Humility imparts the wonders of nature: a virtue-ethical elaboration of some Michael Bonnett's thoughts

Jani Pulkki

Abstract

An attitude of (1) metaphysics of mastery is a major ecological problem accompanied with (2) scientism, which considers all reality is understood with one form of knowledge acquisition, that of classical experimental science. In this article, I consider the two ideas of Michael Bonnett from a virtue ethical perspective. I propose that metaphysics of mastery and scientism are virtue ethical problems of hubris. Modern hubris considers everything a resource for human use without asking for permission. I also claim humility is usually conceived incorrectly, as self-abasement and poor self-worth in a hierarchical relationship between the higher and the lower. A non-hierarchical idea of humility is proposed instead. Humility, this way conceived, is the proper evaluation of oneself. On the other hand, humility is a virtue and a way to unlearn the metaphysics of mastery and scientism. Humility also enables learning a friendlier and more realistic relation to nature. Without self-abasing humility or the self-absorbed pride of the Western subject, we can see reality in more truthful ways. This means seeing both the ecological havoc and the wonder and awe of nature in a fruitful way for environmental education.

Introduction

The metaphysics of mastery is not just a problem facing modern human culture – it poses a threat to all of the Earth's biosphere and climate, because it sees human beings as separate from and superior to nature. The metaphysics of mastery suggests that human beings have the inherent right to manipulate and control other living creatures by using science (Bonnett, 2021a). The concept of scientism, also elaborated by Bonnett, takes humankind's authoritarian attitude towards nature one step further, by extending "the methods, assumptions, and constructions of the classical experimental sciences beyond the discipline of science and into our daily lives". In other words, it posits that science is the key to unlocking all the secrets of life and gaining mastery over other living creatures (Bonnett, 2021a, pp. 46–47). The problem with both the metaphysics of mastery and scientism, however, is that they share an inherent lack of humility.

My central claim is that by acknowledging and challenging the hubris inherent in the metaphysics of mastery – through learning more humility – we would alleviate the problems that accompany treating nature as an inanimate and soulless resource fit only for human consumption (see Akjuluk et al., 2020). From the environmental virtue ethics (e.g., Pulkki, 2021a; Cafaro, 2015; Sandler, 2013) standpoint, I claim that the metaphysics of mastery and scientism often include the human vices of hubris and pride, and these hinder learning the necessary humility that would allow us to perceive nature in a more realistic and respectful way (see Bonnett, 2021a, p. 5 & p. 29). As Wendell Berry reminds us, humans will always be

prone to mortality, partiality, fallibility, error, and a lack of knowledge regardless of the most intricate science. In the global context of nuclear weapons and a growing number of industrial societies, the pride of overestimating human intellectual capabilities is a grave error (Berry, 2005, pp. ix-x). Only by acknowledging human capabilities and their limitations in a straightforward and honest manner, can we find new guidelines for a sustainable lifestyle and question the hierarchical thinking and practices of competitive capitalism.

With this essay, my purpose is to consider Michael Bonnett's concepts of scientism and the metaphysics of mastery from an environmental virtue ethics perspective. The metaphysics of mastery and scientism are examined as virtue-ethical problems of hubris that need a virtue-ethical and pedagogical solution, which lies in learning the virtue of humility. I propose that both formal and non-formal education should pay greater attention to learning the virtue of humility as part of building a more sustainable society (see Pulkki 2021b; Pulkki & Varpanen & Mullen, 2020). Presently it seems that almost all our hopes of sustainability are pinned on technological development, rather than on the cultivation of human character.

Rather than adopt a history of philosophy perspective, this article will be looking at more contemporary conceptualisations of humility (Richards, 1988; Gerber, 2002; Roberts, 2016; Snow, 2021; Nadelhoffer, 2016), where being humble has nothing to do with self-abasement or feeling low self-esteem or self-worth. Instead, humility has everything to do with gaining a more realistic appreciation of one's internal and external world. To achieve a sustainable lifestyle, which can sustain itself for a long period of time without destroying its life supporting systems, we need to educate people who are not too proud to acknowledge the shortcomings of previous and current generations and who have a realistic enough understanding of the world to take on these challenges seriously.

