA, 3.10.

17 BA, Element 4.

18 BA, 4.12.

19 With the ultimate ratio of 50% of the planet under protection, the ecological footprint would amount to six "smaller planets".

20 The PlantCoopLab research project is an interdisciplinary collaboration between eight academic scholars who are located in three research institutional departments in different areas of France. The research action started in 2020 and has been awarded a grant

for four years. It does not involve cultivation and care of actual plants but organizes transdisciplinary workshops with plant practitioners and has collaborations with civil society organizations that promote agroecology.

[21] This verse is taken to illustrate the paradox of wanting to ignore how food is made. It refers to the episode commonly known as the three temptations of Christ by Satan. In the case of this temptation, the trial is rather cunning since the answer cannot bypass the fact that human beings need food. Although "man shall not live by bread alone", he will obviously live *also* by bread. The complete wording of this verse is to be found in the Gospel of Matthew 4:3: "And when the tempter came to him, he said, If thou be the Son of God, command that these stones be made bread" and in the Gospel of Luke 4:3: "And the devil said unto him, If thou be the Son of God, command this stone that it be made bread" (Saint James version of the Bible).

References

1. Guattari, F. *Qu'est-Ce Que L'ecosophie?* Lignes: Paris, France, 2018.
2. Naess, A. *Une Ecosophie pour la Vie. Introduction à L'écologie Profonde*; Seuil: Paris, France, 2017.
3. Guattari, F. *Les Trois Ecologies*; Galilée: Paris, France, 1989.
4. Guattari, F. Pratiques écosophiques et restauration de la Cité subjective. *Chimères* **1992**, *17*, 95–115. [CrossRef]
5. Bourriaud, N. Le paradigme esthétique. *Chimères* **1994**, *21*, 77–94. [CrossRef]
6. Antonioli, M. Pratiques écosophiques. In *Théories et Pratiques Ecologiques, de L'écologie Urbaine à L'imagination Environnementale*; Antonioli, M., Ed.; Presses Universitaires de Paris Ouest: Nanterre, France, 2013; pp. 353–358.
7. Plumwood, V. *Environmental Culture: The Ecological Crisis of Reason*; Routledge: Oxon, UK; New York, NY, USA, 2002.
8. Dzwonkovska, D. Is environmental virtue ethics anthropoentric? *J Agric. Environ. Ethics* **2018**, *31*, 723–738. [CrossRef]
9. Rolston, H., III. What do we mean by the intrinsic value and integrity of plants and animals? In *Genetic Engineering and the Intrinsic Value and Integrity of Animals and Plants: Proceedings of an Ifgene Workshop*; Heaf, D., Wirz, J., Eds.; Ifgene: Hafan, UK, 2002; pp. 5–10.
10. McKenna, E. Feminism and farming: A response to Paul Thompson's the Agrarian Vision. *J. Agric. Environ. Ethics* **2012**, *25*, 529–534. [CrossRef]
11. Thompson, P.B. *The Agrarian Vision: Sustainability and Environmental Ethics*; University Press of Kentucky: Lexington, KY, USA, 2010.
12. Anthony, R. The ethics of food for tomorrow: On the viability of agrarianism–how far can it go? Comments on Paul Thompson's Agrarian vision. *J. Agric. Environ. Ethics* **2012**, *25*, 543–552. [CrossRef]
13. Mayes, C. An agrarian imaginery in urban life: Cultivating virtues and vices through a conflicted history. *J. Agric. Environ. Ethics* **2014**, *27*, 265–286. [CrossRef]
14. Struik, P.; Bos, A.; van Mansvelt, J.D.; Sprangers, D.; Zoeteman, K. Handling tensions between natural and utility purpose of farm animals and crop plants. *Sustainability* **2019**, *11*, 1019. [CrossRef]
15. Pinton, F. Le Développement de la Cueillette de Plantes Sauvages sur le Territoire Français: Conditions et Enjeux de la Durabilité. Fondation pour la Recherche sur la Biodiversité. 2022. Available online: https://www.fondationbiodiversite.fr/ (accessed on 16 October 2023).
16. Javelle, A. L'acceptation de la part "sauvage" des plantes pour développer des systèmes maraîchers "diplomatiques". *La Pensée Écologique* **2020**, *6*, 16–26. [CrossRef]
17. Garnier, R. Nouvelles réflexions étymologiques autour du grec ἄνθρωπος. *Bull. Soc. Linguist. Paris* **2008**, *CII*, 131–154.
18. Cauvin, J. *Naissance des Divinités, Naissance de L'agriculture. La Révolution des Symboles au Néolithique*; CNRS: Paris, France, 1997.
19. Watkins, T. *The Neolithic Revolution in Southwest Asia*; Routledge: London, UK, 2000.
20. Arendt, H. *The Human Condition*; 1st publication 1958; University of Chicago Press: Chicago, IL, USA, 1998.
21. Mingucci, G. The place of human beings in the natural environment. Aristotle's philosophy of biology and the dominant anthropocentric reading of Genesis. *J. Anc. Philos.* **2021**, *15*, 210–225. [CrossRef]
22. Monod, J. *Le Hasard et la Nécessité. Essai Sur la Philosophie Naturelle de la Biologie Moderne*; Seuil: Paris, France, 1970; pp. 224–225.
23. Descartes, R. *Discours de la Méthode*; 1st publication 1637; Nathan: Paris, France, 1981; p. 79.
24. Poincaré, H. *La Science et L'hypothèse*; Flammarion: Paris, France, 1902.
25. Thuillier, P. Espace et perspective au Quattrocento. *La Rech.* **1984**, *160*, 1384–1398.
26. Aristotle. Magnia Moralia. In *The Works of Aristotle*; Ross, W.D., Ed.; St. Stock, G.W.J., Translator; Oxford Clarendon Press: Oxford, UK, 1915; pp. 1–97. Available online: https://archive.org/details/p2workstranslat09aris/page/n3/mode/2up?view=theater (accessed on 4 August 2023).
27. Aristotle. *The Nicomachean Ethics*; Ross, D., Translator; Oxford University Press: London, UK, 1966; Available online: https://archive.org/details/in.ernet.dli.2015.264227/mode/2up?view=theater&ui=embed&wrapper=false (accessed on 4 August 2023).
28. Pignier, N. Ecosémiotique des paysages nourriciers. Quand semences et plantes paysannes nous (r)amènent à la terre/Terre. *Degrés* **2022**, *21–28*, 188–189.
29. Pouteau, S. Beyond "second animals": Making sense of plant ethics. *J. Agric. Environ. Ethics* **2014**, *27*, 1–25. [CrossRef]
30. Pouteau, S.; Javelle, A.; Mouret, S.; Pignier, N.; Pinton, F.; Porcher, J. PlantCoopLab, coopérer avec les plantes pour une alimentation durable. *NSS* **2024**, *32*, 1.
31. Kazic, D. *Quand les Plantes n'en Font qu'à Leur Tête. Concevoir un Monde sans Production ni Economie*; La Découverte: Paris, France, 2022.

32. Salcedo Fidalgo, H. The coronavirus pandemic: A critical reflection on corporate food patterns. *Right Food Nutr. Watch.* **2020**, *12*, 16–23. Available online: https://www.righttofoodandnutrition.org/files/rtfn_watch12-2020_eng.pdf (accessed on 28 August 2023).
33. Giraldo, O.M.; Rosset, P.M. Agroecology as a territory in dispute: Between institutionality ans social movements. *J. Peasant. Stud.* **2018**, *45*, 545–564. [CrossRef]
34. Odparlik, S. The dignity of plants. An overview of the discussion in German-speaking countries. In *Plant Ethics, Concepts and Applications*; Kallhoff, A., Di Paola, M., Schörgenhumer, M., Eds.; Routledge: Oxon, UK; New York, NY, USA, 2018; pp. 59–69.
35. Kallhoff, A.; Di Paola, M.; Schörgenhumer, M. (Eds.) *Plant Ethics, Concepts and Applications*; Routledge: Oxon, UK; New York, NY, USA, 2018.
36. Kallhoff, A. Plants in ethics: Why flourishing deserves moral respect. *Environ. Values* **2014**, *23*, 685–700. [CrossRef]
37. Kallhoff, A. The flourishing of plants: A neo-Aristotelian approach to plant ethics. In *Plant Ethics, Concepts and Applications*; Kallhoff, A., Di Paola, M., Schörgenhumer, M., Eds.; Routledge: Oxon, UK; New York, NY, USA, 2018; pp. 51–58.
38. Hall, M. In Defence of Plant Personhood. *Religions* **2019**, *10*, 317. [CrossRef]
39. Cooper, D.E. "Growing your own"—Gardens, plants and the good life. In *Plant Ethics, Concepts and Applications*; Kallhoff, A., Di Paola, M., Schörgenhumer, M., Eds.; Routledge: Oxon, UK; New York, NY, USA, 2018; pp. 177–187.
40. Kallhoff, A.; Schörgenhumer, M. The virtues of gardening: A relational account of environmental virtues. *Environ. Ethics* **2017**, *39*, 193–210. [CrossRef]
41. Hiernaux, Q. The Ethics of plant flourishing and agricultural ethics: Theoretical distinctions and concrete recommendations in light of the environmental crisis. *Philosophies* **2021**, *6*, 91. [CrossRef]
42. Besson, Y. *Les Fondateurs de L'agriculture Biologique*; Sang de la Terre: Paris, France, 2011.
43. Porcher, J. *The Ethics of Animal Labor. A Collaborative Utopia*; Palgrave MacMillan: London, UK, 2018.
44. Porcher, J. *Cause Animale, Cause du Capital*; Le Bord de l'Eau: Lormont, France, 2019.
45. Pelluchon, C. *Les Nourritures: Philosophie du Corps Politique*; Seuil: Paris, France, 2015.
46. Mouret, S. Travail et domestication des animaux: De la gratitude. *La Pensée Ecol.* **2022**, *9*, 124–135. [CrossRef]
47. Houle, K. Devenir plante. *Chimères* **2012**, *76*, 183–194. [CrossRef]
48. Pouteau, S. Providing grounds for agricultural ethics: The wider philosophical significance of plant life integrity. In *Climate Change and Sustainable Development: Ethical Perspectives on Land Use and Food Production*; Potthast, T., Meisch, S., Eds.; Wageningen Academic Publishers: Wageningen, The Netherlands, 2012; pp. 154–159.
49. Kawall, J. The epistemic demand of environmental ethics. *J. Agric. Environ. Ethics* **2010**, *23*, 109–128. [CrossRef]
50. Gerber, S.; Hiernaux, Q. Plants as machines: History, philosophy and practical consequences of an Idea. *J. Agric. Environ. Ethics* **2022**, *35*, 1–24. [CrossRef]
51. Wright, J. *Subtle Agroecologies: Farming with the Hidden Half of Nature*; CRC Press: Oxon, UK, 2021.
52. Karafyllis, N. «Hey Plants, take a walk on the wild side!». The ethics of seeds and seed banks. In *Plant Ethics, Concepts and Applications*; Kallhoff, A., Di Paola, M., Schörgenhumer, M., Eds.; Routledge: Oxon, UK; New York, NY, USA, 2018; pp. 188–203.
53. Barbanti, R.; Bordini, S.; Verner, L. Art, paradigme esthétique et écosophie. In *Théories et Pratiques Ecologiques, de L'écologie Urbaine à L'imagination Environnementale*; Antonioli, M., Ed.; Presses Universitaires de Paris Ouest: Nanterre, France, 2014; pp. 317–334.

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Article

Virtue, Environmental Ethics, Nonhuman Values, and Anthropocentrism

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Abstract: This article discusses the encounter between virtue ethics and environmental ethics and the ways in which environmental virtue ethics confronts nonhuman axiology and the controversial theme of moral anthropocentrism. It provides a reasoned review of the relevant literature and a historical–conceptual rendition of how environmental and virtue ethics came to converge as well as the ways in which they diverge. It explains that contrary to important worries voiced by some non-anthropocentric environmental ethicists, environmental virtue ethics enables and requires a rich and nuanced engagement with nonhuman values of all sorts—intrinsic as well as extrinsic, moral as well as nonmoral, anthropocentric as well as non-anthropocentric—and neither presupposes nor implies moral anthropocentrism in its normativity. Finally, the article considers the fortunes of, and some challenges for, environmental virtue ethics in its application to the ethics of climate change, an increasingly central topic in environmental ethics. This article proceeds as follows: the first section introduces virtue ethics; the second section looks at axiological and normative themes in environmental ethics; the third section discusses environmental virtue ethics; and the fourth section considers its application to climate change. The fifth section draws some conclusions.

Keywords: virtue ethics; environmental ethics; anthropocentrism; climate change

Citation: Di Paola, M. Virtue, Environmental Ethics, Nonhuman Values, and Anthropocentrism. *Philosophies* **2024**, *9*, 15. https://doi.org/10.3390/philosophies9010015

Academic Editors: Sylvie Pouteau and Gérald Hess

Received: 18 September 2023
Revised: 12 November 2023
Accepted: 26 December 2023
Published: 15 January 2024

1. Virtue Ethics

The study of virtue investigates what sort of person one should be to live a good life. Since ancient times, in the East and West, the practice of virtue has typically been thought to not only enable but also to constitute (at least partly) a good life. Correspondingly, the practice of vice has typically been thought to not only enable but also to constitute (at least partly) a bad life. This is the core of virtue ethics (VE)[1].

Virtues and vices are traditionally understood to be tendencies in thought and action that are sufficiently habitual to an agent as to count, though somewhat loosely, as characteristic modes of their being. These modes are typically identified as "character traits"[2]. Influential versions of VE have it that a character trait (being benevolent/malevolent, humble/arrogant, courageous/cowardly, etc.) qualifies as a virtue if, because, and to the extent that its development and exercise contribute to the agent living a good life. Correspondingly, a character trait qualifies as a vice if, because, and to the extent that its development and exercise contribute to the agent living a bad life.

The criteria for what counts as a good life typically include welfarist, perfectionist, aesthetic, and moral entries, with different theories privileging or emphasizing one or more of these entries over the others. Importantly, while these criteria for goodness may be (and typically are) impersonally defined, the goodness of satisfying them—including other-regarding criteria like moral criteria—is, according to VE, to be measured from the perspective of the agent. In other words, the goodness of a virtuous life (whatever its ingredients and their proportions) is/must be good for, and from the perspective of, the agent who lives it: it is/must be a prudentially good life[3].

Many versions of VE accept that a prudentially good life is a life of *eudaimonia*, a term used by Plato and Aristotle to indicate something like a "good spirit" and typically

translated as "happiness" or "flourishing". A good life is thus a happy or flourishing life, and the practice of virtue not only enables but also constitutes (at least partly) such a life. This is the eudaimonistic view of VE, which is very influential among virtue ethicists though not without alternatives [9–16]. This article does not dismiss but will not discuss these alternatives; its subject is eudaimonistic VE[4].

Widely different accounts of *eudaimonia* have been given through the centuries (for a conceptual overview, see [19]). Differences in such accounts tend mainly to stem from the ways in which different theorists define, ordain, and relate to one another (including by reduction and subsumption) the criteria—including the welfarist, perfectionist, aesthetic, and moral—for the goodness of a life. Generally, these different configurations in turn depend on the ideas about human nature and/or the human condition that different authors entertain which, in turn, inform their ideas about what matters most to a good human life.

Whatever may matter most in different theories, all theories agree that a virtuous agent will be able to appreciate that certain things do matter most, or more than others, to a virtuous life, and steadfastly, or as steadfastly as possible, comport themselves accordingly. In the eudaimonistic picture, both such orderings of importance (whose practical functions are those of blueprints, allowing for the planning and pursuit of a good life, as well as yardsticks to measure the extent of one's success in living such a life) and their steadfast pursuit are typically thought to be guided by reason, often understood as a blend of rational understanding, practical rationality, and socio-circumstantial reasonableness whose proportions vary in different theories.

Indeed, the exercise of virtue is traditionally thought to require a special, reasoned appreciation of what matters most in particular circumstances considering what matters most in general. Such appreciation is known from ancient thought as *phronesis*, which is typically translated as "practical wisdom" and often conceived of as something of a meta-virtue, activating and guiding the exercise of the other virtues [20,21]. The practically wise virtuous agent knows what matters to a good life and what does not (or less), and they are thus able to read some features of given situations as more salient than others and conduct themselves accordingly (see, among others, [22]). Another meta-virtue, also counselled and buttressed by reason, is fortitude, typically conceived of as strength of character. Fortitude is a bastion against practical irrationality (or *akrasia*)—the lack of self-control that leads one to act against one's better judgment—and, as such, is also often seen as a precondition for the development and exercise of the other virtues[5].

Few theories will expect a virtuous agent to be guided always and only by reason. Most VE is rather concerned with the good lives of those not-fully-rational, non-idealized, desiring, biased, limited agents that most humans are. Yet it is still as reflective agents that humans explore the question of how to best live their lives, so most versions of VE will appeal to reason when evaluating living in certain ways rather than others (both at the macro level, where those general blueprints for life are built, and at the micro everyday level where the agent acts).

VE persisted as the dominant normative theory in Western philosophy from the times of Plato and Aristotle to the 18th century, when it was superseded by Deontology and Utilitarianism. These theories focused less on the agent's self-regarding search for happiness or flourishing and more on their other-regarding obligations—or, in other words, less on the prudentially and more on the morally good life—and provided rules, formulas, and tests for the goodness and rightness of actions based on universalist and universalizable principles rather than focusing on these less-regimented, less clearly action-guiding, and inevitably more situated refinements of character.

In the late 20th century, Deontology and Utilitarianism came under sustained attack, particularly at the hands of Cambridge philosopher B. Williams. Williams [25] argued that in most cases, agents do the right (or wrong) thing not because they apply (or disapply) the universalist and universalizable rules, formulas, or tests that these theories provide but rather because they recognize certain actions, preferences, practices, etc.,

to correctly valorize themselves, other people, relations, traditions, projects, and other things that they see as important and care about. These recognitions feed on emotions, attachments, and commitments that are vital to the agent but, Williams argued, are sidelined by both Deontology and Utilitarianism as these theories work toward their universalist and universalizable systematizations. From this perspective, "the Morality System" (as Williams called it) is mostly an invasive external factor which tends to obscure what really matters to us as individuals with lives of our own to live, conflating living well with obeying the right rules or formulas and mostly ignoring that which really moves us: affections, allegiances, emotions like shame, pride, fear, love, and disgust (most of which are socially configured and reinforced), and personal and collective aspirations.

None of this is to say that morality does not matter, of course. Williams' point was rather that there are various ways in which morality can matter, and the correct one—morality at its best, as Williams saw it—is from within and in the light of our projects and attempts to live a good life. From this perspective, however important morality may be, it remains the other-regarding, obligation-speaking department of ethics more generally understood—the "do-onto-others" focus group in the larger "living well" office of practical reason(s). Williams thought that too much of what matters is lost, in philosophy as well as in practical life and its evaluation, if morality cannibalizes ethics; and although he was not engaged in a thematic defense of VE, his objections and arguments were moves toward the re-instatement of a picture (which 18th- and 19th-century deontologists and utilitarians had managed to upset) that had long seen the prudentially good life as including rather than being guided by the pursuit of a morally good life, and that picture entailed a larger and renewed role for VE[6].

Williams' concerns about "the Morality System" were shared by many philosophers, including A. McIntyre, S. Cavell, I. Murdoch, J. McDowell, and S. Blackburn. His and their works have led other theorists to re-embrace VE as a central framework for ethical reflection, recommendation, and evaluation, while others yet have revamped their favorite versions of Deontology or Utilitarianism by complementing them with morally justified virtue theories (e.g., [27,28], among utilitarians; and [29], among deontologists).

Overall, the work carried out to bring VE back has been quite significant[7]. It has sharpened both VE itself and the moral systems that previously obscured it, greatly enriching our contemporary ethical vocabulary and conceptual toolbox. So equipped, we met the ecological crisis.

2. Environmental Ethics

The philosophical discipline that first engaged this crisis is Environmental Ethics (EE), the origins of which as an independent field of academic study are customarily spatiotemporally located in early-1970s North America and synchronized with the peak of US environmentalism as a political movement [50–52]. EE's guiding idea has always been that thinking differently—basically, non-anthropocentrically or at least less anthropocentrically—about nonhuman entities will also lead to acting differently (less exploitatively) toward and regarding them. In particular, a more thorough consideration of the value(s) of nonhuman entities would lead to the recognition of their moral standing and the articulation of human responsibilities (of beneficence, respect, care, justice, and solidarity) toward and regarding them.

The founding philosophical move of EE is a critical denunciation of a cornerstone of Western thought, namely anthropocentrism—an understanding of the human station within the wider workings of things as, in various ways, exceptional, justifying "humans first" or even "humans only" axiologies and normativities. These anthropocentric axiologies and normativities have roots in antiquity, gained strength through Christianity [53] and were then consecrated by modernity with the metaphysical schism practiced by Descartes in the early 17th century—the division of being into *res cogitans* and *res extensa*. Descartes' allocation of mentality exclusively to humans among all bodily beings implied human

exceptionalism (see, among others, [54], for a discussion). The latter, in turn, can justify forms of anthropocentrism.

Ontological anthropocentrism baptizes human beings as the end or reason for which everything exists and works in the way that it does. It is often accompanied, but does not entail nor is entailed by, *moral anthropocentrism*, which holds that human beings are morally superior to everything else in the natural order. This can justify axiological anthropocentric instrumentalism—the thesis that the nonhuman has value only and insofar as it is useful to the realization of the value of the human. Such instrumentalism, in turn, can justify an anthropocentric normativity that selects actions, practices, or policies exclusively on grounds of what good they do for humans and regardless of the ills they may bring to nonhumans. Finally, *conceptual anthropocentrism*, which is neither implied nor implies its ontological and moral counterparts, holds that human beings can only encounter and comprehend the world from a characteristically human vantage point. Different theories may present that vantage point as either privileged or just one among many and as either empowering or limiting[8].

These distinctions were not always kept clear in the early days of EE, but what environmental ethicists really took issue with was, and still is, moral anthropocentrism. That was, and still is, widely believed to be the ideational root of all ecological travails, degradation, and destruction that humans, especially affluent Western humans, have brought about, particularly in the last five centuries, with colonialism first and industrialization later[9]. Therefore, many thinkers past and present have seen moral non-anthropocentrism as something of a pre-condition for any plausible, stable, and incisive EE[10].

A central research domain in which this question has been explored is that of nonhuman axiology, with a focus on the notion of intrinsic moral value and the question of whether and which nonhuman entities possess it and on what grounds. Environmental ethicists have traditionally thought that the normative demands of obligatory non-anthropocentrism (or the limits of justifiable anthropocentrism) could be made to follow from the results of such axiological exploration.

2.1. Values

By intrinsic value, environmental ethicists will at least mean non-instrumental value. Based on this interpretation, nonhuman entities that have intrinsic value are valuable for their own sake: they have what, in value theory, is sometimes called final value [60–62]. With a stronger interpretation, intrinsic value means non-relational (or non-extrinsic) value—that is, value that nonhuman entities may possess simply based on grounds of their own features alone, quite apart from whatever relations they may happen to entertain with anything else (including, but not limited to, relations with humans). On this stronger interpretation, what has intrinsic value matters not just for its own sake but also in its own right and has what may be called freestanding value[11].

Historically, there has been something of a hierarchy—at times made explicit, more often left implicit—in the sorts of values that environmental ethicists have thought nonhuman entities to have, and this hierarchy has mostly tracked the anthropocentric vs. non-anthropocentric divide. Basically, the more anthropocentric a value, the lower its ranking; the less anthropocentric a value, the higher its ranking. So, in the scale of values, instrumental value is typically thought to rank lower than intrinsic value, and non-instrumental intrinsic (final) value is often thought to rank lower than non-relational intrinsic (freestanding) value. The beings thought to bear such different values are typically ranked accordingly: entities of freestanding value are thought to have higher axiological status than entities of final value, and both are thought to have higher axiological status than those that are valuable merely instrumentally. In EE, entities of freestanding (intrinsic non-relational) value have been thought to have direct moral standing, entities of final (intrinsic relational) value have been thought to have derivative moral standing, and entities of instrumental value have been thought to have no moral standing whatsoever.

EE's primary focus has mostly been on establishing, wherever possible, the freestanding moral value of nonhuman entities. This has widely been thought to be the most solid axiological basis for non-anthropocentric normativity. Sentientists argued that individual nonhuman animals have such value because they are sentient [65]. Biocentrists argued that all individual organisms have such value because they are alive [66]. Ecocentrists argued that all ecosystems, understood as ontological units, have such value on grounds of their internal complexity, diversity, integration, evolvability, and other features deemed to be morally relevant [67–69][12].

Immediately below in the ranking of values is relational final value, which comes in two versions and thus involves a sub-ranking. In one version, ranking higher, the relations grounding the final value of nonhuman entities are not anthropocentric. For example, ecocentrists who argued that ecosystems, understood as ontological units, have freestanding value also typically argued that all ecosystem members, from humans to rivers and on equal footing, have relational final value as parts of an ecosystem that is valuable, and each to the extent that it is a valuable part to such ecosystem (contributing, for example, to its complexity, integration, diversity, and evolvability). Non-anthropocentric relational final value can still support a fully non-anthropocentric normativity.

Not so the other version of relational final value. Here, the relations grounding the final values of nonhuman entities do involve humans, with their perspectives, systems of meaning, and larger axiological and normative constructions. These are aesthetic, scientific, historical, cultural, and sacred/religious relations, which make nonhuman entities important to humans in ways that are more than merely instrumental. All those thinkers who have insisted on the manifold meanings that nonhuman entities have for humans have been concerned with relational final value [70,71]. Yet these thinkers—at least during the first decades of EE's development as a discipline—have been relatively few compared to those who engaged in the search for non-relational freestanding value. This is somewhat surprising, considering that many nonhuman entities have vast amounts of anthropocentric relational final value(s)—of many varieties and disseminated across space, time, and cultures.

One reason may simply be that such value, as noted, is anthropocentric, and that is not what many environmental ethicists were looking for because it seemed to not provide a solid grounding for non-anthropocentric normativity, which was the normativity they wanted. Another reason may be that much of the anthropocentric relational final value of nonhuman entities is non-moral value, which is also not what many environmental ethicists were looking for because what they wanted their axiology to deliver were moral obligations toward nonhuman entities, not (or at least not primarily) aesthetic, scientific, historical, cultural, and sacred/religious reasons for acting one way or another toward or regarding them. A third reason for the relative neglect of anthropocentric relational final value in/by EE may be that such value can be incorrectly construed, or conflated, with instrumental value, and instrumental value occupies the two lowest ranks in the hierarchy of values that nonhuman entities have been thought to have.

Next to last sits non-anthropocentric instrumental value. This is very rarely discussed in EE, although innumerable nonhuman entities use and are used by one another in myriad ways. Humans themselves have non-anthropocentric instrumental value for many nonhumans in various circumstances (for example, when they steward them in gardens or restoration projects, when they feed and nurture them as pets in their homes, when they host bacteria or provide breeding grounds for viruses in their guts, etc.). Emphasis on non-anthropocentric instrumental value effectively brings the human down to the level of an instrumental node in a wider multi-species, multi-realm network of interconnected use, on a par with all other entities. It thus highlights a basic, factual condition of axiological equality.

Leveling down the human in this way, however, does not pair well with the moralization of the nonhuman, which rather wants to bring the nonhuman up to the (allegedly higher) axiological level of humans[13]. Such moralization is the task that many environmental ethicists, in their different ways and domains, have traditionally set for themselves. The

study of non-anthropocentric instrumental value has accordingly not enticed them much, as it seems to deliver no normative directives for humans toward nonhumans because the intrinsic nonhuman values that are typically thought to ground these directives are absent. The value is certainly non-anthropocentric, but only because it is a-centric generally. This seems to be no fertile axiological ground for other-regarding obligations of any kind among any beings.

Finally, the lowest of the low in the eyes of many environmental ethicists is anthropocentric instrumental value. Such is the value that nonhuman entities have merely as a means to human benefit. Nonhuman entities can have exorbitant amounts of anthropocentric instrumental value, but if that is all the value that they (can be shown to) have, then they have no moral standing of their own. The normative upshot is that it is entirely permissible for humans to use nonhumans in view of human benefit alone. Nonhumans may be used wantonly and exploitatively or cautiously and gently, but even that will be decided only according to obviously and exclusively instrumental anthropocentric considerations. For many environmental ethicists, this is literally not a good enough basis for normativity.

This overview oversimplifies very complex and subtle debates. Even so, one element should emerge quite clearly: the nonhuman values that EE has mostly focused on, and upon which it has built its main theoretical postures and normative constructions, have been mostly limited to two sorts, both of which are non-anthropocentric—namely freestanding intrinsic value (for sentientists, biocentrists, and ecocentrists looking at ecosystems whole) and non-anthropocentric relational final value (for ecocentrists looking at ecosystem members). In addition, in its search for nonhuman moral standing, EE has typically focused just on the moral or morally relevant variants of these values.

These may well have been the most important values to focus on, and doing so might have been the most theoretically innovative and practically urgent action that EE could take. Nonetheless, non-anthropocentric moral values simply do not exhaust nonhuman axiology, which is rather richer and far more nuanced. Although anthropocentric non-moral and yet still final values, non-anthropocentric instrumental values, and anthropocentric instrumental values have obviously not been absent from EE's radar entirely, they have not managed to shape its theoretical configurations and preoccupations with the same intensity and systematicity as non-anthropocentric moral ones have. Yet all these values can provide humans with reasons, including extremely strong and strongly felt reasons, to respect, protect, and steward nonhuman entities. These reasons are somewhat sidelined once moral ones take center stage.

2.2. Normativity

As already noted at various junctures, many environmental ethicists, particularly early in the development of the discipline, saw it as their task to establish intrinsic non-anthropocentric moral value and, with that, the independent moral standing of nonhuman entities, in view of a non-anthropocentric form of normativity that could establish precise moral obligations of humans toward nonhumans. Most attention was devoted to, and most controversy occurred about, the first step of this sequence, devoted to value/standing. Fewer thinkers questioned the next step—from standing to non-anthropocentric moral obligations. Yet including an element within a moral community does not necessarily imply a requirement for human agents to respect it, preserve it, promote it, etc. For example, mosquitos may have moral standing, but there might nonetheless be excellent and in some cases overwhelming anthropocentric reasons to exterminate them, for instance, when they act as disease vectors[14]. Some virulently invasive plants may have moral standing, but there might nonetheless be excellent and in some cases overwhelming non-anthropocentric reasons to exterminate them, for instance, when they cannibalize the spaces and resources of native and typically more diverse and ecosystemically integrated plants.

The reasons for which morally considerable nonhuman entities may be protected or killed, left alone or appropriated, and revered or exploited may be anthropocentric or non-anthropocentric but, either way, they will be reasons for us humans. Something must

intervene at the juncture between axiology and normativity to turn the former into the latter, and however non-anthropocentric the axiology and the normativity, what turns the former into the latter are humans and facts about us and our modes of being. Even nonhuman values that have nothing to do with us (freestanding value but also non-anthropocentric final value) need to become or be made ours in some way or another before they can normatively direct us in some way or another. These values need to concern us, make sense to us, and perhaps even make sense of us before we can begin to see the ways in which we should be concerned about them and create within our individual and collective lives the conditions to adequately express these modes of concern [74–76] (p. 113). This is not to deny that the intrinsic non-anthropocentric values of nonhuman entities can or even should guide our behaviors but to underscore what it takes for them to do so.

Unsurprisingly, B. Williams, in his only brief incursion into EE, was eager to make just this point: axiological and normative questions about nonhuman values must be asked and answered as questions about values and norms "that human beings can make part of their lives and understand themselves as pursuing and respecting" [25] (p. 234). Otherwise—one may hear him continue—EE will either simply fail to become relevant or become yet another set of external constraints (however solidly grounded and justified), plotted against an agent's lived experience, in this case their experience of and with nonhuman entities. The nuances, complexities, and contradictions of such an experience may thus fail to be fully represented, and the experience itself will be regulated but not necessarily enriched, better understood, or made more meaningful thereby.

So, it is not just whether given nonhuman entities should be addressees of human obligations—a question that the establishment of their intrinsic moral value was thought to resolve—but also what these obligations are and how they should be fulfilled. Asking these questions is to ask how these obligations fit, or can be made to fit, into our individual and collective lives given the lives that these are, and answering them will inescapably require taking into account the particular combinations of, as well as trade-offs between, values (intrinsic and extrinsic, moral and nonmoral, and anthropocentric and non-anthropocentric) that will be at stake in specific circumstances given all the value-bearers involved (human and nonhuman animals, all other living organisms, species, ecosystems, landscapes, etc.).

The general point is that whichever entities are ultimately shown to have intrinsic value, normativity will not just simply follow. Normative directives will still need to be built on the ground, balancing in each particular case a plurality of values (intrinsic as well as extrinsic) and reasons, and possibly a variety of obligations (some of which might also be conflicting), and then selecting this or that particular course of action as the most adequate (feasible, useful, sustainable, legitimate, and fair) in the circumstances. Given such a plurality of values, reasons, possibly conflicting obligations, and adequacy standards, it is implausible to expect that the contents of the most adequate response will always be identifiable simply by spotting intrinsically valuable entities and then applying a restricted set of universalist rules and principles to determine courses of action for or regarding them. At least in many cases, the practical wisdom that is part of virtue will be indispensable to identifying the contents of the most adequate course of action[15].

And then, once such a course has been identified—even if clearly obligatory, and whatever its contents and nonhuman addressees—it will also need to be effectively pursued in real life every day. Alas, it is perfectly possible to know the best and still do the worst—that is, to act akratically. *Akrasia* already infests our moral comportments toward humans, and it seems it should find even easier terrains when one's obligations are toward nonhuman entities which, unlike humans, usually have little to no power to plead, protest, or retaliate if these obligations go unfulfilled. To know the best and also do it in such circumstances will take fortitude as well. The latter is the virtuous agent's bastion against *akrasia*.

So, two central elements of VE, practical wisdom and fortitude, will need to power even obligation-based versions of EE that recognize intrinsic value to nonhuman entities. Even an agent who acknowledges their obligations toward intrinsically valuable nonhumans will often need to exercise practical wisdom to place and understand these obligations

within the larger context of their life and to determine what actions to take to fulfil them in specific circumstances; and they will also need fortitude to follow up on that determination in action despite powerful incentives not to do so.

This suggests that, at least in EE, the meta-virtues of practical wisdom and fortitude will be of instrumental importance also to utilitarians and deontologists. The former will define them as character traits that yield utility, and the latter as character traits that propel the reliable fulfilment of duties. But environmental virtue ethicists will want more. They will want virtue to be foundational rather than just an aid to differently grounded systems.

3. Environmental Virtue Ethics

An (eudaimonistic) environmental virtue ethics (EVE) will include an account of the role of nonhuman entities, and virtuous relations therewith, in and for a prudentially good human life; in other words, it will explain how developing and exercising environmental virtues will benefit the agent by opening them up to experiences, goods, sources of meaning, knowledge, etc., that would instead be unavailable to the non-virtuous. EVE's evaluative focal point will be character traits, and its normative standards will be environmental virtues, that is, prudentially valuable character traits whose development and exercise involve responsiveness toward nonhuman entities and their values. It will provide a catalogue of such virtues and indications regarding which practices will enable and require the agent to develop and exercise them[16].

Environmental virtue ethicists have argued that EVE, though anthropocentric, is an adequate reference framework for EE. In what follows, I size up this claim against the themes that have been given prominence in this article so far–nonhuman values and the issue of anthropocentrism (with no implication that no other themes exist that may also be relevant to an assessment of EVE's overall adequacy as a reference framework for EE)[17].

3.1. EVE and Nonhuman Moral Values

EVE simply bypasses the whole intrinsic-value-to-non-anthropocentric-moral-obligations format that has been so popular in EE. EVE is concerned with prudential reasons rather than moral obligations, and that is enough to eliminate the theoretical need for nonhuman intrinsic (freestanding) moral values. To do so is not to deny the existence and importance of such values, but it emancipates EVE from having to prove their existence and importance prior to launch. In the previous section, I noted that, by themselves, these values are often not sufficient bases for normativity even for obligations-based EE; EVE has it that they are not necessary either.

EVE takes all nonhuman entities, regardless of whether they have freestanding or other varieties of value, as ethically considerable—that is, as all involved in, and relevant to (though each in its own ways, roles, and contexts), the goodness of a human life. Different virtues are responsive to different entities and their different intrinsic as well as extrinsic properties in different ways (via different actions, reactions, inactions, and practices). Different virtues are also responsive in different ways to the different sorts of values that these nonhuman entities may have (from freestanding to anthropocentric instrumental value), and it is the job of practical wisdom to adjudicate which virtues should be more centrally or urgently operative in response to which values in particular situations [76] (pp. 40–42).

So, EVE can be theoretically lean, axiologically flexible, contextually alert, and practically inclusive. These are all good things. Nonetheless, in this framework, emphasis is lifted from nonhuman intrinsic moral values and the establishment of non-anthropocentric obligations, and is instead placed on the agent's search for a good life and their prudential reasons for pursuing it by acting in certain ways and not others. The worry is that EVE might be an anthropocentric quicksand. Under its lens, for example, the freestanding values of nonhuman entities no longer seem freestanding but are rather derived from the value of a good human life. And what makes a character trait a virtue is its contribution to

a human life being prudentially good for and from the perspective of the agent who lives it—not its contribution to that life being morally good toward nonhuman entities[18].

Regarding the first concern, EVE does not claim that nonhuman entities derive all their values from their contribution to the goodness of human lives. EVE rather claims that the goodness of a human life is enabled and constituted (at least partly) by the agent's developing and exercising character traits that adequately respond to the values of non-human entities, including freestanding values as much as any other sort of values these entities may (be shown to) have. It is the character traits that one develops and exercises as a response to the intrinsically valuable sentience of animals, the aliveness of plants, and the complexity of diverse ecosystems, whose ethical value (their status as virtues or vices) derives from their contribution to the goodness of the agent's life, not the freestanding moral value of the animals, plants, and ecosystems to which these character traits respond. To count as a prudentially good environmental virtue, a character trait might well have to also respond to non-anthropocentric moral demands posed by intrinsically valuable nonhuman entities.

