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Biodiversity: Ethics and Aesthetics in the decentralization of the human in deep ecology and vital materialism

*Biodiversidade: Ética e estética na descentralização do humano na ecologia profunda e no
materialismo vital*

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Abstract: This paper analyzes the differences and, above all, a possible dialogue between the environmental ethics of Arne Naess's deep ecology and Jane Bennett's vital materialism, emphasizing the aesthetics that emerge from the relationship between humans, non-human animals, and planetary biodiversity. This approach uses the concepts of Delight (Naess) and Enchantment (Bennett), which play a crucial role in reshaping the hierarchical relationship humans have with animals, as discussed by both authors. For Arne Naess, Delight emerges from a change in thinking and moral values, forging an ethics that understands animals and the environment as having intrinsic value, thus allowing the pleasure of contemplating and relating to non-humans to flow. In Bennett, on the other hand, the concept of Enchantment is more central to her environmental ethics, as she understands that ethical values can emerge from the sharpening of sensory perception of how encounters with animals can affect

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humans. Although Delight stems from ethics rooted in human cognition and Enchantment comes before ethics, combining both perspectives creates a more realistic notion of intrinsic value with a more substantial impact on the ethical justification for biodiversity conservation.

Keywords: Intrinsic Value; Environmental Ethics; Environmental Aesthetics; Biodiversity Conservation.

Resumo: O artigo analisa as diferenças e, sobretudo, um diálogo possível entre a ética ambiental da ecologia profunda de Arne Naess e o materialismo vital de Jane Bennett, com ênfase na estética que emerge da relação entre humanos, animais não-humanos e a biodiversidade planetária. Essa aproximação é feita por meio dos conceitos de Delight (Naess) e Enchantment (Bennett) que são componentes importantes no deslocamento da relação hierárquica que humanos mantêm em relação aos animais em ambos os autores. Para Arne Naess, Delight emerge de uma mudança de pensamento e valores morais, forjando uma ética que compreende os animais e o ambiente como possuindo valor intrínseco, deixando, assim, fluir o prazer de contemplar e se relacionar com os não-humanos. Em Bennett, por outro lado, o conceito de Enchantment possui maior centralidade em sua ética ambiental, pois ela compreende que valores éticos podem emergir do aguçamento da percepção sensorial de como os encontros com os animais podem afetar os humanos. Embora Delight seja precedido pela ética forjada na cognição humana e Enchantment precede a ética, uma junção de ambas as perspectivas, pode gerar uma noção de valor intrínseco mais realista e com maior impacto em termos de justificativa ética para a conservação da biodiversidade.

Palavras-chave: Valor Intrínseco; Ética Ambiental; Estética Ambiental; Conservação da Biodiversidade.

Introdução

Biodiversity conservation is a topic often associated with ecology and environmentalism. One of the main foundations of the dialog between ecology and environmentalism lies in environmental ethics as the basis of a political ecology that permeates the conservation of biodiversity as a problem common to both the scientific and political fields. After all, neither ecology nor environmentalism can fully answer why

biodiversity should be conserved without there being some ethical basis to the answer¹. This ethical foundation is usually contemplated by biocentrism and the concept of intrinsic value, hallmarks of the deep ecology movement and formulated principally in the works of philosopher Arne Naess. However, the recent movement of the so-called new materialisms adds other elements to the debate on the foundations of the relationship between human and non-human animals, which can also be useful for thinking about the relationship between the former and biodiversity. New materialisms are philosophies that reject the notion that non-humans (be they animals, things, objects, etc.) are passive and directly correlated to the human capacity for thought, classification and representation, but are on the contrary active, elusive, and agents of transformation and change.² On the other hand, human beings themselves are understood to be in a physically dynamic and mutable condition that escapes a fixed notion of species, especially if this notion presumes a binary, anthropocentric or anthropo-exclusivist understanding of the world.³ The best-known representatives of this heterogeneous movement, such as Bruno Latour, Donna Haraway, Karen Barad, and Jane Bennett, among others, are singled out as responsible for a revival of an ethics of care in relation to non-human animals, because they reject a notion of agency centered on human intentionality and capacity to manage the world.

Thus, some studies have compared the biocentrism proposed by deep ecology and the decentralization of that which is human in the new materialisms, seeking implications for the development of other ethical attitudes towards non-human animals and the environment. One of the criticisms of deep ecology, coming especially from ecofeminism and material feminism, is the masculinist persistence of 19th century European romanticism with its emphasis on liberating nature (as an objective totality) through transformation of the human individual.⁴ According to these authors, this ignores the fact that the nature-nurture binary

¹ ROSUMEK, F.B.; MARTINS, R.P. "Ecology, Philosophy and Conservation." *Nature & Conservation*. v. 8, n. 1, 87-89, 2010.

² SHAVIRO, S. *The Universe of Things: On Speculative Realism*. London: University of Minnesota Press, 2014.

³ FERRANDO, F. "Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms: Differences and Relations." *Existenz*. v. 8, n. 2, p. 26-32, 2013.