This article tries to show that perhaps the most important aspect of humility is that it allows for the re-enchantment and resacralization of nature, which is fitting as Bonnett (2007, p. 711) talks about the spiritual impoverishment in our understanding of nature. Treating nature out of pragmatic and enlightened self-interest is not enough as it "prevents us from seeking to know the world as it is – in its intrinsic value […] – and therefore truly understanding our place within it" (Bonnett, 2007, p. 711). Relinquishing our human-centredness frees up our cognitive and perceptual capabilities for experiencing more awe and wonder at nature (Gerber, 2002). In that sense, humility is precisely what we need to teach ourselves as individuals and as societies, as it provides a means of coming to our senses (see Gerber, 2002, p. 42). Rather than debasing anyone or anything, humility actually provides the means to raise others to the same level with appreciative joy and honour (Rasmussen, 2021).

Metaphysics of mastery and the desacralization of nature

As Bonnett explains, the metaphysics of mastery describes a fundamental cultural motive that emerged during the Enlightenment and was central to modern humanism, in which all issues were framed in anthropocentric terms – the world was something that could be manipulated for the benefit of humankind and its satisfaction. As such, the metaphysics of mastery casts nature as having little inherent value beyond those resources it has which can be exploited for human consumption, gain, or profit; while also implying that human beings

can manage any ecological problems that might then arise by simply applying the necessary scientific research (Bonnett, 2021a, p. 14; 2021b; see Akjuluk et. al., 2020).

The concept of resources is itself closely related to the metaphysics of mastery (Bonnett, 2021a; 2021b). Feminist scholars such as Carolyn Merchant have written insightfully about how much of human society's relationship with nature changed after Middle Ages (also Plumwood, 2003). According to Merchant (1989), the scientific revolution in the 16th and 17th centuries started a major change in the way people viewed nature in the modern world. Removing the existing animistic and organic assumptions about nature (also known as "the death of nature") was one of its most far-reaching effects. A new scientific mechanical worldview, in which inert particles were moved by controllable external forces, justified the exploitation of nature and use of its resources for commercial purposes (Merchant, 1989, p. 193; Bonnett, 2021a, p. 50).

If nature is seen as an inanimate pool of resources destined for the exclusive use of humans, there is no need to apologize for the destruction and inconvenience we cause to other living creatures. Gratitude, which is an important part of the same virtue family that humility belongs to, is of little use when animals are merely seen as production units or mechanical matter in motion (Roberts, 2016; see also end remarks). In this respect, the concept of nature has been warped and distorted as modern interpretations generally ignore the mystery and transcendence of nature which is nevertheless so relevant to environmental education (Bonnett, 2021a; 2021b). Vandana Shiva (1996) calls this process the "desacralization of nature".

By stressing the material and mechanistic features of nature over any transcendent or sacred qualities it has, nature becomes demystified, and questions about what we should be "entitled to expect from nature" thus become futile, or hardly arise as issues (Bonnett, 2021a, p. 39). Dismissing something that has gained the status of being sacred in a community is often done in an aggressive, uncaring, greedy, and selfish manner. Hubris is a proper word to describe the vices included in the process of desacralization. As explained in more detail later, hubris here means being excessively self-confident about the primacy of one's own "modern" worldview over more "primitive" ones.

Both the metaphysics of mastery and the desacralization of nature seem to operate via a system of interlocking dualisms, as proposed by Val Plumwood (2003). These traditionally western dualisms include culture-nature, male-female, mind-body, rationality-animality, civilized-savage, reason-emotion, objective-subjective, developed-primitive, and master-slave, and they are used to exclude and dominate various people and animals in a hubristic manner. Such a dualist system entails a logic of colonization which came to prominence with European expansion, and still exists to this day in the division of labour between the global North and South. According to Plumwood (2003, pp. 41-42), at the heart of these Western dualist ways of understanding the world is not only inferiorizing the feminine and the nature, "but all those human orders treated as nature and subject to denied dependency."

One important step towards moving away from the metaphysics of mastery and desacralization of nature is to transform the demeaning concepts that entail disdain for other living creatures, other cultures, other religions, other worldviews, other economic systems, and so on (Armstrong, 1995; see Sachs, 1996). For example, words like primitive, superstitious, undeveloped, pagan, and uncivilized are designed to work in a hierarchical

and dualist manner (Martusewicz & Edmundson & Lupinacci, 2015) which works like a seesaw – pejorative words are used to lift one side up by putting the other down.