Regarding the second concern, although the theoretical justification for developing and exercising an environmentally virtuous character trait is anthropocentric and prudential, considerations about what makes a character trait a virtue do not guide a virtuous agent's actions and practices; instead, the virtues themselves do [93] (p. 439). In various circumstances, some of these virtues may well countenance reasons for actions and practices that respond to non-anthropocentric moral demands. Whatever the anthropocentric, prudential benefits of engaging nonhuman entities virtuously, in many cases, for these benefits to accrue, the engagement must be with these entities as ends in themselves—much as is the case among humans when relating to friends [94,95].

As noted, EVE need not deny the existence or importance of nonhuman freestanding moral values. What EVE is concerned about is the ways in which humans should appreciate and respond to nonhuman values as they attempt to live a good human life. That includes freestanding moral values but it is also not limited to them, simply because even if/when nonhuman entities (can be shown to) have such values, they hardly ever have these values only. Most nonhuman entities are also extremely likely to have final non-anthropocentric value (as elements of valuable ecosystems) and non-anthropocentric instrumental value (as means for other nonhumans—for example, as food, pollinators, mates, and habitats) Many nonhuman entities are also likely to have anthropocentric non-moral final values (aesthetic, cultural, etc.), as well as anthropocentric instrumental values. EVE sees none of these many sorts of nonhuman values as constitutively pre-eminent, at least not in the sense that responding virtuously to that sort of value should automatically dispense the agent from responding virtuously to the others. Each and all sorts of nonhuman values provide the virtuous agent with some reasons to act in certain ways and not others. It will be practical wisdom that indicates which values and reasons matter most in particular cases and how virtuous responses should be accordingly modulated.

Freestanding moral values will provide a virtuous agent with reasons for valuing their bearers intrinsically and responding accordingly [96]. Other sorts of values that these bearers might have will provide reasons for valuing and responding to them differently; and of course, other contextually relevant bearers might have various values of their own. Even if intrinsic values may be stable, some of these other values will shift as they will be triggered, reinforced, weakened, changed, or annulled by circumstances. An environmentally virtuous agent will have rich and nuanced capacities to appreciate all the values involved in given circumstances and their contextually shifting combinations and thus to appreciate the varieties of reasons dynamically soliciting the exercise of different virtues in different cases. But again, while EVE is indeed open to the many and diverse sorts of values that nonhuman entities can have and is thus alert to a wide variety of reasons for exercising virtue—including anthropocentric instrumentalist reasons, such as those typically enshrined in sustainability policy documents—EVE presumes not that any specific sorts of values and reasons should take systematic precedence over the others,

taken either singularly or in concert. Hence, it also presumes not that anthropocentric instrumental values and reasons should take systematic precedence over all other varieties of values and reasons, taken either singularly or in concert.

It could be objected that EVE indulges a different, deeper form of anthropocentric instrumentalism: whatever actions a virtuous agent takes they take to live a good life that is good for them in their own eyes [92]. Verily, the virtuous agent is using the nonhuman entities that they treat virtuously to achieve a good life for themselves. Environmental virtues are thus means, and the nonhuman entities toward or regarding which these virtues are developed and exercised are, as it were, the means of means.

This might be an objection to the virtuous agent's motives, or to the structure of EVE as a theory (or both). Regarding the motives, as noted just above, it is widely recognized among environmental virtue ethicists that for the prudential benefits of exercising virtues toward and regarding nonhumans to accrue to the agent, these entities must often be engaged with as ends in themselves: engaging them as means to an end invalidates the very possibility of reaching that end. So, if the objection charges the agent with intentionally instrumentalist motives, whereby the agent does what they do because they believe that doing so will help them to achieve *eudaimonia*, then the charge is not only that the agent is objectionably anthropocentric but also that they are practically unwise. Yet a practically unwise virtuous agent is a wild theoretical (and practical) anomaly. So, the agent that the objection targets, with their objectionably anthropocentric/instrumentalist motives, is likely not to be an environmentally virtuous agent.

If the objection is to the structure of EVE as a theory, for it to bite it must be presupposed that the exercise of virtue is an efficient cause of a good life, with such a life understood as something other than the exercise of virtue—as an effect produced by and external to it. But it is a constant leitmotiv of VE, and EVE, that the exercise of virtue is rather (at least partly) constitutive of the good life, or an immanent cause of it, with a good life inhering (at least partly) in the very exercise of virtue. Rather than an efficient means to the good life, then, the development and exercise of virtues are better described as immanent modes of it. And if the good life also inheres in the exercise of environmental virtues, and the exercise of environmental virtues enables and requires the agent to adequately respond to the values of nonhuman entities, including freestanding as much as any other sort of values—then the exercise of environmental virtue is anthropocentrically instrumentalist only in substantively unthreatening senses of both "anthropocentric" and "instrumentalist". This should go some significant way in deflating the objection.

3.2. EVE and Nonhuman Nonmoral Values

Because EVE, like VE more generally, is not in the business of articulating moral obligations, it does not restrict its attention to specifically moral values, nor to specifically moral virtues. So, among the reasons for the development and exercise of virtues, there may be, in addition to intrinsic moral values, the relational anthropocentric nonmoral final values (aesthetic, scientific, historical, cultural, and sacred/religious) of nonhuman entities and their anthropocentric as well as non-anthropocentric instrumental values. And among the virtues, there will be intellectual virtues (virtuous ways of thinking about human-nonhuman relations, for example, openness and ecological sensitivity)[19], aesthetic virtues (virtuous ways of experiencing and appreciating nonhuman aesthetic qualities, for example, wonder and attentiveness)[20], and socio-political virtues (virtuous ways of relating among humans when nonhumans are also involved, for example, cooperativeness and justice, and/or virtuous ways of relating to nonhumans, for example care and respect)[21].

According to EVE, a good life is one in which an agent's capacities to appreciate and adequately respond to nonhuman values enable and/or constitute (at least partly) the agent's enjoyment of those very values. Now, much of the prudential goodness that EVE promises to the virtuous agent lies in their enjoyment of the anthropocentric relational nonmoral final values of nonhuman entities. It is often through the protection and promotion of these values that the agent can valorize those emotions, attachments, commitments, and

other realities of their individual life that involve, refer to, or depend on the manifold meaning(s) that nonhuman entities can have. As noted in Section 2, theoretical consideration for what nonhuman entities mean for humans has traditionally not been a signature of EE. EVE is more interested in and hospitable to it[22].

Meaning emerges from the mental ability to "connect things" [103]. Any anthropocentric relational final value that nonhuman entities can have depends on humans connecting them to other "things" (beliefs, values, objects, persons, narratives, etc.)—typically on aesthetical, scientific, historical, sacred/religious, and generally cultural grounds. This makes human sense of nonhuman entities, often as a part of larger attempts to bring a structured coherence to the human experiences of such entities and to position these experiences within some version of a "bigger picture". In this way, nonhuman entities acquire forms of significance for humans, and in many cases, come to matter personally to individuals as well as collectively to peoples, becoming in various ways entwined with human self-conceptions and cultural identities.

Such entwinement explains why exercising virtues toward or regarding nonhuman entities can be a source of meaning in and for one's own life, when that life is seen as connected in valuable ways to these entities and the exercise of virtues toward or regarding them is seen to correctly valorize such connections. One's life acquires meaning through the exercise of environmental virtues when that exercise makes that life cohere with larger structures of value, belief systems, and traditions, and when it connects one's present actions with the future persistence and furthering of such structures, systems, and traditions, thus providing a sense that one's life also matters to "the bigger picture". This sense of meaning is a powerful component of prudential goodness [104], and the search for it provides strong reasons for individuals and collectives to exercise virtues toward and regarding nonhuman entities, including virtues of stewardship such as loyalty and diligence [105].

Finally, EVE has no disdain for the instrumental values, both anthropocentric and non-anthropocentric, of nonhuman entities. Indeed, the material component of the prudential goodness that EVE promises to the virtuous agent lies in the (virtuous) enjoyment of the anthropocentrically instrumental values of nonhuman entities. These values are, of course, very notable, as nonhuman entities—now understood as goods, capital, services providers, and the like—can be necessary to human life, agency, and the very exercise of virtue [82]; to the initiation and continuation of valuable human projects [94]; and to the maintenance of social and political stability. This all provides strong reasons to exercise virtues of sustainability (including temperance and farsightedness) and virtues of environmental activism (including cooperativeness, perseverance, and creativity)[23]. These virtues focus on how best to structure and manage our uses of nonhuman entities to the advantage of all humans and ensure their availability for all humans to use into the future. Yet the very same virtues can also respond to non-anthropocentric values and be focused on creating and maintaining the conditions for, for example, retaining a climate congenial to the survival of nonhuman species, sustaining a resource base sufficient to the replenishment of ecosystems, ensuring that enough pollinators remain active in given areas, containing the spreading of invasive organisms, and other non-anthropocentric actions, practices, and policies[24].

4. EVE and Global Climate Change

In the early 1990s, global anthropogenic climate change (CC) was officially added to the list of planetary environmental challenges, which already included resource depletion, pollution, and biodiversity loss [108]. The consensus was that a changing climate could be anticipated to have pervasive, transformative effects at all scales, from the planetary to the cellular, many of which would be uncongenial to *sapiens* and other species. Over the next thirty years, climate science solidified—yet climate diplomacy squabbled, climate governance stalled, average global temperatures continued to rise, and the effects of CC became increasingly significant and apparent the world over [109].

CC shot EE to new heights. It posed unprecedented theoretical challenges; connected the discipline to many other research programs across the sciences; and, in a (perhaps dark) sense, valorized it in the eyes of a wider public, simply because it raised the stakes of so-called "environmental problems" so vertiginously. The lives and well-being of billions of present as well as future people are now known to be on the line, along with the preservation of large chunks of the Earth's and *sapiens'* natural and cultural heritage, the stability of ecosystems, and the persistence of uncounted species. In addition, CC challenged social, economic, and political institutions at all scales—whose rationality, efficiency, sustainability, legitimacy, and justice were (are) all called into question by its planetary, multifarious ills and risks (for a wide-ranging treatment of the philosophy of CC, see the essays in [110]).

CC is a planetary, intra- and inter-generational collective action problem that feeds on the accumulation of individually innocuous everyday actions and behaviors, such as driving cars and consuming imported foods; it enmeshes causal responsibilities in complex ways, and it harms and burdens humans and nonhumans dispersed across space and time. Given these (and other) features, CC seems to overwhelm individual moral agency: no one causes nor can ever fix it in isolation; no one intends to bring about the badness and injustices that it mobilizes; and indeed, no one brings about any specific instances of such badness and injustices by contributing to CC with their everyday fossil-fueled actions and behaviors. For these (and more) reasons, some philosophers have argued that our moral theories are mostly incapable of generating individual moral obligations not to engage in those everyday actions and behaviors (see, among others, [111]; for an overview of the complex debate on individual responsibility for climate change, see [112]).

M. Midgley has called this insufficiency of our moral systems in articulating the connections between the individual and the planetary a "conceptual emergency [113] (p. 40). S. Gardiner [114] (p. 41) has denounced it as "theoretical ineptitude" that fuels moral corruption. Some have also argued that such insufficiency or ineptitude is part of a much larger difficulty. D. Jamieson [109] has diffusedly explained the many ways in which our psychology, cognitive schemes, value systems, normative criteria, and institutions—evolved as they have in low-density, low-tech societies—are mostly at a loss when confronted with CC, and B. Latour [115] has examined the incongruences between this challenge and the interpretive, emotional, symbolic, and ideational tools made available by our (Western) cultural repertoire and inherited understanding of the human station within the wider workings of things. Ultimately, these and other thinkers have suggested, whether explicitly or implicitly, that what is at stake with CC is the very tenability of our (Western) conception(s) of the good life and our ability to still find meaning in such life as we remake the planet.

The recalcitrance of CC to our individual-obligation-generating moral systems; the depth of its cultural, philosophical, and existential premises and implications; and the power with which it threatens our very idea of what a good, meaningful human life is, has led many environmental ethicists to EVE [116]. In this connection, EVE can be used both as an upper, as it were, and as a downer.

As an upper, EVE functions as a reflective framework for processing the premises and implications of CC and revising conceptions of the good life accordingly, as well as a normative framework in which individuals can experiment these new, climate-wiser conceptions through different practices with different effects on both humans and nonhumans [88]. In this scenario, the development and exercise of virtue enables and requires individual empowerment, both intellectual and practical, considering this planetary challenge and in view of structuring more savvy and effective forms of its societal management. This empowerment, which can be seen as a form of ethical adaptation to CC, is to be pursued through "experiments in living", in J. S. Mill's apt words: new conceptual, practical, cultural, technological, and institutional (re-)arrangements that finely disregard the status quo and try alternatives. Ideally, such experiments should be capable of prompting systemic reform if adequately scaled up, and interpersonal coordination upon them should be as easy as possible to achieve [90]. Individuating and even inventing these experiments in

living, personally engaging in them, and promoting and sustaining coordination upon them is one way to retrieve one's agency in the face of CC and possibly also find new sources of meaning in one's life amidst planetary changes (for more on CC and meaning in life, see [117]).

I have argued elsewhere that networked, food-producing urban gardening is one such climate-wise environmentally virtuous experiment in living [90]. Of course, there may be many others: while one individual grows their own food, another may be changing their teaching topics and practices; another may be searching for ways to calculate and price carbon emissions more precisely; another will organize weekly strikes, or campaign for the rights of nature; and another will push for the establishment of green courts, science courts, nonhuman institutional representation schemes, a global constitution, or other institutions for the future.

From this perspective, EVE is also environmental virtue politics (EVP). Given the nature of CC, EVE/EVP must be multi-scalar, ranging from global/multi-generational to local/individual. This means that EVE/EVP requires accounts that connect and explain the connection between planetary goodness (which, not to forget, must also be multi-species in most versions of EVE) and the goodness of local, situated, individual virtuous lives. Given such demands for multi-scalarity, using EVE/EVEP as an upper in the face of today's ecological challenges is itself very challenging in both theory and practice.

It is also tempting to use EVE as a downer, for however empowered by and through experiments of living, and however interpersonally well-coordinated these experiments may be, a virtuous agent confronting CC will still have extremely little power. CC remains a transformative phenomenon of planetary proportions involving, in a wide variety of different ways, billions of humans and nonhumans across time and space and mobilizing human and nonhuman forces of monumental complexity that are still only partially understood. However virtuous an agent is, Earth's climatic future is mostly out of their hands, and even well-coordinated experiments that can prompt systemic reform are neither guaranteed to achieve nor to secure that reform. Still, an agent is virtuous not because they achieve some final success but rather because they steadfastly strive for it by exercising effort, skills, wisdom, and fortitude even in the face of probable failure, and even as a way of facing that failure [109,118].

In such circumstances, exercising virtues will reward the agent with prudentially precious self-acquiescence. This is an ancient theme in VE—going back to Epictetus at least—that is easily repackaged for contemporary times: none of us can control the climatically incongruous behaviours of other people, states, companies, and global institutions, nor the nonhuman forces that these behaviours unleash, but each of us can try to refine our evaluations of, and responses toward, these uncontrollable human and nonhuman factors so as to control at least our own ways of living with them. Then, says VE, forms of pacification will follow.

Perhaps this notion of virtue as hard-won self-acquiescence in the face of the overwhelming was best articulated by B. Spinoza in his *Ethics*:

> Human power is very limited and infinitely surpassed by the power of external causes. So we do not have an absolute power to adapt things outside us to our use. Nevertheless, we shall bear calmly those things which happen to us contrary to what the principle of our advantage demands, if we are conscious that we have done what we had to do, that the power we have could not have extended itself to the point where we could have avoided those things, and that we are a part of the whole of nature, whose order we follow. If we understand this clearly and distinctly, that part of us which is defined by understanding, i.e., the better part of us, will be entirely satisfied, and will strive to persevere in that satisfaction[25].

Obviously, the worry with using EVE as a downer is that it might foster squeamish forms of quietism, or even resignation, just when action is needed most. But the worry is misplaced, and in the last line of the quote above, Spinoza explains why. To "persevere in that satisfaction" of self-acquiescence is to "strive"; self-acquiescence is never final and

there is no acquired entitlement to it, and thus, there is no relenting and no resignation in it. As the climate changes and the planet is remade, we will need to persevere in thinking and acting virtuously and do so knowing that what Spinoza calls "the whole of nature"—humans included—surpasses us infinitely in power. So, engaging in experiments of living in the face of CC will also enable and require the development and exercise of a peculiar, self-acquiescing form of clear-mindedness that still counsels further engagement, whereby the sobering acknowledgement of one's vertiginous insufficiency accompanies without contradiction a constant, unending striving toward self-empowerment [109,118].

This tells us that when it comes to CC, to use EVE as a downer is also always to use it as an upper and vice versa. And as Spinoza would also tell us, there is only extremely limited self-empowerment without the empowerment of others and thus no ethics without politics [119]. In the face of overwhelming ecological changes and challenges, even self-acquiescence requires experimenting, and even self-concern requires coordination with others. EVE is both an upper and a downer, and all EVE is also EVP.

What about obligation-based, non-anthropocentric EE in all this? No illuminating indications have come from that direction with respect to CC yet. It is mostly unclear how CC should be thought of from the perspective of value positions such as sentientism, biocentrism or ecocentrism, and how these positions look at certain forms of climate adaptation or geoengineering. No solid position has been reached on whether CC provides justification for strongly interventionist environmental policies and on whether there are obligations to preserve intrinsically valuable nonhuman entities facing climate-induced extinction or transformation. It is also controversial that the idea of "climate justice" can meaningfully be extended to nonhumans. Perhaps most importantly, obligation-based non-anthropocentric EE has not yet provided a clear assessment of the extents of convergence or divergence between anthropocentric and non-anthropocentric theoretical and practical approaches to CC, nor clear pronouncements on the moral acceptability of possible divergences.

EVE might be a few steps ahead compared to non-anthropocentric EE regarding CC, but it has its own matters to attend to. From what has been said in this and previous sections, at least two stand out. First, as noted just above, with CC, there is a need for both a theory and a practice of these continuous transitions from agent to planetary scales and back, and from individual self-concern to societal and indeed species-level arrangements, including cultural and institutional arrangements—in other words, the systematic remodulation of EVE into EVE/EVP. This is no small feat considering that, being prudentially focused, VE is originally a self-centered form of ethics [120–123].

Here, EVE can move in at least three different but compatible directions. First, it can explore the theoretical configuration, practical development, and exercise of specifically political virtues of sustainability, stewardship, and activism—such as justice, loyalty, and cooperativeness [101]. Second, it can configure a form of virtue politics which, in Western democratic contexts, typically means loosening liberalism in favor of perfectionism and typically goes by the name of civic republicanism [124]. And third, it can move in Spinoza's own, characteristically radical direction to rethink the self—the very self on which VE is centered, from atomistic to intrinsically relational and indeed ecological: one with "the whole of nature", human and nonhuman [125].

This leads to the second matter that EVE needs to attend to—the very topic of this article: its relations with nonhuman intrinsic values and its anthropocentrism. Even if, as I have argued, EVE enables and requires a rich and nuanced engagement with nonhuman values of all sorts and neither presupposes nor implies moral anthropocentrism, the fact remains that most of the thinking about virtue that has been carried out throughout Western history has indeed been morally anthropocentric, even with those rare thinkers, like Spinoza, who did deny ontological anthropocentrism[26]. Most of what we think virtue is has been built upon morally anthropocentric foundations. In questioning such foundations, EVE might be well equipped but is nonetheless venturing into largely unchartered waters, which it enters in a particularly stormy time of planetary ecological changes and challenges,

as well. In addition, precisely because EVE enables and requires a rich and nuanced engagement with nonhuman values of all sorts and neither presupposes nor implies moral anthropocentrism, the EVP that EVE must somehow always also become in the face of these ecological changes and challenges needs to be multispecies, and we—and our current political theories and institutions—have virtually no experience with that [126].

5. Concluding Remarks

In this article, I suggested that EVE enables and requires a rich and nuanced engagement with nonhuman values of all sorts. While promising prudential goodness to the agent, EVE neither presupposes nor implies moral anthropocentrism. EVE denies the theoretical primacy but not the existence and importance of non-anthropocentric intrinsic nonhuman values. It accepts that these values can and possibly should guide human behavior in the context of our individual and collective projects of living well, and, indeed, it might affirm that all the more strongly in times of CC. It does not suggest that nonhuman value is derivative from human value, including the prudential value that EVE promises to the agent. It does not assign moral standing to humans only, and it accepts that there might be circumstances in which the interests of nonhumans may obligatorily override those of humans. It does not claim any privileged ontological role of humans. It only claims that a good human life is one that includes a rich and nuanced engagement with nonhuman values of all sorts, and that the exercise of environmental virtues not only enables but also constitutes (at least partly) such a life.

Still, however well-equipped EVE may be, its tasks are daunting. Virtue is human virtue, and in discussing human virtue, Western philosophy has traditionally assumed moral anthropocentrism. In addition, the goodness that virtue promises is prudential, and in discussing prudential goodness, Western philosophy has not always been clear if it was one with or the very other of moral goodness and political justice. In the face of planetary ecological challenges such as CC, which mobilizes spatiotemporally unbound badness and injustices for both humans and nonhumans, EVE is catapulted to the task of not just articulating but of also becoming a multispecies EVP—shot across scales and levels of social and genetic organization in search of a theory and practice of the good life that links individuals to collectives, the species to the planet, and human with nonhuman values.

What seems most exciting about this task is that for EVE to engage with it successfully, it will require EE's help. With its characteristic focus on nonhuman intrinsic values and non-anthropocentric obligations, EE has investigated nonhuman axiology and normativity for decades now, thoroughly mapping the fundamental options as well as challenges for extending our moral consideration to nonhumans (from animals to plants; from rivers to forests and planets). As it did so, EE also interrogated the boundaries between morals and politics and always informed, or aimed to also inform, political theory and action. As EVE attempts to become a multispecies EVP, and non-anthropocentric EE continues its evolution to confront CC and other planetary ecological changes and challenges, perhaps the best we can hope for is reciprocal guidance across uncharted waters.

Funding: This research received no external funding.

Institutional Review Board Statement: This research required no ethical approval.

Informed Consent Statement: Not applicable.

Data Availability Statement: No new data were created or analyzed in this study. Data sharing is not applicable to this article.

Conflicts of Interest: The author declares no conflict of interest.

Notes

1 On the difficulties of defining VE effectively and concisely, see [1].

2 The notion of character traits has been powerfully problematized in the past two decades. Findings in experimental psychology have shown that individuals are very significantly influenced in their choices and actions by situational factors, casting doubts on

the idea that character traits are standing dispositions whose operations extend consistently across contexts and situations, which, as some have argued, would in turn cast doubts on the existence and nature of virtues [2,3]. Virtue ethicists have sometimes downplayed [4], often responded to [5], and, in some cases, absorbed these findings and critiques, possibly by reconceiving character traits as habituated skills rather than standing dispositions [6,7].

3 On the distinction between criteria for goodness and the goodness of satisfying them see [8].

4 Among these alternatives are broadly sentimentalist ones (most notably Slote's), and among the most important contemporary expressions of the sentimentalist tradition is care ethics, which stresses the normative significance of relations and dependencies and the deliberative and evaluative significance of motivations, emotions, and the body. Care ethics is hospitable to and interested in the theory and practice of virtues; VE very often sees care as a virtue and/or recognizes that there are distinctive virtues of care. Care ethics has also been thought to have strong affiliations with feminist thinking, and the contact points between VE, care ethics, and feminism are many and important; nonetheless, there are good theoretical reasons to keep VE, particularly in its eudaimonistic variant, distinct from both care ethics and feminism [17,18].

5 On fortitude as a meta-virtue, see [23], which discusses Spinoza's notion of *fortitudo*. It is generally the case that fortitude, understood as a meta-virtue, is a notion more at home with Stoic versions of VE. Other versions, influenced by certain readings of Aristotle, conceive of fortitude rather as continence and then actually contrast it with virtue on the grounds that a truly virtuous person is precisely one who is not even exposed to acratic temptations and thus needs not exercise continence. On these matters see, among others, [24].

6 On what makes an ethical position a genuine specimen of VE, see [26].

7 See, among others, [16,30,31]; essays in [1,10–13,32,33]; essays in [34]; essays in [14,35]; essays in [36]; essays in [37]; essays in [6,38,39]; essays in [40,41]; essays in [42,43]; essays in [44]; essays in [7,45–48]; essays in [49].

8 This classification of anthropocentrism(s) is in [55].

9 See [53], for a classic statement of this thesis. See [56], for a discussion of its many and only partially coherent variations. On colonialism and industrialization as key historical premises of the contemporary ecological crisis see, among others, essays in [57].

10 Anthropocentrism is often "equated with forms of valuation which easily, or even necessarily, lead to nature's destruction" [58] (p. 9), and thus, "We are told by some theorists that we must assume that an adequate and workable environmental ethics must embrace a restricted set of properties: non-anthropocentrism, holism, moral monism, and, perhaps, a commitment to some form of intrinsic value" [59] (p. 273).

11 According to an even stronger reading, which mobilizes very complex issues in metaethics, intrinsic value means objective (i.e., non-subjective) value, that is, a value that nonhuman entities possess even in the absence of any human valuer. Value objectivism has always been tempting to EE, and some of its defences within the discipline have been strong and highly influential (see, for example, [63]). Nonetheless, it remains a very impervious position to hold, and insistence on it within the discipline has waned with time (see [64], for a discussion). This article does not dismiss but will not discuss nonhuman intrinsic value in this controversial objective sense.

12 It should be noted that none of these claims are uncontroversial, and none of these views have been spared extensive criticism. In fact, some of those who have turned to environmental virtue ethics may have done so because they were ultimately unpersuaded by the arguments for the intrinsic value of nonhuman entities, at least as provided by these theories. In what follows, I will not insist on this aspect and will rather direct my critical remarks in different directions.

13 One would be hard-pressed to find an environmental ethicist who has questioned the idea that humans have intrinsic (freestanding) value. For relevant reflections, see [72].

14 On the strange environmental ethics of mosquito eradication, see [73].

15 On the role of practical wisdom in normativity-configuring deliberation, see [77,78].

16 See, among others, [37,76,79–91].

17 Aside from anthropocentrism, other contentious terrains include whether EVE is objectionably self-centred, whether and how it can be action-guiding, whether it can produce an adequate account of right action, whether it is able to respect but not succumb to cultural relativism, and whether it be self-effacing. Most of these worries are simply inherited by EVE from VE, and none of them appear to be fatal. For a literature-savvy comprehensive treatment, see [76].

18 A classic statement of these worries is in [92].

19 On epistemic virtues see, among others, [31]; essays in [34,97].

20 On aesthetic virtues see, among others, [98].

21 On socio-political virtues see, among others, [50,90,99–101].

22 On the relation between virtue and meaning generally, see [102].

23 See [26,76,106].

24 The EVE discussed in this and in the previous subsection evokes B. Norton's "weak anthropocentrism" but corrects it at one central juncture. In Norton's words [107] (p. 133), weak anthropocentrism "distinguishes between the actual felt preferences (which may be irrational) and the considered felt preferences (rationally justifiable preferences)" of humans, and is guided

by the latter preferences only. Norton argued that "While the pursuit of selfish, short-term, consumptive desires may lead to the destruction of nature, a far-sighted individual with scientific knowledge, rationally defensible moral ideals, and a set of preferences consistent with such a world view would protect nature for human reasons" [107] (p. 133). The juncture at which EVE corrects Norton's position is where it substitutes his "rationally justifiable preferences" or "rationally held world views" with "environmentally virtuous character". There is no element in Norton's view securing that rationally justifiable preferences or rationally held world views will favour nonhuman entities and, clearly, there are rationally defensible preferences (for efficiency and convenience, for example) and rationally held worldviews (liberalism, for example) that could, at least on occasion, also work to the disadvantage of nonhuman entities [107]. An "environmentally virtuous character", on the other hand, both secures that, and explains why, its possessor entertains the specifically environmental-friendly rationally justifiable preferences and worldviews that Norton wants.

[25] Ethics IV, Appendix XXXII, G II.276/C I.593–94. On Spinoza's virtue ethics, see [23].

[26] Spinoza denied conceptual anthropocentrism as well, though his philosophical routes there are too thick to follow here.

References

1. Hursthouse, R. *On Virtue Ethics*; Oxford University Press: Oxford, UK, 1999.
2. Doris, J. *Lack of Character: Personality and Moral Behaviour*; Cambridge University Press: New York, NY, USA, 2002.
3. Harman, G. Scepticism About Character Traits. *J. Ethics* **2009**, *13*, 235–242. [CrossRef]
4. Sreenivasan, G. Errors About Errors: Virtue Theory and Trait Attribution. *Mind* **2002**, *111*, 47–68. [CrossRef]
5. Miller, C. *Character and Moral Psychology*; Oxford University Press: New York, NY, USA, 2014.
6. Snow, N. *Virtue as Social Intelligence: An Empirically Grounded Theory*; Routledge: New York, NY, USA, 2010.
7. Stichter, M. *The Skilfulness of Virtue*; Cambridge University Press: Cambridge, UK, 2018.
8. Tiberius, V. *The Reflective Life. Living Wisely Within Our Limits*; Oxford University Press: New York, NY, USA, 2008.
9. Murdoch, I. *The Sovereignty of Good*; Routledge: London, UK, 1971.
10. Foot, P. *Natural Goodness*; Clarendon Press: Oxford, UK, 2001.
11. Slote, M. *Morals from Motives*; Oxford University Press: Oxford, UK, 2001.
12. Swanton, C. *Virtue Ethics: A Pluralistic View*; Oxford University Press: Oxford, UK, 2003.
13. Swanton, C. *Target Centred Virtue Ethics*; Oxford University Press: Oxford, UK, 2021.
14. Adams, R. *A Theory of Virtue*; Oxford University Press: New York, NY, USA, 2006.
15. Chappell, T. *Knowing What to Do*; Oxford University Press: Oxford, UK, 2014.
16. Zagzebski, L. *Exemplarist Moral Theory*; Oxford University Press: New York, NY, USA, 2017.
17. McLaren, M. Feminist Ethics: Care as a Virtue. In *Feminists Doing Ethics*; Des Autels, P., Waugh, J., Eds.; Rowman and Littlefield: Lanham, MD, USA, 2001; pp. 101–118.
18. Held, V. *The Ethics of Care*; Oxford University Press: New York, NY, USA, 2006.
19. Baril, A. Eudaimonia in Contemporary Virtue Ethics. In *The Handbook of Virtue Ethics*; van Hooft, S., Ed.; Acumen: Durham, UK, 2014; pp. 17–27.
20. Annas, J. *Intelligent Virtue*; Oxford University Press: New York, NY, USA, 2011.
21. Finnigan, B. Phronesis in Aristotle: Reconciling Deliberation with Spontaneity. *Philos. Phenomenol. Res.* **2015**, *91*, 674–697. [CrossRef]
22. McDowell, J. Virtue and Reason. *Monist* **1979**, *62*, 331–350. [CrossRef]
23. Nadler, S. *Think Least of Death. Spinoza on How to Live and How to Die*; Princeton University Press: Princeton, NJ, USA, 2020.
24. Foot, P. *Virtues and Vices*; Blackwell: Oxford, UK, 1978.
25. Williams, B. *Ethics and the Limits of Philosophy*; Harvard University Press: Cambridge, MA, USA, 1985.
26. Kawall, J. In Defence of the Primacy of Virtues. *J. Ethics Soc. Philos.* **2009**, *3*, 1–21.
27. Driver, J. *Uneasy Virtue*; Cambridge University Press: New York, NY, USA, 2001.
28. Hurka, T. *Virtue, Vice, and Value*; Oxford University Press: Oxford, UK, 2001.
29. Johnson, R. Virtue and Right. *Ethics* **2003**, *133*, 810–834. [CrossRef]
30. MacIntyre, A. *After Virtue*; Duckworth: London, UK, 1985.
31. Zagzebski, L. *Virtues of the Mind*; Cambridge University Press: New York, NY, USA, 1996.
32. Crisp, R.; Slote, M. (Eds.) *Virtue Ethics*; Oxford University Press: Oxford, UK, 1997.
33. Annas, J. *The Morality of Happiness*; Oxford University Press: New York, NY, USA, 1993.
34. DePaul, M.; Zagzebski, L. (Eds.) *Intellectual Virtue: Perspectives from Ethics and Epistemology*; Oxford University Press: New York, NY, USA, 2003.
35. Gardiner, S. (Ed.) *Virtue Ethics, Old and New*; Cornell University Press: Ithaca, NY, USA, 2005.
36. Chappell, T. (Ed.) *Values and Virtues*; Oxford University Press: Oxford, UK, 2006.
37. Welchman, J. (Ed.) *The Practice of Virtue: Classic and Contemporary Readings in Virtue Ethics*; Hackett Publishing: Indianapolis, IN, USA, 2006.
38. Walker, R.; Ivanhoe, P. (Eds.) *Working Virtue*; Oxford University Press: Oxford, UK, 2007.
39. LeBar, M. *The Value of Living Well*; Oxford University Press: New York, NY, USA, 2013.
40. Van Hooft, S. (Ed.) *The Handbook of Virtue Ethics*; Acumen: Durham, UK, 2014.

41. Bloomfield, P. *The Virtues of Happiness: A Theory of the Good Life*; Oxford University Press: New York, NY, USA, 2014.
42. Alfano, M. (Ed.) *Current Controversies in Virtue Theory*; Routledge: New York, NY, USA, 2015.
43. Chappell, S. Lists of the Virtues. *Ethics Politics* **2015**, *17*, 74–93.
44. Birondo, N.; Braun, S.S. (Eds.) *Virtue's Reasons: New Essays on Virtue, Character, and Reasons*; Routledge: New York, NY, USA, 2017.
45. Carr, D.; Arthur, J.; Kristjansson, K. (Eds.) *Varieties of Virtue Ethics*; Palgrave Macmillan: London, UK, 2017.
46. Bommarito, N. *Inner Virtue*; Oxford University Press: New York, NY, USA, 2018.
47. Brady, M. *Suffering and Virtue*; Oxford University Press: Oxford, UK, 2018.
48. Stangl, R. *Neither Heroes nor Saints: Ordinary Virtue, Extraordinary Virtue, and Self-Cultivation*; Oxford University Press: New York, NY, USA, 2020.
49. Pettigrove, G.; Swanton, C. (Eds.) *Neglected Virtues*; Routledge: New York, NY, USA, 2022.
50. Purdy, J. *After Nature: A Politics for the Anthropocene*; Harvard University Press: Cambridge, MA, USA, 2015.
51. Radkau, J. *Nature and Power*; Cambridge University Press: Cambridge, UK, 2008.
52. Montrie, C. *A People's History of Environmentalism in the United States*; Bloomsbury: London, UK, 2011.
53. White, L. The Historical Roots of Our Ecological Crisis. *Science* **1967**, *155*, 1203–1207. [CrossRef]
54. Vogel, S. *Thinking Like a Mall: Environmental Philosophy after the End of Nature*; MIT Press: Cambridge, MA, USA, 2015.
55. Thompson, A. Anthropocentrism: Humanity as Peril and Promise. In *The Oxford Handbook of Environmental Ethics*; Gardiner, S., Thompson, A., Eds.; Oxford University Press: New York, NY, USA, 2017; pp. 77–90.
56. Droz, L. Anthropocentrism as the Scapegoat of the Environmental Crisis: A Review. *Ethics Sci. Environ. Polit.* **2022**, *22*, 25–49. [CrossRef]
57. Hamilton, C.; Bonneuil, C.; Gemenne, F. (Eds.) *The Anthropocene and the Global Environmental Crisis*; Routledge: London, UK, 2015.
58. Light, A.; Rolston, H. (Eds.) *Environmental Ethics. An Anthology*; Blackwell: London, UK, 2002.
59. Light, A. Callicott and Naess on Pluralism. *Inquiry* **1996**, *39*, 273–294. [CrossRef]
60. Koorsgaard, C. Two Distinctions in Goodness. *Philos. Rev.* **1983**, *92*, 169–195. [CrossRef]
61. Lemos, N. *Intrinsic Value: Concept and Warrant*; Cambridge University Press: Cambridge, UK, 1994.
62. Kagan, S. Rethinking Intrinsic Value. *J. Ethics* **1998**, *2*, 277–297. [CrossRef]
63. Rolston, H., III. Value in Nature and the Nature of Value. In *Philosophy and the Natural Environment*; Royal Institute of Philosophy Supplement 36; Attfield, R., Belsey, A., Eds.; Cambridge University Press: Cambridge, UK, 1994; pp. 13–30.
64. Jamieson, D. *Ethics and the Environment: An Introduction*; Cambridge University Press: New York, NY, USA, 2008.
65. Singer, P. *Animal Liberation*; Random House: New York, NY, USA, 1975.
66. Taylor, P. *Respect for Nature*; Princeton University Press: Princeton, NJ, USA, 1986.
67. Leopold, A. *A Sand County Almanac*; Oxford University Press: New York, NY, USA, 1949.
68. Rolston, H., III. *Environmental Ethics. Duties to and Values in the Natural World*; Temple University Press: Philadelphia, PA, USA, 1988.
69. Callicott, B. *Thinking Like a Planet: The Land Ethic and Earth Ethic*; Oxford University Press: Oxford, UK, 2013.
70. O'Neill, J.; Holland, A.; Light, A. *Environmental Values*; Routledge: London, UK, 2008.
71. James, S. *How Nature Matters: Culture, Identity, and Environmental Value*; Oxford University Press: Oxford, UK, 2022.
72. Mercon, J. Environmental Ethics and Spinoza's Critique of Anthropocentrism. *Ethica* **2011**, *18*, 161–173.
73. Wienhues, A. The Innocent Mosquito? The Environmental Ethics of Mosquito Eradication. In *Mosquitopia: The Place of Pests in a Healthy World*; Markus, H., Tamïr, D., Eds.; Routledge: London, UK, 2021; pp. 196–208.
74. O'Neill, O. Environmental Values, Anthropocentrism and Speciesism. *Environ. Values* **1997**, *6*, 127–142. [CrossRef]
75. James, S. Human Virtues and Natural Values. *Environ. Ethics* **2006**, *28*, 339–353. [CrossRef]
76. Sandler, R. *Character and Environment: A Virtue-Oriented Approach to Environmental Ethics*; Columbia University Press: New York, NY, USA, 2007.
77. Star, D. *Knowing Better: Virtue, Deliberation, and Normative Ethics*; Oxford University Press: Oxford, UK, 2015.
78. Russell, D. *Practical Intelligence and the Virtues*; Oxford University Press: New York, NY, USA, 2009.
79. Hill, T. Ideals of Human Excellence and Preserving Natural Environments. *Environ. Ethics* **1983**, *5*, 211–224. [CrossRef]
80. Frasz, G. Environmental Virtue Ethics: A New Direction for Environmental Ethics? *Environ. Ethics* **1993**, *15*, 259–274. [CrossRef]
81. Shaw, B. A Virtue Ethics Approach to Aldo Leopold's Land Ethic. *Environ. Ethics* **1997**, *19*, 53–67. [CrossRef]
82. Van Wensveen, L. *Dirty Virtues: The Emergence of Ecological Virtue Ethics*; Humanity: Amherst, NY, USA, 2000.
83. Cafaro, P. Environmental Virtue Ethics. *Philos. Contemp. World* **2001**, *8*, 1–3. [CrossRef]
84. Chapman, R. The Goat-Stag and the Sphinx: The Place of the Virtues in Environmental Ethics. *Environ. Values* **2002**, *11*, 129–144. [CrossRef]
85. Sandler, R.; Cafaro, P. (Eds.) *Environmental Virtue Ethics*; Rowman and Littlefield: Lanham, MD, USA, 2005.
86. Hursthouse, R. Environmental Virtue Ethics. In *Working Virtue: Virtue Ethics and Contemporary Moral Problems*; Walker, R., Ivanhoe, P., Eds.; Oxford University Press: Oxford, UK, 2007; pp. 155–171.
87. Cafaro, P.; Sandler, R. (Eds.) *Virtue Ethics and the Environment*; Springer: Berlin/Heidelberg, Germany, 2010.
88. Thompson, A.; Bendik-Keymer, J. *Ethical Adaptation to Climate Change: Virtues of the Future*; MIT Press: Cambridge, MA, USA, 2012.
89. Zwolinski, M.; Schmidt, D. Environmental Virtue Ethics: What It Is and What It Needs to Be. In *The Cambridge Companion to Virtue Ethics*; Russell, D., Ed.; Cambridge University Press: Cambridge, UK, 2013; pp. 221–233.