⁴ Cf. BRAIDOTTI, R. *The Posthuman*. Cambridge: Polity Press, 2013.; FREDENGREN, C. "Nature Cultures: Heritage, Sustainability and Feminist Posthumanism." *Current Swedish Archaeology*, v. 23, p. 109-130, 2015.;

opposition has the same roots that sustain the marginalization of women and various social groups. In keeping with the critique of the maintenance of the modern notion of nature, the natural-artificial dichotomy sustained in the biocentrism of deep ecology is also rejected in the new materialisms.⁵ In this sense, technical objects are understood to be fully connected to the “natural” environment and should be analyzed and not alienated from the environmental crisis, thus following Gilbert Simondon’s critique of environmentalism.⁶ On the other hand, some authors argue that there are little-recognized affinities between the ideas of the new materialists (especially vital materialism) and those of environmental philosophers who defended biocentric or ecocentric notions of the world in the 20th century, such as Arne Naess himself.⁷

Recognition of 20th century environmental philosophy by the new materialisms, as well as these recent currents of thought by contemporary environmentalism, remains controversial. This article analyzes the possible approximations and differences that mark the decentralization of the human animal in the biocentric ethics of Arne Naess’ deep ecology and the ethics of generosity in philosopher Jane Bennett’s vital materialism, and how the blending of both perspectives can have positive implications for biodiversity. Bennett’s choice of vital materialism has to do with a (little recognized) proximity between Naess’s biocentric ethics and the ethics of generosity. The political project that permeates vital materialism and its ethics of generosity has already been compared to the premises of deep

COLE, D.; MALONE, K. “Environmental Education and Philosophy in the Anthropocene.” *Australian Journal of Environmental Education*. v. 35, p. 157-162, 2019.; MALONE, K. et al. “Shimmering with Deborah Rose: Posthuman Theory-Making with Feminist Ecophilosophers and Social Ecologists.” *Australian Journal of Environmental Education*. v. 36, n. 2, p. 129-145, 2020.

⁵ MARCHESINI, R. *Over the Human: Post-humanism and the Concept of Animal Epiphany*. Spriger, 2017.

⁶ SIMONDON, G; KECHICKIAN, A. “Save the Technical Object. Interview with Gilbert Simondon.” *Esprit*, n. 76, p. 147-52, 1983. Accessed on November 5, 2015.

<https://philosophyofinformationandcommunication.files.wordpress.com/2013/02/gilbert-simondon-save-the-technical-object.pdf>

⁷ THOMPSON, P.B. “Environmentalism and Posthumanism.” *Essays in the Philosophy of Humanism*, v. 21, n. 2, p. 63-73, 2013.; CUDWORTH, E.; HOBDEN, S. “Complexity, Ecologism and Posthuman Politics.” *Review of International Studies*, v. 39, n. 3, p. 643-664, 2013.; CUDWORTH, E.; HOBDEN, S. “Liberation for Straw Dogs? Old Materialism, New Materialism, and the Challenge of an Emancipatory Posthumanism.” *Globalizations*, v. 12, n. 1, p. 134-148, 2015.; GOUGH, A. “Working With/In/Against More-Than-Human Environmental Sustainability Education.” *On_Education: Journal for Research and Debate*, v. 1, n. 2, p. 1-5, 2018.

ecology, where perceptive engagement with the living world and the rejection of anthropocentrism is understood as one of the most accessible and influential studies in affinity with ethics based on intrinsic value.⁸ In addition, the individual response to the environmental crisis proposed by aesthetic engagement in vital materialism has also been suggested as another point of contact with deep ecology.⁹ Finally, both deep ecology and vital materialism are based on philosopher Baruch Spinoza's (1632-1637) ideas of the animation of matter.

In his work, Arne Naess defended a deep ecology over a shallow ecology, with no instrumental hierarchies regarding which species should or should not be conserved for human needs. All species have the same vital needs and right to life, existing to be contemplated and not conquered or destroyed. Deep ecology recognizes human animals as just another species in the world, without superiority, within the framework of biospheric egalitarianism. Jane Bennett, on the other hand, draws attention to details that are usually overlooked, such as the ability of non-humans (be they animals or even things) to affect humans and the environment itself. The condition of being affected is what she calls enchantment, which occurs in the immersion in a world composed of vibrant matter, where all things have a vitality (the ability to affect and act in the world). Unlike Naess, the dichotomies human-nature, organic-inorganic, living-dead are dissolved in the use of the category *force*, which emerges in the relationships or assemblies that make up the world. Bennett advocates a posture of generosity towards non-human animals, going further by elucidating that everything in the world has the capacity to actively affect its surroundings, thus decentralizing the human animal by removing it from the title of sole agent in the world. By sharpening one's perception and sensitivity, one recognizes that everything is interconnected, affecting each other, and this is the important point in order to become aware

⁸ SMITH, T.S.J. *Sustainability, Wellbeing and the Posthuman Turn*. Palgrave Macmillan, 2019, p. 75.

⁹ CUDWORTH, E.; HOB DEN, S. "Liberation for Straw Dogs? Old Materialism, New Materialism, and the Challenge of an Emancipatory Posthumanism."

of the importance of basing human actions on respect and care in relationships with non-humans.¹⁰

This article begins by analyzing the concept of biodiversity, its origins and implications. It then analyses the biocentrism of deep ecology and how the decentralization of the human through the notion of intrinsic value has become important for the ethics that underlies the issue of biodiversity conservation. It then goes on to analyze the ethics of vital materialism proposed by Jane Bennett, how it is based on a decentralization of the human, but in this case through an ontology of force, which marks its difference from deep ecology. Finally, we will analyze how possible mergers between the two currents, mainly involving the notion of the animation of matter, which comes from Spinoza's philosophy, and the principle of enchantment can help to renew the ethics of the intrinsic value of biodiversity itself along a pragmatic path.

The concept of biodiversity

Biodiversity is a concept linked to the institutionalization process of Conservation Biology in the 1990s and has been used by various other fields of knowledge, fomenting disputes and controversies.¹¹ The term was coined by Walter G. Rosen during the organization of the National Forum on Biodiversity in 1986, an event sponsored by the United States National Academy of Sciences in partnership with the Smithsonian Institution. In 1988, the term was again used in the title of the collection of studies resulting from the 1986 National Forum on Biodiversity, under the organization of Edward O. Wilson, gaining strength in scientific circles and among conservation activists. This was short for biological diversity and referred to the variety of life on the planet (including all organisms, species and populations) and the genetic variation between them, as well as their complex associations in communities and ecosystems.¹²

¹⁰ WATSON, J. "Eco-Sensibilities: An Interview with Jane Bennett." *The Minnesota Review*, v. 81, p. 147-158, 2013.