A "disenchanted world," (see Weber, 1946, p. 51) stripped of its wonder and mystery is to downplay the experience that many people have about nature (Abram, 1996). Bonnett is among those scholars who asks how the mystery of nature might be kept alive. Heesoon Bai (2009) also wonders whether reanimating our perception of the universe is the best way to make us realise what was lost with the scientific and industrial revolutions.

> How can we reanimate the numbed perceptual consciousness so that the Earth appears to us in full sentience and presence? How shall we recover the sensations and feelings in our numbed psyche so that we see, hear, feel the joy and pain, wonder and despair in experiencing the Earth and all its biotic communities? (Bai, 2009, p. 136; see also Sewall, 1995).

It not only causes us to see everything as resources, but also prevents things from showing up as they are themselves (Bonnett, 2016). Paradoxically, this numbing of the senses in favour of scientific rationality works against scientific pursuits, precisely because the basis of empirical science lies in the human senses; their reanimation is therefore needed not just for environmental education, but for science in general if we are to avoid lapsing into scientism.

Problems of scientific hubris and pride: scientism

It is fair to say that Bonnett sees hubris in both the metaphysics of mastery and scientism. Scientism is closely related to the metaphysics of mastery when science is practised as if humankind was the master of all other living creatures. As a systematic method of acquiring knowledge through observation, experimentation, and reasoning, science is very much needed, but scientism takes this one step too far, by presuming that classical experimental scientific thinking has a privileged access to the nature of reality (Bonnett, 2021b) which goes "beyond the discipline of science and into our daily lives" (Bonnett, 2021a, pp. 46—47). Science (as scientism) is thus being used to solve religious, ethical, and existential questions, when in fact science was originally planned for a more specific purpose without such capabilities (Bonnett, 2019, p. 252). In overstepping the boundaries of what science is expected to achieve, scientism is thus committing an act of hubris.

Yet even though hubris is considered a vice in Christianity, and humility a virtue (Nadelhoffer et al., 2016), the same religion presupposes humankind's supremacy over all other living beings (White Jr., 1967). Humility is thus seen in purely anthropocentric terms, as in our relationships with other life forms it seems to be acceptable to dominate and use them without particular concern for their wellbeing. Lynn White Jr (1967) has argued that humankind's sense of entitlement and hubris towards non-human nature comes from (western) Christian religion and its culture. According to Max Weber (2005), the Protestant work ethic – so crucial to "the spirit of capitalism" – comes from there being no way of knowing where we spend our eternity except by working hard to achieve earthly success, in the hope that this will eventually bring us closer to God (Weber, 2005).

Hubris may thus well be a psychological defence strategy for avoiding this uncertainty and the unsavoury prospect of eternal damnation – and one way to cope with this prospect is to

look for certitude in science, thinking that science will solve *all* our problems within *one* system of knowledge. Though capitalism has mostly left its earlier ethical roots behind and replaced them with a purely mechanical foundation (Weber, 2005), the same hubris still puts humans at the top of a natural hierarchy.

Hubris and pride are the opposites of humility (Bommarito, 2021, p. 238; Nadelhoffer et. al., 2016). In Finnish, the word hubris is perhaps best translated as *ylimieli* – a compound of *yli*, meaning over, and *mieli*, meaning mind. The usual dictionary definition of hubris in English is "excessive pride or self-confidence" (Gerber, 2002; Roberts, 2016; Nadelhoffer et al, 2016), and *ylimieli* certainly emphasizes the "excessive" aspect here: by aiming higher than others, people with hubris may think they deserve more than others (Pulkki & Varpanen & Mullen, 2020; Pulkki, 2021a). Hubris therefore distorts reality by overestimating one's own capabilities and merits and, in so doing, arrogantly neglecting the importance of other people (and species).