90. Di Paola, M. *Ethics and Politics of the Built Environment: Gardens of the Anthropocene*; Springer: London, UK; New York, NY, USA, 2017.
91. Di Paola, M. Virtue. In *Encyclopedia of the Anthropocene*; DellaSala, D., Goldstein, M., Eds.; Elsevier: Amsterdam, The Netherlands, 2018; Volume 4, pp. 119–126.
92. Rolston, H., III. Environmental Virtue Ethics. Half the Truth but Dangerous as a Whole. In *Environmental Virtue Ethics*; Sandler, R., Cafaro, P., Eds.; Rowman and Littlefield: Lanham, MD, USA, 2005; pp. 61–78.
93. Solomon, D. Internal Objections to Virtue Ethics. *Midwest Stud. Philos.* **1988**, *13*, 428–441. [CrossRef]
94. O'Neill, J. *Ecology, Policy, and Politics: Human Well-Being and the Natural World*; Routledge: London, UK, 1993.
95. Hill, T. Finding Value in Nature. *Environ. Values* **2006**, *15*, 331–341. [CrossRef]
96. McShane, K. Why Environmental Ethics Should Not Give Up on Intrinsic Value. *Environ. Ethics* **2007**, *29*, 43–61. [CrossRef]
97. Stafford, S. Intellectual Virtue in Environmental Virtue Ethics. *Environ. Ethics* **2010**, *32*, 339–352. [CrossRef]
98. Hall, N.; Brady, E. Environmental Virtue Aesthetics. *Br. J. Aesthet.* **2023**, *63*, 109–126. [CrossRef]
99. Calhoun, C. The Virtue of Civility. *Philos. Public Aff.* **2000**, *29*, 251–275. [CrossRef]
100. Treanor, B. Environmentalism and Public Virtue. In *Virtue Ethics and the Environment*; Cafaro, P., Sandler, R., Eds.; Springer: Dordrecht, The Netherlands, 2010; pp. 9–28.
101. Lane, M. *Eco-Republic: What the Ancients Can Teach Us about Ethics, Virtue, and Sustainable Living*; Princeton University Press: Princeton, NJ, USA, 2012.
102. McPherson, D. *Virtue and Meaning: A Neo-Aristotelian Perspective*; Cambridge University Press: Cambridge, UK, 2020.
103. Baumeister, R. *Meanings of Life*; Guilford Press: New York, NY, USA, 1991.
104. Seligman, M. Flourish: Positive Psychology and Positive Interventions. The Tanner Lectures on Human Values. Available online: Https://tannerlectures.utah.edu/_documents/a-to-z/s/Seligman_10.pdf (accessed on 12 November 2023).
105. Welchman, J. The Virtues of Stewardship. *Environ. Ethics* **1999**, *21*, 411–423. [CrossRef]
106. Newton, L. *Ethics and Sustainability: Sustainable Development and the Moral Life*; Prentice Hall: Upper Saddle River, NJ, USA, 2003.
107. Frasz, G. Bryan Norton's Concept of Weak Anthropocentrism: A Critique. 1987. Available online: https://www.academia.edu/32516125/Bryan_Nortons_Concept_of_Weak_Anthropocentrism_A_Critique_1987 (accessed on 12 November 2023).
108. IPCC. *Climate Change: The 1990 and 1992 IPCC Assessments. Overview and Policymaker Summaries*; Intergovernmental Panel on Climate Change: Montreal, QC, Canada, 1992.
109. Jamieson, D. *Reason in a Dark Time*; Oxford University Press: Oxford, UK, 2014.
110. Pellegrino, G.; Di Paola, M. (Eds.) *Handbook of Philosophy of Climate Change*; Springer: London, UK; New York, NY, USA, 2023.
111. Sinnott-Armstrong, W. It's Not My Fault: Global Warming and Individual Moral Obligations. In *Perspectives on Climate Change*; Walter, S.-A., Howarth, R., Eds.; Elsevier: Amsterdam, The Netherlands, 2005; pp. 221–253.
112. Fragnière, A. Climate Change and Individual Duty. *WIREs Clim. Change* **2016**, *7*, 798–814. [CrossRef]
113. Midgley, M. Individualism and the Concept of Gaia. In *How Might We Live? Global Ethics in a New Century*; Booth, K., Dunne, T., Cox, M., Eds.; Cambridge University Press: Cambridge, UK, 2001; pp. 29–44.
114. Gardiner, S. *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*; Oxford University Press: New York, NY, USA, 2011.
115. Latour, B. Agency at the Time of the Anthropocene. *New Lit. Hist.* **2014**, *45*, 1–18. [CrossRef]
116. Jenkins, W. The Turn to Virtue in Climate Ethics. *Environ. Ethics* **2016**, *38*, 77–96. [CrossRef]
117. Di Paola, M.; Nyholm, S. Climate Change and Anti-Meaning. *Ethical Theory Moral Pract.* **2023**, *26*, 709–724. [CrossRef]
118. Di Paola, M. Virtues for the Anthropocene. *Environ. Values* **2015**, *24*, 183–207. [CrossRef]
119. Kirsner, M. *Spinoza on Human Freedom. Reason, Autonomy, and the Good Life*; Oxford University Press: New York, NY, USA, 2011.
120. Toner, C. The Self-Centeredness Objection to Virtue Ethics. *Philosophy* **2006**, *81*, 595–618. [CrossRef]
121. Toner, C. Virtue Ethics and The Nature and Forms of Egoism. *J. Philos. Res.* **2010**, *35*, 323–352. [CrossRef]
122. Annas, J. Virtue Ethics and the Charge of Egoism. In *Morality and Self-Interest*; Bloomfield, P., Ed.; Oxford University Press: Oxford, UK, 2009; pp. 205–221.
123. Angier, T. Aristotle and the Charge of Egoism. *J. Value Inq.* **2018**, *52*, 457–475. [CrossRef]
124. Dodsworth, A.; Honohan, I. *Green Politics and Civic Republicanism*; Routledge: London, UK, 2023.
125. Mathews, F. *The Ecological Self*; Routledge: London, UK, 2021.
126. Jamieson, D.; Di Paola, M. Political Theory for the Anthropocene. In *Global Political Theory*; Held, D., Maffettone, P., Eds.; Polity Press: Cambridge, UK, 2016; pp. 254–280.

philosophies

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Rethinking the Environmental Virtue of Ecological Justice from the Interdependencies of Non-Human Capabilities and Synergetic Flourishing

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Abstract: The capabilities approach has largely addressed individual capabilities via a liberal framework common in its literature. However, a growing number of scholars concerned with sustainable human development are analyzing theories and methodologies that are both suitable for human flourishing and display a respect for nature. This paper explores several forms of considering the value of non-animal and non-individual natural entities, such as ecosystems. I first expose some instrumental reasons why we may care about the flourishing of ecosystems and then other reasons based on the assumption that they have integrity and their own capabilities and, therefore, deserve moral consideration. I argue that despite the possible moral conflicts that may emerge between human and ecosystemic autonomy, they could be avoided by adopting an ecological justice virtue. I present this ecological justice characterized by some contributions of decolonial thought and environmental virtue ethics. I propose that if the capabilities approach was not anchored only in an individualistic ontology, it could better assume a multi-level axiology from which the inherent and instrumental value of ecosystems would be interconnected. And, to this end, I find the concept of synergetic flourishing helpful to accept an interdependent and non-human-centered recognition of the capabilities.

Keywords: ecological justice; ecosystem capabilities; integrity; synergetic flourishing; interdependence; environmental virtue ethics; capabilities approach; decolonial thought; non-humans

Citation: Moyano-Fernández, C. Rethinking the Environmental Virtue of Ecological Justice from the Interdependencies of Non-Human Capabilities and Synergetic Flourishing. *Philosophies* **2023**, *8*, 103. https://doi.org/10.3390/philosophies8060103

Academic Editors: Sylvie Pouteau and Gérald Hess

Received: 1 September 2023
Revised: 30 October 2023
Accepted: 30 October 2023
Published: 2 November 2023

1. Introduction

We currently live in an emerging context marked by ecosystem decline, biodiversity loss, accelerated climate change, and resource depletion [1–3]. Neoliberal philosophy and market capitalism have caused huge social inequalities and led to a definition of "wellbeing" that bears little connection with caring for non-human nature [4]. Satisfying basic human needs has been hegemonically propped up by unfair conditions and an anthropocentric bias that prioritizes human over non-human development [5]. Here, I pose the question of whether the capabilities approach advocated by some authors might not be following a similar bias.

This is relevant here because the capabilities literature has largely attempted to guarantee an equal wellbeing for everyone. However, who is "everyone" and to what extent should the non-human world be a concern for justice? Such a question calls for justice not only in terms of distribution but also in terms of recognition and may be helpful in articulating new approaches to environmental virtue ethics.

Although Sen and Nussbaum's particular theories aspire to be liberal, because individualism, freedom, and capability to choose are considered substantial goods, it is possible to construct capability theories that are less so [6] (p. 196). According to Robeyns, the concept of human capabilities has long been acknowledged as an approach, rather than a theory, that addresses a broad philosophical framework; this lends it the qualities of being open to different outcomes and not being overly specific [6] (pp. 29–30). However, arguments

justifying an instrumental use of non-human nature to enhance human development have become habitual in the capabilities literature driven by Sen and Nussbaum [7–10], considering that the world of nature forms an important capability for human flourishing. From this view, the natural environment would only matter insofar as it ensures a threshold of human capabilities and ecosystem management is mainly guided by human interests. However, some other scholars call for a shift in our valuations of non-human nature [11].

Hence, this paper examines the relationship between human and non-human capabilities, focusing on the urgent need to link the two because it is a matter of environmental virtue ethics [12]. I think that including an approach that considers non-human capabilities in a non-anthropocentric and non-instrumentalist way may contribute to a "flourishing planet", a guiding concept that helps on a theoretical level to respect the self-realization of living beings and the natural entities that make up the Earth [13].

I argue for including the non-sensocentric and non-individualistic contributions of ecological justice in the environmental virtue ethics framework. To this end, I will consider how the notion of flourishing can apply to non-human nature. By flourishing we may understand the meaning provided by Sen's and Nussbaum's framework: it is the end of all political, social, and economic activity, and it arises when the capabilities (that are, the opportunities for individuals to live the life they choose and have reason to value given their personal and social circumstances) are granted [14,15]. Aristotle coined the term and defined it as the way we are supposed to be as human beings. For him, the cultivation of virtue and good character would lead to flourishing.

Ecological justice views non-sentient nature as capable of flourishing in its own way [16–18]. This acceptance might be justified by identifying that an ecosystem as a whole has integrity, to which it tends naturally if it does not encounter obstacles [19]. Despite integrity being recognized by some scholars as an elastic concept with no clear definitions [20] and even inconsistent meanings [21], many others concur that integrity is defined by three elements: naturalness, wholeness, and continuity through time [19,21].

These issues will be revisited in the following pages which are structured as follows. In the next Section 2, I outline and discuss the way human development and capabilities theories can include the non-human world in their moral frameworks and political procedures: instrumentally or virtuously?

Section 3 attempts to understand some causes of conflicts between capabilities, those of sentient beings (such as humans and nonhuman animals) or those of non-sentient living beings (such as plants and fungi), or those of individual beings or those of collective entities (such as ecosystems). To this end, it explores the biases of domination that might exist in the interaction with non-human nature, offering some of the contributions of decolonial thought and environmental virtue ethics. The trade-offs of advocating for a sort of ecocentrism instead of only anthropocentrism is not a new debate within the capabilitarian rhetoric [22]. Within a capabilitarian framework, the premises would be to reimagine and deconstruct the minimum thresholds of capability needed for sustainable and environmental human development.

Finally, in Section 4, I propose the term "synergetic flourishing", as a flourishing concept beyond an individualistic and anthropocentric standpoint. The purpose of suggesting such a concept is to highlight how to overcome anthropocentrism on the one hand and methodological and ontological individualism on the other when providing arguments from capabilitarian ethics. The idea of synergetic flourishing reinforces the assumption of interdependent capabilities among species and beyond a single generational time scale.

Hence, one of the central tenets of this article is to rethink the virtue of ecological justice by considering the non-animal capabilities and integrity of non-sentient entities, and to reason how they might lead to recognizing a synergetic flourishing.

2. The Value of Ecosystems from a Green Capabilities Approach

2.1. The Instrumental Value of Non-Human Nature for Enhancing Human Capabilities

Capabilities are the conditions that make it possible for people to do various things that make up a flourishing human life [23]. They are necessary for flourishing. However, what capabilities are necessary and for whose flourishing?

There are several reasons to justify an ethical commitment to non-human nature from an instrumentalism perspective concerned mainly with human capabilities. Regarding moral respect for non-human animals there are anthropocentric reasons to defend it, in addition to the arguments that Nussbaum and others already provide in defense of their value and the need to include the recognition of their capabilities within the boundaries of justice [23,24]. Interacting with pets or liminal animals can easily enhance the capability of emotions, listed by Nussbaum [25] (pp. 33–34). Whether we establish a symmetrical emotional correspondence with the non-human animal or an asymmetric correspondence where we feel something totally different from the internal state of that animal, the case in both is that we are emotionally involved. There is a connection between the capability of emotions and the capability for affiliation, suggesting a link with other basic capabilities on Nussbaum's list, such as the capability to play or the capability to experience concern for and in relation to nature (other species). In addition to the psychological and emotional benefits of caring for and not devastating the non-human animals living in our environment, there are clearly demonstrated benefits on a more physical level. Protecting the health of animals with whom we have some (more or less direct) interaction usually reduces the risk of human diseases. The COVID-19 pandemic of zoonotic origin is an excellent example of this interrelationship and of this instrumental interest that we can be respectful of other species [26]. Hence, there are crucial connections between the capabilities threshold safeguard of the non-human animals and the human capability of bodily health.

In short, strong motivations exist to defend anthropocentric and non-anthropocentric management of non-human animals. Beyond the benefits we may self-interestedly extract from our relationship with them, the recognition of their capabilities as sentient beings facilitates the acceptance of their flourishing and value. But, the treatment of non-animal and non-sentient nature, insofar as it lacks sentience, tends to be based more on instrumental moral reasons. If ecosystems or species as a whole are ethically valuable, it is because their care generates advantages for the sentient individuals that make them up.

There is another basic capability that comes into play and gets fostered through our relationship with non-human nature, regardless of whether it is with another animal or with another natural entity, such as a river or a mountain: the capability of the senses, imagination, and thought [25]. Such capability is fostered best when we interact with wild nature, whether discreetly or otherwise. And, if the focus of our appreciation is not only an individual but a whole ecosystem, with all its interdependencies and dynamic processes, then our basic capability is boosted. This is because our "Self", that is, our personal and atomized identity (due in part to the neoliberal values that Western culture has instilled in us during the last decades), is silenced [27]. Thus, our cognitive inertia of anthropomorphization and instrumentalization is weakened when we respectfully admire an ecosystem environment and learn from it [28].

And, this is not merely a reaction to something. Rather, we enter into a living and changing correspondence. We do not interact with wild nature through verbal dialogue, as we commonly do with other people. We interact through an exchange of smells, sounds, chemical flows, and various sensations [29]. It may be a quieter but, in some senses, more intense relationship, given the differences where our subject is involved. We enter a network in which the evolution and movement of each thread conditions the rest and intertwines new links [30]. When interacting with natural ecosystems, we are truly faced with what is most different from us, because they are full of non-human beings and processes and also have a strong systemic identity forged by numerous symbiotic relationships [31]. Although we are also nature and also made up of tiny systems and networks of nature [30], we have organized and developed our lives outside nature without recognizing ecodependencies

by instrumentalizing non-human nature and prioritizing an atomized autonomy, self-realization, and personal identity [5,32].

The aesthetic approach to nature [33] does not have to consist only in visually contemplating a forest, a watershed, or a swamp; rather, the cognitive journey is deeper and more interesting when we also pay attention to the multiple sounds and the fusion of different aromas, breathe the lightness of the air, and touch the different textures. Making use of our aesthetic senses in environments little exploited by humans and surrounded by beings other than those we already know could empower our senses and our imagination [34]. In addition to literacy and the core mathematical and scientific education that Nussbaum comments on in relation to how to (re)create the capability of senses and imagination [25], ecological literacy is also required. An ecological education can turn us to sharpen our physical senses and discover new ways of being or functioning of which we were previously unaware. In fact, the recognition of dynamic life forms and processes we are not accustomed to opens the door to broadening our (bio)ethical and moral circle, stimulating the elasticity of our moral sense [35].

Beyond these psychological and emotional benefits, there are further reasons why the environment should be considered a baseline for all human capabilities. The ecosocial collapse and climatic chaos we are currently experiencing [2] endangers all basic capabilities, starting with the capability of life and being bodily healthy. Awareness of the links between the environment status and human health [3,36] is fundamental because being healthy may be the basis for ensuring that capability thresholds are protected. Therefore, being healthy could itself be considered a "meta-capability" [37] (pp. 143–169). The ecosocial collapse jeopardizes our opportunities to live healthy lives, as well as threatening our ecological resilience to adverse weather conditions and our social resilience to cultural changes in our lifestyle [32]. Accelerated climate change and deforestation dramatically affect our opportunities to be healthy, and this has become particularly visible through the COVID-19 pandemics. Scientific evidence of its emergence is tightly linked to deforestation, industrial animal farming, wildlife trade, and biodiversity loss [36].

This also holds for our right to be well-nourished, because accelerated climate change and deforestation wear down the crop fields, increase temperatures, capture less CO_2, and increase pollution, among other devastating effects. Hence, if the environment is key in protecting the main human capability of being healthy, we may then state that the environment should be also understood instrumentally as a meta-capability [8]. A meta-capability could be defined as "an overarching capability to achieve a cluster of basic capabilities to be and do things that make up a minimally good human life in the contemporary world", according to Venkatapuram's view of health [37], or as "a broader capability that enables all the capabilities worthy of protection as constitutional entitlements", according to Holland's view of environment [8]. In short, meta-capability could be understood as an umbrella from which other capabilities may develop.

It should be pointed out that just because there are instrumental reasons to carefully manage ecosystems does not mean that these reasons are strictly anthropocentric nor that they will necessarily cause more harm to nature than a non-anthropocentric choice made without human-centered interventionism. First, non-human animals also have instrumental interests in benefiting from healthy ecosystems. Second, if an ecosystem wants to change from a rainforest to a savannah, the implications for human and non-human animals probably would be worse, at least from a utilitarian balance, than if an instrumental and human-centered approach tries to stop that because of its implications for human and non-human capabilities. In short, managing ecosystems under instrumental criteria to safeguard the capability thresholds of sentient beings need not be ethically reprehensible.

2.2. The Intigrity and Flourishing of Non-Sentient and Non-Individual Nature

As noted above, there are several instrumental moral reasons for managing ecosystems in ways that facilitate animal (including human) flourishing. However, moral hesitation arises when it is argued that such management mediated by instrumental interests does

not take into consideration the autonomy or free flourishing of the ecosystems themselves. That is, when ecosystems are not recognized for their integrity and value. For this conflict of interests to emerge, between what a sentient being needs for its individual flourishing and what an ecosystem as a whole needs for its own collective flourishing, it must first be recognized that both parties possess capabilities. Thereby, first focus on this assumption.

The capabilities extension to ecosystems has already been discussed within the academic literature [22]. One of the main claims often put forward in defense of ecosystem autonomy is that ecosystems have an integrity towards which they tend to evolve [19,38]. To pursue this propensity of natural oneness, they would manifest systemic capabilities such as homeostasis, autopoiesis, or resilience [1]. The basis of the argument is not that ecosystems have value because they have rational capabilities like ours or sentient capabilities like other animals but that they can also flourish in their own way and, to do so, perform their own capabilities. And, just as it might be unjust to force how a human or non-human animal should flourish, ignoring its agency, the same kind of injustice might be claimed of an ecosystem that is permanently disrupted in a way such that it cannot return to its original functions [41]. For both cases there could be an oppression of capabilities and integrity would be overshadowed. According to a biocentric or ecocentric deontological approach, ecological injustice would occur because the flourishing of some entities is not being recognized [42,43].

On this argumentative point, the discussion remains open as to whether there is such a thing as integrity as a value for conservation biology and with a normative meaning. Authors such as Rohwer and Marris [21] have elaborated a number of critiques of the concept of ecological integrity. As they explain, ecosystems are simply too dynamic in space and time, their complex interconnections, including coevolved relationships, are ultimately ephemeral at the geological scale. Any impression of wholeness would be an artifact of the brevity of human lives and the shallowness of our historical records. However, understanding integrity flexibly and not as an immutable whole is something that other authors have already pointed out [19,20]. Moreover, for non-human beings, the idea of integrity can make sense insofar as most animals and plants feel or flourish as part of a territory, community, or ecosystem. They have a certain multidimensional, not strictly individual, identity.

Nonetheless, even if integrity was accepted as a core condition for ecosystems, the conclusion that this is the basis of moral value and, therefore, we must deontologically respect it remains troublesome. The change from ecosystem A to ecosystem B is usually understood to be a bad thing because we believe that the integrity of ecosystem A has been lost. But, this reasoning seems odd: the integrity of ecosystem A does not necessarily have to be better than that of ecosystem B. If we think of a savannah that, due to the disappearance of large mammals and other processes, is surprisingly transformed into a rainforest, we could assert that there has been a loss of value but that this loss of value may be explained by reference to integrity seems problematic. Integrity might be a rough proxy for complexity, diversity, and preferred historic states [21], which have an implicit value. In terms of complexity and diversity, a rainforest outperforms a savannah. However, arguing that the former has a more valuable integrity than the latter seems as unreasonable as arguing that the latter has more than the former. We could agree that both ecosystems, with or without integrity, are equally valuable. But, we still perceive moral problems when the transition from one ecosystem to another occurs.

The moral concern comes when such a transition is produced by a deliberate domination over ecosystems, by specific attitudes and behaviors, or reduces the value of ecosystems and non-human nature to mere ecosystem services or mechanical functions useful for our flourishing. Rather, we can understand their value in relation to their own dynamic flourishing and not subject only to our interests.

To excuse domination by arguing that this will better protect an ecosystem does not seem entirely acceptable. With instrumental management, it is easy to recognize that non-human processes and beings have different states and qualities, and several

expressions of their development. But, it is again we human beings who select which of these we want to prioritize over others. We leave no room for non-human nature to develop in its own way, because no capability to flourish is recognized. In this way, we stand as her owners, guardians, or tutors, as we usually do with children, those with severe intellectual disabilities, or even pets [15] (pp. 370–380). This is the moral weakness of paternalism: omitting the possible autonomy of those we care for or protect. It is not only important to respect the value of non-human nature because it is a duty, but because in doing so we do cultivate a kinder ethical attitude towards the non-human realm; we develop environmental virtues.

Assuming we recognize the integrity and a certain autonomy of systemic entities, then it remains to be discussed on what moral criteria we would decide when to prioritize the autonomy of an ecosystem and when that of a human being. In sum, whose capabilities matter more and why? However, who's or what autonomy to flourish should be prioritized is a necessary but secondary question with much debate ahead. First, it is relevant to discern what are the factors that have pushed one ecosystem to shift to another and whether these were really inevitable to safeguard the capability thresholds of other beings. Otherwise, a biased moral dilemma may be perpetuated.

3. Addressing the Moral Conflicts between Human and Ecosystem Flourishing from Environmental Decolonial Thoughts and Virtue Ethics

Environmental justice tends to claim a deontological approach where the demands of justice consist of how to distribute non-human nature among humans, while ecological justice is usually a call for a virtuous attitude through which non-human nature is not only instrumentally valued. In Western moral political tradition, philosophers like Aristotle, Hume, and Rawls have agreed that justice may be considered the most important virtue of social relations and political institutions and the greatest of all virtues [44]. Hence, environmental justice can be understood as the major environmental virtue. Environmental justice has been mainly conceived as a framework to fairly allocate environmental resources and impacts among unequal people [18]. However, only human beings are part of the community of justice, while non-human nature is somehow reified. Ecological justice, on the other hand, includes non-humans within the community of justice and recognizes that they do not matter only because of what benefits or harms human beings but that they matter in themselves [18,43]. Changing our attitude towards the non-human realm is not only a deontological but also a virtuous call: it might help us all to flourish better. While some authors have used the concepts of environmental justice and ecological justice interchangeably [45], others have made the effort to see their different nuances [16,46]. Other contemporary authors, like Dobson [47], have followed this claim for justice as the first virtue of "ecological citizenship" and argued that the other virtues of care or compassion are related to individuals instead of social and institutional, and for this reason they are less important than justice.

Some have discussed Dobson's particular prioritization of virtues and try to accurate his ecological citizenship contribution to environmental virtue ethics, for example, by suggesting a new virtue which can be called "resourcefulness", as a countervailing virtue of the profligate use of resources [48]. Others have advocated for non-distributive demands of justice and emphasizing changing the private and citizen behaviors, beyond social or institutional claims, and, thus, have suggested environmental virtues like mindfulness [49] or cheerfulness [50]. And yet, ecological justice should bear more than new individual attitudes and should be more than following distributive norms of how to allocate the environmental resources and also be concerned about who is being recognized as critical to the decision-making process of understanding justice and virtue is being developed.

It is not possible to completely dissipate the cognitive limits that separate our first-person experience from those of other beings, but we can enable other beings to express themselves and try to listen to them. This should be one of the main goals of ecological justice because it is necessary to trigger reflexivity and global meta-consensus that represent

both human and non-human communities [51]. According to Dryzek and Pickering, ecological reflexivity can be considered an environmental virtue crucial for governance in the Anthropocene [51,52]. This virtue is defined as a democratic virtue that attempts to listen to an active system such as Earth through interdisciplinary means, seeking, receiving, and responding to early warning signs about potential changes in the ecological state [51]. Advocating for a governance committed within non-human realm and ecological justice virtues does not necessarily mean claiming a hermetical ecocentric morality. Following Section 2, we might agree that an ecosystem has autonomy and integrity. This means that ecosystems enter the moral balance on an equal footing with other valuable beings capable of flourishing but not that they are the most valuable entities. What ecological justice does imply is adopting a holistic, rather than just individualistic, ontology when evaluating the trade-offs of a choice. These evaluations would be made by human beings, insofar as I am claiming here for human-cultivated environmental virtues. But, this does not mean that the analysis of the trade-offs of a choice must be anthropocentric. Precisely, it may be a non-anthropocentric analysis, evaluation, and decision-making process because democratic commitment to ecological reflexivity could lead us, on the one hand, to the recognition of the capabilities and flourishing of non-humans and, on the other hand, to the recognition that we are a non-atomized ecological self and interdependent and eco-dependent agents.

For example, from a holistic view, in understanding why a rainforest tends to become a savanna, we may realize that it is partly due to external human pressures and less to "free choice". Our epistemological limitations [53] (pp. 435–450) inhibit us from knowing all the reasons behind why a forest would become a savanna or why a savanna would become a forest. If we do not rely on scientific knowledge and adopt an environmentally virtuous attitude that allows us to leave space for nature's expression without constant human pressures, it becomes necessary to understand how ecosystems flourish and maintain their integrity, and to distinguish when they transition healthily or are altered by disturbances. Some scholars are researching ways of appreciating non-human capabilities [54]. Using ancient oriental philosophies [55], they highlight the existence of strategies that could help with this exercise of recognition. And, in the realms of fieldwork-based science, an increasing number of studies are being conducted on the knowledge of ecosystems and non-human beings from an interconnectivity paradigm, where the human and non-human interfaces as well as the individuals and their surrounding environment are considered intertwined [56,57].

Moreover, despite epistemological limitations of what the non-human entities experiences consist of, what we can attempt to discover is how our lifestyles constrain and affect ecosystemic transitions. Precisely, the limitations of knowing what is most different from us can be an opportunity to focus more on understanding the scope of our actions. This also invites us to acquire another environmental virtue: humility, whereby we are open to change our behaviors in order to award biophysical space for non-human and non-sentient entities' self-expression [58,59].

Questioning our lifestyles as well as our capability thresholds, so sustained on an instrumental use or even exploitation of the environment, is also one of the tasks of decolonial thought. Similarly, imagining new forms of life and behaving with lower energivorous metabolisms (which, for example, do not require building a dam in a river to generate energy) could be one of the tasks of the environmental virtue ethics [60].

While virtue ethics depends on agent-centered development of human excellences, decolonial thought might be understood as an educational and political program which could encourage virtue ethics. Thus, although they are not the same because their origins differ, they could benefit from each other. The global decision requirements to live sustainably with a serious respect for nature might not be achieved by cultivating environmental virtues and, similarly, cultivating human excellence might not be achieved without political programs and adequate educational support. Here, I understand decolonialism as a political philosophy complementary to environmental virtue ethics.

Focusing on decolonial thought, in particular, the degrowth movement appears as a complement to change the instrumental meaning of justice and human development laid out by some. The agenda and philosophical language used in environmental sustainability often refers to utilitarianism and distributive justice, rather than recognitional forms of justice [16]. The mainstream notions of sustainable development have been criticized for perpetuating present conditions of inequality, growth dependency, neoliberal accumulation, and a utilitarian relationship with living beings [32,61]. However, the degrowth movement could be considered as an alternative to adaptation or mitigation policies based on a sustainable development agenda. Part of the emphasis of degrowth lies in reducing production and consumption in the Global North, hence slowing down energy and raw material flows [62,63]. While it might not seem to differ much from orthodox proposals around the Green New Deal across the globe, degrowth scholarship argues for a radical and qualitative change, affecting our activities, relationships, and values, directed towards liberating human beings and the non-human world from the capital accumulation imperative [62,64].

While many sustainable human development advocates promote technologies and the global economy within the scope of green capitalism, degrowth advocacy takes a different tack [2]. It focuses on a decolonizing imaginary instead of perpetual economic growth narratives [61–64]. As a movement, it first emerged in Europe heavily criticizing Western capitalist lifestyles and complementing political ecology. The decolonization that degrowth aims at favors the reception of new narratives and worldviews that rightly support to weaken the dominant anthropocentrism, a goal shared by ecological justice. Thus, for instance, the Quechua concept "sumak kawsay" or "buen vivir" in Latin American philosophy is based on a deep change of the cosmovision, where interculturality and plurinationality unite and nature is awarded greater consideration [65]. "Ubuntu" or the "Gandhian Economy of Permanence" are other examples of complementary narratives that move away from a strong moral anthropocentrism [61]. Recognition of these movements and philosophies that bring different understandings of socio-ecological systems and other starting points of interacting with non-human nature becomes an important step towards non-anthropocentric management. In contrast to individualistic and atomized approaches, many indigenous cosmovisions have advocated a non-anthropocentric, relational and holistic way of life, in which humans and non-humans live with their own agency and develop in interconnectedness [9,66].

This is a further advantage of the degrowth movement: it is open to establishing networks with allied philosophies and practices from other cultures that try to topple the common hegemonic imaginary in different ways. In fact, a common criticism of degrowth consists in arguing that it can only be applied to rich economies in the Global North, while developing countries still have to satisfy their basic needs. However, developed countries should adhere to degrowth not so that the Global South follows the same example of ecosystems exploitation and economic growth fetishization but rather to free up a "conceptual" space where other countries can build their own paths towards a fairer and more sustainable conception of life [32]. This would represent a substantial step towards participation and recognition policies that respect the development of the most oppressed beings and the disturbed ecosystems, and where the cost–benefits relationship becomes multidirectional. Degrowth aims to be critical to those domination cultures that inhibit agent-centered virtue because embracing interculturality and non-colonial imaginaries of economic growth leads us to wonder what our environment is and who forms that "our", instead of being concerned only about deontological and distributive issues.

When analyzing the moral conflicts derived from broadening conceptions of the subject of justice, it is also fundamental to deconstructing the hegemony of liberal political discourse. In Nussbaum's or Holland's political liberalism there is an overcoming of anthropocentric prejudice due to the recognition of non-human animal capabilities [23,24]. However, much work remains to be done in order not to be anchored in individualistic ontologies. Some authors have claimed the recognition of a dynamic and relational flourishing instead of an individualistic one [67] and recognize the value of nature's in-

terconnectivity. The multi-species justice proposed by Celermajer and others [67] goes precisely in this direction of starting from a more relational and dynamic ontology than simple individualism.

Bendik-Keymer's approach of multi-species fields [68] shows similar reasoning to Celermajer's and leads him to criticize Nussbaum's biocentric individualism. His notion of multi-species fields starts from a holistic perspective by considering that the autonomy of living beings is relational with respect to other beings, to collective communities, and to ecosystems. This idea contributes to thinking of a multi-level axiology, where there is not a single biospheric integrity or different individual integrities; instead, the integrity of each being or natural entity is relative because it depends on the relational point of view adopted. Here, the concept of integrity might be expanded by adopting another environmental virtue, which may be called a "wonder": wonder at the evolution and flourishing of what or who we do not perceive as an instrumental materialistic interest; wonder at relational integrity [68,69]. Rachel Carson was one of the pioneers of understanding wonder as a radical state of mind helpful for environmental ethics. In some of her books, she encouraged her readers to consciously cultivate habits of awe, to pay careful attention to the often-overlooked 'beauties and mysterious rhythms of the natural world' [70]. More recently and similarly, other authors have echoed the ethical potential of adopting wonder behavior to facilitate human and non-human flourishing [71].

Aesthetic wonder helps to sustain the multi-level axiology mentioned by Bendik-Keymer, but other more reflective virtues are also needed to rethink the thresholds and ceilings [8] of our capabilities and to reduce anthropocentric conceptions of nature's value. Here, the ecological reflexivity virtue proposed by Dryzek and Pickering [52] and mentioned above may help to incorporate a broad flexibility and resilience when it comes to changing our behaviors and activities if we gain a profound understanding of the value of integrity to non-sentient entities in the near future.

Integrating holistic ideas into a discussion on justice, where some capabilities are supposedly prioritized over others, helps to generate depth in the debate. On the one hand, this is because not only the sum of individual interests enters into the assessment but also the result of diverse synergistic interactions. So, when an ecosystem is transitioning to another one, we should probably focus on the new conditions generated by the convergence of factors. On the other hand, the debate becomes richer and more reflective because the thresholds of (e.g., human) capabilities are no longer understood as atomized needs and come to be understood as relational and, in most cases, eco-dependent historical needs.

4. Towards a Synergetic flourishing Based on Ecological Justice

So far, I have stressed the importance of decolonizing our lifestyles and expanding our epistemologies in order to rethink from a holistic point of view the conditions that influence ecosystem changes and disruptions. I have also emphasized the need to review to what extent the "conversion factors" (using Sen's words) that we usually demand to guarantee a minimum threshold of capability are necessary or, on the contrary, there could be other (lower energivorous and materialistic) means to satisfy our human flourishing. The virtue of ecological justice can bring a decolonial and more humble attitude as it questions relations of domination over the non-human beings and non-sentient entities. Thanks to environmental virtues such as this, we can recognize the capabilities and integrity of some natural entities and strive to flourish synergistically and not just blindly to foster individual and atomized development.