¹¹ SARKAR, S. "Approaches to Biodiversity." In: GARSON, J.; PLUTYNSKI, A.; SARKAR, S. (Org.). *The Routledge Handbook of Philosophy of Biodiversity*. London and New York: Routledge, 2017, p. 43-55.

¹² DELONG JR., D.C. "Defining Biodiversity." *Wildlife Society Bulletin*, v. 24, n. 4, p. 733-749, 1996.

The book *Biodiversity*, organized by Edward O. Wilson and published in 1988, clarifies the ethical principles that accompany the concern for conservation. The first chapter of the book, written by Wilson himself, draws attention to the urgency of classifying and using biodiversity with a greater emphasis on its preservation. The aspect that highlights the urgency is related to the destruction of habitats and the extinction of species.¹³ Throughout the 60 articles in the collection, there are different references to *deep ecology*, the notion of the intrinsic value of species, and quotes from Arne Naess. Although not all the authors of the collection were unanimous on the importance of *deep ecology*, it is present among the authors and continues to be so in conservation biology through the notion of the intrinsic value of the diversity of life. Michael Soulé, one of the greatest exponents of conservation biology in its early days, was explicit: “Biotic diversity has intrinsic value, irrespective of its instrumental or utilitarian value. This normative postulate is the most fundamental.”¹⁴ This is due to the influence of 19th and 20th century environmental philosophers such as Henry David Thoreau, John Muir, Aldo Leopold, and Arne Naess himself.¹⁵

Thus, both the term biodiversity and conservation biology as an area of knowledge have strong roots in an ethic based on intrinsic value, of which Arne Naess was one of the greatest representatives at the time. It is important to mention that the notion of intrinsic value in vogue in the debates on biodiversity conservation is not purely intrinsic, but relational. That is, there is always an implicit relationship forged in the study of the relationships of a particular species or ecosystem in order to define its richness, difference or uniqueness, in addition to the very aesthetic issue involved.¹⁶ Furthermore, the use of this concept for ethical debates involving biodiversity conservation is also permeated by tensions, mainly involving radical animal welfare groups.

¹³ WILSON, E.O. “The Current States of Biological Diversity.” In: WILSON, Edward O. *Biodiversity*. Washington: National Academy Press, 1988.

¹⁴ SOULÉ, M. E. *Collected Papers of Michael E. Soulé: Early Years in Modern Conservation Biology*. Washington: Island Press, 2014, p. 43.

¹⁵ FRANCO, J.L.A. “The Concept of Biodiversity and the History of Conservation Biology: from Wilderness Preservation to Biodiversity Conservation.” *História*. v. 32, n. 2, p. 21-48, 2013.

¹⁶ SARKAR, S. *Biodiversity and Environmental Philosophy: An Introduction*. Cambridge University Press, 2005, p. 54-55.

Intrinsic Value as a Path to Delight in Deep Ecology

Arne Naess's deep ecology emphasizes the non-distinction between species in relation to the right to life, as one of the main foundations of the decentralization of the human animal. The importance of the human is recognized in terms of evolution and self-awareness, but not as superior. The hierarchy between species is even perceived as a risk for the planet and the human species itself, due to the notion of use. The central idea is that there needs to be a change in attitude towards the world, recognizing that all species are important because they have intrinsic value, just as much as the human species.¹⁷ In practical terms, deep ecology decentralizes the human animal when it defends the intrinsic value of all species, outlining a concern for nature in its entirety and without hierarchies.¹⁸ To live according to the teachings of deep ecology is to adopt a vision of respect towards all species, recognizing the human animal as a part and not as the center of the universe.¹⁹

Arne Naess questions the way nature is recognized, denying that it is human property, and that its conservation must take place because all forms of life must be respected. As long as human animals see themselves as higher than organisms, their actions will be aimed at conquering territories, increasing profits and production. Thus, the philosopher understands that conservation actions aimed at maintaining nature as an economic resource could be called shallow ecology because they advocate continued exploitation with the aim of human well-being in terms of consumption. Deep ecology, on the other hand, aims for a profound change in attitude through a biocentric ethic that understands the intrinsic value of all beings, regardless of whether it directly benefits humans or not.²⁰ Deep ecology questions patterns of human behavior that are passed down from generation to generation, encouraging a

¹⁷ ARETOULAKIS, E. "Towards a Posthumanist Ecology: Nature without Humanity in Wordsworth and Shelley." *European Journal of English Studies*, v. 18, n. 2, p. 172-190, 2014, p. 176.

¹⁸ BARATELA, D.F. "Environmental ethics and the protection of animal rights." *Brazilian Journal of Animal Law*. v. 9, n. 16, p. 73-93, jun/jul. 2014. p. 84.

¹⁹ ARETOULAKIS, E. "Towards a Posthumanist Ecology: Nature without Humanity in Wordsworth and Shelley," p. 181.

²⁰ BREIVIK, G. "What Would a Deep Ecological Sport Look Like? The Example of Arne Naess." *Journal of the Philosophy of Sport*. v. 46, n. 1, p. 63-81, 2019.

yearning for respect for all species by rejecting the human position as owner or manager of the world.