This is the hubris that Gerber (2002) is also referring to when talking about becoming increasingly self-absorbed and losing one's perspective. Self-absorbed people spend too much time reflecting on themselves and their concerns (Gerber, 2002, p. 42), with or without pride, meaning they are overly concerned with matters that they see as their "own". Hubris and pride are not the same things, but hubris usually includes pride. As Roberts (2016, p. 185) explains, pride is not a single vice but a collection of them including an inappropriate concern for and sensitivity to glory, personal importance, honour, prestige, status, favourable notice, and superiority.

In scientism, science becomes part of how a person understands their own identity – indicating prestige, and personal importance beyond its original purpose of simply acquiring empirical knowledge. It is the inability to relinquish one's pursuits for existential certainty that disturbs this scientific process. To acquire true knowledge, and to conduct scientific research worthy of that name, one needs humility to allow science to take its proper place in people's lives besides ethics, religion, worldviews, belief systems, and other cultural traditions.

Humility is a necessary virtue in environmental education for children and adults alike to accept and understand the larger reality outside oneself as a point of departure for considering ecologically necessary changes. With humility, it is possible to maintain and formulate more nuanced opinions based less on idiosyncratic likes and dislikes developed during one's own particular path of socialization and more on solid knowledge of what is actually there. Humility therefore encourages opinions which correspond to an external as well as an internal reality (Pulkki & Varpanen & Mullen, 2020). But what is it exactly that makes humility, in my opinion, one of the most enigmatic and exciting of all virtues?

Western difficulties with humility - humility as the proper evaluation of oneself

First we should note that humility has been out of style for a while now (Nadelhoffer et al., 2016). This is understandable as, in contemporary English dictionaries, humility is defined not only as the absence of haughtiness, pride, and arrogance, but also as having a modest or low opinion of oneself (e. g. Richards, 1988; Nadelhoffer, 2016). This latter aspect goes against contemporary psychological attitudes to self-esteem; as modern psychology stresses the importance of having self-confidence, good self-esteem, and the ability to recognise

what you (and others) are good at (Hewitt, 2017). These different attitudes towards humility form a kind of demarcation line between the modern and premodern subject.

In autocratic societies of the premodern feudal Europe, for example, humility ensured that people modestly accepted their place in the social hierarchy and respected those in power. With modernity came ideas of liberty, freedom, individual merits, and democracy which made social mobility acceptable and even desirable. We are now encouraged to work hard and travel, not to stay put on our ancestors' lands or let anyone else determine our place in the social hierarchy. Two features of self-esteem, evaluation of performance and social comparison (Hewitt, 2017), became more important with the advent of modern democratic and meritocratic societies.

Rather than be humble, people are now encouraged to build a self-image based on success over others. Pride is nevertheless sometimes frowned upon and considered a vice, as traces of old moral traditions are still among us (MacIntyre, 2007). On the other hand, people are encouraged to take ownership of their achievements and in so doing be proud of them. Being humble is considered a problem of low self-esteem which can cause all sorts of trouble. Many kinds of educational and social reforms are based on the idea that better self-esteem can solve a surprisingly wide range of problems – from poverty and criminality on the one hand, to business and schools on the other (Hewitt, 2017). In this respect, any place that humility may have had in modern psychology has now been somewhat displaced with the value-neutral terminology of self-esteem.

I thus claim, along with some recent scholarship (e.g., Richards, 1988; Gerber, 2002; Roberts, 2016), that humility is gravely misunderstood. Humility is not about having a low estimate of oneself but about keeping a realistic one (e.g., Hare, 1996). Humble people keep their merits in perspective and assess themselves fairly accurately without exaggeration (e.g., Snow, 2021; Hare, 1996). Humility actually requires a sincere sense of self-esteem and self-worth, without putting too much emphasis on people's achievements, one's own included. Identity in premodern (feudal) and indigenous societies is often based on belonging to a place, tradition, family, and tribe, rather than on social comparisons and one's place "in the market".

Erich Fromm (1986, pp. 68–71) describes how in modern society people have been assigned a "market character", which could explain why maintaining a sober sense of the self is increasingly difficult. A market character describes how people see and value themselves as commodities within a market. The fundamental problem with this is that the process of determining this value becomes externalized; it is therefore paradoxically outside the subject's control. Yet, according to Fromm (1986), mature human beings experience value in themselves according to their action. Whereas premodern or indigenous people thought of themselves, for instance, as mothers, fathers, hunters, farmers, and healers within their communities, modern citizens depend on the depersonalized mechanism of market competition to determine their worth (Fromm, 1986, pp. 68–73; Pulkki, 2017).