"Synergetic flourishing" is an original concept proposed here to define the positive feedback between human flourishing and non-human flourishing as a way of empowering different capabilities without creating tensions between them. Some academics have rethought similar meanings for concepts such as "planetary flourishing", which consists of aligning pathways of both flourishings and adopting an integral identity, in which individuals see themselves in relation to their wider environment [13]. The essential idea may be the same, but the "synergetic" adjective appeals to revalue the hypothetical emerging

benefits derived from multi-level relations between individuals and embodied ecosystemic entities [56,72]. The capabilities approach could contribute to such concepts introducing the distinction between functions and capabilities and proposing that flourishing should be based on protection of the latter [14]. Likewise, accepting the ecosystem capabilities could expand the Sen and Nussbaum frameworks towards new environmental ethics approaches.

Fostering synergetic flourishing through ecological justice virtue entails adopting philosophical thinking with epistemological, moral, and political dimensions, in which the rational understanding that non-human life has its own development is imbued with personal motivation to respect that development. As for the understanding that non-human nature is capable of self-realization, a starting point would consist in shifting the weight on which a large part of the literature on capabilities approach is based upon. For Nussbaum, self-realization is closely associated with the notion of dignity [15,73], which is fundamentally defined by the opportunity to have autonomy and freedom, a particular feature of humanity. However, if that origin (with Aristotelian roots) on which the concept of flourishing rests is extended to include the notion of "integrity" [38,46] (pp. 136–147), then other ways of non-sentient life have a place in human development theories or the capabilities approach.

Why embrace the concept of integrity and not just rely on dignity, as Nussbaum does? We could expand the meaning of dignity and attribute it to non-animal entities as well. On the one hand, the problem in expanding it is that there is the risk of misunderstanding why a non-rational, non-sentient, and non-individual entity has dignity. The theoretical frameworks that have accompanied the capabilitarian discourses in defense of dignity have rightly based their arguments on the premise that beings have dignity because they are rational, sentient, or individually autonomous [74]. Yet, there are exceptions, such as Katy Fulfer, who has offered a relational description of dignity linked to interdependence and neediness, which also includes non-animal entities in the community of justice [75]. But, to what extent dignity can be a concept with a malleable meaning is a question that some authors have already discussed [76].

On the other hand, the concept of integrity makes it easier to start from a multi-level axiology than solely dignity. Recognizing the integrity of ecosystems can help to understand their instrumental value in a way that is neither reified nor highlighted by a dichotomous otherness. The notion of integrity refers to understanding ourselves, human beings, as ecodependent individuals who are at the same time systems for other smaller components. This means proceeding from a notion of identity shaped by limit concepts [77] (pp. 959–961). From this relational point of view, the "Self" and the "Other" are both integral parts of a broader and more complex life reality that encompasses us all (including other individuals). Therefore, it would be inconsistent and a fallacy of fuzzy logic [78] to defend the integrity of an individual but not of a broader being like systems, because indeed each individual is composed of other smaller individuals. From this perspective, our development should be considered internally and externally systemic.

The commitment of the ecological justice virtue to synergetic flourishing would consist in assuming that for humans it is not possible to flourish without integrating non-human life into the equation and recognizing their integrity, as done in many indigenous cosmovisions across the globe [61]. The symbolic identification that human societies have expressed with the non-human world in ways that cannot be reduced to simply instrumentalism has been common in different religions, in the literature, and ultimately in the culture of our species over time. When thinking about the instrumental benefits of ecosystems for humans from a multi-level axiology and from the recognition of an embodied integrity at several scales, it may leave behind the rigid separation between anthropocentric and non-anthropocentric viewpoints. That would also be the contribution of the idea of synergetic flourishing: reframing human and non-human capabilities in a context of dynamic interdependence.

However, there are challenges for the virtue of ecological justice to try to adapt human behaviors to a non-anthropocentric and non-individualistic flourishing. Probably the first moral obstacle for human reason and main objection to synergetic flourishing concerns

the acceptance of ecosystem capabilities. As noted above, even if we do shift our morals from dignity to integrity, some kind of autonomy or freedom for non-human nature must still be acknowledged. Otherwise, accepting an environmental meta-capability for human beings, and only functions rather than capabilities in ecosystems, might suffice. Many advocates of ecocentrism have been criticized, given that there are examples of various non-human biotic communities that have neither a conscience nor desires and, therefore, no moral agency can be attributed to them [79]. It is possible to be ecologically responsible without the need for deep assumptions such as the capabilities of ecosystems. Human survival itself depends on preserving the health and integrity of ecosystems [80], so few "intellectual gymnastics" are actually required. A prompt response could be that the value of non-human nature may be justified by considering it a moral patient [81] or because it contains its own potentialities. A deeper counter-argument could be that the notion of integrity does not comprise moral agency as in the concept of dignity defended by Western tradition based on Aristotle or Kant. Using concepts such as striving or integrity [38,74], they appeal to a meaning of agency not based exclusively on pursuing rational or sensible interests but on flourishing according to one's systemic identity. An identity that may be dynamic and diverse but struggles to remain stable in the face of possible disruptions through capabilities for homeostasis and resilience [40].

A second and related challenge concerns the way we discern the basic capabilities required for ecosystems to flourish. Would it be possible to understand the whole meaning of integrity for those biotic communities most different from humans? Any rational explanation of this will be more anthropogenically mediated if theoretical research consists of using our human senses to define and list non-human capabilities. There is an epistemological risk of projecting our own values here [82]. Recognizing capabilities in non-human nature could ultimately involve some human being expressing the voice of nature, which would be an illusion provoked by anthropocentrism and by epistemological biases, as pointed out in Sections 2 and 3. Again, the risk of paternalism could come up here. Consequently, this result might limit the philosophical exercise of assuming the virtue of ecological justice.

To reduce the risk that this utilitarian paternalism of human societies may emerge, there are political projects, guided by decolonial thinking, that can help. For example, Schlosberg has proposed a "politics of sight", based on expressing and making visible what is invisible in our societies and cultures, such as anthropogenic impacts on non-human nature [83] (pp. 193–208). Awarding space to non-human nature, to make other living beings and ecosystem rhythms and processes more perceptible, could also be fostered by "rewilding" policies. specifically if rewilding embraces a passive management of nature where there is minimal interventionism [84].

Next, if rewilding policies and politics of sight are put in practice, a third challenge or concern emerges, this time in relation to ethics and politics: is there any moral hierarchy among capabilities in a supposed ecocentric egalitarianism? From the individualistic anthropocentrism standpoint, it is reasonable to defend a healthy environment as being a meta-capability for human development, but from holistic non-anthropocentrism it is not so clear. A non-anthropocentric approach may agree with "green" anthropocentrism or sustainable human development theories in constraining some human capabilities in common situations (always above a minimum threshold), through mitigation policies for instance. But, the form of management would definitely change in a tragic scenario where a choice had to be made between protecting human or ecosystem capabilities (in the event they are even accepted). Non-human capabilities are not recognized from the perspective of anthropocentric flourishing, which legitimizes privilege being granted to human capabilities. Nevertheless, from a synergetic flourishing approach guided by a virtue of ecological justice, which capabilities would be viewed as a priority in a tragic scenario and based on what criteria? This is a pragmatic point requiring further research.

The outlined challenges articulate reasonable objections that can, nevertheless, be addressed if the capabilities of ecosystems are accepted. Although the concept of synergetic flourishing is not immune to criticism, it may entail another way of communicating the

need to evade moral centrisms, especially atomized ones, and bring to the capabilities framework based on political liberalism an open dialogue with non-individualistic or rationalistic axiologies. It allows different indigenous worldviews that recognize the values inherent in the environment to be easily incorporated [9,61,65] and, therefore, expands the common sense of human development. The biological integrity of each living being requires ecological integrity in their habitat, so the loss of ecosystem capabilities could result in morbidity, altered function or loss of individual capabilities [19]. Hence, synergetic flourishing guided by ecological justice could also provide a better protection of the thresholds associated with human capabilities over time. In addition, it encourages our sensibility and empathy for what is different, on the one hand, and a rational support for strong mitigation-oriented political decisions and humble ecosystem management, on the other. It may, therefore, be fruitful to advocate this environmental virtue.

5. Closing Remarks

The main goal of this paper revolves around exploring the non-animal capabilities by acknowledging the underlaid integrity in ecosystems and some contributions of ecological justice virtue to the moral conflicts among different axiologies and flourishings. One first take-away message here is that "centrisms" could be abandoned in favor of a moral ontology that is not exclusively individualistic or holistic but rather navigates between the two options. These abstractions make it harder to connect capabilities that are in fact intergenerational, interspecific, and interdependent. Likewise, anthropocentrism and ecocentrism should negotiate a common deal wherein both philosophical perspectives give up a small part of their moral norms. The capabilities approach may benefit from concepts like synergetic flourishing because it collects ideas provided by decolonial thought and environmental virtue ethics which help to understand flourishing from a relational and non-domination viewpoint.

Funding: This research was supported by the project "Ética del Rewilding en el Antropoceno: Comprendiendo los Escollos de Regenerar Éticamente lo Salvaje (ERA-CERES)", with reference PZ618328/D043600, funded by Fundación BBVA; and supported by the project "La solidaridad en bioética (SOLBIO)" with reference PID2019-105422GB-100, funded by the Spanish Ministry of Science and Innovation (MICINN).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.

Notes

1 According to Maturana and Varela, autopoiesis or self-production is the capacity of living cells or systems to reproduce and organize themselves, while homeostasis is the capacity of a complex system to constantly maintain its identity while adapting to changes in its internal and external environment [39]. For them, resilience is closely related, because it may be understood as the capacity to safeguard the availability of molecules necessary for self-maintenance, whatever the problem that may threaten self-maintenance. Kortetmäki provides a similar meaning when studying ecosystem capabilities, defining resilience as maintaining characteristic functioning in disruptive circumstances [40].

2 One might ask how to convince aspirational citizens and ambitious politicians to consider or adopt such a program, insofar as they might prefer to produce and sell as much as possible to keep the machine alive. If people actually valued being virtuous they would not commit so many harmful acts. However, I would answer here that environmental virtue ethics is not a substitute for a normative approach. It is a necessary condition for developing more ethical awareness. The basic issue is not to "change people" and "convince citizens and politicians" but to change oneself rather than to be forced to change by external laws. "Adopting virtues" is sufficient to stop only those who do not want to behave badly.

References

1. Steffen, W.; Richardson, K.; Rockström, J.; Cornell, S.; Fetzer, I.; Bennett, E.; Biggs, R.; Carpenter, S.R.; de Vries, W.; de Wit, C.; et al. Planetary boundaries: Guiding human development on a changing planet. *Science* **2015**, *347*, 736. [CrossRef] [PubMed]
2. IPCC. An IPCC Special Report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. In *Global Warming of 1.5 °C*; IPCC: Geneva, Switzerland, 2018; *in press*.
3. IPBES. *Methodological Assessment Report on the Diverse Values and Valuation of Nature of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*; IPBES: Bonn, Germany, 2022. [CrossRef]
4. Willow, A. Wells and well-being: Neoliberalism and holistic sustainability in the shale energy debate. *Local Environ.* **2015**, *21*, 768–788. [CrossRef]
5. Shiva, V. *Making Peace with the Earth*; Pluto Press: London, UK, 2013.
6. Robeyns, I. *Wellbeing, Freedom and Social Justice: The Capability Approach Re-Examined*; Open Book Publishers: Cambridge, UK, 2017. [CrossRef]
7. Kamsler, V. Attending to nature. In *Capabilities Equality: Basic Issues and Problems*; Kaufman, A., Ed.; Routledge: New York, NY, USA, 2006; pp. 198–213.
8. Holland, B. Ecology and the Limits of Justice: Establishing Capability Ceilings in Nussbaum's Capabilities Approach. *J. Hum. Dev. Capab.* **2008**, *9*, 401–425. [CrossRef]
9. Watene, K. Valuing nature: Māori philosophy and the capability approach. *Oxf. Dev. Stud.* **2016**, *44*, 287–296. [CrossRef]
10. van Jaarsveld, J. How Nussbaum's Capabilities Approach Values the Environment: Extrinsically But as an End? *J. Hum. Dev. Capab.* **2021**, *22*, 468–485. [CrossRef]
11. Pascual, U.; Balvanera, P.; Anderson, C.B.; Chaplin-Kramer, R.; Christie, M.; González-Jiménez, D.; Martin, A.; Raymond, C.M.; Termansen, M.; Vatn, A.; et al. Diverse values of nature for sustainability. *Nature* **2023**, *620*, 813–823. [CrossRef] [PubMed]
12. Holland, B. *Allocating the Earth*; Oxford University Press: Oxford, UK, 2014.
13. Miller, M.; Douglass, M.; Rigg, J. Governing resilient cities for planetary flourishing in the Asia-Pacific. *Urban Stud.* **2020**, *57*, 1359–1371. [CrossRef]
14. Sen, A. *Development as Freedom*; Knopf, A.A., Ed.; Anchor: New York, NY, USA, 1999.
15. Nussbaum, M. *Frontiers of Justice: Disability, Nationality, Species Membership*; Harvard University Press: Cambridge, MA, USA, 2009.
16. Schlosberg, D. Three Dimensions of Environmental and Ecological Justice. In *European Consortium for Political Research Annual Joint Sessions*; European Consortium for Political Research: Grenoble, France, 2001; pp. 6–11.
17. Kortetmäki, T. Can Species Have Capabilities, and What if They Can? *J. Agric. Environ. Ethics* **2018**, *31*, 307–323. [CrossRef]
18. Wienhues, A. *Ecological Justice and the Extinction Crisis Giving Living Beings Their Due*; Bristol University Press: Bristol, UK, 2020.
19. Westra, L.; Bosselmann, K.; Gray, J.; Gwiazdon, K. *Ecological Integrity, Law and Governance*; Routledge: London, UK, 2018.
20. Bridgewater, P.; Rakhyun, E.K.; Bosselmann, K. Ecological integrity: A relevant concept for international environmental law in the Anthropocene? *Yearb. Int. Environ. Law* **2014**, *25*, 61–78. [CrossRef]
21. Rohwer, Y.; Marris, E. Ecosystem integrity is neither real nor valuable. *Conserv. Sci. Pract.* **2021**, *3*, e411. [CrossRef]
22. Melin, A. Should we Ascribe Capabilities to Species and Ecosystems? A Critical Analysis of Ecocentric Versions of the Capabilities Approach. *J. Agric. Environ. Ethics* **2021**, *34*, 26. [CrossRef]
23. Holland, B.; Linch, A. Cultivating Human and Non-Human Capabilities for Mutual Flourishing. In *The Oxford Handbook of Environmental Political Theory*; Gabrielson, T., Hall, C., Meyer, J.M., Schlosberg, D., Eds.; Oxford University Press: Oxford, UK, 2016. [CrossRef]
24. Nussbaum, M. *Justice for Animals: Our Collective Responsibility*; Simon & Schuster: New York, NY, USA, 2023.
25. Nussbaum, M. *Creating Capabilities: The Human Development Approach*; Harvard University Press: Cambridge, MA, USA, 2011.
26. Gollakner, R.; Capua, I. Is COVID-19 the first pandemic that evolves into a panzootic? *Vet. Ital.* **2020**, *56*, 7–8. [CrossRef] [PubMed]
27. Horkheimer, M.; Adorno, T. *Dialectic of Enlightenment*; Stanford University Press: Stanford, CA, USA, 2002.
28. Tafalla, M. *Ecoanimal: Una Estética Plurisensorial, Ecologista y Animalista*; Plaza y Valdés: Madrid, Spain, 2019.
29. Carlson, A.; Lintott, S. *Nature, Aesthetics, and Environmentalism: From Beauty to Duty*; Columbia University Press: New York, NY, USA, 2008.
30. Capra, F.; Luigi Luisi, P. *The Systems View of Life: A Unifying Vision*; Cambridge University Press: Cambridge, MA, USA, 2014.
31. Lovelock, J. *Gaia: A New Look at Life on Earth*; Oxford University Press: Oxford, UK, 1979.
32. D'Alisa, G.; Demaria, F.; Kallis, G. *Degrowth: A Vocabulary for a New Era*; Routledge: New York, NY, USA, 2015.
33. Brady, E.; Prior, J. Environmental aesthetics: A synthetic review. *People Nat.* **2020**, *2*, 254–266. [CrossRef]
34. Shapshay, S.; Tenen, L.; Welchman, J. Aesthetics of Nature, Constitutive Goods, and Environmental Conservation: A Defense of Moderate Formalist Aesthetics. *J. Aesthet. Art Crit.* **2018**, *76*, 419–428. [CrossRef]
35. Moyano-Fernández, C. Building Ecological Solidarity: Rewilding Practices as an Example. *Philosophies* **2022**, *7*, 77. [CrossRef]
36. IPBES. *Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services*; IPBES: Bonn, Germany, 2020. [CrossRef]
37. Venkatapuram, S. *Health Justice: An Argument from the Capabilities Approach*; Polity Press: Cambridge, UK, 2011.
38. Schlosberg, D. Justice, Ecological Integrity, and Climate Change. In *Ethical Adaptation to Climate Change: Human Virtues of the Future*; Thompson, A., Bendik-Keymer, J., Eds.; MIT Press: Cambridge, UK, 2012; pp. 445–461. [CrossRef]

39. Maturana, H.; Varela, F. Autopoiesis: The organization of the living. In *Autopoiesis and Cognition. The Realization of the Living*; Springer: Dordrecht, The Netherlands, 1980.
40. Kortetmäki, T. Applying the Capabilities Approach to Ecosystems in advance: Resilience as Ecosystem Capability. *Environ. Ethics* **2017**, *39*, 39–56. [CrossRef]
41. Crescenzo, D.L. Loose integrity and ecosystem justice on Nussbaum's capabilities approach. *Environ. Philos.* **2013**, *10*, 53–74. [CrossRef]
42. Taylor, P. *Respect for Nature: A Theory of Environmental Ethics*; Princeton University Press: Princeton, NJ, USA, 1986.
43. Baxter, B.H. *Theory of Ecological Justice*; Routledge: London, UK, 2005.
44. Okereke, C.; Charlesworth, M. Environmental and Ecological Justice. In *Advances in International Environmental Politics*; Betsill, M.M., Hochstetler, K., Stevis, D., Eds.; Palgrave Macmillan: London, UK, 2014; pp. 328–355. [CrossRef]
45. Low, N.; Gleeson, B. Justice, society and nature. In *An Exploration of Political Ecology*; Routledge: London, UK, 1998.
46. Schlosberg, D. *Defining Environmental Justice: Theories, Movements, and Nature*; Oxford University Press: Oxford, UK, 2007.
47. Dobson, A. *Citizenship and the Environment*; Oxford University Press: Oxford, UK, 2003. [CrossRef]
48. Hayward, T. Ecological Citizenship: Justice, Rights and the Virtue of Resourcefulness. *Environ. Politics* **2006**, *15*, 435–446. [CrossRef]
49. Jamieson, D. When utilitarians should be virtue theorists. *Utilitas* **2007**, *19*, 160–183. [CrossRef]
50. di Paola, M. Virtues for the Anthropocene. *Environ. Values* **2015**, *24*, 183–207. [CrossRef]
51. Pickering, J. Ecological reflexivity: Characterising an elusive virtue for governance in the Anthropocene. *Environ. Politics* **2018**, *28*, 1145–1166. [CrossRef]
52. Dryzek, J.; Pickering, J. *The Politics of the Anthropocene*; Oxford University Press: Oxford, UK, 2019.
53. Nagel, T. What Is It Like To Be a Bat? *Philos. Rev.* **1974**, *83*, 435–450. [CrossRef]
54. Maller, C. *Healthy Urban Environments: More-than-Human Theories*; Routledge: Abingdon, UK, 2018.
55. Kemmerer, L. The Interconnected Nature of Anymal and Earth Activism. *Am. Behav. Sci.* **2019**, *63*, 1061–1079. [CrossRef]
56. Raymond, C.M.; Giusti, M.; Barthel, S. An embodied perspective on the co-production of cultural ecosystem services: Toward embodied ecosystems. *J. Environ. Plan. Manag.* **2017**, *61*, 778–799. [CrossRef]
57. Palmer, M.; Ruhi, A. Review Linkages between flow regime, biota, and ecosystem processes: Implications for river restoration. *Science* **2019**, *365*, eaaw2087. [CrossRef] [PubMed]
58. Bendik-Keymer, J. Species Extinction and the Vice of Thoughtlessness: The Importance of Spiritual Exercises for Learning Virtue. *J. Agric. Environ. Ethics* **2010**, *23*, 61–83. [CrossRef]
59. Pianalto, M. Humility and Environmental Virtue Ethics. In *Virtues in Action*; Austin, M.W., Ed.; Palgrave Macmillan: London, UK, 2013. [CrossRef]
60. Marima, P. The Influence of Environmental Virtue Ethics in Water Conservation. Master's Thesis, Strathmore University, Nairobi, Kenya, 2018. Available online: http://su-plus.strathmore.edu/handle/11071/5960 (accessed on 1 August 2023).
61. Escobar, A.; Demaria, F.; Kothari, A.; Salleh, A.; Acosta, A. *Pluriverse: A Post-Development Dictionary*; Tulika Books: New Delhi, India, 2019.
62. Demaria, F.; Schneider, F.; Sekulova, F.; Martínez-Alier, J. What is degrowth? From an activist slogan to a social movement. *Environ. Values* **2013**, *22*, 191–215. [CrossRef]
63. Kallis, G.; Kerschner, C.; Martínez-Alier, J. The Economics of Degrowth. *Ecol. Econ.* **2012**, *84*, 172–180. [CrossRef]
64. Ruuska, T.; Heikkurinen, P.; Wilén, K. Domination, Power, Supremacy: Confronting Anthropolitics with Ecological Realism. *Sustainability* **2020**, *12*, 2617. [CrossRef]
65. Gudynas, E. Buen vivir: Today's Tomorrow. *Development* **2011**, *54*, 441–447. [CrossRef]
66. Winter, C.J. Decolonising dignity for inclusive democracy. *Environ. Values* **2019**, *28*, 9–30. [CrossRef]
67. Celermajer, D.; Schlosberg, D.; Rickards, L.; Stewart-Harawira, M.; Thaler, M.; Tschakert, P.; Verlie, B.; Winter, C. Multispecies justice: Theories, challenges, and a research agenda for environmental politics. *Environ. Politics* **2021**, *30*, 119–140. [CrossRef]
68. Bendik-Keymer, J. Beneficial relations between species & the moral responsibility of wondering. *Environ. Politics* **2021**, *31*, 320–337. [CrossRef]
69. Bendik-Keymer, J. The Reasonableness of Wonder. *J. Hum. Dev. Capab.* **2017**, *18*, 337–355. [CrossRef]
70. Carson, R. *The Sense of Wonder*; Harper & Row: New York, NY, USA, 1965.
71. Willmott, G. *Reading for Wonder: Ecology, Ethics, Enchantment*; Palgrave MacMillan: London, UK, 2018. [CrossRef]
72. Giusti, M.; Samuelsson, K. The regenerative compatibility: A synergy between healthy ecosystems, environmental attitudes, and restorative experiences. *PLoS ONE* **2020**, *15*, e0227311. [CrossRef]
73. Nussbaum, M. Human Dignity and Political Entitlements. In *Human Dignity and Bioethics, by the President's Council on Bioethics*; President's Commission on Bioethics: Washington, DC, USA, 2008.
74. Bendik-Keymer, J. From humans to all of life: Nussbaum's transformation of dignity. In *Capabilities, Gender, Equality*; Comim, F., Nussbaum, M., Eds.; Cambridge University Press: Chicago, IL, USA, 2014. [CrossRef]
75. Fulfer, K. The Capabilities Approach to Justice and the Flourishing of Nonsentient Life. *Ethics Environ.* **2013**, *18*, 19–42. [CrossRef]
76. Kymlicka, W. Human Rights without human supremacism. *Can. J. Philos.* **2017**, *48*, 763–792. [CrossRef]
77. Ferrater, J. *Diccionario de Filosofía (A-K)*; Editorial Sudamericana: Buenos Aires, Argentina, 1964.
78. Hájek, P.; Novák, V. The Sorites Paradox and Fuzzy Logic. *Int. J. Gen. Syst.* **2003**, *32*, 373–383. [CrossRef]

79. Ferry, L. *The New Ecological Order*; University of Chicago Press: Chicago, IL, USA, 1995.
80. Hernandez Betancur, J.P. Is There Common Ground between Anthropocentrists and Nonanthropocentrists? *Environ. Ethics* **2019**, *41*, 99–114. [CrossRef]
81. Goodpaster, K. On Being Morally Considerable. *J. Philos.* **1978**, *75*, 308–325. [CrossRef]
82. Callicott, J.B. Defense of the Land Ethic. In *Essays in Environmental Philosophy*; State University of New York Press: Albany, NY, USA, 1989.
83. Schlosberg, D. Environmental Management in the Anthropocene. In *Oxford Handbook of Environmental Political Theory*; Gabrielson, T., Hall, C., Meyer, J., Schlosberg, D., Eds.; Oxford University Press: Oxford, UK, 2016. [CrossRef]
84. Pettorelli, N.; Barlow, J.; Stephens, P.; Durant, S.; Connor, B.; Schulte to Bühne, H.; Sandom, C.; Wentworth, J.; du Toit, J.T. Making rewilding fit for policy. *J. Appl. Ecol.* **2018**, *55*, 1114–1125. [CrossRef]

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Article

The Ecological Community: The Blind Spot of Environmental Virtue Ethics

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Abstract: Since their emergence in the 1980s, environmental virtue ethics (EVEs) have aimed to provide an alternative to deontological and consequentialist approaches for guiding ecological actions in the context of the global environmental crisis. The deterioration of the ecological situation and the challenges in addressing collective action problems caused by global changes have heightened interest in these ethics. They offer a framework for meaningful individual actions independently of the commitment of other actors. However, by shifting the focus onto individuals, EVEs appear to grapple with the tension between anthropocentrism and respect for nature, as well as between self-flourishing and concern for other living beings. This article argues that this difficulty is rooted in the neglect within EVEs of the communitarian aspect of ancient virtue ethics. Drawing from Baird Callicott's ecocentric approach and Val Plumwood's works, this paper explores the possibility of conceiving ecological communities as collective frameworks in which both public and private virtues are defined and practiced.

Keywords: environmental virtue ethics; ecological community; collective virtues; relational self; egocentrism; ecocentrism; self-realization

Citation: Beau, R. The Ecological Community: The Blind Spot of Environmental Virtue Ethics. *Philosophies* **2023**, *8*, 112. https://doi.org/10.3390/philosophies8060112

Academic Editors: Sylvie Pouteau and Gérald Hess

Received: 7 October 2023
Revised: 20 November 2023
Accepted: 21 November 2023
Published: 23 November 2023

1. Introduction

Since the 1980s, environmental ethics have significantly echoed the revival of virtue ethics in moral philosophy [1]. While deontological and consequentialist approaches struggled to show concrete effects on the deterioration of the ecological situation, environmental virtue ethics (EVEs) emphasized the role of character and flourishing in the environmental movement. Remaining faithful to the Aristotelian idea that "by doing the acts that we do in our transactions with other men we become just or unjust" [2] (1103b15), EVEs aim to extend this moral approach to our transactions with Earth others. These reflections took the form of a series of studies aimed at identifying dispositions for action that could be described as 'environmental virtues' (e.g., humility, frugality, and attentiveness) [3–5]. Several approaches emerged in this regard. Some followed the path of eudaimonist virtue ethics, aiming to demonstrate how respect for the environment was a necessary condition for human flourishing [6]. Others pursued agent-centered approaches, which sought to identify the motivations found in the actions of exemplary individuals that enable virtuous acts to be defined. The goal was to illustrate how some of the great figures in environmentalism (such as Henry David Thoreau, Aldo Leopold, and Rachel Carson) embodied a particular environmental virtue [7].

Now firmly established in the field of environmental ethics, virtue ethics are facing the most pressing questions that permeate the discipline, particularly those related to global changes. How do we define moral virtues aimed at protecting a nature that is constantly changing? How do we care for ecological communities in the Anthropocene, that is, in a world where climate change and the erosion of biodiversity continue to accelerate? This article will begin by showing in Section 2 how EVEs address these questions by proposing a response to the problem of collective action that lies at the heart of the "moral storm" [8] triggered by global change. Section 3 will analyze two strong objections to this response,

claiming that it amounts to a return to an anthropocentric and individualistic ethical framework. The following two sections will examine how some EVEs have attempted to escape this criticism by demonstrating how the relational nature of the self implies consideration of Earth others in self-realization. However, after pointing out the limitations of these relational approaches in light of the works of Val Plumwood and Baird Callicott, Section 5 advocates for shifting the focus away from the self to explore collectives in which environmental virtues can be exercised. Finally, Section 7 demonstrates how the de-individualization of EVEs can involve characterizing collective virtues conceived on the scale of ecological communities.

2. A Response to the Problem of Collective Action

Virtue ethics have grown in significance within environmental discourse as the global dimension of the ecological crisis has become one of the primary challenges to environmental action. Indeed, on a global scale, environmental issues present a particularly challenging "collective action problem". This type of problem, extensively discussed in moral and political philosophy, characterizes situations in which cooperation that would benefit all parties involved is hindered by the risk that some agents may opt not to act, prioritizing their individual self-interests over the common good. An early formulation of this is to be found in David Hume's *Treatise on Human Nature* published in 1739:

> "Two neighbours may agree to drain a meadow, which they possess in common; because it is easy for them to know each others mind; and each must perceive, that the immediate consequence of his failing in his part, is, the abandoning the whole project. But it is very difficult, and indeed impossible, that a thousand persons should agree in any such action; it being difficult for them to concert so complicated a design, and still more difficult for them to execute it; while each seeks a pretext to free himself of the trouble and expence, and would lay the whole burden on others". [9] (p. 538)

In this light, climate change emerges as an immense challenge for cooperation, as it affects all inhabitants of Earth and spans multiple generations. Furthermore, as philosopher Stephen Gardiner has pointed out, the characteristics of this global problem, particularly the spatial and temporal dispersion of its causes and effects, foster forms of 'moral corruption' and free-riding strategies among individual or collective actors [8]. In the absence of binding regulations enforced by an international institution capable of sanctioning non-compliance, the prospect that the commitment of some may not be reciprocated by others fosters a sense of inaction. Without cooperation, the calculation of costs and benefits does not necessarily support committing to action, as it may be more disadvantageous to combat climate change than to do nothing in a world where cooperative partners are not reliable.

At various levels, this issue prompts the question of the significance of ecological commitment. Particularly at the individual level, recognizing the imperative need to profoundly transform the production and consumption patterns of industrial societies, alongside the observation of collective inertia, threatens to undermine the definition of an ethical life project. Why should I change my way of living, eating, moving, traveling, or housing myself if I know that these changes will not have any impact on global changes? In this context, virtue ethics provide a solution by no longer tying motivation for ecological action to the success of cooperation. Instead, they advocate for the development of dispositions for action, seen as intrinsic qualities of virtuous individuals, and therefore pursued regardless of the actions of others. As noted by American philosopher Dale Jamieson, in the context of climate change, virtues "give us the resiliency to live meaningful lives even when our actions are not reciprocated [10]". Therefore, virtue ethics prove particularly relevant due to their ability to guide individual behavior in a context where environmental disruptions pose new moral challenges that cannot be solved on an individual basis.

3. Back to Anthropocentrism and Individual-Centered Approach?

However, an ethical response similar to Jamieson's, in turn, raises an important question. Does it ultimately lead to a departure from the realm of collective action, embodying an individual retreat into ethics, partly motivated by the failure of climate and environmental policies? Thus, EVEs may not truly offer a solution to the problem of collective action in environmental matters. Instead, they might lead to giving up on attempting to address it and pose the question of the possibility for individuals to lead a good life, knowing that we have failed to address global environmental issues. In doing so, it would result in a refocusing of environmental ethics on human individuals.

In *Radical Ecology: The Search for a Livable World* [11], Carolyn Merchant schematized the shift in ethical thinking brought about by the environmental ethics movement, describing a progression that began with an egocentric stance and moved towards ethics centered on relationships among members of the same eco-community. In light of what has just been said, would the emergence of EVEs lead us to travel in the opposite direction?

In fact, from the outset, the resurgence of virtue ethics starting in the 1960s generally faced criticism that viewed this movement as a focus on self-concern at the expense of concern for others. To put it simply, some virtue ethics were accused of theorizing a form of moral selfishness. Canadian philosopher Thomas Hurka argued in this regard that Aristotelian-inspired virtue ethics were, at their core, egoistic because they ultimately made the individual pursuit of eudaimonia the central core of ethics [12]. In such a framework, he believed that the ultimate reasons for moral action always relate to one's own flourishing and not to the flourishing of others. According to him, they would fail to escape a form of moral solipsism: the idea that by placing the self at the center of ethics, they render concerns for others secondary or even inconsequential.

Within the field of environmental ethics, these approaches centered on moral agents presented a second issue. The pursuit of individual flourishing, as theorized by eudaimonistic ethics, also seemed to narrow the sphere of moral consideration, limiting concerns to humans alone. From this perspective, virtue ethics represented a return to moral anthropocentrism. For many proponents of the intrinsic value of nature, this focus disqualified them from their claim to be an alternative to non-anthropocentric environmental ethics. In this regard, Holmes Rolston highlighted the limitations of these approaches in the field of environmental ethics:

> Environmental virtues, as achieved by humans, will initially involve concern for human quality of life. But our deeper ethical achievement needs to focus on values as intrinsic achievements in wild nature. These virtues within us need to attend to values without us. Perhaps one starts with a love of nature that is tributary to self-love. Later one discovers that this self-love is quite inclusive, for the health of myriad nonhumans is implicated, entwined with ours. One is called to an active concern and positive engagement with the object of encounter. The other cannot be seen simply as a source of personal transformation. We must make the model at least an ellipse with two foci: human virtue and natural value. [13] (p. 69)

For Rolston, the reflection on human virtues can indeed demonstrate how self-concern can benefit others, especially non-human beings. The flourishing of humans indirectly involves, without being aimed at as a moral end, the flourishing of other forms of life. However, according to him, this position, which resembles a weak anthropocentrism, cannot replace the moral imperatives that stem from the recognition of the intrinsic value of nature insofar as it requires respecting other Earth beings, even if they do not contribute to any human's self-flourishing.

In his discussion of EVE, Callicott, in a similar line, critiques the strictly individualistic approach adopted by their theoreticians. He writes as follows:

> The Aristotelian cast of the contemporary revival of virtue ethics, consistent with the hyper-individualism of Modern moral philosophy, renders contemporary

> environmental virtue ethics supportive of the first prong of the virtue ethics at which Leopold hints, the self-respect of the individual. [1] (pp. 255–256)

In summary, EVEs would represent a significant regression toward anthropocentrism and individualism compared to the ambitious thinking carried out in environmental ethics since the 1970s.

4. Relational Approaches

Faced with these criticisms, EVEs could rely on the arguments put forth by virtue ethics theorists to counter the objection of egoism. One of the most robust responses is based on the assertion that the flourishing sought by the virtuous individual is fundamentally relational. This involves affirming the primacy of relationships in the pursuit of flourishing. This is, for example, clearly articulated by the philosopher Christopher Toner in his response to John Hare's formulation of the self-centered objection:

> This, then, is the template for a non-self-centred eudaimonistic virtue ethics: the agent seeks to live a life of virtue, where the virtues are simply those traits the possession and exercise of which constitute flourishing for a rational agent of that sort, where to flourish is to stand in the right relation to 'objects' according to their degrees and kinds of goodness, and where the right relation is that which acknowledges the nature or status of each relatum, in such a way that it is held in regard at least in part for its own sake. It is not self-centred to seek one's own flourishing because such flourishing is essentially relational. Attachment to others is not secondary as Hare alleges, but is of the essence of flourish. [14] (p. 613)

Toner responds point by point to the previous objections. Because virtues are relational dispositions, they necessarily entail extending consideration to others than oneself. Furthermore, because a relationship cannot be considered good if it only contributes to the flourishing of one of the two related beings, virtue ethics must take into account the specificity of the good for each of these beings. The flourishing of others, which presupposes the recognition of their existence as moral agents who matter for themselves, no longer appears as secondary but as a necessary correlate of one's own flourishing.

The scope of this theoretical reflection on virtue ethics, in general, quite explicitly extends to the specific domain of environmental ethics. Indeed, taking into account the flourishing of others for their own sake appears to open up virtue ethics to considering the intrinsic value of non-human beings. In his proposal for EVEs, Ronald Sandler responds precisely in this manner to the objection that "a Virtue-Oriented Approach Cannot Value Environmental Entities for Their Own Sake [6] (p. 114)". The relational approach allows him to refute this criticism because, as he writes regarding certain environmental virtues:

> They are not excellent in themselves, abstracted from the rest of the world. They are excellences in relating to the world. The facts about us (the sort of beings we are) and our world (the sort of demands there are for beings like us) are what make particular character traits virtues or vices. The bases of the virtues, therefore, in elude entities with inherent worth and values "without us". Moreover, they justify responsiveness to all sorts of environmental entities, including landscapes, ecosystems, living things, and sentient beings. Thus, there is no danger of environmental virtue losing touch with values or worth in the natural world. [6] (pp. 112–113)

This conception of ethical inquiry strongly resonates with Arne Naess's moral perfectionism. The theory of the ecological self that he unfolds in his works appears indeed as a relational approach to the self. It asserts that the self is not a social atom separate from the relationships it forms with the world but rather that it is fundamentally constituted by its relationships with others and with nature. In this framework, making self-realization the goal of ethics would not signify a retreat into a form of egoism and anthropocentrism. Instead, it would involve defining ethical work as a practice aimed at continually improving one's connection to the world. Naess writes:

> The greater our comprehension of our togetherness with other beings, the greater the identification, and the greater care we will take. The road is also opened thereby for delight in the well-being of others and sorrow when harm befall them. We seek what is best for ourselves, but through the extension of the self, our 'own' best is also that of others. The own/not-own distinction survives only in grammar, not in feeling. [15] (p. 175)

In summary, proponents of relational approaches counter the criticisms of EVEs by arguing that these objections hold true only if one assumes a flawed conception of what constitutes a moral agent. In an atomistic ontology, a moral theory does not seem capable of simultaneously being agent-centered and other-centered. However, they contend that this apparent contradiction dissipates when one adopts a relational conception of the self.