Deep ecology, as proposed by Arne Naess, was formulated in dialog with the ideas of the philosopher Baruch Spinoza. Naess considered that there were several possible connections between ecological and Spinozist thinking for the development of an environmental ethic. Naess used Spinoza's notion of *natura naturans* to argue that nature is not passive or neutral, but inclusive, creative, alive in a pampsychic sense (with a conscious/animic foundation), and perfect in itself. This is the initial point that everything, with its respective essence, is connected to everything else in a holistic sense, being the basis for the self-realization of humans and non-humans in the sense of perpetuating the creative and diverse sense of the world. Intrinsic value thus leads to the creative self-realization of all species, including the human species on the planet in various networks of cause and effect. The dualism of good and bad is rejected in its most general sense, to encompass what is good and bad for the other, whether non-human or the other in cultural terms, avoiding the idea of the single thought (of development, capitalism) that leads to industrial society. Thus, the pacifism that would mark social relations should encompass relations with nature, since everything has the right to self-realization and to live, and humans would not have a special right to kill and subjugate.²¹ Naess's interpretation of Spinoza emphasizes the active character of nature in its tendency towards unity or equilibrium and not towards mutual coercion.

However, the pampsychistic character of nature is lost in his work. More than that, Naess makes it clear that Spinoza's thinking is important for combating human cruelty towards animals, but not for establishing similarities or any kind of equality between human and non-human animals beyond the right to life. The question of the human on the evolutionary scale is central to this differentiation, where identification with animals would lead to highlighting the unique characteristics of each species. In this case, the unique characteristic of the human species, considered as such at the time, is the capacity for thought, a capacity that Naess understood as fundamental to human self-realization through an

²¹ NAESS, A. "Spinoza and Ecology." In: HESSING, Siegfried (Org.). *Speculum Spinozanum: 1677-1977*. London: Routledge, 1977.

intellectual and comprehensive love of nature. This love would also serve human self-realization and would not constitute a moralism of self-sacrifice. This self-realization in humans is related to the basic satisfactions of the depths of the soul and heart, while there must be a decrease in the development of the material standard of living that motivates human domination and exploitation of the planet.²²

It is important to emphasize that the idea of the capacity for cognition and the production of representations as something specific to the human animal, justifying the idea of its exceptionality, has been changing in recent years. Smaers et al., indicate that in non-human mammals, the lateral cerebellum, associated with higher cognitive functions, plays an important role in the acquisition of associative learning skills.²³ In turn, Roth and Dicke, mention that higher cognitive abilities are observed in rodents, artiodactyls, carnivores, cetaceans, elephants, and primates.²⁴ On the other hand, birds, more specifically crows, have an awareness of themselves and the world, accompanied by sophisticated planning skills, even though the structure of their brains differs greatly from that of humans.²⁵ These findings reinforce the limits of the decentralization of the human in the biocentrism of deep ecology and its application in the 21st century.

For Naess, human identification with non-human animals must come from cognitive processes, from sensations that are understood as something on the surface of the perfection of the union, which lies at a deeper level and is attainable through reason.²⁶ The active character of other species, whether through a cognitive capacity or even their mere presence in the world, is lost in the main aspect of deep ecology, which is human self-realization

²² NAESS, A. "Environmental Ethics and Spinoza's Ethics. Comments on Genevieve Lloyd's article." *Inquiry: An Interdisciplinary Journal of Philosophy*. v. 23, n. 3, p. 313-325, march. 1980.

²³ SMAERS, J.B.; TURNER, A.H.; GÓMEZ-ROBLES, A.; SHERWOOD, C.C. "A cerebellar substrate for cognition evolved multiple times independently in mammals." *eLife*, v. 7, p. 1-19, 2018.

²⁴ ROTH, G.; DICKE, U. "Evolution of Cognitive Brains: Mammals." In: WATANABE, S.; HOFMAN, M.A.; SHIMIZU, T. (Org.). *Evolution of the Brain, Cognition, and Emotion in Vertebrates. Brain Science*. Tokyo: Springer Japan, 2017. p. 125-146.

²⁵ KABADAYI, C.; OSVATH, M. "Ravens Parallel Great Apes in Flexible Planning for Tool-Use and Bartering." *Science*. v. 357, n. 6347, p. 202-204, 2017.; NIEDER, A.; WAGENER, L.; RINNERT, P. "A Neural Correlate of Sensory Consciousness in a Corvid Bird." *Science*. v. 369, n. 6511, p. 1626-1629, 2020.

²⁶ NAESS, A. *Ecology, Community, and Lifestyle: Outline of an Ecosophy*. Cambridge University Press, 1989, p. 83.

through the biocentric notion of intrinsic value. In other words, the human animal, with its supposedly unique capacity for thought, would be the only one capable of developing an environmental conscience to contemplate and understand the relationships that permeate all forms of life. This is the human potentiality that suggests the evolution and development of the potentiality of other non-human species.²⁷ Thus, what really matters in Spinoza's philosophy is what grounds the doctrine of self-realization in an interrelated universe, justifying moral considerations in relation to the existence of other species.²⁸ This human self-realization must occur in peaceful coexistence with the self-realization of the potential of other non-human organisms, with the apex of self-realization being the manifestation of the maximum diversity/complexification of all forms of life.²⁹ Biospheric egalitarianism, then, is an egalitarianism of the right of all life forms to live out their potential for self-realization.

For Naess, the capacity for human thought is also at the heart of the ability to be delighted by the world. This is an explicit definition in his work: "Our biological heritage allows us to delight in this intricate, living diversity. This ability to delight can be further perfected, facilitating a creative interaction with the immediate surroundings".³⁰ This delight is an important aspect in the development of a biocentric ethic based on the intrinsic value of other forms of life. According to Naess, it is the human biological inheritance that allows us to marvel at the diversity of life and to produce new forms of interaction and balance with the environment. Delight here emerges from empathy in the interaction with the other. But this empathy is related to a rational understanding (resulting from a condition seen at the time as innate to humans, which is awareness of themselves and the world around them) leading to a moral stance towards the lives of other beings. In this way, as much as biocentrism decentralizes, on the one hand, the human figure as superior and with license to use nature, on the other hand this figure still remains at the center due to its capacity for reasoning and

²⁷ *Ibid.*, p. 201.