The problem of hierarchy in a competitive society

Hierarchy refers to an order of power (e.g., in autocratic societies and monotheistic religions) in which someone is considered higher and more valuable than those lower down the scale. Feminist scholars have been active in critically analysing hierarchical power (e.g.,

Plumwood, 2003, p. 47), and anarchism is another example of a hierarchy-critical way of thinking (Margalit, 1998, pp. 12–22). Hierarchical thinking includes a plethora of problems, and its implementation within a competitive society is one major reason why humility became less fashionable once those societies moved towards being more egalitarian and democratic – the concept of hierarchy does not sit comfortably with either of the concepts of equality or humility.

Competition also involves the metaphysics of mastery, as it is used in egalitarian and democratic society to create hierarchies of resources, social status, and esteem. A competitive society encourages its members to outdo each other socially and emerge victorious at the top of the hierarchy. In this respect, pride and hubris seem to be more useful to these ends than humility and other life-sustaining virtues (Pulkki, 2017; Pulkki, 2016; Pulkki, 2021a; Bommarito, 2021). Humility was borne of quite a different social arrangement to that of competitive capitalism (Bommarito, 2021) which, according to Polanyi (2009), has been a comparatively recent development in human history.

One reason for the modern unattractiveness of humility has to do with its usage in the hands of autocratic rulers who use humiliating power tactics to induce obedience. Humiliation brings a person down to a lower position in their own eyes, in the eyes of others, or both, often involving tactics to embarrass and shame them. But there are many arguments for what qualifies as humiliation: anarchists seem to think many human institutions are humiliating if based on unjustified authority (Rasmussen, 2021; Margalit, 1998, pp. 9-27); while stoics feel the opposite. In this respect, no society can provide good reasons as to why one should feel humiliated (Margalit, 1998, pp. 9–27) – whatever that reason, the problem of hierarchy remains. While humility may enable people to exist within a social hierarchy without feeling humiliated, it is clear that social hierarchies are created for particular purposes in history – such as determining ranks of nobility – and they may be upheld today for no other apparent reason.

As some ecofeminists (e.g., Hatten-Flishner & Martusewicz, 2017) have pointed out, hierarchies are particularly problematic as they can and have been used to degrade people and other living creatures. Hierarchical thinking carries with it the denigrating histories of colonialism, sexism, and racism. Figure 1 below illustrates how *ego-centred* anthropocentric ideas of the modern world put humans at the top of a hierarchy, while *eco-centred* concepts of nature places them on a level footing with other creatures, implying that humankind does not automatically have the right to all of nature's "resources", and that there is a cost involved.
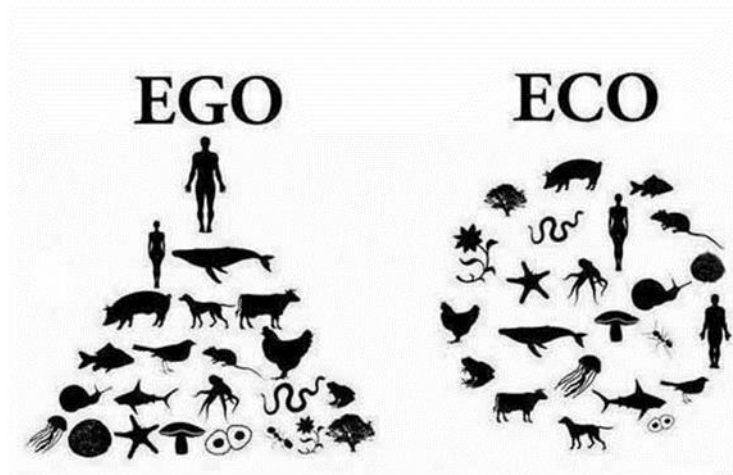
Figure 1. http://www.sustainableideas.it/2013/02/ego-vs-eco-2/