5. Redefining or Decentering the Self

However, while they may offer an elegant response to the objections of egoism and anthropocentrism, relational approaches to virtues maintain a certain ambiguity concerning how they seem to describe the merging of personal interests and the interests of others. According to these propositions, the risk of theorizing a form of moral egoism dissipates when one understands that self-realization entails the realization of the others who constitute this self. In Naess's terms, self-realization cannot be selfish if it pertains to an ecological self. But how can we ensure that this is indeed an overcoming of egoism and not merely a resolution of the tension that may exist between self-flourishing and the flourishing of others through the absorption and dissolution of others' interests?

Analyzing the discussion between Naess and the existentialist philosopher Peter Reed on this matter, Val Plumwood highlights the indecisive nature of self-realization:

> On first glance, Naess's account does not appear to appeal to either fusion or to egoism—since we are supposed to defend not the self but the big Self as 'the totality of our identifications'. But, says Reed, there seem to be inconsistent requirements hidden here: we are supposed to retain a sense of our individuality as we work to save the big Self from destruction—but at the same time we are supposed to lose interest in our individuality as we cultivate our identification with the big Self. We are required to be egoists and also not egoists, to retain the intensity and defence drive of egoism, but also to abandon certain key differentiations between ourselves and others, in order to establish that equivalence between self and other which enables a transfer of our selfregarding motives. Naess's position, on closer inspection, ultimately is based on a kind of self-interest and upon a form of fusion or expulsion of difference—taking the form, as Naess explains in his reply, of identity of interests. [16] (p. 199)

According to Plumwood, the model of identification that guides the realization of the ecological self ultimately leads not to a critique of egoism but to its extension through this expansion of the self.

In an article on the concept of self-realization in Naess's philosophy, Callicott presents a similar critique by arguing that Naess's thought has evolved from a genuinely relational conception of the self that was emerging in the foundational article on deep ecology [17] to a monist conception inspired by Hinduism. Regarding the former, he writes:

> What is an ecological approach to being in the world? In the context of 'The Shallow and the Deep' article Self-realization is a relational conception of the self and, more importantly, an experience of oneself in relational terms. One is and one experiences oneself to be a 'knot in the biospherical net of intrinsic relations.' Or better: as a node or nexus in a skein of internal socio-environmental relations. One experiences 'the beauty and complexity of nature [as] continuous with [one]sel[f]'. [18] (p. 239)

However, according to Callicott, this conception fades later on, particularly in *Ecology, Community and Lifestyle* [15]. In this work, he observes a unification and merging of selves that he finds problematic and describes as follows:

> In the metaphysics of Advaita Vedanta, the atman or Self at the core of oneself is equated with Brahman, the one universal Being at the core of all other selves (jivas) and indeed at the core of all phenomena whatsoever. In short, there is a unity in multiplicity and that unity is Atman-Brahman. There is, thus, an actual, literal common identity that oneself shares with other selves. My Self is also your Self; my Self and your Self are not two (advaita); they are one and the same. All Selves are one and the same Self. [18] (p. 244)

From this perspective, it becomes apparent that relational approaches can lead ethical reflection into what Plumwood refers to as the "Ocean of continuity [19] (p. 155)", which no longer allows for the recognition of the distinct differences of each moral agent. If everyone is directed on an ethical path that leads from the ego to the Self, this process takes the form of a "one-place relationship" [16] (p. 197) that does not acknowledge other beings as centers of resistance with their own interests and goods. Consequently, ethical reflection may fail to break free from the monological relationship between the self and nature that characterizes centric constructions of ethics. In the end, EVEs that follows this path would fall under the previous charge of defending egocentrism.

For Plumwood, this is the reason why virtue ethics should redirect the focus from self-flourishing towards interpersonal relations. Virtues, especially environmental virtues, are, in her view, dispositions to act against "the oppressive ideologies of domination and self-imposition that have formed our conceptions of both the other and ourselves" [16] (p. 194). She calls them counter-hegemonic virtues. Through the exercise of these virtues, moral agents cultivate a form of decentering that involves attention and openness to the alterity of the diversity of Earth others. The horizon of this virtue ethics is a world without a single center, in which beings, acting as nodes in the biospheric network, are recognized in their specificity.

6. From Counter-Hegemonic to Collective Virtues

Against the holistic view of the merging of the moral self into a vast, undifferentiated whole, Plumwood and Callicott emphasize the plurality of selves and non-human agents. From this perspective, they assert that adopting a relational ontology does not imply the absorption of divergent interests or their alignment toward a single process of flourishing. Furthermore, they argue that EVE's central concern should not be the flourishing of individual agents but rather the characterization of a state of the community to which they belong. conducive to establishing a coexistence that respects the diversity of interconnected beings.

In that sense, Callicott assesses that EVE's main shortcoming is precisely that it failed to draw on what ancient philosophy offered in terms of thinking about virtues not merely as individual or even relational traits but as attributes of collectives. Collective virtues, in his view, represent the unexplored dimension of the contemporary revival of virtue ethics in the environmental domain.

In his own analysis of the potential of virtue ethics to address environmental issues, Callicott outlines three levels: personal, professional, and societal [1] (p. 158). The latter two differ from the first in that they refer to institutions or collective actors. Professional virtues are associated with ways of excelling in the practice of a profession. Societal virtues, on the other hand, characterize an entire community capable of cultivating traits that enable self-respect. According to Callicott, these virtues are particularly important because they allow us to address environmental problems at the collective level. However, EVEs, including their relational versions, have not been able to provide satisfactory answers because they have primarily focused on personal virtues.

What exactly does Callicott mean by collective virtues? A rich philosophical debate on the definition or even the existence of this type of virtue and the nature of the groups

capable of exercising them has emerged [20,21]. This debate intersects with the theoretical discussions initiated by Margaret Gilbert's work on collective actions and beliefs [22]. Without going into the details of this discussion, it is sufficient to mention here that the concept of collective virtue does not imply granting personhood status to groups. Following Ryan and Meghan Byerly's proposal, a collective virtue can be defined as follows:

> A collective C has a virtue V to the extent that the members of C are disposed, qua members of C, to behave in ways characteristic of V under appropriate circumstances. [21] (p. 46)

The collective dimension of these virtues is expressed in the fact that individuals or agents exercise them as members of a community to which these virtues are attributed.

But what communities are we referring to here? In his discussion, Callicott mainly mentions the ancient model of the polis. His references are to Aristotle and Plato [1] (pp. 259–261). However, this anchoring raises serious difficulties, first of all, because these social forms no longer exist, and moreover, their highly unequal structure makes them difficult to mobilize as a normative horizon within contemporary societies. These difficulties are at the heart of Alasdair McIntyre's work. How can we revive a virtue ethics that depends on social conditions that have disappeared? The analysis of this question takes an aporetic turn in *After Virtue* [23]. McIntyre does not believe that modern nation-states can embody social forms conducive to the development of a communal life oriented toward a common ideal of a good life that would allow for the definition of private and public virtues. He then retreats to small face-to-face communities that he believes are the only remaining spaces for the development of virtue ethics.

However, does the idea of public virtues necessarily lead to this pessimistic and politically conservative conclusion? A first response can emphasize that virtue ethics may not be destined to embody the type of moral authority capable of ordering society, as McIntyre aspires to. In a version more compatible with democracy, it can be conceived more modestly as an ethical reflection that engages in public discourse about the organization of common life. A second response can draw inspiration from the critique addressed by Plumwood to McIntyre, in which she asserts that virtue ethics are not necessarily linked to the attempt to resurrect social structures from the past but can accompany the invention or recognition of other more emancipatory social forms [19] (p. 186). Such a proposition allows us to redirect the discussion on environmental virtues toward the identification of collective virtues that can be exercised within ecological communities.

7. Collective Virtues within Ecological Communities

Critiquing the individualistic approach of EVEs, Callicott calls for a shift in thinking by suggesting that environmental virtues could pertain to collectives or communities. This notion prompts us to delve further into two questions: At what collective scale is it relevant to locate environmental virtues? Which environmental virtues can be defined as collective virtues?

The first question has the merit of drawing attention to the contextualization of the reflection on environmental virtues. While the theorization of individual virtues has often leaned towards the abstract characterization of virtuous environmental individuals, the approach through collective virtues appears as a way to reposition ethical reflection within a specific place and among a community of members who feel at least partially responsible for the decisions and actions of this community. In this regard, Plumwood repeatedly emphasizes the contextual dimension of the virtue ethics she describes.

Because spatial proximity promotes attention to the ecological consequences of our actions, small-scale communities seem to provide an especially conducive framework for practicing ethics that value the care given to the relationships that bind the diversity of living beings. Plumwood appears to align with McIntyre in this regard by focusing on small face-to-face communities. In her discussion of bioregionalism, she acknowledges how the movement has effectively highlighted the invisibilization of ecological relationships resulting from the remoteness of chains of production and distribution and the benefits

of relocalizing production activities. She also subscribes to the idea that decentralizing decision making, on the contrary, encourages the consideration of the effects of these decisions on the environment. Finally, she argues that true participatory democracy can only occur at this local level. She writes on this subject:

> Democracy can only be truly participatory at the level of the small, face-to-face community, people will be in a position to have the knowledge and motivation as well as the democratic and communicative means to make good ecological decisions, decisions that reflect their own extended long-term and familiar interests as well as those of their local ecologically-defined communities. [16] (p. 74)

In summary, Plumwood's analysis leads us to consider that local socio-ecological communities represent a good scale for the collective practice of environmental virtues. However, she also cautions against the risks of becoming confined to localism that could generate other forms of invisibility. She observes that the proximity to nature facilitated by small-scale communities does not necessarily guarantee "the first condition of the bioregionalist, the transparency to inhabitants of ecological relationships and dependencies [16] (p. 76)". From this perspective, while McIntyre tended to focus on goods internal to communities, Plumwood's concerns also revolve around embedding these communities within the broader network of socio-ecological relationships. According to her, environmental virtues must precisely help cultivate a "critical sense of place that can situate local relationships and communities in relation to wider communities" [16] (p. 77).

This leads us to the second question raised concerning the identification of collective and environmental virtues. What kind of trait or disposition to action could members of an ecological community cultivate as members of that community and be described as an environmental virtue? Among the list of virtues identified by Plumwood, solidarity emerges as an interesting candidate in this context. Thus, while this reflection will need to be broadened by considering other collective virtues, such as conviviality, the end of this section will focus on the concept of solidarity, which has already found significant resonance in ecological thought [24].

While she does not explicitly define it as a collective virtue herself, solidarity does indeed meet the criteria of a virtue that characterizes a collective rather than an individual. One would describe a community as "solidary" if the members of that community act and make decisions that demonstrate empathy towards others and an acknowledgment of the interdependent situation in which all members of that community find themselves. As noted by Byerly, there is no individual-level analogue to solidarity, which is why it constitutes a specifically collective virtue [21].

Plumwood assigns a pivotal role to solidarity in her virtue ethics. She carefully distinguishes it from unity in her concern for respecting differences. Analyzing the central role of this concept in Plumwood's work, Chaone Mallory writes:

> Political solidarity for Plumwood is a relation in which one (or, as is more suitable for our purposes, the collective) does not claim an identification with the other—political solidarity describes a relation in which beings are motivated to act on behalf of others with whom one admits one does not (necessarily) share experiences, interests, worldviews, or subjectivity. However, those standing in solidarity become joined both with the object of solidarity and others involved in struggling for change through the shared recognition of injustice and oppression and through acting to change it. [25] (p. 8)

As Mallory suggests, ecological solidarity is a form of political solidarity in Plumwood's philosophy. It is indeed a collective and public virtue, in the sense of being a "character trait[s] that bring[s] us into virtuous relationships with our communities and environments" [26] (p. 18).

This approach has the merit of undoing most binary distinctions that seemed to render EVEs ineffective, particularly the dichotomies between the individual and the collective, the private and the public, or ethics and politics. In addition, rather than in opposition to

the realization of an ecological self, the work on collective virtues can be interpreted as a process through which members of an ecological community care for the flourishing of the diversity of living beings within it.

8. Conclusions

During their initial phase of development, EVEs were associated, both by their theorists and their critics, with the solitary practice of virtues that exemplified what a life respectful of the diversity of living beings on Earth could be. This analytical framework aligned with a common way of narrating the history of environmental conservation, which successively invokes the prominent figures of the environmental cause, such as Thoreau, Muir, Leopold, and Carson. Despite their claims to the contrary, these individualistic approaches to EVEs are seen by many of their critics as a form of depoliticization of environmental action.

However, the contributions of Plumwood and Callicott to this debate introduce a different perspective within EVEs. By reintroducing social forms and ecological communities in which environmental virtues can be practiced, they demonstrate how a virtue ethics approach can, on the contrary, resonate with new forms of politicization of ecological issues.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: No new data were created or analyzed in this study. Data sharing is not applicable to this article.

Acknowledgments: The author thanks two anonymous reviewers for helpful comments on earlier drafts of the manuscript.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Callicott, J.B. *Thinking Like a Planet: The Land Ethic and the Earth Ethic*; Oxford University Press: New York, NY, USA, 2013; ISBN 978-0-19-932489-7.
2. Barnes, J. *Complete Works of Aristotle, Volume 2: The Revised Oxford Translation*; Princeton University Press: Princeton, NJ, USA, 2014; ISBN 978-1-4008-3585-0.
3. Hill, T.E. Ideals of Human Excellence and Preserving Natural Environments. *Environ. Ethics* **1983**, *5*, 211–224. [CrossRef]
4. van Wensveen, L. *Dirty Virtues: The Emergence of Ecological Virtue Ethics*; Humanity Books: Amherst, NY, USA, 2000; ISBN 978-1-57392-649-2.
5. Sandler, R.D.; Cafaro, P. (Eds.) *Environmental Virtue Ethics*; Rowman & Littlefield: Lanham, MD, USA, 2005.
6. Sandler, R. *Character and Environment. A Virtue-Oriented Approach to Environmental Ethics*; Columbia University Press: New York, NY, USA, 2007.
7. Cafaro, P. Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics. *Environ. Ethics* **2001**, *23*, 3–17. [CrossRef]
8. Gardiner, S.M. *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*; Oxford University Press: New York, NY, USA, 2011; ISBN 978-0-19-537944-0.
9. Hume, D. *A Treatise of Human Nature*, 2nd ed.; Selby-Bigge, L.A., Nidditch, P.H., Eds.; Oxford University Press: Oxford, UK, 1739.
10. Jamieson, D. *Reason in a Dark Time: Why the Struggle Against Climate Change Failed—And What It Means for Our Future*; Oxford University Press: New York, NY, USA, 2014; ISBN 978-0-19-933766-8.
11. Merchant, C. *Radical Ecology: The Search for a Livable World*; Routledge: New York, NY, USA, 1992.
12. Hurka, T. Monism, Pluralism, and Rational Regret. *Ethics* **1996**, *106*, 555–575. [CrossRef]
13. Rolston, H., III. Environmental Virtue Ethics: Half the Truth but Dangerous as a Whole. In *Environmental Virtue Ethics*; Sandler, R.D., Cafaro, P., Eds.; Rowman & Littlefield: Lanham, MD, USA, 2005; pp. 61–78.
14. Toner, C. The Self-Centredness Objection to Virtue Ethics. *Philosophy* **2006**, *81*, 595–617. [CrossRef]
15. Næss, A. *Ecology, Community and Lifestyle: Outline of an Ecosophy*; Cambridge University Press: Cambridge, UK, 1989; ISBN 978-0-521-34873-7.
16. Plumwood, V. *Environmental Culture: The Ecological Crisis of Reason*; Routledge: Londres, UK, 2002.
17. Naess, A. The Shallow and the Deep Long-Range Ecology Movement. A Summary. *Inquiry* **1973**, *16*, 95–100. [CrossRef]
18. Callicott, J.B. Notes on "Self-Realization: An Ecological Approach to Being in the World". *Worldviews* **2017**, *21*, 235–250. [CrossRef]

19. Plumwood, V. *Feminism and the Mastery of Nature*; Routledge: New York, NY, USA, 1993; ISBN 978-1-134-91668-9.
20. Fricker, M. Can There Be Institutional Virtues. *Oxf. Stud. Epistemol.* **2010**, *3*, 235–252.
21. Byerly, T.R.; Byerly, M. Collective Virtue. *J. Value Inq.* **2016**, *50*, 33–50. [CrossRef]
22. Gilbert, M. *On Social Facts*; Princeton University Press: Princeton, NJ, USA, 1992; ISBN 978-0-691-21462-7.
23. MacIntyre, A. *After Virtue: A Study in Moral Theory*, 3rd ed.; University of Notre Dame Press: Notre Dame, IN, USA, 2022; ISBN 978-0-268-20405-1.
24. Mathevet, R.; Bousquet, F.; Larrère, C.; Larrère, R. Environmental Stewardship and Ecological Solidarity: Rethinking Social-Ecological Interdependency and Responsibility. *J. Agric. Environ. Ethics* **2018**, *31*, 605–623. [CrossRef]
25. Mallory, C. Val Plumwood and Ecofeminist Political Solidarity: Standing with the Natural Other. *Ethics Environ.* **2009**, *14*, 3–21. [CrossRef]
26. Treanor, B. Environmentalism and Public Virtue. *J. Agric. Environ. Ethics* **2009**, *23*, 9–28. [CrossRef]

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Mutual Flourishing: A Dialogical Approach to Environmental Virtue Ethics

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Abstract: Environmental virtue ethics is about how things (nature) matter, and this is explicated through the virtues (character and dispositions of the agent). It has been suggested that human virtue should be informed by what constitutes our flourishing and by what constitutes nonhuman entities flourishing. Our flourishing, in other words, involves recognising their flourishing and autonomy. My purpose in this paper is to elucidate the notion of mutual flourishing through a study on the relational space that a recognising attitude or disposition of a loving and caring subject creates in its interactions with 'earth others'.

Keywords: mutual flourishing; recognition; autonomy; love (of nature); relational space; relational ontology; dialogical ethics

Citation: Arcos, E. Mutual Flourishing: A Dialogical Approach to Environmental Virtue Ethics. *Philosophies* **2024**, *9*, 6. https://doi.org/10.3390/philosophies9010006

Academic Editors: Sylvie Pouteau and Gérald Hess

Received: 5 October 2023
Revised: 20 November 2023
Accepted: 26 December 2023
Published: 29 December 2023

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It has been suggested that human virtue should be informed by what constitutes our flourishing and by what constitutes others' flourishing. As the scholar Robin Wall Kimmerer [1] likes to say: 'all flourishing is mutual'. This mutual flourishing paradigm is beautifully illustrated in the parable of the Three Sisters [1] (pp. 128–140). The Three Sisters refer to three plants: corn, beans and squash. Together they form a garden, which represents a place of possibilities for mutual flourishing: 'There are layers upon layers of reciprocity in this garden between the bean and the bacterium, the bean and the corn, the corn and the quash, and, ultimately, with the people' [1] (p. 134). The parable of the Three Sisters captures the basic intuition of the mutual flourishing approach to environmental virtue ethics that I will outline in this essay. Philosopher John O'Neill [2] formulates the issue nicely:

> For a large number, although not all, of individual living things and biological collectives, we should recognize and promote their flourishing as an end itself. Such care for the natural world is constitutive of a flourishing human life. The best human life is one that includes an awareness of and practical concern with the goods of entities in the nonhuman world. [2] (p. 24; see also pp. 78, 153 and p. 155)

I highlight the term 'recognition' as a central concept of our enquiry. My suggestion is that a *recognising attitude of nature* creates a *relational space* in which natural beings can be seen as independent, legitimate, others; that is, as free beings with their own 'projects' and 'ends'. It is because there are individuated others that there can be reciprocity, and thus mutual flourishing. I will make the hypothesis that the *recognition of nature's autonomy* is a necessary condition for an environmental virtue ethics based on mutual flourishing. In arguing for the recognition of nature's autonomy as the foundation of an ethic of mutual flourishing, I intend to continue Val Plumwood's [3,4] philosophical project, that is, to elaborate a counter-hegemonic strategy to replace 'monological relationships with nature by dialogical ones that are responsive to the other on their own terms' [3] (p. 111). In a dialogical, subject–subject, methodology, 'the other is always encountered as a potentially

communicative other' [3] (p. 190). Communicability, then, in Plumwood's view, means respecting 'earth others' as agents, as subjects, viz. 'intentional beings' [3] (pp. 182–183 and *sq*.).

This project, in V. Plumwood's work, takes the form of what she calls 'weak panpsychism', that is, the idea that elements of mind are widespread in nature ([3] (p. 178) and [4] (p. 133)). This thesis, however, raises the following issue, eloquently put by Bryan Bannon [5]: 'if nature is to have properties and agency, then it must be a substantial being with mind-like properties' (p. 44); but, B. Bannon notes, '[a]ttributing certain *properties* [author's italics] to nature without altering how nature is initially defined is not sufficient to overcome the crisis of rationality she [Plumwood] describes so eloquently.' (p. 41). Hence, B. Bannon suggests moving away from traditional *substantial* accounts of nature as a being with teleological properties to *relational* accounts of nature as a web of relations and processes (pp. 40–41)[1]. B. Bannon is right to make the case for a shift in ontology, and like him, I also take a place-based ethics approach. I therefore share the general view, central to the relational framework that I will adopt, that place is a composite of relations between affective bodies [6] (p. 270)[2].

However, the problem with this, and similar accounts [7], is that they lead to an ontology of events in which, because intentionality is blocked from the start, autonomy and agency become difficult, if not impossible, to conceive. Indeed, in this approach, 'our description of the world can only refer to the state of processes without a subject' [8] (p. 32). What is generally missing here is the question of the subject as 'being-for-oneself [*du pour soi*]'; to-be-for-oneself means to be the end of oneself; and this self-finality, at the level of the living, comes with a world of its own, namely the presentation, representation and relation of what is represented in the constitution of a singular world [9] (pp. 196–201) [10]. In other words, the natural world is populated by a multitude of beings who produce their own singular worlds and perspectives [11] (pp. 204–207)[3]. The state of the question of the subject as being-for-oneself is not of immediate importance to our purpose here. Rather, our focus is on the concept of the subject *necessary* for a *dialogical*, subject–subject, ethic. Only then, when this point has been adequately addressed, can we fully appreciate, as an illustration of a mutual flourishing environmental virtue ethic, R. W. Kimmerer's assertion:

> Individuality is cherished and nurtured, because, in order for the whole to flourish, each of us has to be strong in who we are and carry our gifts with conviction, so they can be shared with others'. [1] (p. 134)

In the Three Sisters parable, 'each plant does what it does in order to increase its own growth. But as it happens, when the individuals flourish, so does the whole.' [1] (p. 134). Based on this intuition, I will, as a starting point, make the following assumption: the autonomy of nature, that is, conceiving natural entities as subjects, as agents, is a necessary condition for a dialogical methodology and a mutual flourishing virtue ethics.

A Grammatical Aproach to the Subject: Toward a Narrative Environmental Virtue Ethics

We require a concept of the subject that does not lead to a substantial account of nature, and at the same time is compatible with a relational ontology framework. In particular, we need a concept of the subject that allows us to see 'earth others' as agents without conceiving of nature in terms of substances and properties. This concept, I argue, is the concept of the subject as an agent, i.e., the concept of a 'concrete individual endowed with causal powers' [8] (p. 34). I therefore adopt French philosopher Vincent Descombes' [8] grammatical approach in which the subject is defined as a *suppôt*, i.e., a substrate of action and change. As V. Descombes puts it: it is 'the individual such that he can play an actancial role in a story, so that one can ask whether he [/she/it] is the subject of what happens [agent], or if he [/she/it] is the object [patient], or if he [/she/it] is the recipient [beneficiary]' [8] (p. 14; see also pp. 16, 28–29, 121–124). This syntactic model of the subject might hold the key to ground a dialogical methodology for a mutual flourishing environmental virtue ethics in line with V. Plumwood's philosophical project.

V. Descombes' syntactic model of the subject, I argue, can help develop a communicative interspecies ethics in terms of a *narrative ethic*, which does not require the substantiation of nature but still recognises the autonomy of nature. As V. Plumwood [3] puts it: 'narrative ethics, supplying context and identity, can help us configure nature as a realm of others who are independent centres of value' (p. 188). The grammatical approach I take here, following then V. Descombes, allows us to distinguish between two ways of speaking about properties or qualities: one *attributive*, the other *verbal*. He gives the following example: 1. '*L'herbe est verte* [the grass is green]', and 2. '*L'herbe verdoie* [grass green]'. The first sentence is an attributive sentence, and the second is a verbal sentence. The important point here is that 'not everything that is presented as an action is an action, but this means that there is a way of presenting something *as if it were* [author's italics] an action' [8] (p. 73). This is the case in the second phrase '*L'herbe verdoie* [green grass]', where the phrase suggests the notion of an internal active force that is at the origin of the tree's foliage (*ibid*.). This, I think, gives full expression to V. Plumwood's statement that 'intentional *description* [my italics] is in turn crucial to legitimating rich *narrative description* [my italics] of the non-human sphere' [3] (p. 188). In this regard, Amitav Ghosh's *The Nutmeg's Curse* [12] is a compelling illustration of this narrative description of the non-human sphere in which natural entities are presented as subjects, or agents, viz. as 'protagonists in their own right, fully capable of generating forms of narrative and meaning' [12] (p. 96). Additionally, I claim that this narrative approach aligns with V. Plumwood's project of establishing continuity within difference in a counter-hegemonic strategy. In the Anthropocene framework, for example, establishing continuity takes the form of overcoming the great divide between natural history and human history [13,14]. Here, again, A. Ghosh's *The Nutmeg's Curse* [12] perfectly illustrates the varied interactions, continuities and 'enmeshments' of human and non-human forms of agency.

The syntactic model of the subject can therefore help determine the intentionality or agency of nature without presupposing a substantial account of nature. In this sense, the narrative approach can help convey the ideas of flourishing and of mutual flourishing, which, I argue, are part of an environmental virtue ethic. Environmental virtue ethics is about the character dispositions that we should have towards nature. As Ronald Sandler puts it: 'Indeed, how one interacts with the environment is largely determined by one's disposition toward it [. . .] In this way proper character [i.e., the virtues] is indispensable for facilitating right action and behavior' [15] (p. 253). In the context of environmental virtue ethics, narratives can inspire, motivate and help in the transmission of the virtues [16] (p. 371). As Brian Treanor has shown, narratives can help us see things from a different perspective, from a sort of 'virtual' or 'as if' experience [16] (pp. 369–370): 'We use narratives to experiment with possibilities, exploring different situations and different ethical responses' (*ibid*.). In addition, narratives are also central in a dialogical methodology. As V. Plumwood puts it: 'To treat the other as a potentially intentional and communicative being and narrative subject is part of moving from monological modes of encounter [. . .] to dialogical modes of encounter' [3] (p. 190)[4]. To this I propose to add: the dialogical encounter between human and other-than-human entities necessarily depends on the existence of a *relational space*. It is within this space that humans and 'earth others' relate, interact, as equally agents, patients and beneficiaries sharing common histories and stories. It is within this relational space that virtues can be cultivated, and that flourishing and mutual flourishing can take place as a result of living together in a relational space.

2.

I have argued that we do not require a substantial account of nature in order to conceive of nature's agency. Nature's *subjectivity* can be conveyed by a grammatical, syntactic, model of the subject as agent. However, this account is not yet an account of the *recognition* of nature's intentionality, which is how V. Plumwood presents her philosophical project of a communicative interspecies ethics [3] (pp. 182–183). Thus, my purpose now is to elucidate the idea of a recognising attitude of nature. I will argue that a recognising attitude of nature

creates a relational space in which nature can emerge as a legitimate other, that is, as an autonomous being.

2.1. A Recognising Attitude of Nature Based on Love as a Form of Adequate Recognition

The idea that we can understand our relationship with nature in terms of a theory of recognition is not generally accepted [17] (p. 276) [18] (p. 61). The reason can be traced back to the *mutual* recognition paradigm as the central explanatory and normative principle of the concept of recognition. This paradigm requires that 'only recognizers can be recognized' [19] (p. 320)[5], which then blocks nature from the start. However, in an *adequate regard* insight, *adequate* (and not mutual or interpersonal) *recognition* is about responding to the normatively relevant features of the other, *any* other [19] (p. 326)[6]. This *unrestricted* view of recognition opens up the way to think of a recognising attitude of nature. Thus, I suggest that we can define this recognising attitude of nature in terms of love (of nature) *as a form of adequate recognition* [20]. I use the term 'love' in Humberto Maturana's sense: 'love is the domain of those *relational behaviours* [my italics] through which another arises as a *legitimate other* [my italics] in co-existence with oneself' [21] (p. 55). The particularity of this definition is that, as an embodied characteristic of human beings (of the human bodyhood or body-self), it reveals the self as a relational-self, that is, a self that is constituted by the different kinds of relations (dependencies and interdependencies) it enters into (an embodied and embedded self). A recognising attitude of nature based on love as a form of adequate recognition means then that the other (nature) arises as a legitimate other (read: is recognised), without necessarily being an active participant (read: a recogniser)[7]. In short, the idea of a *recognising attitude of nature* based on *love as a form of adequate recognition* means the recognition of *nature's otherness*, viz. of nature's autonomy or capacity of agency.

2.2. The Relational Space of a Mutual Flourishing Environmental Virtue Ethics

Maturana's concept of love, which I have used to formulate a recognising attitude of nature, holds the key to develop the idea of a *relational space* in which the idea of mutual flourishing can be conceived and serve as a foundation of a dialogical ethic. I propose then to look closer into Maturana's concept of love. Emotions create relational spaces that constitute ways of living. As Maturana puts it: 'Emotions as domains of relational behaviours constitute the relational space in which they exist and are conserved' [21] (p. 56). For Maturana, emotions are realised in themselves in the relational space that constitutes them: '[e]motions create the systemic relational dynamics which conserves them' [21] (p. 55). This is highly reminiscent of Aristotle's description of the acquisition of virtues: 'For the things we have to learn before we can do them, we learn by doing them [. . .] so too we become just by doing just acts [. . .]' [22] (*NE* II 1 1103a). In a similar way, then, the emotion of love is realised in loving [21] (p. 55). What is important here is that the emotional dynamic of love as an embodied characteristic of a relational self creates a relational space in which flourishing, the cultivation of virtues, and as we shall see, mutual flourishing and collaboration become possible[8]. In other words, the recognition of nature's subjectivity is only possible in a relational space that emerges from the recognising attitude of an embodied, relational self. I propose to summarise my purpose so far as follows: a recognising attitude of nature based on love as a form of adequate recognition creates a relational space in which the othering of nature is recognised as an autonomous other living in coexistence with oneself[9].

2.3. Ascription: Conceiving Nature's Autonomy or Capacity for Agency

I suggested that the recognition of the othering of nature as a legitimate other means the recognition of nature's autonomy: the recognition of 'earth others' as intentional beings, that is, as agents. I claimed that recognising the autonomy of nature is a necessary condition for a dialogical ethic based on mutual flourishing. However, in order to avoid a substantial account of nature that risks prolonging the oppositional definition of nature [5] (p. 41), I have suggested adopting a grammatical, syntactic, model of the subject, which, from a

narrative ethics perspective, allows us to conceptualise nature's agency without endorsing a metaphysical ontology in terms of substances and properties.

Moreover, the introduction of the concept of recognition, reformulated as an adequate response based on love, can not only be used, as we have seen, to conceptualise the relational space of a dialogical ethics, but it can also help elucidate the question of *how* the intentionality and, in general, other capacities of nature can be recognised. The question is this: does the act of a recognising attitude of nature *prescribe* or *describe* (*a priori*) qualities of nature? The question is analogous to the epistemic problem of knowing whether the act of recognition 'attributes' or 'reproduces' *a priori* qualities of the individual's identity (Honneth). In the case of a recognising attitude of nature, the latter seems to imply a substantial account of nature, whereas the former seems to imply a strong anthropocentric perspective.

In order to overcome this difficulty, and to understand in what sense we can speak of nature's agency, I propose to introduce Paul Ricœur's [23] concept of 'attestation', which defines the epistemic mode of assertions having to do with capacities (pp. 91–92). There are two interesting aspects of the concept of 'attestation' that might be relevant to our study here: first, attestation challenges the opposition between description and prescription. As Ricœur puts it: 'Capacities are not observed to be true, but attested [23] (pp. 148–149). Second, attribution, as part of the meaning of intentional action, is called 'ascription', and, as Ricœur notes: 'The term *ascription* [author's italics] points to the specific character of attribution when this has to do with the connection between action and its agent [. . .]' [23] (p. 98). By analogy, then, I propose that, with respect to nature, nature's intentionality is not (theoretically) observed to be true, (much less as an inherent property or quality), but is attested; we therefore *ascribe* intentionality or agency to nature; or: in our interaction with nature, we practically attest nature's capacity of agency. I therefore use ascription and attestation in a similar way to Ricœur: as practical categories that assert capacities, that is, in the case of nature, nature's intentionality or varied capacity of agency. With respect to nature, however, ascription must give up its reflective character. Indeed, we cannot say, as we do when we speak of human agents, that 'ascription is directed to the agent's capacity to designate him- or herself as someone who does or who has done this' [23] (p. 98). Therefore, regarding nature, I will align my interpretation of ascription with the structure of the emotion of love. We have seen that love is unidirectional, other-directed. Similarly, ascription, with respect to nature, is other-directed. It is other-directed because attestation of the varied capacities of nature depends on a recognising stance.

Ascription is the practical act of attesting, in our recognising relationship with nature, nature's subjectivity. In other words, the attestation of nature's autonomy depends on the emotional dynamic taking place in the *relational space* in which nature emerges as a legitimate other in coexistence with oneself through a recognising stance of a relational self. Here, then, I join B. Bannon, who, referring to Neil Evernden, speaks of our relationship to individual beings so as to *let them be* [5] (p. 47). B. Bannon understands letting a being be as requiring that 'we abandon representations of beings in order to free the being from the limitations imposed by the representation' [5] (p. 47). Thus, B. Bannon sees the attribution of intentionality to nature as contrary to the liberating goals at the heart of V. Plumwood's project, implied in the stance of letting a being be. However, as we have seen, the attribution of properties, or rather *capacities* (of which intentionality, or agency), to nature is not a form of 'making nature ours' (Bannon (*ibid*.) quoting Evernden). As a matter of fact, if we understand the attribution of capacities (intentionality or agency) as ascription, in P. Ricœur's sense, then attribution is a *practical act* of *attesting* how nature, in our interaction with it, just *is*; it self-realises its subjectivity, that is, its varied capacity of agency.

3.

We have seen that recognising nature's intentionality means the practical ascription of agency to nature. The ascription of intentionality to nature and, in general, the attestation of the varied capacities of nature's agency, depends on the emotional dynamic of a relational space of interaction brought about by the other-directed recognising stance of a relational

self. In what follows, I propose that this relational space created by the emotional dynamic of a recognising attitude of nature of a relational self can be categorised in two different and complementary ways—as a moral space and as an ontological and ethical place. Interactions with nature in the relational space defined as a moral space allow us to conceive the self-realisation of an ecological or environmental identity; defined as an ethical place, interactions with nature in the relational space allow us to conceive the autonomy of nature and, from there, the idea of mutual flourishing.

3.1. The Relational Space as a Moral Space: Toward an Ecological Identity

An *ecological* or *environmental identity* is like any other collective identity: a *social construction* and a *motivating force*, with the difference that it is also the product of an *interaction* with nature[10]. As psychologist Susan Clayton [24] puts it: 'an environmental identity is one part of the way in which people form their self-concept' (p. 45). Thus, an environmental identity refers to the idea that nature must be part of the way we form our self-concept, that is, of the way we define what the good life is, since selfhood and the good, as Charles Taylor [25] argues, are intertwined themes (p. 3).

To develop this point, I suggest referring to Charles Taylor's [25] understanding of modern identity. C. Taylor defines identity as 'the commitments and identifications which provide the frame or horizon within which I can try to determine from case to case what is good, or valuable, or what ought to be done, or what I endorse or oppose. In other words, it is the horizon within which I am capable of taking a stand.' [25] (p. 27). What is interesting here is that C. Taylor conceives identity as having to orient oneself within a 'moral space'. As he puts it: 'To know who you are is to be oriented in moral space, a space in which questions arise of what is good or bad' [25] (p. 28). To these questions, C. Taylor argues, we respond through 'framework-definitions', or 'qualitative distinctions', of what is good, of what meaningful life is.

I suggest using this definition of identity to interpret the current ecological crisis as a crisis of disorientation within the moral space that provides the frame within which we define our identity. Thus, in this light, the idea of an environmental identity conveys the idea that the self-realisation of personal identity requires that we orient ourselves within a moral space in which nature is valued as a constitutive relation of our self-concept and a qualitative distinction of the good life. However, to understand how nature can be valued as a qualitative distinction of the good, this moral space needs to be coupled with an ontological and ethical place where place is regarded as constitutive of one's sense of selfhood.

3.2. The Relational Space as an Ontological and Ethical Place: Toward a Mutual Flourishing Environmental Virtue Ethics

It is at this point that I re-join B. Bannon's project of a place-based environmental ethics. Indeed, to understand the idea that place is constitutive of one's self-concept, we need to define place in relational terms as the product of all beings participating through their openness to affection and their affection of other bodies [5] (p. 50). This is more than saying that there is reciprocal influence between self and place; rather, place here is constitutive of the self. As Edward S. Casey [26] puts it: 'The relationship between self and place is [. . .] of constitutive coingredience: each is essential to the being of the other [. . .] there is *no place without self and no self without place* [author's italics]' (p. 684). This concept of place allows redefining nature, from a relational ontology perspective, as the common production of relations between bodies [5] (p. 48), and because these are relations of affective bodies, it is then easy to see how place, that is nature, can be constitutive of individual identity.