²⁸ JONGE, E. *Spinoza and Deep Ecology: Challenging Traditional Approaches to Environmentalism*. Routledge, 2004.

²⁹ NAEISS, A. Self-Realization in Mixed Communities of Human Beings, Bears, Sheep, and Wolves. *Inquiry: An Interdisciplinary Journal of Philosophy*. v. 22, n. 1-4, p. 231-241, 1979.

³⁰ NAEISS, A. *Ecology, Community, and Lifestyle: Outline of an Ecosophy*, p. 23.

self-awareness. The nature-culture binomial also remains somewhat untouched, despite the emphasis on interdependence through dialogue with Spinoza's philosophy. All of this can characterize deep ecology as a form of non-anthropocentric humanism: a humanism that morally rejects the human capacity to dominate and control natural processes with a view to a deeper self-realization, of harmony in the face of the diversity of life.

The Aesthetic Experience in Vital Materialism

This form of delight in interaction with animals and the environment, resulting from values linked to human reason, is the opposite of what philosopher and political theorist Jane Bennett proposes in her works. In the 1970s, Jane Bennett found affinity with the environmentalist and pacifist movements and with the idea of adopting a simple lifestyle close to nature, in a vein similar to that advocated by *deep ecology*. However, her experiences with her younger brother with schizophrenia in the 1980s dissolved her beliefs in nature as a cohesive or harmonious totality, whether endowed with verifiable laws (in a Cartesian scientific sense) or providential, in a theological sense.³¹ What's more, Bennet also realized that in her environmental science classes, students remained indifferent to rational critical exposition of the environmental issue. She noticed that the increase in critical knowledge about environmental problems did not sensitize students.³² These factors led her to propose a notion of enchantment that is the basis of a human sensibility linked to the relationship with a material world that is actively capable of self-organization in a random and contingent way. This is an environmental ethic based less on concepts, narratives, and examples of simple life and more on heterogeneous everyday sensibility.

In *The Enchantment of Modern Life: Attachments, Crossings, and Ethics* (2001), Bennett develops the concept of enchantment as a prerequisite for an ethics of generosity. In this work, she examines how sensory experiences in everyday encounters can shape ethical formation, particularly through an enhanced perception of the capacity of non-human entities

³¹ BENNETT, J.; KHAN, G.A. "Vital Materiality and non-human agency: an interview with Jane Bennett." In: BROWNING, G.; PROKHOVNIK, R.; DIMOVA-COOKSON, M. (Org.). *Dialogues with Contemporary Political Theorists*. Palgrave-Macmillan, 2012. p. 42-57.

³² WATSON, J. "Eco-Sensibilities: An Interview with Jane Bennett."

to affect the world. This idea is further radicalized in her 2010 book *Vibrant Matter: A Political Ecology of Things*, where she proposes an ontology of force termed "vital materialism." Vital materialism marks a second phase in her philosophical project, focusing on how non-human things, events, and elements affect each other and also humans, potentially constituting themselves as political agents or as manifestations of "thing-power." Both works represent two complementary moments in her philosophy: the first with an emphasis on human affects and the second centered on the indifferent force of things to produce, by themselves, these affects. In *Vibrant Matter*, Bennett shifts away from the notion of ethical cultivation through human perception of non-human agency, shifting her thinking to the way non-humans operate. The concept of enchantment, according to Bennett, forges two directions (one positive and one negative), explored in each of these works: "the first toward the humans who feel enchanted and whose agentic capacities may be thereby strengthened, and the second toward the agency of the things that produce (helpful, harmful) effects in human and other bodies".³³ This article follows Bennett's own indication, understanding both works as complementary because negative effects are also part of the enchantment process.³⁴

Bennett seeks to sharpen the reader's perception of details that can concretely enchant, from an ant to a song playing on a radio. According to her, enchantment is the feeling that surprises, an encounter, and involvement with something unexpected, which can be both pleasant and unpleasant, but which disturbs and displaces individuals from their standard sensory, psychic, and intellectual disposition, transforming them.³⁵ Thus, enchantment can come from a relationship with non-human animals, but also from a cell phone, a landfill, a dead rat, a plastic bottle or any other thing or force present in the world. Bennett's political

³³ BENNETT, J. *Vibrant matter: A political ecology of things*. Durham and London: Duke University Press, 2010, p. xii.

³⁴ BENNETT, J. *The enchantment of modern life: Attachments, crossings, and ethics*. Princeton: Princeton University Press, 2001, p. 5.

³⁵ *Ibid.*, p. 5.

ecology decentralizes the notion of human agency to include all non-human beings, setting aside morality in favor of an ethics that emerges from encounters and relationships.³⁶

Thus, Bennett is explicit in pointing out, on the one hand, that modernity is not disenchanted as a place of human reason, freedom, and control with the inertia, death, and alienation of the environment. For her, codes of conduct, critical thinking and rational criteria are insufficient for the formation of ethical values: enchantment (the way things touch and affect humans), on the other hand, is the fundamental part of ethical development.³⁷

This condition stems from the fact that humans are immersed in a universe of vitality, where all things manifest themselves as vibrant matter. Being vibrant matter, anything from bottle caps, dead rats, or a landfill manifest themselves as a living force that can act on any aspect of everyday life, generating diverse effects. However, by sharpening our senses to the vitality of matter, new ways of being in the world that are less moralistic, oppressive, and harmful to the planet can be formulated.³⁸ Vitality is thus understood as the capacity of organic and inorganic phenomena to affect/touch the other, producing material effects and feelings. It would be "the capacity of things - edibles, commodities, storm, metals - not only to impede or block the will and designs of humans, but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own".³⁹ This capacity is not in itself innate, but emerges through relationships with and through other phenomena, working with or against human intentions and representations.⁴⁰ Bennett's vital materialism is understood as an ontology of force because what exist are forces (events) that overlap, cross, and/or work with or against each other, and there are no entities with fixed limits and boundaries. In this case, the species itself is seen as a force among the others.⁴¹

³⁶ BENNETT, J; KHAN, Gulshan Ara. "Vital Materiality and non-human agency: an interview with Jane Bennett."