It is important at this stage to point out that my conception of humility and humiliation are that they are *not* two sides of the same coin, even though there have been historical occasions where this might have been the case. Humiliation fosters resentment rather than humility, and hampers its learning (see Nietzsche's 2007[1887] idea of "slave morality"). Again, I illustrate the difference between humiliation and humility with the Finnish word for humility – *nöyryys* – which describes the state of being both (1) submissive, obedient, modest, subservient, and (2) respectful and reverent. It is particularly the second meaning that I believe is vital in preventing the hubris that causes humans to think they are inherently better than other living beings, and therefore entitled to use them without equal concern for their well-being (e.g., Abram, 1997). This kind of mindset (2) is often found in religious or spiritual settings and from the notion of sacred or holy. My concern is that in secular competitive society, where one is geared more towards outdoing others in hierarchical social comparisons, these achievements will seem empty because the sense of humility so vital for experiencing the wonder, awe, and veneration of life is lacking (Pulkki, 2017).

As such the distinction between these two meanings of humility is a fundamental one. In my understanding of Finnish, *nöyryys* is perhaps closer to the second meaning of veneration than submissiveness – it means deep reverence with a quality of the sacred, and a lack of self-centeredness. Humility is, therefore, the ability set aside hierarchical and competitive thinking, and social comparisons. Humility is the ability see the more complex reality of "the eco", with its myriad interconnections, in compared to "the ego" in Figure 1. Humility allows us to marvel not only at the mystery of people, nature, and the interactions between them, but it also stops us from feeling we must be in control of them (see Värri, 2004).

Indeed, as Derek Rasmunssen (2021) has stated, a true sense of humility is best achieved by not by putting anything or anyone down, but by dispensing with this hierarchical seesaw altogether and thus elevating everything. Seeing reality in a humble and non-hierarchical manner allows us to achieve a much richer interaction with other living beings without any (Hegelian) master-slave dialectic – as such, this hierarchy is not only degrading for the slave, but also for the master (Rasmussen, 2021). A humble person is usually not that interested in comparisons of higher and lower as often they are unnecessary and harmful. Human beings

and other life forms certainly differ in many ways, and sometimes human centredness may be justified, but going any deeper into this topic would require its own further study.

Humility as re-enchantment: perceiving the wonders of nature

According to Lisa Gerber (2002) humility is vital for understanding the world that is both internal and external to humans. Humility is being at peace with oneself and the ideas that people have about themselves. This means the moderate and reasonable pursuit of relevant goals and the ability to see what we need and don't need. Humility consists of not just relinquishing the vices of pride, self-absorption, envy, and arrogance, but also of opening oneself up to the beautiful and sublime. Many environmental educators including Bonnett, (2021a) emphasise the importance of perceiving the wonder and mystery of nature as it also encourages one to develop a sense of respect and caring.

From the perspective of humility, Figure 1 is thus a criticism of human self-absorption, and the forms it takes in hierarchical and anthropocentric ways of thinking. Whereas staying on top of the ego-pyramid requires the metaphysics of mastery to be applied in an ecological context, being part of the eco-circle requires humility and respect for other living beings and a rejection of our ideas of human supremacy.

Figure 1 shows there is no devaluation of humanity involved in transforming from ego to eco. By acknowledging our place within rather than above nature, we resacralize nature and we resacralize ourselves at the same time. Resacralization requires us to accept the lapses of judgement we have already made. Saying we are sorry is purifying and stems from a humble understanding of what beautiful, true, and good really are; real humility requires a truthful self-evaluation, which means having a view of oneself that is neither too low (self-abasement) nor too high (hubris, pride, narcissism) but, as Aristotle notes, somewhere between these two extremes.

The desacralization of nature has stultified our senses, and to sensitise them again we need to humble ourselves before nature's wonders (see Bonnett, 2019, p. 255). This resensitisation will provide richer and more nuanced perceptions and thoughts about the natural world. Nevertheless scientific and technological developments are also required but, a more nuanced perception of environment would also allow us to give them a more effective role (Sewall, 1995). To commit the hubris of remaining self-absorbed in the metaphysics of mastery is to be "out of our senses" (Gerber, 2002, p. 42) – i.e., ignoring the sounds, sights, and smells of the world around us.