More importantly, however, a place-based ethic so defined, can help clarify the idea of mutual flourishing: because of this mutual affectivity of bodies, 'all flourishing is mutual' [1] (p. 15). Going back to the parable of the Three Sisters, each plant, as an affective body, contributes to the flourishing of the other plants, which, as affective bodies, contribute, reciprocally, to the other plant's own flourishing. However, here I do not follow B. Bannon's

interpretation, because the idea of mutual flourishing requires, by hypothesis (*supra* I), the concept of the subject. This does not mean, as we have seen, that we attribute teleological properties to nature defined as a substance, but rather that we ascribe to nature, as practical categories that assert capacities, intentionality, that is, varied capacities of agency.

The plant does what it does *in order to* increase its own growth. This 'in order to' is not a teleological quality of the plant as a substance, rather the *practical* attestation of a capacity—e.g., the capacity of the beans plant to produce nutrients from nitrogen necessary for the other plants, whose own individual flourishing contributes to the bean's flourishing, for example, by providing support (from the corn's height) and shade (from the squash's leaves); and we *practically* ascribe this capacity in our interaction, as embodied and relational observers, in the garden defined as a relational space in which the recognition of the plant's mutual flourishing ultimately means the recognition of their contribution to our own flourishing in terms of the 'universal language: food' [1] (p. 129). The idea of mutual flourishing therefore requires the concept of the subject: of individual agency, or autonomy. Indeed, it is the recognition of individuality, that is, of the capacities or, in R. W. Kimmerer words, of the 'gifts' of the individual that, when they are cultivated, can be shared in order for the whole to flourish. Based on this idea of mutual flourishing, we can then conceive a dialogical ethics, that is, an ethics of solidarity and collaboration.

3.3. Being(s) Together: An Illustration

To illustrate the idea of an environmental virtue ethic based on mutual flourishing, that is, a dialogical ethics of solidarity and collaboration, I will draw on the current exhibition at the Ethnography Museum of Geneva (MEG), 'being(s) together'[11]. The exhibition explores the relationships between humans and nature and, through different portraits of humans, animals, plants, and the relationship between them, tackles the question of communication and understanding among different species. I will present, as one illustration, one portrait that is highly representative of the type of dialogical ethic that I have outlined here, and in particular of the idea of nature's subjectivity.

The portrait is that of photographer and zoologist Stefano Unterthiner[12]. Stefano looks at the daily life of animals in 'tales of wildlife'. His documentary work carefully reproduces the individualities and specific moments of each animal. In the Alps he had several encounters with foxes and established a special form of intimacy with them. This is how the curators of the exhibition describe this relationship: 'Fred, Beauty and Rourounette [names that Stefano gave to the foxes] fed his imagination. For many months, man and the foxes spied on and tamed each other [. . .]'.

> [Stefano:] *And these encounters were. . .let's say a way of deepening knowledge that in this close contact with a wild animal created the desire to learn to get to know a very fascinating animal better. [. . .] In fact, he's a character. The fox, when you meet him, you understand he has a lot to tell you. What I like doing is getting to know an individual. In this case the fox, not as a species, but as this specific subject, this individual. And so learn its habits, its behaviour, its character, I mean. . .the animal's personality. Jokingly with my wife, we often say they're my 'anima friends', but we really do become friends. So, in this context, ethics are something natural. I work on the principle that I respect my friends. If a fox is unbelievably beautiful and has a particular attitude, I call it Beauty. If on the contrary, the fox is dominant in its territory with maybe a scar on its nose, I remember, we nicknamed hi the Boss. [. . .] So, these are little nicknames, which in fact enable us, on the one hand, to break down a bit the barrier between me and the other species. For example, I didn't see a fox, but I saw the Boss who was doing this or that. And so the story begins there.*

This practical relationship between Stefano and the foxes perfectly illustrates the type of dialogical ethic that I have outlined in this essay in terms of an environmental virtue ethic based on mutual flourishing. In particular, it illustrates the idea that for this form of communication ethics to be possible, we need the concept of the subject, of nature's

autonomy—in this case the recognition of the fox's individuality as a being, a subject, with a capacity for agency. When Stefano describes his encounter with the fox ('*let's say a way of deepening knowledge that in this close contact* [. . .] *created the desire to learn to get to know* [. . .]'), I am tempted to say that this encounter, as he describes it, was dependent on a participatory attitude that I have called 'a recognising attitude of nature' based on love as an adequate form of recognition. I have argued that this other-directed stance of an embodied relational self creates a relational space in which interaction, coexistence, and dialogical methodologies become possible ('*The fox, when you meet him, you understand he has a lot to tell you*'). This dialogical relationship is narrative in essence ('*For example, I didn't see a fox, but I saw the Boss who was doing this or that*'). Here, the attribution of agency is in terms of ascription: practical categories that assert capacities and explain that we can consider the fox as a subject, as a being with capacity of agency ('*And so learn its habits, its behaviour, its character, I mean. . .the animal's personality*'). Ascription helps then to create the portrait of the animal as an individual, as a subject, in our coexistence with it ('*If a fox is unbelievably beautiful and has a particular attitude, I call it Beauty*'), and to establish continuity ('*these are little nicknames, which in fact enable us, on the one hand, to break down a bit the barrier between me and the other species*'). Moreover, because this relational space as an ethical place is, from a relational ontology, a composite of relations between affective bodies, we can readily see that 'man and the foxes spied on and tamed each other' as a result of their affective interaction. Defined as a moral space, the interaction with nature, with the foxes, in the relational space leads Stefano to consider the foxes as friends ('*but we really do become friends*'): from this we are not far from envisaging the possibility of the self-realisation of an environmental or ecological identity in the form of an ecological ethos: an attitude of respect and care for the environment ('*So, in this context, ethics are something natural. I work on the principle that I respect my friends*').

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: No new data were created or analyzed in this study.

Conflicts of Interest: The author declares no conflict of interest.

Notes

1 The expression 'substantial account of nature' means, according to B. Bannon's interpretation, that natural entities have mind-like properties (intentionality, agency, etc.); that is, that they have 'teleological purposiveness'. Bannon counters this with a relational account in which it is not intentionality but processes and relations that best explain the basis of non-dualistic environmental ethics.

2 In this approach, place, therefore, supplants nature: 'beings all participate in the creation of a place to the extent that they contribute to it through their openness to affection and their affection of other bodies' [5] (p. 50).

3 Taking Jacob von Uexküll's example, Virginie Maris [11] illustrates her purpose thus: 'Whereas the world-for-the-bear, stretching for hundreds of kilometres, is made up of rivers, fish, paths, plants and caves, the world-for-the-tick is made up of branches, hair, skin and blood. It is as complete a world for the tick as the world-for-the-bear is for the bear.' (pp. 204–205).

4 Today, in the epoch of the Anthropocene, this encounter takes the form of *the uncanny:* 'It is surely no coincidence that the word *uncanny* has begun to be used, with ever greater frequency, in relation to climate change [. . .] No other word comes close to expressing the strangeness of what is unfolding around us [. . .] the uncanny and improbable events that are beating at our doors seem to have stirred a *sense of recognition*, an *awareness* that humans were never alone, that we have always been surrounded by beings of all sorts who share elements of that which we had thought to be most distinctively our own: the capacities of will, thought, and consciousness' [12] (p. 35).

5 Indeed, 'there always needs to be two-way recognition for even one-way recognition to take place' [19] (p. 319).

6 As Arto Laitinen notes, recognition is not only a matter of attitudes: 'It can be a matter of acting, emoting, expressing the attitudes or emotions, a matter of statuses, relations, etc.' [19] (p. 335).

[7] This is because love, in Maturana's sense, is unidirectional, that is, is other-directed and does not require *mutual* loving: 'the loved one arises as a legitimate other through the behaviour of the lover without necessarily being an active participant in a loving or any other relation with the lover' [21] (p. 55).

[8] Thus, virtues, I argue, can be cultivated only when a relational space exists that then makes the cultivation of virtues possible.

[9] At this point, the following question inevitably arises: moral subjectivity entails *responsibility*. If nature's subjectivity involves recognising its capacity for intentionality and agency, then what about nature's responsibility (e.g., when a snake bites me, or a rock hits me on the head. . .)? Is not responsibility an important feature of subjectivity? This is a very important question that deserves a thorough examination. However, I will give the following tentative answers: often responsibility *is* indeed ascribed (on this see the following section) to an animal, as when we attribute to the wolf the responsibility for killing the sheep (and, in most cases, it is hunted to death as a result). More importantly, I think that from a place-based ethics perspective, the question of responsibility is closely linked to the question of limits. First, knowing '*our*' limits: the snake bites me, but did I step into the s*nake's place*? The rock hits me on the head, but was I in '*my' place* when I climbed the mountain? Sometimes animals step into '*our' place*. This last point is reminiscent of V. Plumwood's example: in this case, '[f]or example, the ethical perplexities and strategies for dealing with a strange highly venomous snake who has just moved onto your veranda may not be all that different from those involved in dealing with a difficult human stranger who has done the same' [3] (p. 170). Ultimately, as V. Plumwood argues, this is a question of interspecies distributive justice: sharing the earth with other species [3] (p. 117). Of course, sometimes tragedy happens at the crossing of boundaries, at the interface of places. I am very grateful to one attentive reviewer of this essay for raising this important question.

[10] I use the term 'environmental identity' in a narrower sense than what we might call, following Arne Naess, 'an ecological self', that is, a metaphysical reality in which I participate on the basis of a subjective experience of *identification* with nature. In short, it is the extension and the transformation of the ego into a broader understanding of the self in which ecological dependencies and interdependencies are constitutive of identity ('my' self-realisation is then the self-realisation of an ecological self). This rather (eco)phenomenological perspective, although at the heart of our subject matter here, goes beyond the scope of the place-based approach that I have chosen to develop here. It is for this reason that I will now turn to C. Taylor's understanding of modern identity.

[11] Available online: https://www.meg.ch/en/expositions/beings-together (accessed on 20 November 2023).

[12] Available online: https://www.stefanounterthiner.com/ (accessed on 20 November 2023).

References

1. Kimmerer, R.W. *Braiding Sweetgrass*, 1st ed.; Milkweed Editions: Minneapolis, MN, USA, 2013.
2. O'Neill, J. *Ecology, Policy and Politics, Human Well-Being and the Natural World*; Routledge: London, UK; New York, NY, USA, 1993.
3. Plumwood, V. *Environmental Culture: The Ecological Crisis of Reason*; Environmental Philosophies Series; Routledge: London, UK, 2002.
4. Plumwood, V. *Feminism and the Mastery of Nature*; Digital Printing; Routledge: London, UK, 2003.
5. Bannon, B. Developing Val Plumwood's Dialogical Ethical Ontology and Its Consequences for a Place-Based Ethic. *Ethics Environ.* **2009**, *14*, 39. [CrossRef]
6. Bannon, B.E. From Intrinsic Value to Compassion: A Place-Based Ethic. *Environ. Ethics* **2013**, *35*, 259–278. [CrossRef]
7. Gilliand, C. Experiencing Values in the Flow of Events: A Phenomenological Approach to Relational Values. *Environ. Values* **2021**, *30*, 715–736. [CrossRef]
8. Descombes, V. *Le Complément de Sujet: Enquête Sur Le Fait d'agir de Soi-Même*; Tel 421; Gallimard: Paris, France, 2018.
9. Castoriadis, C. L'état Du Sujet Aujourd'hui. In *Le Monde Morcelé, Les Carrefours Du Labyrinthe III*; Éditions du Seuil: Paris, France, 1990.
10. Maturana, H.; Varela, F. *De Maquinas y Seres Vivos, Autopoiesis: La Organizacion de lo Vivo*; Editorial Universitaria: Santiago de Chile, Chile, 1994.
11. Maris, V. *La Part Sauvage Du Monde: Penser La Nature Dans l'Anthropocène*; Anthropocène Seuil; Éditions du Seuil: Paris, France, 2018.
12. Ghosh, A. *The Nutmeg's Curse: Parables for a Planet in Crisis*; University of Chicago Press: Chicago, IL, USA, 2021.
13. Chakrabarty, D. The Climate of History: Four Theses. *Crit. Inq.* **2009**, *35*, 197–222. [CrossRef]
14. Chakrabarty, D. The Anthropocene and the Convergence of Histories. In *The Anthropocene and the Global Environmental Crisis, Rethinking Modernity in a New Epoch*; Hamilton, C., Bonneuil, C., Gemenne, F., Eds.; Routledge: New York, NY, USA, 2015.
15. Sandler, R. Environmental Virtue Ethics. In *Environmental Ethics, The Big Questions*; Keller, D.R., Ed.; Wiley-Blackwell: Malden, MA, USA; Oxford, UK, 2010.
16. Treanor, B. Narrative Environmental Virtue Ethics: Phronesis without a Phronimos. *Environ. Ethics* **2008**, *30*, 361–379. [CrossRef]
17. Rosa, H. *Resonance: A Sociology of Pur Relationship to the World*; James Wagner, J., Translator; Polity Press: Cambridge, UK, 2019.
18. Honneth, A.; Butler, J.; Geuss, R.; Lear, J.; Jay, M. *Reification: A New Look at an Old Idea*; The Berkeley Tanner Lectures; Oxford University Press: Oxford, NY, USA, 2008.
19. Laitinen, A. On the Scope of "Recognition": The Role of Adequate Regard and Mutuality. In *The Philosophy of Recognition: Historical and Contemporary Perspectives*; Schmidt am Busch, H.-C., Zurn, C.F., Eds.; Lexington Books: Lanham, MD, USA, 2010.

20. Arcos, E. Autonomy as the self-realisation of an environmental identity. *Environ. Values* **2023**, 09632719231214311. [CrossRef]
21. Maturana Romesín, H.; Verden-Zöller, G. *The Origin of Humanness in the Biology of Love*; Imprint Academic: Upton Pyne, UK, 2012.
22. Aristotle; Ross, W.D.; Brown, L. *The Nicomachean Ethics*; Oxford University Press: Oxford, NY, USA, 2009.
23. Ricœur, P. *The Course of Recognition*; Institute for Human Sciences Vienna Lecture Series; Harvard University Press: Cambridge, MA, USA, 2005.
24. Clayton, S. Environmental Identity: A Conceptual and an Operational Definition. In *Identity and the Natural Environment, The Psychological Significance of Nature*; Clayton, S., Opotow, S., Eds.; The MIT Press: Cambridge, MA, USA; London, UK, 2003.
25. Taylor, C. *Sources of the Self: The Making of the Modern Identity*; Cambridge University Press: Cambridge, UK, 1989.
26. Casey, E.S. Between Geography and Philosophy: What Does It Mean to Be in the Place-World? *Ann. Assoc. Am. Geogr.* **2001**, *91*, 683–693. [CrossRef]

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Article

Virtue Ethics and the Ecological Self: From Environmental to Ecological Virtues

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Abstract: This article examines how a non-anthropocentric virtue ethics can truly avoid an anthropocentric bias in the ethical evaluation of a situation where the environment is at stake. It argues that a non-anthropocentric virtue ethics capable of avoiding the pitfall of an anthropocentric bias can only conceive of the ultimate good—from which virtues are defined—in reference to an ecological self. Such a self implies that the natural environment is not simply a condition for human flourishing, or something that complements it by adding the proper good of animals, organisms or ecosystems. Fulfilment is not that of a human self, but that of an ecological self: the natural environment or nature is not an external but an internal good. Therefore, the virtues or character traits that such an ecological self must nurture and develop leads us ultimately to distinguish—without opposing them—three different forms of virtue ethics applied to the environment, depending on whether it is anthropocentric or non-anthropocentric and whether nature is considered extrinsically or intrinsically. Such distinctions are also crucial to determine how we conceive of the political community and the collective goals that virtuous citizens assign to it (for instance, to preserve biodiversity, to tackle climate change, and so on).

Keywords: ecological self; human flourishing; ultimate good; ecological virtue; environmental virtue; virtue ethics

Citation: Hess, G. Virtue Ethics and the Ecological Self: From Environmental to Ecological Virtues. *Philosophies* **2024**, *9*, 23. https://doi.org/10.3390/philosophies9010023

Academic Editor: Arran Gare

Received: 25 December 2023
Revised: 4 February 2024
Accepted: 6 February 2024
Published: 9 February 2024

1. Introduction

Since the 1970s, many proponents of environmental ethics have essentially set for themselves the task of justifying duties towards nature based on the intrinsic value of nature itself [1]. For over 40 years, they have been calling for a moralisation of the human relationship with the environment by means of obligations and prohibitions. The pragmatist approach objected that they were wrong to raise theoretical problems (for example, regarding the intrinsic value of nature). Hence, in so doing, they would distract from the essential task of seeking a consensus on the urgent environmental policies that are the responsibility of governments and prevent an effective response to the ecological crisis. So far, the moralisation has not yet materialised at the political level[1].

Based on a virtue ethics approach, Philip Cafaro [3] notes that environmental ethics has neglected another ethical question, which is just as important as that of human duties and responsibility toward nature: the question of how to achieve the quest for the good that a virtuous person chooses to pursue. For virtue ethics, certain character traits or dispositions of a person (virtues)—to which are added representations and affects—motivate her or him to act in a particular way, as long as these traits are stable, are the result of a deliberate choice and contribute to the person's self-fulfilment [4]. Such an approach focuses traditionally on character traits such as courage, benevolence, temperance, etc., but can also aim at an action insofar as it is evaluated according to good, evil and certain dispositions (or character traits). In so doing, it seems better able to take into consideration the motivation of the agent than deontological or consequentialist forms of ethics which judge the morality of an action according to norms or objective reasonings to be followed. Thus, one may ask:

would a virtue-based approach be more effective than more traditional forms of deontology or consequentialism?

A number of proposals for an environmental virtue ethics have emerged to tackle this issue over the last twenty years [5–8]. But the renewed interest in virtue ethics for environmental issues also raises a dilemma of principles. On the one hand, by seeking to formulate moral principles and duties towards nature, environmental ethics had opened up a way out of the moral anthropocentrism that characterises classical ethics. On the other hand, virtue ethics seemed to head back to a fundamentally anthropocentric ethics since it is focused on human flourishing or happiness (*eudaimonia*) that constitutes the ultimate good—that good which is no longer a means to another end but an end in itself—namely, a good, quality life (*eû zên*) [9] (p. 5 [1095a 17–18]; p. 11 [1097b 1–2]). It follows that a perspective on (non-anthropocentric) environmental ethics based on (anthropocentric) virtue ethics seems hardly compatible with its initial intention [10]. In this article, I will look at several ways of dealing with this dilemma.

To this end, I will distinguish two ways of looking at the relationship between virtue ethics and the natural environment.

- Extrinsically. The environment is a condition either for the exercise of virtues or for human flourishing; it is not part of the human flourishing itself. Moreover, one could possibly extend virtue ethics to other goods that are not strictly related to human happiness. In this case, one could speak of environmental virtues that contribute to the "good life" of an individual, whether human or non-human, such as temperance, for instance.
- Intrinsically. The environment is part of the human good and not just a condition of that good. This means that humans are not external to nature; they are part of it in such a way that, by virtue of an intrinsic relationship between humans and the environment proper to an ecological self, the flourishing of humans is neither separate from nor independent of the flourishing of nature. In other words: nature is not external to our existence; it constitutes it. Therefore, in this case the ultimate good of a virtue ethics is not the flourishing of human self but that of an ecological self.

I will develop this distinction in the next three sections. In Section 2, I will first clarify the characteristics of virtues ethics. In Section 3, I will examine how an extrinsic relationship translates into environmental virtues and show the limits of this conception. In Section 4, I will explore how an intrinsic relationship allows us to reach beyond these limits based on the notion of the "ecological self", a notion already defended by the deep ecology of Arne Næss and by the ecofeminism of Val Plumwood or Freya Mathews. I will reckon that certain virtues are fundamentally ecological and not simply environmental, because they are ascribed, strictly speaking, to an ecological identity. That is, when the relationship with the environment remains extrinsic, the virtues developed are at best environmental virtues; when the relationship with the environment becomes intrinsic, by returning to the lived experience of the world, the virtues are truly ecological. Finally, I will conclude that this proposal can overcome the anthropocentric bias underlying environmental virtue ethics. What is at stake in identifying this anthropocentric bias is not simply to emancipate ourselves from the *centred* character of moral anthropocentrism, which limits itself to taking account of humans and humans alone. It is a question of overcoming the *centric* character of moral anthropocentrism, which reduces the world to the human perspective alone.

2. The Characteristics of a Virtue Ethics

Generally speaking, a virtue ethics does not seek to answer the question, "What should I do?" but rather the question, "What kind of human being do I want to become?" The virtuous person strives towards a life that she or he considers good, a life of quality (*eû zên*) or of flourishing (*eudaimonia*). This requires the exercise of certain dispositions in the pursuit of excellence, namely virtues. These practical dispositions are called virtues when they are sufficiently stabilised to be perceived by an agent as motivating his action. In this respect, virtues define the character traits of an individual: goodness, generosity, humility,

etc. But not every character trait is a virtue. For it to be a virtue, it must be related to the ultimate good and aimed at for its own sake, i.e., in the aim of what the agent considers to be a flourishing life. Virtues are therefore character traits in the pursuit of excellence, in the sense that they contribute to and are even a part of happiness and a fulfilled human life. In virtues, beliefs, affective orientations, perceptual dispositions and behavioural tendencies are inextricably linked [11] (p. 14–15). These general considerations require two clarifications. The first concerns the relationship between virtues and duty. In truth, an ethics of virtues is not opposed to an ethics of duty, in the sense that in its own way it also aims to act, but with reference to virtues and not according to an obligation or moral principle. The second point concerns the ultimate good, i.e., human flourishing, a fulfilled human life. While it is true that a character trait is a moral virtue because of its contribution to human flourishing, virtue does not relate strictly to the virtuous agent's own flourishing; it also concerns other humans and, possibly, other non-humans.

For Aristotle, to whom we owe a systematic study of the ethics of virtues, a good or fulfilled life depends on the effective performance of what is inherently human. Just as a "good" eye depends on the eye's ability to see without distortion, the "good" human being depends on the human's ability to act virtuously. For Aristotle, what defines a well-functioning human being is the exercise of reason [9] (p. 103–107 [1139a and b—1140b 1–10). Indeed, the human good necessarily has to do with what makes us human, and what distinguishes us as humans from other species is the use of reason. Thus, it would follow that it is reason that enables us to live a good human life [12] (p. 6). To be virtuous, and therefore to live a flourishing life, as Philippa Foot puts it, rational will must be translated into purposeful, voluntary actions [13] (p. 66–67, 69–70).

Today, however, it seems increasingly difficult to define the highest good in reference to a human nature. Irene McMullin distinguishes two ways of conceiving of the ultimate good [11] (p. 24). The first way is from a subjective perspective in terms of the agent himself: a fulfilled human life is what each person decides it to be; fulfilment then comes down to the agent's evaluation of her or his experience, independently of its content, which is no longer relevant in terms of defining that good. This first perspective responds to a modern vision of a plurality of conceptions of what is good but runs counter to the widespread—and indeed self-evident—idea that there are basic goods on which everyone can agree, such as healthy food, a good education, a social life, and so on.

The second perspective sees the human good not from the subjective perspective of the agent, but from an objective point of view. In this case, the good is considered in relation to biological functions such as survival, the continuity of the species, a pain-free state and the successful functioning of the social group [14] (p. 153–154). The definition of what is good must then be based on physiology, biology and ethology; this is, strictly speaking, the naturalistic point of view of science. But to leave it at this point would be to reduce human flourishing to externally observable traits of human reality, while overlooking the fact that these traits are—at least in part—experienced by human beings, i.e., that each human being appropriates them and lives them from her or his own perspective.

This is why, rather than opposing the two conceptions—subjective and objective—of a good or fulfilled life, McMullin suggests "reconceptualizing the self" [11] (p. 30). The human self whose fulfilment we seek is not simply myself; it includes the self of other humans and the self of the human community to which I belong, i.e., its values and ends. A person's character cannot be assessed simply by observing him or her from the outside as an organism with objectively defined ends (survival, continuity of the species, etc.). But the subjective perspective seems just as flawed if the agent is simply judged from the angle of his subjective experiences (positive or negative), with himself and the others, independently of what constitutes his biological basis, of scientific knowledge in general and of the community to which she or he belongs [11] (p. 31). Thus, the self is a reality that must be approached in its unity, both as a subjective, lived experience and, so to speak, as an "object".

Ultimately, self-realisation in the world, from the point of view of happiness or a fulfilled life, must be approached, according to McMullin, from three complementary perspectives. From a first-person perspective, it operates on the basis of what is specific to me (my identity, what defines me, my unique perspective). From a second-person perspective, it includes everything that stems from my relationship with others (their needs, vulnerability, interests, etc.). From a third-person perspective, self-fulfilment in the world is motivated by scientific knowledge and by certain values shared by the community to which I belong (freedom, equality, friendship, and so on) [11] (p. 37; 40–64).

This contemporary redefinition of the good or flourishing human life both renews and extends the classical—Aristotelian—tradition of virtue ethics. Yet it is striking to note that this redefinition in no way refers to the natural environment as an aspect of self-realisation in the world. The natural environment as moral patient is absent from McMullin's discussion. In this respect, the concepts that define virtue ethics seem to lend support only to a moral anthropocentrism[2].

3. Environmental Virtues: The Extrinsic Relationship between Virtue Ethics and the Environment

Ronald Sandler's thinking is one of the most accomplished contributions to date that addresses this blind spot and endeavours to take the natural environment into account in virtue ethics [7]. In his approach, he examines the different ways by which the environment can contribute to a virtuous life. Firstly, the environment can be seen as a condition for human flourishing (moral anthropocentrism). Secondly, it can be considered for its own good (moral non-anthropocentrism).

3.1. Moral Anthropocentrism

According to Sandler, the anthropocentric perspective can make sense of the environment in virtue ethics in two ways: as a condition for a person to be virtuous, or as a condition for human happiness[3].

In the first case, a healthy environment would be necessary for the exercise of virtues. This would mean, for example, that a degraded environment would prevent us from being virtuous. But if this degradation were compensated for by technological innovation or other artificial goods, it would no longer be a problem. On closer examination, this argument is not convincing, because it is difficult to objectively assess the threshold at which the ecological conditions would cease to enable virtue, if such a threshold even exists. Does a severely degraded environment really prevent gratitude, love or frugality, for example? Experience seems to show the opposite: it is often in difficult times, such as war, that certain virtues—frugality or solidarity, for example—motivate people's behaviour. Furthermore, the latter part of this argument implies that technology could, if available, easily compensate for degraded environmental conditions. This presupposes the utilitarian meaning attributed to the environment, but ignores all the very real values—aesthetic, cultural, patrimonial, and so on—that individuals or communities ascribe to their environment, and that commit those people to protecting it, regardless of its utility.

But—and this is the second case—it is easy to see the environment as a condition for human flourishing. There is no doubt that in many situations the quality of the natural environment contributes to a good human life. A healthy soil means that we can produce good quality food in sufficient quantity; unpolluted air means that we can maintain good health, and so on. A healthy environment also encourages social cohesion and cooperation between communities. The inverse is also true: the virtues of justice and concern for the people in our community and between communities, for example, help to promote good environmental conditions.

The two ways by which virtue ethics can make sense of the environment with an anthropocentric perspective assume that there is an extrinsic relationship to be found between the environment and humans.

When nature is seen as a simple condition for a good human life, such a vision remains dependent at worst on an ontological dualism between man and his environment, and at best on an epistemological dualism between the knowing subject and the object to be known. Let us begin with the objection posed by ontological dualism. Ontological dualism implies that the human being stands out from the environment, a classic opposition established by modernity between a material reality (nature) and a spiritual reality (culture), harshly criticized today by anthropologists[4]. This ontological dualism provides a justification for a moral dualism. If the environment is no more than a means to the end of achieving human good, it has only an instrumental value in the service of human flourishing, whereas the latter is intended for its own sake, and therefore has its own intrinsic value. The difference between the instrumental value of nature and the intrinsic value of human life duplicates an ontological difference between an environment that is fundamentally inert and devoid of value in itself and human beings who are both the source and the repository of value.

Admittedly, the conception of the human being standing out from nature has been undermined by the advent of scientific ecology and the theory of evolution, among others, which state that human beings actually belong to nature and have evolved from it. However, epistemological dualism raises a second objection. From the point of view of scientific knowledge, while humans are ontologically reintegrated into nature, they nonetheless remain outside it as knowing subjects. The epistemological model of a disembodied knowing subject, external to the object it seeks to understand, guarantees objectivity in science. It provides the basis for a third-person approach to the world and has structured the development of scientific knowledge until now. This second objection is more difficult to unpick in the context of virtue ethics and is usually not given sufficient attention. This can be further clarified by considering the way Sandler tries to escape the anthropocentric bias in virtue ethics.

3.2. Moral Non-Anthropocentrism

Without departing from scientific naturalism, Sandler believes that a virtuous life is not limited to the pursuit of human flourishing in the sense developed above. Virtue ethics, he says, is also able to take into account the natural environment, not only as a condition for human flourishing but as an end in itself. He explains that what makes certain character traits virtuous need not necessarily be a function of human happiness alone, for what makes a character trait a virtue has to do also with ends other than human happiness, insofar as these virtues too are considered ends in themselves. Thus, if it is acknowledged that animals and organisms have their own immanent good independent of that of humans (the satisfaction of an animal's own desires or needs, for example), certain character traits can be seen as virtues in relation not only to human ends (happiness), but also to desires or needs of animals, to ecosystemic health and even to ecological integrity [7] (chap. 3).

Sandler's proposal therefore seeks to extend virtue ethics to considerations that are no longer solely concerned with the human good, but with a good that is specific to the natural environment or to its elements. In this respect, an ethics of virtues would become compatible with the attempts of environmental ethics to overcome the moral anthropocentrism underlying classical ethics. Some aspects of the environment are then no longer simply a condition for human flourishing; they take on a properly moral value, based on their own good. Temperance, for example, which traditionally aims to control our desire for pleasure in areas such as food or sexuality, would become an appropriate character trait for moderating the consumption of natural resources, where this consumption is detrimental to animal welfare, the well-being of certain organisms or the ecological integrity or health of an ecosystem. Hence the virtue of temperance, initially conceived in relation to human happiness and flourishing, now has a new goal: the promotion of the good of certain aspects of the environment. Thus, here we see a traditional virtue which, when applied to environmental issues, becomes an environmental virtue.

Applying virtue ethics to the environment is undoubtedly useful in everyday practice. However, as long as the emphasis is on the character of a person in relation to human

happiness and the good of the environment, this confrontation will meet numerous conflicts of interest in which human happiness is very likely, depending on the circumstances, to relegate what is good for the environment to second place. For example, the benevolence that encourages me to visit my sick grandmother, who lives thousands of miles away, contrasts with the temperance that encourages me to avoid long plane journeys. Or, within a virtue such as love, for example, love for my sick grandmother is opposed to my love for nature, a love that strives to avoid an act that is harmful to the environment (air travel). No doubt benevolence will win out here over temperance, or love for my grandmother over love for nature. As long as the moral agent is considered to be a human subject (i.e., a moral subject), according to the logic of virtue ethics, the good of non-human patients will often be evaluated in favour of the human patients who are human subjects too and therefore moral subjects. This is because an environmental virtue ethics remains subject to an epistemological subject–object model. Such a model underlies the structure of the ethical relationship between moral subject and moral patient. What makes a human subject a moral subject is determined, as Philippa Foot shows, by the fact that the human subject possesses a rational will. Naturalism may strive to define objectively, from the outside, the properties of the object likely to make it a moral patient (for example, the happiness of other human beings, the well-being of animals, the good of organisms, etc.) and the properties of the subject likely to make it a moral agent (for example, the rational will of the human). However, decision in the sphere of moral assessment and behaviour will ultimately be determined by the human will: the rational will always choose itself over that which differs from it. This preference ultimately results from the subject–object structure underlying naturalism, which defines what is a human subject (a moral subject) as opposed to what is merely an object—or, at most, a moral patient.

To address this anthropocentric bias, we need to turn to a level that escapes the human subject/object or moral subject/moral patient structure. This level is that of a lived experience which, as we shall see, has not yet fixed on an intentional relationship to an object or to a moral patient.

3.3. The Remaining Anthropocentric Bias

In order to fully grasp the sense of this objection, we need to clarify what anthropocentrism means. An initial distinction can be made between epistemic anthropocentrism and moral anthropocentrism. The anthropocentric bias referred to above does not fall under moral anthropocentrism, since, as we have seen, environmental virtue ethics is apt to considering non-human moral patients. The objection therefore concerns epistemic anthropocentrism (see Figure 1, below). But this expression can remain a relatively vague concept and needs to be clarified.

<table>
<tr><td>1
Kind of
Anthropocentrism</td><td colspan="3">Epistemic anthropocentrism</td></tr>
<tr><td>2
Human Mind</td><td colspan="2">Mental dimension
Psycho-physiological functionnality</td><td>Physical dimension
Physical body, brain</td></tr>
<tr><td rowspan="4">3
Human Subjectivity</td><td colspan="2">Ontological Perspective
(in first person)</td><td>Epistemic Perspective
(in third person)</td></tr>
<tr><td>Non-objectified</td><td colspan="2">Objectified</td></tr>
<tr><td></td><td>Subject,
self-consciousness</td><td>Reason, affectivity, belief, interest</td></tr>
<tr><td>Lived experience</td><td colspan="2">Personal identity</td></tr>
</table>

Figure 1. Epistemic anthropocentrism.

In a first approximation, epistemic anthropocentrism means that human consciousness must be presupposed for knowledge and evaluation of nature. Without human conscious-

ness, there could possibly be a reality, but it would be perceived and thought of differently than it is by the human species. The idea underlying epistemic anthropocentrism has two dimensions, physical and mental. The physical aspect consists of the physical body by which reality is apprehended, in particular the brain. The mental aspect, on the other hand, comprises the psycho-physiological functions that the body and brain enable (cognition, affectivity, conation, consciousness). These two aspects together form what we might call the mind[5]. On a third level of epistemic anthropocentrism, the mental aspect of the mind can be approached from a strictly epistemic angle, i.e., from an external, third-person point of view, as reason, affects, interests, beliefs, desires, and so on. However, it can also be approached from an ontological angle, from an interior, first-person point of view. It is then a conscious subject, aware of himself, who thinks and acts rationally, exercises his will, has interests, desires, etc., in relation to his social and natural environment. Viewed from both inside and outside, the mind comes to constitute, so to speak, the personal identity of a human being or, in other words, the subject (knowing subject, moral subject, etc.).

Having said that, can we reduce the mind to a personal identity? In fact, this reduction can only result from an objectification of the subject, whether this objectification is done by himself or by other subjects. For apart from a constituted self—that is, insofar as we strive not to objectify the subject—lived experience seems, on the contrary, to attest that it is much more fluid and diffuse, without precise limits. It suggests relationships rather than objects or subjects. Co-extensive with experience, the mind is then no longer limited to the human subject and his body; it is still neither truly subject nor truly object, but traverses what surrounds our lived bodies in a multitude of ways through the beings we encounter (humans, animals, plants, ecosystems, etc.)[6]. The anthropocentric bias then refers precisely to the ignorance or exclusion of this underlying—non-objectified—dimension of mind that precedes any representation of humans and non-humans as subjects or objects, of moral (human) agents and of moral (human and non-human) patients.

As Figure 1 shows, anthropocentrism is hardly questionable at the first and second levels [epistemic (1), human mind (2)]. On the other hand, in order to avoid falling into an anthropocentric bias, we must—at the third level, i.e., human subjectivity (3)—not reduce our understanding of the concept to that objectified part of the subjectivity that lets its non-objectified part slip away. For it is within this non-objectified part that reside the meaningful relationships between humans and non-humans that are likely to motivate action, before they crystallise and become fixed in a personal identity through character traits.

For the moment, we can therefore draw the following conclusion. In order to avoid an anthropocentric bias in the ethical evaluation of a situation based on virtues (and vices), it is necessary to reconsider the subject–object model and also to relativise the scope of naturalism in the definition of the ultimate good. For while naturalism ensures objectivity in the definition of the human and non-human good, it is also naturalism that justifies the human subject in his exclusive role as a moral agent in relation to moral patients. Thus, before any objectification by science (subject/object) or morality (agent/patient) in a third-person perspective, we must first remember that we are dealing with lived relationships between selves or agents (human and non-human) in a first-person perspective. Such a first-person perspective avoids the pitfall of the epistemological dualism underlying naturalism; it allows access to the *relational* dimension of lived experience which is an experience *with* nature and no longer an experience *of* nature.

In other words, self-realisation in the world can no longer be seen simply as that of a human subject or agent in relation to objects or patients (human and non-human). Before any recourse to naturalism, before any objective consideration, it must be approached, first and foremost, from a subjective perspective that provides access to the natural environment from the inside, without remaining outside it. The promotion of a moral non-anthropocentrism in virtue ethics, such as Sandler's, does not escape an anthropocentric bias. The latter is ultimately based on an epistemological dualism in which the relationship between humans and their environment remains extrinsic.

This leads to shift the emphasis from environmental virtues to ecological virtues. As we shall see, in an ethics of ecological virtues, the good life, or the good to which these virtues are attached, needs to be considered as that of an ecological self, i.e., the self that must be considered from a first-person perspective.

4. Ecological Virtues: The Intrinsic Relationship between Virtue Ethics and the Environment

4.1. A Relational Ontology, beyond the Epistemological Subject–Object Model

Returning to a subjective, first-person perspective involves an awareness that the object of experience does not exist independently of the intentional relationship of the subject established through that subject's experience. For example, when I see a tree through the window, I may become aware that the tree does not exist in itself, but that it appears to me in the perception I have of it, i.e., in my perceptual relationship with the tree. However, if the subject is in an intentional relationship with the environment, the latter can be seen in two different ways. First, it can be seen as a spatially constituted object (empirical or conceptual). For example, a tree can be seen as a cherry tree whose tasty fruit I eat in summer. We are dealing with a relation of meaning, but of a meaning that has already been formed. Here, the subject–object model continues to permeate the relationship with nature.