³⁷ BENNETT, J. *The enchantment of modern life: Attachments, crossings, and ethics*.

³⁸ BENNETT, J. *Vibrant matter: A political ecology of things*, p. 17.

³⁹ *Ibid.*, p. viii.

⁴⁰ LUPTON, D. "Vital Materialism and the Thing-Power of Lively Digital Media." In: LEAHY, D.; FITZPATRICK, K.; WRIGHT, J. (Org.). *Social Theory, Health, and Education*. London: Routledge, 2018.

⁴¹ GAMBLE, C.N. HANAN, J.S.; NAIL, T. "What is New Materialism?" *Angelaki*. v. 24, n. 6, p. 111-134, 2019.

In Jane Bennett's works, the ethics of generosity manifests itself as values that emerge from concrete experience, from feeling affected by non-human animals and by things in general, which can inspire a greater perception of the extent to which all bodies are kin, inextricably entangled in dense networks of relationships.⁴² Thus, she adopts a critical stance towards actions that only involve discourse, since what is required is an aesthetic disposition, in other words, a keen perception of daily connections with non-humans.⁴³

Vital materialism would thus be a way of addressing environmental problems by questioning the notion of the inertia and passivity of non-humans, which encourages the view that everything belongs to humans due to their supposed innate ability to create and recreate the world, which also justifies the atrocities committed against animals. The decentralization of the human animal occurs here through reformulation of the notion of agency through the assumption of the vitality of matter: humans are not the only ones to touch, influence and modify the world. Bennett removes humans from the position of hierarchical superiority by clarifying that humanity modifies and guides non-humans but is also affected and even guided by them. The very diversity that makes up the human organism (as in the case of intestinal bacteria), responsible for maintaining the life of the individual, indicates a certain alienation in the daily non-observation of this phenomenon. Therefore, the interaction between humans and non-humans is a two-way street because the agency is reciprocal, an enchantment that is independent of human representations, requiring a re-education of perception.⁴⁴

It is through the notion of reciprocal agency that Bennett warns that the home of all species is being modified, causing suffering in plants as well as human and non-human animals, because everything is connected in a network of influences. The philosopher believes that recognizing, through sensations, that we are all interconnected and that we influence each other in various ways, can lead to a rethinking of human actions in relation to

⁴² BENNETT, J. *Vibrant matter: A political ecology of things*, p. 13.

⁴³ BENNETT, J. *The enchantment of modern life: Attachments, crossings, and ethics*, p. 29.

⁴⁴ NEFF, I. "Vital and Enchanted: Jane Bennett and New Materialism for Nursing Philosophy and Practice." *Nursing Philosophy*, v. 21, n. 2, p. e122-173, July. 2019.

the environment.⁴⁵ Ethics must emerge by heightening the sensation of the constant processes of enchantment.⁴⁶

Like Naess, Bennett is inspired by Spinoza's ideas, although she highlights more explicitly the tangle of influences in the world that direct human lives. This is an important point for Bennett, as the author has called these influences enchantment, the feeling that strikes surprisingly and unconsciously, starting from things and phenomena that are normally ignored. The Deleuzian interpretation of Spinoza's concept of *affectus* (affection) is primordial, meaning a non-representational form of thought, such as will, love, hate, anxiety, sadness, sensations, feelings.⁴⁷ It is from the notion of *affectus* that the meaning of agency derives as the capacity to affect and be affected, in addition to *conatus*: the persistence of living organisms, things, elements, everything in the world in striving to continue to exist in its own essence.⁴⁸ This seems to be the main difference in the impact of Spinoza's work on both philosophers. Bennett radicalizes the notion of *affectus* and *conatus*, arguing that the world is a universe of forces that continually affect each other. Naess, on the other hand, emphasizes interdependence without delving into the question of how humans are affected in their relationship with non-humans, keeping the question open.

Enchantment as a Basis for Valuing Biodiversity

Delight, as a result of critical rationality and awareness of human interdependence with nature and non-human animals, strengthens a biocentric ethic in deep ecology. Although authors such as Michael E. Soulé, John B. Cobb Jr, Paul R Ehrlich, David Ehrenfeld and John Todd made their sympathy for the notion of the intrinsic value of deep ecology explicit in the collection *Biodiversity* (1988), this position was not a consensus. James Nations, an

⁴⁵ BENNETT, J. "Systems and things: A response to Graham Harman and Timothy Morton." *New Literary History*, Baltimore, v. 43, n. 2, p. 225-233, 2012.

⁴⁶ BENNETT, J. *The enchantment of modern life: Attachments, crossings, and ethics*.

⁴⁷ DELEUZE, G. "Spinoza: Cours Vincennes." *Les Cours de Gilles Deleuze*, 1978. Accessed on May 5, 2022. <https://web.archive.org/web/20080414220914/http://www.webdeleuze.com/php/texte.php?cle=194&groupe=Spinoza&langue=5>

⁴⁸ NEFF, I. "Vital and Enchanted: Jane Bennett and New Materialism for Nursing Philosophy and Practice," p. 2.

anthropologist and ecologist with experience in protected areas, biodiversity, and indigenous populations in Latin America, was the dissenting voice in the book.