The second way aims to get rid of the subject–object structure. The subject's intentional relationship with the environment is then no longer with an already constituted object, but with an object as it appears in the present experience. It is that of an *appearance of the object*, of its genesis in experience, *before* the division into subject and object, i.e., below the objectifying and spatialising subject–object structure [18] (p. 103–104). In this case, the environment does not pre-exist the *event* through which I encounter it In the life-world. Indeed, through my body, I belong to the life-world. I constitute this world as much as it constitutes me. Now, this co-constitution is event-based and precedes both the "subject" and the "object" [19] (p. 726–727); it relates to the temporal structure of consciousness. It follows that, in this respect, the value of the environment belongs neither to the realm of physical reality (object) nor to the realm of mental reality (subject); it is neither subjective nor objective. It comes from a reality—the life-world—that is fundamentally relational: a field of consciousness that pre-exists a valued object and the subject who values it. To take the previous example, the tree in my garden is experienced in the event of the shimmering branches of the cherry blossom that I see waving in the spring breeze, in the event of the deep red colour of the cherries when they are picked up, or in the event of their tender, sweet flesh when I taste them.

In the latter case, the "de-objectification" is radical. This de-objectification is radical in the sense that it frees us from the epistemological subject–object model and definitively turns our backs on an ontology that conceives of the entities of the world as separate from one another. This other, relational ontology is neither an ontology of the object (materialism) nor of the subject (idealism), but of a relational field in which the value of nature is above all an event. Both the evaluator and what is being evaluated depend on this event, which is the origin of practical dispositions—character traits or virtues—that motivate us to act.

Consequently, the natural environment is not simply a condition of the human good but is itself an aspect of the good. In other words, it is a constituent of flourishing, of a realisation that is not exclusively that of the human self but encompasses everything with which human beings are in relationship: other humans, but also nature (animals, living things, soil, air, natural things like rivers or mountains, landscapes, and so on). The supreme good that an ecological virtue ethics must pursue is thus not that of a human self, but of a self that defines itself in relation to its environment. As we have seen, the character traits that make up the virtues, according to Sandler, are not only a function of human good (happiness), but also of ends immanent to non-human natural entities (their own good). However, if the self is not what we think it is, then the good, flourishing life is not what we think it is either. A self extended to the environment is an ecological self, not a human self. It is not defined as an entity separate from its environment, but as a

node of relationships within a relational network. The realisation of such a self means the crystallisation of a knot of relationships constituting the environment, in which true happiness is achieved. It follows that a virtuous human being must be judged according to a renewed understanding of fulfilment: that of an ecological self, not a human self.

Before taking a closer look at what the flourishing of an ecological self means, let us briefly note some advantages of an ecological ethics of virtue, in other words, a non-anthropocentric virtue ethics, which the above development makes it possible to highlight. Compared with an environmental virtue ethics, such as Sandler's, which seeks to extend the scope of certain classical virtues to the good of the environment, an ecological virtue ethics defends the idea of properly ecological virtues. These virtues presuppose an acute awareness of the anthropocentric bias that constantly threatens our day-to-day practice and that Sandler's approach cannot avoid. In an ecological virtue ethics, however, awareness of an anthropocentric bias invites us to return again and again to the events of our lived experience of nature, within which our multiple relationships to the environment are born and renewed.

Moreover, ecological virtues are not limited to natural entities that have a proper good, a good in and for itself, but can allow us to take into account all the constituent elements of the natural environment, without having to worry about the (theoretical) question of whether such and such an entity actually has its own good or ecological integrity. An ecological virtue ethics is able to do this because it is based on a relational ontology—where the entities of nature (including ourselves) exist through the relationships they enter into with each other—and not on a naturalistic ontology in which the entities exist separately from and are independent of each other.

An ecological ethics of virtue finally makes explicit a deeper living dimension of human experience than that of perception, which motivates and guides our actions and, more generally, our behaviour. In the environmental virtue ethic model, on the other hand, virtues are applied to objectified entities which, unlike the relationships we have as humans with other humans, leave little room for the affectivity inherent in the experience that permeates our motivations. By escaping epistemological dualism, the ecological self can also hope to escape the anthropocentric bias.

4.2. The Good Life, or the Ultimate Good of an Ecological Self

The ecological self is not a new idea. It was proposed in the 1980s by the philosopher Arne Næss [20] and [21] (p. 171–183), developed later theoretically by Freya Mathews [22] and then taken up again, with certain nuances, in the ecofeminism of Val Plumwood, among others [23] (ch. 6). In the philosophical tradition of phenomenology [24], let us say that the ecological self refers, in a first approximation, to a relational self whose realisation includes, among its own primary ends and through different modes of participation, the fulfilment of other beings on earth. In this context, I examine how to make sense of the three-dimensional model that McMullin uses to define human flourishing (see above).

Adapted to the concept of an ecological self, the first-, second- and third-person perspectives can be replaced, respectively, by those of interiority (a relationship to oneself), exteriority (a relationship with nature or the environment in general) and objectivity (scientific concepts validated intersubjectively).

- First-person perspective. Considered primarily from the point of view of interiority, the realisation of the ecological self—its flourishing or fulfilment—no longer operates on the basis of a personal and social identity of its own, but on the basis of a decentring of oneself, or, so to speak, a "dying" to oneself. This implies a return to the impersonal layer of my existence, to that of the lived body, the body that feels and lives in the space-time and temporality of consciousness. It is through such a body that we can grasp the otherness of natural beings and act virtuously towards them at the very heart of this relationship with the other. The self refers not to the *ego* but to a dimension of being deeper than that of the beliefs, desires, interests and feelings with which I usually identify. The decentring of oneself therefore concerns not the self but what

defines the self socially and personally as an *ego* who does not reflect on and transform that self.

- Second-person perspective. From the point of view of exteriority, the realisation of the ecological self includes everything that can be accessed through the various ways of participating in nature. This participation can take various forms. For example, through empathic participation with an animal, I am able to respond to its sensitive, affective and even, in some cases, conative life. Meanwhile, in a form of participation that I describe as 'enactive' (because of the finality immanent in every organism that produces its environment), I am able to respond to the vital activity of an organism, as it manifests itself in metabolism (feeding, breathing) and movement (desiring). And in a 'trajective' participation (in which I project my body into the environment), I can grasp, as part of a human community, the characteristics of my environment and of the particular space-time within which my existence takes place: the climate, the aridity or fertility of the soil, the presence or absence of an animal or plant population, the singular beauty of a landscape, and so on. And, in so doing, I can also respond to the particularities of the natural environments in which other human communities live.
- Third-person perspective. Finally, from the perspective of objectivity, the flourishing of the ecological self is also motivated by the knowledge developed over time through scientific research, which, in the context of ecological awareness, aims to gain a better understanding of the non-human animal, the living and the plant world in particular, so as to have a more accurate view of ecosystems and, more fundamentally, a more complete understanding of reality. As we can see, the third-person perspective of scientific naturalism has not been abandoned. But it is relativised in relation to a first- and second-person perspective.

An ecological virtue ethics can only be developed on the basis of an ecological self. Nevertheless, in the context of this article, it is not possible to identify and describe ecological virtues any further. In the final part of this section, I shall confine myself to illustrating what an ecological virtue could be on the basis of a well-known figure in environmental thought. Drawing on her personal experience, the philosopher and ecofeminist Val Plumwood insists on the development of a relational ethics, based on our lived participation in the environment.

4.3. An Ecological Virtue: Vigilance or Attentiveness

In February 1985, Val Plumwood set off on an excursion to Arnehm Land, east of Kakadu National Park in Australia's Northern Territory. While crossing a river in a canoe in the monsoon rain, she was surprised by a saltwater crocodile. Suddenly, the crocodile pounced on the boat, biting her leg and trying to drown her, but miraculously, albeit wounded, Plumwood managed to escape the predator and flee. With the benefit of hindsight, this traumatic episode became a crucial event in Plumwood's life. It enabled her, she says, to become truly aware, in her own flesh, of the very relative place of the human species in nature, when confronted with a predator. But that is not the whole story.

Afterwards, she asked herself: "Why did I do such dangerous things and not perceive my danger? Why did I not see myself as subject to these kinds of dangers in this place?" [25] (p. 14). When she set out to cross a river infested with sea crocodiles, she thought she was safe. She thought this was her world, a world she knew and was familiar with.

> Yet, as I looked into the eye of the crocodile, I realised that my planning for this journey upriver had given insufficient attention to this important aspect of human life, to my own vulnerability as an edible, animal being. [25] (p. 10)

> One way of answering these questions lies in my background in a certain kind of culture, my background relationship to the land I was visiting and the land of home. My relationship, in other words, to place. I was in a place that was not my own and which was very different from my own place. An important part of place is one's sense of the large predators for placing us. [25] (p. 20)

Plumwood did not realise the risk she was taking by paddling a canoe on a river she knew to be inhabited by crocodiles. Basically, she failed to be vigilant. By failing to pay attention to a habitat that was not her own, she failed to realise that she was sharing it with other animals, not least her own predators. The importance of this sense of "the large predators", or vigilance, is also what Plumwood has in mind when she comes to the end of her story, recalling the forest fires in the south-east of Australia where she lives:

> The southerly change really is Cool. [. . .] I dig out a sweater; lyrebirds are singing again; grasses greening. [. . .] The dripping forest feels good now, but I know it's not over yet until we get a lot more rain. [. . .] You must be able to look at the bush you love and also imagine it as a smoking, blackened ruin, and somehow come to terms with that vision. I am trying to make my house fire-ready, but in the cool moist airstream of the moment I am finding it hard to sustain the sense of urgency and inevitability [. . .]. But I know I will have to meet the fire monster face-to-face one day. [25] (p. 21)

Vigilance is a disposition that translates into attention to the world around us, which comes to us through our experience of it: the beauty of the nature around us, but also the anticipation of the fire that might destroy it.

The virtue of vigilance, as it emerges from this story, is a truly ecological virtue. For it emerges from an identity that does not see itself as separate from the environment in which it evolves. This self is an ecological self, in the sense that this identity is lived and experienced in relation to the place it inhabits, its climate and the other animal and plant species that live there with it: the wildfires, the humid air of the ocean, the lyre birds and the trees of the forest. It is precisely this intimacy with the natural environment that leads it to develop a vigilant attitude to the dangers of fire.

I think that such a virtue of vigilance, understood from the point of view of an intrinsic relationship with the environment, differs from the meaning it would take on in an environmental virtue ethic. Viewed as part of the development of an ecological self, vigilance here reflects an amplified experience of nature in which the threat of an attack by a predator or a forest fire is placed in the context of a lived proximity to the environment—for example, an acute attention to those who share our habitat or to the singular climate of a region. This presupposes the ability to imagine a reality different from the one we are currently experiencing and to anticipate the behaviour it implies. In an extrinsic relationship with the environment, however, it is precisely this amplification of lived experience closely associated with imagination and anticipation that is lacking. In this case, the anthropocentric bias and objectification of the lived experience encourages us to focus our attention on the predator (which we are going to eliminate) or the fire (which we are going to fight) without seeing them as events inherent in the environment we inhabit and with which we must learn to live.

Through the narrative of Plumwood, the virtue of vigilance illustrates its meaning as an ecological virtue. It differentiates itself from the sense it would take as an environmental virtue within an environmental virtue ethics where the relationship to nature is extrinsic and not intrinsic.

The three forms of virtue ethics applied to the environment can now be distinguished in the figure below (Figure 2) according to moral anthropocentrism or moral non-anthropocentrism in virtue ethics and according to the extrinsic or intrinsic relationship with nature.

Figure 2 shows the differences between the three forms of virtue ethics, depending on whether they are founded in moral anthropocentrism or not and whether they are intrinsic or extrinsic to the environment. An environmental virtue ethics is close to an ecological virtue ethics in terms of their common, non-anthropocentric perspective. But it is close to a classical virtue ethics in terms of the extrinsic nature of the relationship to the environment. Only an ecological virtue ethics is both non-anthropocentric and intrinsically committed to nature. In so doing, it avoids the pitfall of anthropocentric bias that constantly threatens an environmental virtue ethics.

Moral Anthropocentrism	Moral Non-Anthropocentrism	
Classical virtue ethic	Environmental virtue ethic	Ecological virtue ethic
Extrinsic relationship to nature		Intrinsic relationship to nature
Human flourishing	Human flourishing + the « good » of the environment	Flourishing of an ecological self
Classical virtues (benevolence, love, etc.)	Environmental virtues (temperance, etc.)	Ecological virtues (vigilance, etc.)

Figure 2. Three forms of virtue ethics applied to environment.

5. Conclusions

The aim of this article was to sketch out a response to the dilemma inherent in a virtue ethics that endeavours to take account of the natural environment. I have tried to propose a non-anthropocentric version, an ecological ethics of virtue, although not an environmental virtue ethics. I have tried to show that the individual who operates on the basis of environmental virtues has an extrinsic relationship with his environment in which the good of the environment is added, so to speak, to human happiness from the outside. This individual remains subject to a dualist subject–object epistemological model that is unable to account for the relationships it has with its environment. In this approach, the environment is at worst a mere object, useful or useless in satisfying human needs and desires; at best, it is a moral patient whose value must be taken into account by a human moral agent who himself has a value and who is responsible for the moral assessment of a situation. This is the inevitably anthropocentric bias of this model applied to environmental ethics.

Unlike environmental virtues, ecological virtues are those of a genuine ecological self whose relationship with its natural environment is intrinsic, not extrinsic. In this case, the relationship we have with nature prevents it from being assimilated to a mere object or to something radically different from ourselves, just as much as it avoids reducing it to ourselves [26]. The relationship with nature strives—through participative relationships—to preserve nature in what constitutes it in its own right: its own experience (animals), its life (organisms) and the environments in which human and non-human communities live, which are always unique (ecosystems).

It will be objected that this conceptual clarification may seem futile in practical terms. After all, in everyday situations where the environment is at stake, it is highly likely that a virtuous person animated by environmental virtues will often act in a similar way to one animated by ecological virtues. In fact, it is not a question of pitting the three versions of virtue ethics that I have proposed in this article against each other. Each has legitimacy at some level of our relationship with the environment. From an anthropocentric perspective, classical virtue ethics can be favourable to the environment. Think of benevolence towards non-human animals or, more generally, love of nature. But here the relationship with the environment remains fairly superficial. From a non-anthropocentric perspective, an environmental virtue ethics makes it possible to consider nature or certain aspects of it morally by redefining certain virtues specifically in relation to the environment, such as temperance. Ultimately, an ethics of ecological virtues is one that probes deeply into our relationship with the environment by aiming at the stratum of lived relationships with nature, before any implementation of the subject–object epistemological model. Ecological virtues are also redefined in relation to the environment, but they are redefined on the basis of our lived experience of it, and not on the basis of the properties of objectified natural entities, identified as belonging to their good.

As Plumwood's example of vigilance illustrates, the character traits of an ecological self presuppose a different experience of how humans belong to their natural environment and a different way of perceiving and behaving in it. An amplified experience of nature, such as Plumwood's, takes account of human and non-human interests alike, aiming for the fulfilment of a whole to which a person is aware of belonging. Furthermore, those

differences inevitably have an effect on the way we conceive of the political community and the collective goals we assign to it. This will inevitably determine the contents, the demands and even the radical nature of environmental policies on, for example, the preservation of biodiversity, climate change or energy transition that are put in place democratically and ultimately accepted by virtuous citizens. I think, for example, that political management of a predator like the wolf, based on ecological virtues, is significantly different from management based on environmental virtues. There is always a risk that the anthropocentric bias, coupled with an immoderate objectivation of the environment, will favour a policy that gives more weight to human fulfilment (in this case, that of livestock farmers and mountain farmers) than to that of an ecological self. The latter will consider a priori the legitimacy of wolves living in a territory they share with farmers. This means considering farmers and wolves together as part of the same ecological reality, while taking account of the interests of both sides—thanks above all to the various forms of participation in nature and that ecological knowledge can complement. Wolves are not just livestock predators (objectivation) that need to be eliminated (anthropocentric bias), and farmers are not just livestock owners (objectivation) that need to be protected (anthropocentric bias). In this way, the solution cannot be subsumed to a norm (apart from that of being virtuous) or be the result of objective reasoning; it is adapted to situations that are always singular. And this is something that only ecological virtues or character traits can address.

The task now ahead is to identify which character traits constitute authentic ecological virtues. This can be achieved through a more precise description of the ways in which humans participate in nature[7].

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.

Notes

1 See the arguments in Andrew Light and Eric Katz [2].

2 Aristotelian ethics and the tradition associated with it—which for the purposes of this debate I will refer to as "classical virtue ethics"—do not envisage the human being separated from his environment; however, the external nature within which the human being flourishes is nonetheless a condition for his flourishing, and no moral value is attributed to it. It is an ethics of and for human beings: it concerns them and is addressed to them. We could say that such a moral anthropocentrism is an anthropo*centred* ethic, but not necessarily an anthropo*centric* ethic. Moral anthropocentrism will become anthropo*centric* in modernity with the ontological and epistemological dualism (see Section 3 below).

3 For a discussion of these two arguments, see Ronald Sandler [7] (p. 43–55).

4 See, for instance, Philippe Descola [15].

5 See the very insightful paper of Max Velmans [16].

6 In the field of environmental ethics, see Gérald Hess [17], especially p. 77–83.

7 I would like to thank Marine Bedon for drawing my attention to her useful formulation of the distinction used in Note 2, and Sylvie Pouteau for her comments and her suggestions to the clear structuring of this article.

References

1. Hess, G. *Éthiques de la Nature*; PUF: Paris, France, 2013.
2. Light, A.; Katz, E. (Eds.) *Environmental Pragmatism*; Routledge: London, UK, 1996.
3. Cafaro, P. Thoreau, Leopold and Carson: Toward an Environmental Virtue Ethics. In *Environmental Virtue Ethics*; Sandler, R., Cafaro, P., Eds.; Rowan & Littlefield: Lanham, MA, USA, 2004; pp. 31–44.
4. Pelluchon, C. *Éthique de la Considération*; PUF: Paris, France, 2018.
5. Van Louke, W. *Dirty Virtues. The Emergence of Ecological Virtues*; Humanity Books: New York, NY, USA, 1999.
6. Sandler, R.; Cafaro, P. (Eds.) *Environmental Virtue Ethics*; Rowan & Littlefield: Lanham, MA, USA, 2004.
7. Sandler, R. *Character and Environment. A Virtue-Oriented Approach to Environmental Ethics*; Columbia UP: New York, NY, USA, 2007.
8. Cafaro, P.; Sandler, R. (Eds.) *Virtue Ethics and the Environment*; Springer: Dordrecht, The Netherlands, 2010.
9. Crisp, R. (Ed.) *Aristoteles Nicomachean Ethics*; Cambridge UP: Cambridge, UK, 2014.

10. Dzwonkowska, D. Is Environmental Virtue Ethics Anthropocentric? *J. Agric. Environ. Ethics* **2018**, *31*, 723–738. [CrossRef]
11. McMullin, I. *Existential Flourishing. A Phenomenology of the Virtues*; Cambridge UP: Cambridge, UK, 2019.
12. Kraut, R. Aristotle's Ethics. In *Stanford Encyclopedia of Philosophy*; Zalta, E.N., Nodelman, U., Eds.; Stanford University: Stanford, CA, USA, 2022.
13. Foot, P. *Natural Goodness*; Oxford UP: Oxford, UK, 2001.
14. Hursthouse, R. *On Virtue Ethics*; Oxford UP: Oxford, UK, 1999.
15. Descola, P. *Beyond Nature and Culture*; Chicago UP: Chicago, IL, USA, 2013.
16. Velmans, M. Reflexive Monism: Psychophysical Relations among Mind, Matter and Consciousness. *J. Conscious. Stud.* **2012**, *19*, 143–165.
17. Hess, G. Le dernier homme et la valeur de la nature. In *Routley, R.S. Aux Origines de l'Éthique Environnementale*; Hess, G., Ed.; PUF: Paris, France, 2019; pp. 57–85.
18. Hess, G. De l'éthique environnementale à l'écophénoménologie et retour. *Cités* **2018**, *76*, 97–108. [CrossRef]
19. Gilliand, C. Experiencing Values in the Flow of Events: A Phenomenological Approach to Relational Values. *Environ. Values* **2021**, *30*, 715–736. [CrossRef]
20. Næss, A. Self-Realisation. An ecological approach to Being in the World. *Trumpeter* **1987**, *4*, 35–42.
21. Næss, A. *Ecology, Community and Lifestyle*; Cambridge UP: Cambridge, UK, 2003.
22. Mathews, F. *The Ecological Self*; Routledge: London, UK, 1991.
23. Plumwood, V. *Feminism and the Mastery of Nature*; Routledge: London, UK, 1993.
24. Hess, G. *Conscience Cosmique. Pour une Écologie en Première Personne*; Dehors: Bellevaux, France, 2023.
25. Plumwood, V. *The Eye of the Crocodile*; Shannon, L., Ed.; Australian National University E Press: Canberra, Australia, 2012.
26. Plumwood, V. Nature, Self, and Gender: Feminism, Environmental Philosophy, and the Critique of Rationalism. *Hypatia* **1991**, *6*, 3–27. [CrossRef]

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Article

Ecological Virtuous Selves: Towards a Non-Anthropocentric Environmental Virtue Ethic?

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Abstract: Existing predominant approaches within virtue ethics (VE) assume humans as the typical agent and virtues as dispositions that pertain primarily to human–human interpersonal relationships. Similarly, the main accounts in the more specific area of environmental virtue ethics (EVE) tend to support weak anthropocentric positions, in which virtues are understood as excellent dispositions of human agents. In addition, however, several EVE authors have also considered virtues that benefit non-human beings and entities (e.g., environmental or ecological virtues). The latter correspond to excellent character dispositions that would extend moral consideration and care for the benefit of non-human beings, entities, or entire ecosystems. In this direction, a few authors have argued that EVE could be considered non-anthropocentric insofar as it could: (a) promote non-human ends, well-being, and the flourishing of non-human beings and entities; (b) involve significant relations to non-humans. Drawing from different traditions, including ecofeminism and care ethics, we argue for a broader notion of self and a decentered notion of virtues. The broader notion of selfhood corresponds to the "ecological self", one that can be enacted by both human and non-human beings, is embedded in a network of relations, and recognizes the more-than-human world as fundamental and yet indispensable otherness. We suggest that this broader notion of agency allows for an expansive understanding of virtues that includes a-moral functional ecological virtues, which can be exercised not only by humans but also by certain non-human beings. This alternative understanding of selfhood and ecological virtues within EVE could have several theoretical and practical implications, some of which may enable different types of agencies and transform collective action.

Keywords: ecological self; ecofeminism; care ethics; environmental virtue ethics; non-anthropocentrism; ecological virtues; agency

Citation: Delorme, D.; Calidori, N.; Frigo, G. Ecological Virtuous Selves: Towards a Non-Anthropocentric Environmental Virtue Ethic?. *Philosophies* **2024**, *9*, 11. https://doi.org/10.3390/philosophies9010011

Academic Editors: Sylvie Pouteau and Gérald Hess

Received: 3 October 2023
Revised: 12 December 2023
Accepted: 26 December 2023
Published: 9 January 2024

1. Introduction

A cautious but philosophically reasonable answer to the leading question of this collection—"Is Environmental Virtue Ethics a Virtuous Anthropocentrism?"—might be "It depends". Of course, it depends on the specific meaning of some of these loaded terms (e.g., "virtue" or "anthropocentrism"). However, the response is also based on some underlying theoretical assumptions, such as the type of agent or actor that is considered capable of demonstrating virtues, and regarding who or what may potentially benefit from certain virtues. In this paper, we question some assumptions regarding the notion of agency and virtue elaborated so far in environmental virtue ethics (EVE) and, as an alternative approach to EVE, we explore non-anthropocentric notions of subjectivity and agency that are not yet moralized. More specifically, we propose that it is possible to answer "Not necessarily" to the question above, provided that the notions of agency and virtues are decentered from human subjectivity, that is, when they become *de*-anthropocentrized. Our aim is to explore the metaphysical, ontological, and ethical conditions for including

non-anthropocentric perspectives within EVE. Our research question is the following: Can a broader notion of self combined with an extended notion of virtues constitute the preconditions for developing a non-anthropocentric approach in environmental virtue ethics? Alternatively, one may ask: can non-anthropocentric notions of agency and virtue become the basis for virtuous non-anthropocentrism in EVE?

Most EVE accounts that have emerged over the past twenty years tend to be weakly anthropocentric. Although this may depend on several reasons, here we suggest that it hinges on assumptions regarding both the notion of agency and that of virtue. First, even though most EVE scholars acknowledge that the human exercise of some virtues may benefit non-human[1] beings and entities (i.e., environmental or ecological virtues), they do not go so far as to claim that *non-human agents* can exercise virtues. This may depend on the metaphysical assumption that only humans are *normative* agents or on the fact that there is a long-standing tradition of thinking primarily about *human* virtues. Second, most accounts in EVE may have consistently assumed a narrow notion of virtue as *moral* virtue, which is a normative human endeavor or an exclusively human disposition or practice. Let us now consider existing alternatives to these views.

Agency. Although, within EVE scholarship, there seems to be no account that explicitly proposes that non-human agents can exercise virtues, some authors in the broader field of environmental ethics have already suggested extended notions of agency and selfhood (e.g., ecological self) that could be considered also in the context of EVE. Thinkers related to ecofeminist and care ethic traditions have often suggested more expansive and relational notions of selfhood and agency. Val Plumwood, for example, writes that "the ecological self recognises the earth other as a centre of agency or intentionality having its origin and place like mine in the community of the earth, but as a different centre of agency, which limits mine." [1] (p. 159). Thus, it is possible to conceive of agency beyond human agency.

Virtue. In EVE literature, "environmental or ecological virtues"[2] have been primarily conceptualized as types of excellent dispositions or behaviors that are exercised by human agents and benefit non-human beings and entities. However, there are at least two possible alternatives to the above-mentioned majority view in EVE. On the one hand, since Aristotle proposed that virtue can also be a quality of non-human beings (e.g., horse) or entities (e.g., knife), it seems possible to conceive of virtues in moral, a-moral, or functional ways. In this sense, a sharp knife is *functionally* virtuous insofar as it cuts the paper well, or the horse is *functionally* virtuous because of being courageous in (human) battle. In this view, however, the knife and the horse are functionally virtuous while only the human person is potentially capable of being morally virtuous. On the other hand, an alternative option could come from cultural/natural anthropology. Drawing upon Descola's anthropology of nature [3,4] and what we might call "non-modern (or non-naturalistic) cultures" (i.e., animism, analogism and totemism), certain virtues may not need to be exclusive to certain agents but could be shared among humans and non-humans within a specific context.

Building on these suggestions, we argue that broadening the notion of self and decentering that of virtues—both in non-anthropocentric terms—would represent the preconditions for developing accounts of non-anthropocentric EVE. Although we do not believe that this is necessarily a fruitful path forward, we suggest that it is important to consider how promising and doable such accounts might be [5]. At the core of the paper, we argue that the notion of self can broaden to become an "ecological self", while that of virtue can expand to include functional ecological a-moral virtues that can also be exercised by non-human agents. Envisioning virtuous agency in non-anthropocentric terms allows for a likewise non-anthropocentric broadening of "ecological virtues", which would represent types of excellent dispositions that can be exercised also by non-human agents. Of course, this is possible because the notion of self is conceptualized as an ecological self. This focus on the ecological self is in line with what Callicott writes when affirming that "the nature of the self—or better how to conceive of and to experience the self—is the central philosophical question of environmental ethics and indeed of ecophilosophy" [6] (p. 11). In this sense, both agency and virtue are decentered or de-anthropocentrized. These theoretical alternative assumptions or proposed theoretical

changes may represent the basis for developing consistent non-anthropocentric accounts in EVE. Given the previous discussion, it should be clear that our thesis challenges the notion of agency in VE (and EVE), as well as the notion of ecological virtues elaborated so far in EVE.

In practice, we maintain that the ecological self can be either a human person or a non-human being and that, while the former can exercise both moral and a-moral virtues, certain species within the latter may only be capable of exercising a-moral virtues. The two reconceptualized notions of "ecological self" and "ecological virtue" would antagonize the separatist function of the so far hegemonic anthropocentric EVE discourse and foster a theoretical and practical precondition for reconnecting human and non-human entities and beings. In this sense, we present an "extensionist" strategy, a theoretical proposal that decenters and broadens both the notion of selfhood and that of virtue, allowing for a compositionist (or non-separatist) framing. This may serve as the ground on which to build non-anthropocentric accounts of EVE that imagine and devise environmental and climate policies differently.

Section 2 illustrates four different ways in which both human and non-human agents could exercise virtues that may benefit either human or non-human subjects or ends. Section 3 describes how it is possible to broaden the notion of self to ecological self. Section 4 develops our proposal to consider functional ecological virtue as a way to transform EVE in a non-anthropocentric perspective and considers some objections. In conclusion, we highlight the benefits of thinking critically about agency and ecological virtues for (human) ethics generally, and we discuss some implications of our proposal for EVE specifically.

2. Variations of Agency Regarding Virtue

Virtue theory has long emphasized the polysemy of the concept of virtue. Leaving aside ulterior types of virtues, such as intellectual or epistemic virtues, here we focus on virtues within the virtue ethics tradition. Reflecting on a possible core concept to establish a coherent virtue ethics, Alasdair MacIntyre distinguished "three very different conceptions of a virtue [. . .]: a virtue is a quality which enables an individual to discharge his or her social role (Homer); a virtue is a quality which enables an individual to move towards the achievement of the specifically human telos, whether natural or supernatural (Aristotle, the New Testament, and Aquinas); a virtue is a quality which has utility in achieving earthly and heavenly success (Franklin)" [7] (p. 122). MacIntyre then notes that each conception refers to a pre-requisite conception of what constitutes a practice, the telos of a human life, and a moral tradition.

This diagnosis seems to reveal an axiom of virtue ethics; virtues are not only exercised by humans, but they express the superior powers of human normativity, which also distinguish them from non-humans and insist on their sovereignty via their practical wisdom. We could call this axiom, in a nod to Routley, the BHC (basic human chauvinism) of VE.

Can we contest this axiom? If we neutralize the anthropocentric assumptions—that practice, telos of a human life, and moral traditions, not only concern specifically human beings but also characterize their metaphysical supremacy—what would be a potentially core conception of (non-anthropocentric) virtue? Different strategies can be found in VE's distinctions.

We first consider the distinction between moral/non-moral virtues [8,9]. This distinction is usually used to question the supposed inherent relation between virtue and morality, leading, for instance, to consider contra-moral virtues [8] and not, as far as we know, to potentially expand the attribution of virtues to non-human agents.

We can also consider the distinction between eudaimonistic (Aristotelian tradition) and intuitionist accounts (Humean tradition) [10,11]. According to Huang, "the former explains virtue as *the character traits that contribute to human flourishing*, while the latter describes it as the *character traits that are simply admirable*" [12]. However, once again, this distinction remains within the prejudice that only humans could be virtuous. For instance, exploring a Daoist perspective on virtue ethics and following Zhuang Zhe, Huang only defined human

virtues; whereas, in our understanding, the principle Daoist virtue, namely a differentialist virtue: "respect diverse ways of life" [12], could endorse a non-anthropocentric meaning.

Another relevant strategy to consider the attribution of virtue to non-human traits of characters and actions could be suggested by the pluralistic virtue ethics developed by Christine Swanton [13]. She adopted a broad definition of virtue as "a good quality of character, more specifically a disposition to respond to, or acknowledge, items within its field or fields in an excellent or good enough way" [13] (p. 19). However, this disposition *to respond well to the demands of the world* is, implicitly and as far as we know, restricted to human agents, even though Swanton explained that her pluralistic view of virtue "avoids the problem of anthropocentrism" [13] (p. 50). In this sense, Swanton suggested that virtues might not be necessarily anthropocentric, and yet, she does not go as far as to propose that non-human beings can act virtuously (i.e., she does not challenge the exclusivity of human agency in VE).

Could a-moral virtue or functionalist virtue and the intuitionist account (recognizing excellences of different kinds) be extended to non-human agents as excellent dispositions capable of responding well to the world? Importantly, Aristotle already pointed out the linkages and differences between "*areté* " and "*ethike areté* "[3]. While the former is defined as "a perfect adaptation" [15] (p. 46) and can be applied to non-human beings, the latter denotes moral virtues that pertain to human morality. Interestingly, the BHC perspective assumes that *ethike areté* is superior to *areté* , but could we avoid a supremacist attitude and envision the exercise of virtuous dispositions as something that humans may share with other species? To illustrate how such an extension might be possible, we list the following four main ways to specify agency and the subject(s) affected by its exercise of both moral and a-moral virtues.

(a) *Human agency affecting human(s).* As anticipated above, this corresponds to the more traditional VE but is present also in EVE. To better understand it, consider the example of the human eye as presented by Aristotle. Such conception of virtue is typically weakly anthropocentric and is displayed in character traits such as compassion, attentiveness, attention, care, justice, etc., toward humans. According to Naess, embracing this type of moral orientation (i.e., "protecting Nature is protecting ourselves") could constitute a motivation for pragmatic ecological ethics.

(b) *Non-human agency affecting human(s).* In this case, the agent is a non-human being that is capable of exercising a virtue that has an effect on humans. It is interesting to point out that such a virtue would be described as an a-moral virtue when considering the non-human agent but potentially also as a moral virtue when considered from the point of view of the beneficiary (i.e., human(s)). For example, Aristotle described this version of virtuous behavior through the case of the brave horse, and it can be easily expanded to other instrumental relationships between animals and humans (e.g., animal labor/working force, food production, care labor). More broadly, this variation can be found in a lot of so-called "ecological services", or "nature's contribution to people" [16], or examples of symbiotic processes that benefit humans (for instance, see Margulis [17], Haraway [18]): breathing, digesting, pollination, filtration, providing food and shelter, and so forth. Accordingly, one might say that non-human agents that affect humans characterize every non-human precondition for human subsistence and flourishing. Often, these ecological capacities are turned toward human ends or made more efficient and productive through technical and technological means (e.g., devices, systems, processes). It goes without saying that many of such relationships are ambivalent and, like the Greek *pharmakon*, can designate either a poison or a medicine/cure (e.g., auto-immune diseases).

(c) *Human agency affecting non-human(s)* (i.e., beings and entities). This option corresponds to EVE's distinctive contribution through the notion of "ecological virtues". Often, the effect(s) of such virtue(s) run the risk of being anthropomorphic in the sense that they may favor a human-centered conception of the "good/bad ends", excluding more pluralistic conceptions (i.e., from the point of view of the non-human(s) affected). This

approach comprises virtues similar to (a) but that affect non-human(s). A further risk of prioritizing non-human ends that has been highlighted several times in environmental ethics literature is that it could favor misanthropic, too radical, or eco-fascist conducts (e.g., some forms of radical environmentalism or Foreman's rewilding proposal). Although the potential sacrifices by humans and even of humans could cohere with the recognition of the intrinsic value of non-human beings and entities, this remains extremely controversial. Later, we suggest that human selves as ecological selves can act virtuously in favor of ecological ends, the ecological worth of which could be studied scientifically.

(d) *Non-human agency affecting non-human(s)* (i.e., beings and entities). In line with our thesis, it is possible to consider non-human beings as agents of a-moral functional ecological virtues that affect non-human beings, entities, or even ecosystems. Here, the distinctive and perhaps original element resides in the fact that the notion of self is broadened to include non-humans as potential agents (like in [b]), and the notion of virtue is decentralized as ecological virtue (like in [c]). In other words, non-human beings can act as ecological selves and are therefore considered agents capable of virtuous actions and behaviors that affect non-humans[4]. Similarly to [c], non-human beings can act virtuously by exercising a-moral functional ecological virtues and, similarly to [c], can affect positively different ecological dimensions and ends. As mentioned in [c], the "goodness" of these effects is a-moral and could be studied scientifically.

In the next two sections, we delve into the expanded notion of self as ecological self (Section 3) and that of virtue as non-anthropocentric ecological virtue (Section 4).

3. Broadening the Notion of Agency as Ecological Self

3.1. Three Traditional Conceptions of "Ecological Self" in Environmental Philosophy

At a basic level, adopting an ecological self means moving beyond a detached notion of selfhood towards one that acknowledges the fundamental importance of relationships among different species and to the ecosystems they live in. Put in the words of Karen J. Warren, in the *Encyclopedia of Environmental Ethics and Philosophy*, recognizing the ecological self means recognizing that "the self is not an isolated, immaterial Cartesian ego, soul or psyche in a physical body (lampooned as "the ghost in the machine"); rather, it is constituted by its relationships with others—just as in ecology the characteristics of various species are constituted by their relationships with other species and the abiotic environment" [19] (p. 231). From at least the late 1980s onwards, different versions of the ecological self have been developed. These have challenged the prevailing notion of selfhood found in European and North American philosophy, which hinges on atomistic metaphysical assumptions [20]. Instead, these alternative proposals are grounded on metaphysical assumptions that recognize the self—or perhaps better, a multitude of selves—as necessarily relational. In this view, humans are part of nature and deeply interconnected with natural beings, entities, and processes.

Despite these general and shared premises about the ecological self, here we discuss three main versions that have been elaborated so far. First, Arne Naess introduced the concept of the ecological self in a seminal article of 1987 entitled "Self-realisation: An ecological approach to Being"[5]. Among others, he drew from the *Gestalt* theory, Spinoza, and Eastern spiritual wisdom to offer a conceptualization of the ecological self based on the "process of identification" with others [22] (p. 35). He explained this process through an example doomed to become famous: once, Naess was looking through a microscope and a flea landed in the acid chemicals he was observing. Within a few minutes, the flea died, and Naess witnessed closely the flea's torturous attempts to live. He explains in these terms what he felt:

> "what I felt was naturally, a painful compassion and empathy. But the empathy was not basic, it was the process of identification, that 'I see myself in the flea'.

> If I was alienated from the flea, not seeing intuitively anything even resembling myself, the death struggle would have left me indifferent. So there must be identification in order for there to be compassion [. . .]" [21] (p. 36).