Although James Nations agrees with the fundamental precepts of deep ecology, he points out the limits of universalizing the biocentric ethics of intrinsic value. First, we have to consider that indigenous peoples had their own traditional forms of respectful relationship with the environment, including agricultural production. Second, there is the lack of feasibility of using critical, rational, and moral precepts to demonstrate the idea of the intrinsic value of biodiversity to small and medium-sized farmers in developing countries. Although Nations pointed out that these producers had a much closer relationship with biodiversity than urban dwellers, economic, survival and family well-being issues always came first. In other words, the relationship with the environment that permeates agricultural activity and indigenous lands was based on practical values of survival in rural areas and not on moral precepts. For him, debates involving intrinsic value were valid in seminars and intellectual conversation circles but would have little or no impact in developing countries, which is the biggest dilemma of deep ecology. Thus, what is missing from the notion of intrinsic value is a pragmatic perspective of what this value or its root would be.⁴⁹

The problem, in this case, seems to lie in the vague position of what intrinsic value is. Katie McShane draws attention to the different meanings that intrinsic value acquires in conservation biology and the controversies they generate. The first of these has to do with the moral character given to biodiversity as having intrinsic value. But since biodiversity is considered a property of something, it is difficult to sustain a moral notion of its intrinsic value. The second meaning is its objective value. But how can we make one value objective to the detriment of others? Why should biodiversity have a higher objective value than others, and who would define this hierarchy? Intrinsic value as non-instrumental value also presents problems. After all, even if biodiversity is not directly useful to humans, it is useful to non-

⁴⁹ NATIONS, J.D. "Deep Ecology Meets the Developing World." In: WILSON, E.O. *Biodiversity*. Washington: National Academy Press, 1988.

humans and is indirectly of interest because it has some kind of utility. Even so, aesthetic, religious, and scientific interest would be manifestations of human instrumentality.⁵⁰

However, it must be considered that biodiversity is important for multiple interests, which is why there are debates about its conservation. But it is also extrinsic, not a final or unconditional value. For McShane, the question of the intrinsic value of biodiversity must be analyzed in a deeper and more plural way, considering the many values that develop in the world for the formulation of conservation policies.

One aspect that seems central to these debates is the anthropocentric or non-anthropocentric nature of intrinsic value and its practical nature. The notion of enchantment in Arne Naess is based on a humanist assumption, i.e., it is a feeling arising from a supposed human superiority, in terms of the evolutionary scale, which manifests itself in cognition. Enchantment stems from a change in thinking and vision about the world, with the non-anthropocentric stance of understanding humans as just another species among others being a choice based on human superiority itself via cognition and ethical decision-making. Decentralization of the human, therefore, comes through the conscious decision to consider oneself to be a part of the world and not a manager of it, aiming for mastery and control for one's own benefit. The question of whether or not humanity benefits is controversial in the adoption of intrinsic value in biodiversity conservation.⁵¹

At this point, Bennett's idea of enchantment, as emerging from the force that things acquire in relationships around the world, may prove appropriate. It offers a pragmatic notion of ethics, which would not be rooted in moral values, but in the attentive perception of the vitality of non-humans, of the way in which individuals and society can be affected by phenomena (assemblages), which bring together non-human animals, humans, and things. Being aware of and feeling the power of non-humans in the configuration and reconfiguration of the world would be important because it would induce us to treat animals, plants, land,

⁵⁰ McSHANE, K. "Is biodiversity intrinsically valuable? (And what might that mean?)." In: GARSON, J.; PLUTYNSKI, A.; SARKAR, S. (Org.). *The Routledge Handbook of Philosophy of Biodiversity*. London and New York: Routledge, 2017. p. 155-167.

⁵¹ *Ibidem*.

and even artifacts and merchandise more carefully, more strategically, more ecologically.⁵² From this attention comes the realization that everything is interconnected. Respect, then, would not come from critical and moral values, from a conscious decision or choice, but would be rooted in the sensory perception that non-humans and material reconfigurations interact in subtle or drastic ways with human life and the planet. It would be a respect for the unknown that has power in itself as an affective body, in the Spinozist sense.⁵³ The intrinsic value of an animal could be justified by the fact that it is a thing-power, an animal-power, which produces a moral sensibility linked to the way this being acts or can act in a world in which humans are a part.

The idea of force goes against the monism of deep ecology, because as Bennett points out, the interconnection and monism present in its ideas does not presume harmony or unified diversity in a common totality. Unlike the holism of deep ecology, vital materialism is a fractured and emergent holism: it emphasizes turbulence, shocks, disintegrations, transformations, etc. in a world that is ontologically one, but formally diverse. Moreover, Bennett rejects the idea of nature, understanding the moralistic and oppressive aspect of the concept, imprisoning other experiences and manifestations of the thing-power.⁵⁴ At this point, different experiences, such as those of indigenous populations and other inhabitants of rural areas, can and should be contemplated in terms of the diversity of how non-humans can affect human life and the different effects (enchantments) of these influences. Even the experiences of individuals in metropolitan areas, whose proximity to non-human animals and things is more restricted, alienated, or supported by intense immersion in technology, can become allies in terms of an ethic of generosity that embraces non-humans. The ethics of vital materialism completely expands the biocentric notion, since all things have a vitality (in the sense of acting on the world) that needs to be observed.

However, these notions do not completely contradict the premises of deep ecology, as formulated by Arne Naess. In fact, they can work in terms of complementarity. Although

⁵² BENNETT, Jane. *Vibrant matter: A political ecology of things*, p. 18.

⁵³ *Ibidem*, p. 21.

⁵⁴ *Ibidem*, p. 17.

Naess sees delight as linked to the rational and evolutionary aspects of the human species, he sees the spontaneous and emotional experiences of everyday life as a powerful source of knowledge.⁵⁵ The intimate contact with the reality of a waterfall, for example, and the immediate feelings that emerge from this contact with reality, according to him, cannot be faked. In this sense, Naess even cites the power of the sound of a song and how the relationships in which an individual is involved when listening to that song (whether alone, next to a loved one, etc.) modify the nature of what is being listened to, generating different impacts.⁵⁶ The immediate experience of things and what is "essentially nature", even within cities, is a valuable starting point for Naess.⁵⁷ Vital materialism, in this sense, adds to these premises a radicalization of this starting point, without using the notion of nature.

The enchantment that emerges from the encounter with things can be a strong starting point for understanding the interdependence and intrinsic value of things. At this point, there is a convergence between deep ecology and vital materialism. According to Bennett, the relationship between a keen perception of the vitality of things and the development of ethical principles is indirect, emerging from many active forces, reinforcing tendencies. However, human moral responsibility does not lie in the idealized autonomy of modern thought, but in the heterogeneity of experiences. The ethical principle would be that of self-sensitization of the diversity of agencies that make up the human and non-human animal in order to work towards reducing the diffuse suffering that modernity produces.⁵⁸ But, thinking about the synergy of both authors, it is from this self-sensitization that the self-realization of human and non-human animals can also come.

Bennett's vital materialism does not invalidate the notion of intrinsic value, but may even reinforce it, deepening the Spinozist sense that Naess gave to the term when he defended the ecological sense of Spinoza's ideas. This deepening comes from the understanding that everything in the world, even apparently inanimate matter, can affect, produce, create,

⁵⁵ NAESS, Arne. *Ecology, Community, and Lifestyle: Outline of an Ecosophy*, p. 32.

⁵⁶ NAESS, A.; JICKLING, B. "Deep Ecology and Education: A Conversation with Arne Naess." *Canadian Journal of Environmental Education (CJEE)*. v. 5, n. 1, p. 48-62, 2000, p. 52-53.

⁵⁷ *Ibid.*, 53.

⁵⁸ BENNETT, J.; KHAN, G.A. "Vital Materiality and non-human agency: an interview with Jane Bennett."

configure, and reconfigure events, circumstances, and human feelings.⁵⁹ The debate on the intrinsic value of biodiversity, with biodiversity seen as an assemblage shifts entirely from the benefits of its conservation for humanity and ecosystems to the unforeseen consequences, contingencies, and even speculation arising from its decline. As Bennett emphasizes, non-humans “it is worthy of our respect because we are composed of it, because we enter into various relations of dependence with it, and because its force fields can turn on us if we don't attend closely to them.”⁶⁰

Biodiversity as a phenomenon can be understood as a thing-power with the capacity to interfere in all aspects of human and non-human life. Since nothing that is understood as nature is static and calculable in vital materialism, what really counts is the aesthetic-affective energy that fuels the urgency of its valorization. Value is intrinsic because its power is intrinsic, since it is associated with the effects it causes, fundamentally due to its own material and peculiar configuration, as is the case with everything-power.⁶¹ The very concept of biodiversity can thus be philosophically shifted from the notion of property to more of a power in itself that affects others, either in its weakening or in its strengthening.

The most radical decentralization of the human in vital materialism is a more pragmatic perceptual stance towards the world, understanding that humans are formed and crossed at all times by non-human animals (microorganisms that make up the body), things, and material phenomena. Even human agency emerges from the complex relationship with other non-human forces that act on the development of their ideas, intentions, and actions. In this way, human thought is not separate from the world, but is in a continuum of nature/culture entanglements, where the very formation of culture is dependent on the concrete conditions of its production, regardless of whether humans understand that their ideas and intentions are separate from material phenomena.⁶² The human position as capable of managing the world, in every sense, is weakened in the emphasis that all things manifest

⁵⁹ CUDWORTH, E.; HOB DEN, S. “Complexity, Ecologism and Posthuman Politics.”

⁶⁰ BENNETT, J.; KHAN, G.A. “Vital Materiality and non-human agency: an interview with Jane Bennett,” p. 51.

⁶¹ BENNETT, J. “Systems and things: A response to Graham Harman and Timothy Morton.”

⁶² FREDENGREN, C. “Nature Cultures: Heritage, Sustainability and Feminist Posthumanism.” *Current Swedish Archaeology*, v. 23, p. 109-130, 2015.

themselves as forces that evade the ability to control.⁶³ In this case, conservation becomes a less applicable term, due to the human inability to effectively achieve any control over biodiversity. However, an ethic based on the vitality of the things that make up the world can lead to a notion of valuing biodiversity, based both on the diversity of life and on values that emerge from concrete individual and collective experiences with the world; a valorization that is much more strategic than moral, given the perception that the world is permanently interconnected, aesthetic, and affective, in other words, formed in enchantment or reciprocal agency.

Final Considerations

In Arne Naess, delight considers human cognition and its ability to contemplate itself and the world in a unique way, observing the interdependencies that comprise everything that exists. For Bennett, enchantment is independent of cognition: it is a primary sensation arising from the interdependence and affective/agential capacity of all things. What is understood by new materialists and critical post-humanists as an irreconcilable difference holds potential for how the idea of intrinsic value can be shifted in order to contemplate a more pragmatic and realistic ethics for the challenges of the 21st century.

The notion of intrinsic value can be strengthened with a pragmatic vision stemming from the different manifestations of other forms of life in the way it affects human animals and ecosystems. By deepening the sense of animation of matter in deep ecology with the ideas of vital materialism, everything comes to have a truly intrinsic value, and in the relationship with biodiversity itself, a strategic and practical stance that is truly relational becomes imperative. This more realistic and materialistic position involves diverse ways of looking at biodiversity, not only from a moral and ethical point of view, but also from a philosophical one. Biodiversity is no longer a concept that presumes a property of the world to be contemplated by morally enlightened minds, but rather a phenomenon in itself, with multiple dimensions and contingent influences and impacts on the world. This is a way of

⁶³ SMITH, T.S.J. *Sustainability, Wellbeing and the Posthuman Turn*, p. 75.

looking at biodiversity that aligns the ethical principle of the environment with scientific, political, and aesthetic perspectives, reinforcing the need to respect and value it as a principle of survival.

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