Naess proposed that the concept of the self extends beyond the traditional understanding of it as simply an "ego" or a "social self". For ecological relationships to become part of our internal relationships, the process/phenomenon of identification is needed. As a result, for Naess, the pursuit of self-realization naturally leads human beings to take a greater interest in and concern for environmental issues. Thus, defending nature is equivalent to defending one-(ecological)-self.

A second account of ecological self was offered by J. Baird Callicott, who criticized Naess on several points (2017), such as the eclectic sources Naess drew upon or the fact that he ignored the cutting-edge science of ecology to inform the ecological self. He proposed, instead, the concept of the ecological self that explicitly recalls the tradition of the Kyoto School of Japanese Buddhism in conjunction with the potential implications of current ecological knowledge. Callicott suggested an *ecological* notion of the self "as a knot, nexus, or node in a skein of social and environmental relationships" [23] (p. 235). Since these relationships are internal (the self), to undo them would mean to undo the self, and nothing left would remain (he used the Buddhist expression *topos* of *mu*, place of nothing). Using his own words:

> "[. . .] the ecological self is constituted by its internal socio-environmental relations. Untie the knot that is oneself in the socio-biospherical net or field of internal relations, and there's nothing left of the self" [23] (p. 241).

More recently, Callicott suggested that it is possible to find conceptual foundations for such an ecological self in existing notions elaborated within both natural sciences and western scholarly traditions [6].

A third perspective on the notion of ecological self is that proposed by Christian Diehm. After analyzing Naess's work on the ecological self, he suggested a different idea of identification with others (including non-human others). According to Diehm, the "process of identification"—central in Naess' ecosophy because it makes possible the very development of the ecological self—should be understood as "a response, just one mode of an ongoing dialogue in which we attempt to find ways to articulate ourselves properly to others, a way of recognizing and assuming responsibility, of being responsive" [24] (p. 34).

A fourth and final option for the notion of ecological self can be found within ecofeminist scholarship. For instance, in her book *Feminism and the Mastery of Nature*, Plumwood wrote about the ecological self as a relational self, essentially characterized by non-instrumental relationships to others. These relationships are not part of the self since they are "incorporated" or "assimilated" within it nor because their flourishing contributes to the well-being of the self. In contrast, for Plumwood, ecological selves represent independent centers of intentionality and agency, which impose limits on the self, thus constituting it. The "earth others" [1] are in constant dialogue with each other, every one of them with its own center. These ecological selves exist in and from this dialogue, made of recognition and awareness (of others and differences)[6]. She wrote:

> "The ecological self can be viewed as a type of relational self, one which includes the goal of the flourishing of earth others and the earth community among its own primary ends, and hence respects or cares for these others for their own sake" [1].

In the context of environmental philosophy, Naess, Callicott, Diehm, and Plumwood offered four main conceptions of the ecological self. In the next section, we illustrate our position in comparison to these approaches.

3.2. Our Position on the Ecological Self

Despite some differences, these positions share a number of aspects. First, the previous conceptions of the ecological self assumed a subjective identity, implying that they tend to

offer a polarized notion that oscillates between the same and the other. For example, Naess started from the modern ego and social self separated from nature and thus extended it to a metaphysical ecological self, focusing on the identity of the ecological *human* self, with ecological relationships. Adopting another strategy, Plumwood started from a critique of the hegemonic "master perspective" [25] (p. 99) and suggested that the otherness of and within ecological relations facilitates entering into a relationship. Second, all the positions presented above consider the ecological self as something peculiar to human beings, thus assuming an anthropocentric conceptualization of the self.

A notable exception to this trend can be found in Freya Mathews' *Ecological Self.* In her work, the author adopted a non-anthropocentric conception of the self that can be applied to organisms but also to the cosmos, and to some extent to ecosystems:

> "The paradigm instance of the self-realizing system—or 'self'—is the organism. But the geometrodynamic universe as a whole also qualifies for selfhood. A self-realizing being is one which, by its very activity, defines and embodies a value (viz., its value-for-itself.) Since self-realization is a function of ecological interconnectedness, the property of intrinsic value is likewise a function of such connectedness." [20] (p. 101).

Mathews inferred from that premise that "The individual is thus in a very real sense a microcosm of the wider self in which it occurs" [20] (p. 101), and that would imply an egalitarianism regarding the "intrinsic value" of substances in such a complex systemic metaphysical cosmic order. This normative consequence seems at first converge with "a bio- or eco-centric ethic" [20] (p. 103) that would have, as a principle, to "'tread lightly' on this earth, taking from it only what we must satisfy our 'vital needs'" [20] (p. 103). However, Mathews later emphasized the spiritual dimension of this "ethics of care" [20] (p. 105) and came back to describe human virtues of "awareness" and "love":

> "Meaningfulness is to be found in our spiritual capacity to keep the ecocosm on course, by teaching our hearts to practise affirmation, and by awakening our faculty of active, outreaching, world-directed love. Though a tendency to 'tread lightly' on the earth, and to take practical steps to safeguard the particular manifestations of Nature, will inevitably flow from such an attitude, the crucial contribution will be the attitude itself, a contribution of the heart and spirit." [20] (p. 113).

In other texts, she speaks about virtues of "commitment" and "loyalty" toward the earth community [26], which mean recognizing or being aligned with the conativity of the systems, working with it in a mutualistic and relational way, and promoting "grace" as an embodiment of the principle of "least resistance" [27] (p. 22)—inspired by the Taoist virtue known as *wuwei*.

Building on Mathews's conception, we propose a conceptualization of the ecological self that underscores the intrinsic connections and the various relationships in which all beings are meshed. In particular, we stress that both humans and non-humans can be/embody ecological selves. This relies on a relational ontology that seems common to Naess, Plumwood, Callicott, and Mathews [6] (p. 24). Regardless of distinct strategies to promote practical ways for humans to be aware of the ecological self (e.g., Naess' expansion or Plumwood's recognition of our inner relation to otherness), at this ontological level, the ecological self constitutes a fundamental premise of the self itself.

This conception of the ecological self can find a scientific ally in biologist and neurologist Francisco Varela's conception of organisms. Indeed, according to Varela, an organism is "a multiplicity of regional selves, all of them having some mode of self-constitution, and in their overall assemblage giving rise to an organism" [28] (p. 80). Varela described different regions of a "self" or "selves" that could also be useful in conceptualizing our version of "ecological selves". These are: "(1) a minimal or cellular unity, (2) a bodily self in its immunological foundations, (3) a cognitive perceptuo-motor self associated to animal behavior, (4) a socio-linguistic 'I' of subjectivity, and (5) the collective social multi-individual totality". Considering the functioning of such systems, we do not need to assert

the autonoetic consciousness (region 4) as a necessary condition for selfhood. The forms of autonomy and self-constitution that give rise to an organism (especially in regions 1 to 3 characterized by an autopoietic organization) allow us to speak of a mesh of relations among "selfless selves" [28] (p. 80), hence, other-than-human—"ego"—subjective selves.

Therefore, our conception of the ecological self includes, but is not limited to, the human self. We assume that the ecological self can be expressed both by humans and some non-humans at different levels (organisms, ecosystems, and even cosmos). Ecological selves could be identified in a symbiotic relationship acting within a web/field of ecological interdependencies in a process of self-realization (which may imply key dimensions such as conativity, agency, identity, and some forms of intelligence). Our ecological self aims to decenter and relocate the notion of selfhood in a less anthropocentric way. This does not mean that we deny differences between species and individuals. Rather, we stress the fact that some non-human beings can also express an ecological self, living in a web of relationships, in which they actively pursue their self-realization and interact accordingly. The processes of communication (release information, encode information, decode information) shared amongst living beings could be the source of multiple examples of such ecological self expressions. For instance, some birds may behave unusually when a storm or an earthquake is coming; some octopi are capable of constantly mimicking their surroundings and have developed very refined hunting strategies; bacteria develop resistance to antibiotics; and some trees like acacias may alter their composition when eaten and release different chemicals to communicate this information to other members of their species [29]. Our perspective on the ecological self highlights a connection rather than a disconnection between humans and other-than-human beings, recognizing in the human self something that is also expressed in other beings but in other forms and maybe pursuing other ends. Why and how can these ontological considerations about the ecological self affect our understanding of environmental virtue ethics?

4. Towards Functional Ecological Virtues

The aim of this paper is to challenge the modern western hegemonic tendency to interpret the anthropological difference—sometimes expressed in terms of "virtue" and *a fortiori* of "moral virtue"—as a criterion of human supremacy and uniqueness. We claim that it is possible to recognize an ontological analogy between humans and non-humans through the above-mentioned conception of the ecological self (e.g., a self that is expressed by both humans and non-humans caught in their web of interrelations). We call these "mastering skills" *functional ecological virtues*, i.e., a-moral virtues that can be exercised both by humans and non-humans. This perspective tries to consider, in a new way, the continuity and discontinuity between humans and non-humans, not as sharing an inanimate physicality or materiality, but as sharing agentivity and, in some cases, ecological virtues (excellences while being an ecological self). Hence, we could say that we tend to emphasize the *analogical*[7] potentialities of virtue ethics rather than its human *supremacist* tendency. However, does it make sense to speak of functional ecological *virtue* to describe certain excellences of these ecological selves? If so, what would it mean to consider non-human agents as potentially expressing (functional) ecological virtues, and how would this transformative[8] conception of ecological virtue influence human behaviors, especially facing planetary ecological crises?

4.1. Step by Step: What Do We Mean by (Functional) Ecological Virtue?

In Section 3, we explained that both humans and non-humans could be considered ecological selves. In their interconnections and relationships to others, plants, animals, and other living beings actively pursue self-realization. If we consider classical moral virtue—strongly or weakly anthropocentric, expressed by a (human) moral agent and pursuing a moral end—it seems that it would be a category error to try to apply virtue language to non-human ecological selves. We respond to some objections later, but what

if we start by reconsidering virtue in a different way, namely as excellent behaviors and actions at a *functional level*?

The first strategy is to consider functional ecological virtues *in relation to an ecological good*, the assessment of which depends on scientific criteria, which are often contested and dependent on the theory, the methodology, the scale considered, the system studied, etc. Actions that contribute to a contextual ecological good or the flourishing of a local ecosystem could be qualified as "ecological virtues" in a non-moral (a-moral) sense. For instance, drawing from Leopold's *Land Ethics* and considering the ecocentric duty to consider and respect other-than human "citizens", Bill Shaw proposed to characterize "land virtues": "The attitudes and practices that serve the ultimate good in this new paradigm—land virtues—tend to preserve the integrity, stability, and beauty of natural systems. Vices tend to destabilize and to destroy these characteristics of natural systems" [30][9]. Fundamentally, this strategy is not satisfactory because either it supposes a heavy set of metaphysical assumptions to consider that evolution is inherently and morally good, but this position is obviously very contested (cf. [31] for instance). Or, it must confront itself with blurred notions of normative criteria to characterize what is *ecologically* good (biodiversity, ecological health, resilience, integrity, connectivity, etc.).

The second strategy could be to characterize *functional ecological virtues* as *expressed by an ecological self*. They might be characterized as excellence in interacting with the environmental context, flourishing and self-realizing within a mesh of interdependencies. For instance, Michael Marder spoke about the "wisdom of plants" [32] and showed that plants are particularly excellent in "living-with" [32] (p. 51) the elements and threats constituting their middle of life. In this sense, plants express a specific virtue in seeking and soaking water and minerals in their surroundings, amongst other excellences [33]. These abilities can be considered *virtuous* because they can develop and perfect themselves according to specific vital ends, or they can fail and lead to some vital failure. On this account, functional ecological virtues are not necessarily (new) specific human qualities or attitudes that we (humans) need to develop in order to face the practical inertia or the non-reaction, which seems common among people in front of the ongoing ecological crisis [34].

Though not restricted to human agents, functional ecological virtues are (ecological) "*agent-focused*" [11] in the sense that they express the ecological self's excellence in specific ecological contexts. For example, a domestic dog named *Gaïa* can be regarded as capable of caring within a familial ecosystem[10]. Moreover, these virtues are "*target-based*", in the sense that certain actions and behaviors can be considered virtuous in that they succeed "in responding well to the demands of the world" [35]. Examples of this are quinoa, which can resist drought, very high salinity, and poor soil [36], or Burmese Pythons, which adapt so well to the anthropogenic warming of Florida Everglades' ecosystem that they become a threat to some native species, such as medium-sized mammals [37]). If we try to transpose Swanton's pluralistic categories to virtue [13], four of them might make sense applied to functional ecological virtues, which can be:

1. "*Value-based*". When ecological selves value and enhance at least some *vital values* (e.g., engagement and caring relationships between emperor penguin's parents and their chicks express some valuation of continuing life, or the Vogelkop bowerbird (*Amblyornis inornata*) in West Papua that builds a hut and decorates it to convince reproductive female values the creation and organization of an adjusted habitat).

2. "*Bond-based*". When ecological virtues express a fine attunement to the mesh of interdependencies of the world (e.g., macaroni penguin faithful couples that reunite about 3 months each year to reproduce, give birth, and raise their chicks before living on their own the rest of the year express a notable virtuosity in forging lasting ties; or mycorrhizal symbiosis, for example, between oak trees and truffles, express a very refined and fructuous biochemical and molecular dialog that co-benefit the individuals and species involved, the soil, the forest, etc.).

3. "*Flourishing-based*". When non-humans seem able to act *for the good* of others (e.g., any cooperative action, such as feeding techniques or common hunt by a wolf pack or a group of humpback whales chasing krill to the surface with bubbles of air, that demonstrates a sense of collectiveness within a specific group; symbiotic relationships, as mentioned before, would demonstrate co-flourishing virtue).

4. "*Status-based*". When the recognition of social or hierarchical relationships, expressed in the non-human world, activates the ability to perform accordingly and to play with them (e.g., understanding of territorial signatures, respect, or contestation of the pack organization seem to be current occasions in wolf lives that express such virtues; the relationship between the beehive and its queen may express some virtues of protection, reproduction, or unification of the hive).

Of course, not all non-humans can exercise ecological virtues, and not every action performed well may correspond to a functional ecological virtue. Our proposal is just an exploration of a rarely navigated field of research (e.g., can other-than-human beings act virtuously?). What we aim to show is that, depending on how we define (ecological) virtues, there are potentially a lot of examples of non-human beings that can exercise and master ecological virtues. Although recognizing that non-humans can "master ecological virtues" (at least in some specific contexts[11]) does not imply a direct normative judgement (i.e., it does not prescribe anything), it does contribute to thinking about the human functional and moral sphere differently.

4.2. Functional Ecological Virtues and Moral Ecological Virtues

Why is it important to specify that such ecological virtues are *functional*? Classically, virtue is defined in relation to a *function* (*ergon* in Aristoteles' philosophy). Therefore, it could seem redundant to qualify ecological virtue as *functional*, but we do so explicitly in order to clarify and at the same time challenge the traditional (in VE and EVE) identification of virtue with "moral virtue". Indeed, opening up the notion of virtue may question and disrupt the anthropocentric, dualistic, and naturalistic ontology that has become predominant in VE debates. We would like to explore the possibility of conceiving, in the first step, *a-moral virtues*, meaning virtues that are not yet considered from any moral perspective and virtues that qualify excellence defined in reference to a functional end (which could end up being morally good or bad). It does not mean that these virtues are necessarily anti-moral (like it is commonly understood when virtue ethicists discuss non-moral virtues, e.g., the excellence in killing furtively for a hitman). Functional ecological virtues are considered before any definition of any moral good and bad in order to (1) bring more complexity and nuances in our spontaneous understanding of what is ecologically good or bad and also to (2) contest and deconstruct rooted assumptions. Using the concept of virtue as a decentering tool, we question the dualistic naturalistic anthropocentrism in western cultures and suggest that virtuous dispositions and behaviors might be more shared or distributed amongst living beings than previously thought or admitted.

How do functional ecological virtues enter the *human* moral sphere? By stressing "human", we do not wish to exacerbate any separation between non-humans and humans. We just want to investigate the implication of our proposal (functional ecological virtues) within a virtue ethical theory, that, by definition, is for humans. In other words, what are the moral implications (for humans) of this new kind of virtue? Adopting functional ecological virtues could have important consequences:

(i) The transformative function of these ecological virtues for humans. The acknowledgment of an ontological closeness to other beings (because of this shared ecological self) and how non-human beings can master this condition of interrelations with others can originate or stimulate in humans interest, sensitivity, care, attention, etc., towards non-humans, towards "the other-than-humans". The recognition of functional ecological virtues would eventually reinforce moral ecological virtues in humans.

(ii) Another possible moral return of functional ecological virtues for humans is the educational aspect. Recognizing "virtues" in non-humans means recognizing complexity

and excellences beyond the human world, and at the same time, it means to stress the human participation to a shared ecological world animated by the active self-realization of multiple other ecological selves. Once again, this could have an influence on how humans relate to non-humans and could reinforce moral ecological virtues in children as well as in adults.

(iii) A third moral implication of this reconfiguration of the field of virtues could be to reconnect naturalistic modern cultures with other non-modern cultures, while recognizing a potentially common ground to compose a common world, contesting the arrogant modern presupposition that the progress of knowledge and civilization is to de-animate the non-human world, and considering that all non-humans only react to a mechanistic determinism. It could then open the way for "partnerships ethics", whose principles, as stressed by Carolyn Merchant [39–41], can rule relationships with non-human agents as well as with other cultures.

4.3. Possible Objections

We are aware that the thesis proposed in this paper can raise more than one objection. In the following section, we address some of these potential criticisms.

(1) The application of "virtue language" to describe the behaviors and attitudes of non-human beings is counterintuitive and potentially wrong. Other-than-human beings or more-than-human beings have been classically identified as non-moral agents or, at most, as moral patients. Indeed, the status of moral agency in modern western cultures is attributed to human *only*, insofar as humans can allegedly conduct their own behavior according to autonomous norms and practical reasoning [42], while virtues designate acquired excellences and not endowments. Thus, although one might agree with recognizing ecological selves in non-human behaviors, it still remains unclear how it would be possible to speak about virtues for them; whether they are considered as ecological selves or not, they would still fall under the category of moral patients, potentially protected or cared for by the expression of environmental virtues (exercised by human agents) but not as potential virtuous agents. However, as we have stressed, we are not talking about moral ecological virtues for non-humans. We rather suggest an extension of the space and meaning of ecological virtues on the basis of ontological considerations about the self. Functional ecological virtues are not virtues in any traditional moral sense; they are a-moral virtues that express mastering skills of ecological selves that can affect either humans, non-humans, or both (see Section 2 above).

(2) A second objection might be put as a question: why use (and possibly distort) the concept of virtue instead of drawing upon another concept to describe such excellences or mastering skills? As we mentioned above, excellence and mastering skills are already historically part of the concept of virtue. These different concepts are not mutually exclusive but embedded in a mutual understanding in the history of ideas. The intellectual challenge of this paper was to question provocatively a well-accepted assumption of environmental virtue ethics (e.g., that the language of virtues is limited to human beings) and see what this could bring about. Using a usually (anthropocentric) moral term in an a-moral way is a strategy to expand and deconstruct dualistic inherited and rarely questioned structures or engrained theoretical assumptions. Moreover, if it were possible to consider a-moral excellences in terms of virtues, this may have a reinforcing positive impact on human moral ecological virtues, in the way explained in (i), (ii), and (iii) (see previous Section 4.2 on pp. 10–11).

(3) One might say that a virtue, by definition, assumes the intentionality of the (human) moral agent as a prerequisite. This is, for example, the objection proposed by Holmes. He contested the extension of virtues to non-human beings, arguing that virtues are "achievements not endowments", "acquired excellences" not "genetics endowments" [43] (p. 69). Holmes preferred to speak about "*values* as intrinsic achievements in wild nature" (ibid.) rather than using the concept of animal virtue.

We can note that he did not consider plants, bacteria, or other living beings. Holmes feared that environmental virtue ethic approaches may not suffice to value nature in itself apart from human interests. Although he mentioned the meaning of virtue used by Thoreau "in the archaic sense of an "excellence", survival skills in the migratory fish (with no reference to praiseworthy character achievement thus analogous to perfect pitch[12] in humans)", he contested it and asserted that value-based ethics respecting the intrinsic value of nature are preferable rather than virtue-based-ethics. We can reply to the objection that Holmes remains dualistic and anthropocentric in a classical naturalistic (as understood by Descola) way. The ethological dualism between will/instinct that underpins the dualistic opposition of acquired excellences/endowments is widely contested. More and more ethologists/psychologists/cognitivists tend to pay attention to individual variations and developed abilities in animal behaviors [44–47]. We argue that human beings, animals, plants, and other living beings can be characterized by "developed excellences" and that we should also pay attention to individual variations rather than only consider species-typical behavior. Moreover, Holmes seemed to adopt agent-based virtue ethics as a strawman, saying that concerns for human ends are not enough to cope with ecological issues. However, as Christine Swanton suggested,

> "The environmental virtues can be understood as being virtues not just because they are dispositions to promote human-centered ends, but also the ends of the flourishing and integrity of ecosystems, species, and natural objects (sentient and non-sentient) for their own sakes. Furthermore, [the principle of pluralistic virtue] allows for the environmental virtues to have a complex profile, consisting not just of promotion of good or value, but also of respect, love for, and appreciation of natural objects." [13] (p. 94).

We therefore suggest that functional ecological virtues do not need intentionality as a requisite, although there might be examples of nonhuman beings intentionally performing actions that could be defined as virtuous (e.g., from human-trained rescue dogs to animals spontaneously rescuing humans and other animals without being trained to/rewarded by humans)[13].

5. Conclusions

This paper aimed to reweave the dualistic gap that separates humans from non-humans in the moral sphere or, at least, in environmental virtue ethics debates. It also aimed to contest the modern dualistic human supremacism constructed on an ontological structure, as shown by Descola, which considered that the continuity between human and non-human beings is based on (inanimate) materiality and the fact that only human beings have an interiority (hence a moral sphere)

We propose to expand or extend the concept of virtues, loading it with a functional a-moral meaning. In so doing, we see a possible way to include, among virtues, excellent actions, behaviors, and attitudes actively exercised by non-humans (plants, non-human animals, even the entire cosmos), expressing their ecological selves. The presupposition of this theoretical move is that we may be able to recognize an ontological analogy between humans and non-humans through an understanding of the ecological self that can be expressed by both humans and non-humans caught in their web of interrelations. Therefore, our strategy is to relocate virtue as an inner ensemble of a more comprehensive way of developing excellence in a mesh of various developed excellences.

Extending the ecological self to non-humans implies, first, that mastering "skills", actions, or behaviors of living in such interconnected webs with a multitude of other beings and pursuing their own interests (flourishing themselves and sometimes making others flourish) can be recognized as functional a-moral virtues that can be exercised both by humans and non-humans. Second, if we operate this transformation, then we might also transform, in return, the concept of human virtue, not as a supremacist acquired

excellence, but as a development of the contextual excellence to interact with the middle of life. Thirdly, virtue entering the moral sphere at a reflexive level could be one peculiar trait of human collectives' contexts. Fourth, the awareness of "living-with" others, and the recognition of others themselves as ecological selves, can promote human behaviors and attitudes that positively affect the various and pressing environmental crises, especially while contesting the reduction of non-humans to a stock of resources to be exploited by humans. This proposal might also have implications for environmental justice, especially while helping to reconsider Indigenous or non-modern knowledge and cosmovisions. This paper contributes to environmental ethics scholarship in several ways. It questions long-standing ontological assumptions about agency and the type of virtues different agents can exercise (linked to Section 2). It broadens the notion of agency as ecological self, thus enlarging the boundaries of who can act virtuously (linked to Section 3). It decenters human agency—assuming that non-human beings could exercise excellent dispositions as ecological virtues—making it possible to conceive non-anthropocentric a-moral dispositions as functional ecological virtues (linked to Section 4). In the case of human ecological selves acting out functional ecological virtues, *intentionality* can be a relevant feature of such virtuous behavior. However, in the case of non-human ecological selves, talking about intentionality might not be reasonable; therefore, it does not constitute a feature.

Going back to the initial question of this SI—"Is Environmental Virtue Ethics a Virtuous Anthropocentrism?"—our response in this essay was "It Depends". It depends on what kind of ontological premises we are moving from. By offering an "ontological detour" of some of the theoretical premises of EVE, we suggested that excellent behaviors as functional ecological virtues can be exercised either by human agents or by some non-human beings. Both would, indeed, act virtuously as ecological selves.

Author Contributions: Conceptualization, writing—review and editing, N.C., D.D. and G.F. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data are contained within the article.

Acknowledgments: The authors would like to thank Nora Ward of the University of Galway for proofreading the article.

Conflicts of Interest: The authors declare no conflicts of interest.

Notes

1 "Non-human" is intended here as a synonym of "other-than-human" in the sense of a useful logical distinction but not in the sense of maintaining or defending a dualistic stance.

2 In this text, we do not distinguish between "environmental virtue(s)" and "ecological virtue(s)". In the reminder, we use only the term "ecological virtue(s)" assuming the other as a synonym. However, in the paper entitled *Virtue Ethics and Ecological Self: From Environmental to Ecological Virtues* in this collection, Gérald Hess proposed a distinction precisely between these two. Cfr. [2].

3 See this note of Roger Crisp in his translation of *Nichomachean Ethics*: "Areté = virtue. Alternative translation: 'excellence'. Covers non-moral as well as moral characteristics, as in, e.g., 'This book has many virtues.' Aristotle usually has in mind either moral excellences of character or intellectual excellences when using the term. It is related to the notion of 'characteristic activity' (ergon): the virtue of something consists in its capacity to perform well its characteristic activity (the virtue of an eye, for example, is to see well). Analogously, a vice (*kakia*) may be seen as a defect or flaw" [14] (p. 205).

4 If "non-humans" is considered a synonym of "nature", then option [d] could be understood within [d].

5 "I therefore tentatively introduce, perhaps for the first time ever, a concept of *ecological self*" [21] (p. 35).

6 Maybe the most important debate about the ecological self is the deep ecology–ecofeminism discussion of the 1980s–1990s, when ecofeminists criticized some aspects of the ecological self proposed by deep ecologists [24]. The main critique dealt with/focused on the fact that an "expanded self" or an "indistinguishable self", and even the identification proposed by Naess, maintains and reproduces some patriarchal distortions.

[7] Analogism refers here to Descola's work [3] which gives it an ontological (and not only logical) meaning. Descola described the modern western ontology, called *naturalism*, as a reversed formula of *animism*: "articulating a discontinuity of interiorities and a continuity of physicalities" [3] (p. 172). Another ontology is *analogism,* which was dominant in western ontology until the Renaissance and which is common in some asian traditional cultures, among others. It is characterized as "a mode of identification that divides up the whole collection of existing beings into a multiplicity of essences, forms, and substances separated by small distinctions and sometimes arranged on a graduated scale so that it becomes possible to recompose the system of initial contrasts into a dense network of analogies that link together the intrinsic properties of the entities that are distinguished in it" [3] (p. 201). In this sense, *ecological virtues* could be considered as such an analogical "form" that can be shared and recognized amongst different beings and potentially arranged in another scale than the naturalistic dualistic hierarchy that only conceives human supremacy over other natural beings.

[8] By 'transformative' we mean mainly two things: (1) that we transform the mainstream conception of environmental virtue, and (2) that this new conception of ecological virtue presupposes a transformation of our main naturalistic (in Descola's sense) ontological structures and corresponding dualistic experiences of the self.

[9] When Shaw exemplified these land virtues, with "respect (ecological sensitivity), prudence and practical judgment", he tended to consider only human actions, allowing us to understand that land virtues are only characterized within the biotic community and human citizens and not all the other ones!

[10] Our proposition could even be applied to a broader scale, such as Lovelock's Gaïa self-regulating her living conditions to provide a habitat for biodiversity.

[11] For instance, at a functional level, some Ruppell's griffon vultures (*Gyps rueppelli*) that can fly up to more than 10,000 meters above African lands demonstrate incredible skills in evolving in the aerial fluid element and can undoubtedly be seen a master by paraglider's pilots. Another more politically involved example are 'weeds' and the rhizomatic vegetal resistance and proliferation model, which are taken by alternative minority ecological collectives (like in the french ZAD of Notre-Dame-des-Landes) as explicit counter-hegemonic inspiring beings and dynamics for eco-social emancipatory movements (see for instance [38] entitled "Eloge des mauvaises herbes", *In praise of weeds*).

[12] Can functional ecological virtues be considered endowed skills analogous to "perfect pitch" and thus not praiseworthy acquired excellences that seem to define virtues? This example may not be the best choice. First of all, we can observe that nobody will ever develop a so-called "perfect pitch", which is a very contextual and culturally situated skill, outside of a specific musical, familial, and social background. Thus, "perfect pitch" seems a weak paradigm of endowments as opposed to acquired excellence. It is rather the actualization in certain individuals of potentialities by a specific context (of learning, practicing, and playing some music).

[13] We also note that intentionality may not be a requisite in classical virtue ethics, at least in the exercising of virtue, because virtues tend to be considered as internalized disposition or *hexis* in aristotelian terms. Moreover, some virtue ethics (e.g., daoist, zen buddhist, etc.) can consider non-deliberative virtues, like *wuwei* or *ziran*, or spontaneity as a key virtue.

References

1. Plumwood, V. *Feminism and the Mastery of Nature*; Routledge: London, UK, 1993.
2. Hess, G. Virtue Ethics and Ecological Self: From Environmental to Ecological Virtues. *Philosophies.* **2024**, 9.
3. Descola, P. *Beyond Nature and Culture*; The University of Chicago Press: Chicago, IL, USA, 2013.
4. Descola, P. *Les Formes du Visible: Une Anthropologie de la Figuration*; Éditions du Seuil: Paris, France, 2021.
5. McShane, K. Anthropocentrism vs. nonanthropocentrism: Why should we care? *Environ. Values* **2007**, *16*, 169–185. [CrossRef]
6. Callicott, J.B. The Topos of Mu and the Predicative Self. *Dialogue Universalism* **2023**, *33*, 9–35. [CrossRef]
7. MacIntyre, A. The Nature of the Virtues. In *Virtue Ethics*; Crisp, R., Slote, M., Eds.; Oxford University Press: Oxford, UK, 1997.
8. McCarty, R. Are there "Contra-Moral Virtues?". *Metaphilosophy* **1994**, *25*, 362–375. [CrossRef]
9. Koller, P. Law, Morality, and Virtue. In *Working Virtue: Virtue Ethics and Contemporary Moral Problems*; Walker, R.L., Ivanhoe, P.J., Eds.; Oxford University Press: Oxford, UK, 2006.
10. Slote, M.A. *From Morality to Virtue*; Oxford University Press: New York, NY, USA, 1992.
11. Slote, M.A. *Morals from Motives*; Oxford University Press: Oxford, UK, 2001.
12. Huang, Y. Respecting Different Ways of Life: A Daoist Ethics of Virtue in the "Zhuangzi. *J. Asian Stud.* **2010**, *69*, 1049–1069. [CrossRef]
13. Swanton, C. *Virtue Ethics: A Pluralistic View*; Oxford University Press: New York, NY, USA, 2003.
14. Crisp, R. (Ed.) Aristotle: Nicomachean ethics. In *Cambridge Texts in the History of Philosophy*; Cambridge University Press: Cambridge, UK, 2000.
15. Fontoynont, V. *Vocabulaire Grec Commenté et Sur Textes. A. du Texte*, 2nd ed.; Editions Auguste Picard: Paris, France, 1933; Available online: https://gallica.bnf.fr/ark:/12148/bpt6k1189078c (accessed on 29 September 2023).
16. Díaz, S.; Pascual, U.; Stenseke, M.; Martín-López, B.; Watson, R.T.; Molnár, Z.; Hill, R.; Chan, K.M.; Baste, I.A.; Brauman, K.A.; et al. Assessing nature's contributions to people. *Science* **2018**, *359*, 270–272. [CrossRef] [PubMed]
17. Margulis, L. *Kingdoms and Domains: An Illustrated Guide to the Phyla of Life on Earth*, 4th ed.; Elsevier Academic Press: Amsterdam, The Netherlands, 2009.

18. Haraway, D. Staying with the Trouble: Anthropocene, Capitalocene, Chthulucene. In *Anthropocene or Capitalocene?: Nature, History, and the Crisis of Capitalism*; Moore, J.W., Ed.; PM Press: Oakland, CA, USA, 2016; pp. 34–76.
19. Callicott, J.B.; Frodeman, R. *Encyclopedia of Environmental Ethics and Philosophy*; Macmillan Reference: Detroit, MI, USA, 2009. [CrossRef]
20. Mathews, F. *The Ecological Self*; Routledge: London, UK, 1991.
21. Naess, A. Self-Realization: An Ecological Approach to Being in the World. *Trumpeter* **1987**, *4*. Available online: https://trumpeter.athabascau.ca/index.php/trumpet/article/view/623 (accessed on 10 March 2023).
22. Naess, A. Ecosophy and Gestalt Ontology. *Trumpeter* **1989**, *6*. Available online: https://trumpeter.athabascau.ca/index.php/trumpet/article/view/756 (accessed on 9 September 2022).
23. Callicott, J.B. Notes on "Self-Realization: An Ecological Approach to Being in the World". *Worldviews* **2017**, *21*, 235–250. [CrossRef]
24. Diehm, C. Arne Naess, Val Plumwood, and Deep Ecology Subjectivity: A contribution to the "Deep Ecology-Ecofeminism Debate". *Ethics Environ.* **2002**, *7*, 24–38. [CrossRef]
25. Plumwood, V. *Environmental Culture: The Ecological Crisis of Reason*; Routledge: London, UK, 2002.
26. Mathews, F. Towards a Deeper Philosophy of Biomimicry. *Organ. Environ.* **2011**, *24*, 364–387. [CrossRef]
27. Mathews, F. Reinhabiting Reality towards a Recovery of Culture. In *SUNY Series in Environmental Philosophy and Ethics*; University of New South Wales Press: Sydney, NSW, Australia, 2005.
28. Varela, F.J. Organism, Cognitive Science and the Emergence of Selfless Selves. *Rev. Eur. Des Sci. Soc.* **1991**, *29*, 173–198.
29. Furstenburg, D.; van Hoven, W. Condensed tannin as anti-defoliate agent against browsing by giraffe (*Giraffa camelopardalis*) in the Kruger National Park. *Comp. Biochem. Physiol. Part A Physiol.* **1994**, *107*, 425–431. [CrossRef]
30. Shaw, B. A Virtue Ethics Approach to Aldo Leopold's Land Ethic. *Environmental Ethics* **1997**, *19*, 53–67. Available online: https://www.pdcnet.org/pdc/bvdb.nsf/purchase?openform&fp=enviroethics&id=enviroethics_1997_0019_0001_0053_0067 (accessed on 2 October 2023).
31. Rohwer, Y. Evolution Is Not Good. In *Environmental Ethics*; Philosophy Documentation Center: Charlottesville, VA, USA, 2023. [CrossRef]
32. Marder, M. *Plant-Thinking: A Philosophy of Vegetal Life*; Columbia University Press: New York, NY, USA, 2013.
33. Chamovitz, D. *What a Plant Knows: A Field Guide to the Senses*, Updated and Expanded ed.; Scientific American/Farrar, Straus and Giroux: New York, NY, USA, 2017.
34. Peeters, W.; Diependaele, L.; Sterckx, S. Moral Disengagement and the Motivational Gap in Climate Change. *Ethic. Theory Moral Pract.* **2019**, *22*, 425–447. [CrossRef]
35. van Zyl, L. Virtue Ethics: A Contemporary Introduction. In *Routledge Contemporary Introductions to Philosophy*, 1st ed.; Routledge: London, UK, 2018. [CrossRef]
36. Jacobsen, S.-E.; Mujica, A.; Jensen, C.R. The Resistance of Quinoa (Chenopodium quinoaWilld.) to Adverse Abiotic Factors. *Food Rev. Int.* **2023**, *19*, 99–109. [CrossRef]
37. Guzy, J.; Falk, B.G.; Smith, B.J.; Willson, J.D.; Reed, R.N.; Aumen, N.G.; Avery, M.L.; Bartoszek, I.A.; Campbell, E.; Cherkiss, M.S.; et al. Burmese pythons in Florida: A synthesis of biology, impacts, and management tools. *NeoBiota* **2023**, *80*, 1–119. [CrossRef]
38. Lindgaard, J. (Ed.) *Éloge des Mauvaises Herbes: Ce que Nous Devons à la ZAD*; Les Liens qui Libèrent: Paris, France, 2018.
39. Merchant, C. *The Death of Nature: Women, Ecology, and the Scientific Revolution*; Harper & Row: San Francisco, CA, USA, 1980.
40. Merchant, C. Radical ecology: The search for a livable world. In *Revolutionary Thought/Radical Movements*; Routledge: New York, NY, USA, 2005. [CrossRef]
41. Merchant, C. *Autonomous Nature: Problems of Prediction and Control from Ancient Times to the Scientific Revolution*; Routledge: London, UK; New York, NY, USA, 2016.
42. Hess, G. *Éthiques de la Nature*; PUF: Paris, France, 2013.
43. Holmes, R.I. Environmental Virtue Ethics: Half the Truth but Dangerous as a Whole. In *Environmental Virtue Ethics*; Sandler, R., Cafaro, P., Eds.; Rowman & Littlefield: Lanham, MD, USA, 2005; pp. 61–78.
44. Blumberg, M.S. Development evolving: The origins and meanings of instinct. *Wiley Interdiscip. Rev. Cogn. Sci.* **2017**, *8*, 10. [CrossRef] [PubMed]
45. Longa, V.M.; Lorenzo, G. Study of Instinct. In *Encyclopedia of Evolutionary Psychological Science*; Shackelford., T.K., Weekes-Shackelford, V.A., Eds.; Springer International Publishing: Cham, Switzerland, 2019; pp. 1–4. [CrossRef]
46. Morizot, B. *Les Diplomates: Cohabiter Avec les Loups sur une Autre Carte du Vivant*; Éditions Wildproject: Marseille, France, 2016.
47. Colling, S. *Animal Resistance in the Global Capitalist Era*; Michigan State University Press: East Lansing, MI, USA, 2021.

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ISBN 978-3-7258-3924-7