Human consciousness exists most fully when it is open to the variety of things in themselves as they are. Losing this perceptiveness is avoided by immersive experiences in nature with the intention of "taking us out of ourselves" (Bonnett, 2019, p. 255). In other words, we should actually feel part of a bigger whole as the illusion of self-absorption falls away (Pulkki & Dahlin & Värri, 2016; Pulkki, 2021b). The key to environmental education is to enable a "respectful intimacy in knowing nature" (Bonnett, 2009). Respecting the "mystery" in nature (Bonnett, 2009) is the best way to overcome self-absorption and to learn humility (Gerber, 2002). As a re-enchantment of perception, humility requires us to perceive a reality that is greater than ourselves – quite literally an awe-inspiring reality (Gerber, 2002, p. 43):

"Nature in its beauty, complexity, and vastness does afford us a sense of the sacred and profane. Nature is complex, intricate, spontaneous. Think of the migration of geese or the sunrise. Visit the Grand Canyon or walk among the exposed and open rocks of southern Utah. Late at night, look up and watch the stars. Or, during spring, crouch and watch a bean sprout coming out of the ground. At some point, you will stop and say, 'Wow, this is incredible. Beautiful. Amazing. To fail to see this, to fail to be moved by the awe-inspiring qualities of nature, is to lack humility. We understand humility through the awe-inspiring qualities the virtuous person can see. Humility comes from contact with a greater, more complex reality".

End remarks: some thoughts about educating humility

I claimed in this paper that (1) the virtue of humility is an antidote to metaphysics of mastery and scientism. Fostering humility is therefore conducive to environmental education. I described (2) scientism in a virtue-ethical manner consisting of hubris about the possibilities and accomplishments of science. (3) Humility does not mean having a low opinion of oneself but essentially the absence of pride and hubris accompanied by a realistic appraisal of oneself. (4) Fostering humility through education is not about lowering a student's self-esteem and resisting pride, but about inspiring an enchanted curiosity in the mysteries of nature. (5) Humility is about overcoming self-absorption, so that the world can be perceived without being obfuscated by any overweening idiosyncrasies. (6) Perceiving the world with humility helps us to see the dire and beautiful aspects of reality, both of which must be accounted for when considering ecological transformations to our lifestyle.

What is the best way to teach this humility? Robert C. Roberts (2016) maintains in his article, *Learning intellectual humility*, that its essential basis is established before children even get to school. He uses the concept of secure attachment by John Bowlby: people don't have to develop defensive pride or hubris if they are brought up in a safe, loving, and caring environment. Roberts also gives four guidelines on how to teach humility:

(1) Practise gratitude to accustom people to humility. Grateful people acknowledge the indebtedness or interconnectedness to their parents, teachers, friends, relatives, ancestors, and so on. This is the basis of understanding and respect in a multispecies society.

(2) Practise generosity as this puts you into the shoes of another person and will lessen the tendency to become self-absorbed. Humility seems to also entail compassion and empathy, and practicing generosity entails goodwill.

(3) Practise admiration. For example, if you envy a colleague, you might mitigate this emotion by complimenting them in a loving and respectful manner. This way, you can rejoice in the colleague's achievement together. Genuine and humble admiration can make both of you happy. This way one can be happy nearly all the time, as happiness will also come from other people's good fortune.

(4) Think critically about your own culture. This helps you realize your culture is only one of many. Your culture is essential to you just as someone else's culture is essential for them. (Roberts, 2016, pp. 191–196.) Being at home and content in one's culture is humble.

Hierarchical thinking about the order of different religions, ethnicities, and nations is problematic.

For environmental education, it is important to see these guidelines in ecological (non-anthropocentric) terms:

(1) Practise gratitude towards all the living creatures we rely on every day for staying alive.

(2) Practise generosity in thinking not only about our personal interests but about what our actions do to other living beings. Generosity is also a compassionate and loving relationship with other living creatures.

(3) Practise admiration for the wonder of nature both inside and outside ourselves without separating the two. Seeing the beauty of nature is a source of happiness and teaches us both affection and a respect for nature.

(4) Think critically of our own culture, society, and lifestyle. Consider its influence on the immediate surroundings and on the climate, for example. Acknowledge the problems in our relationship with nature and acknowledge the beauty and achievements in nature protection, for example.

(5) "Honour those worthy of honour", as the Buddha stated in the Mangala Sutta. Honouring and appreciating something (a person, place, experience, or some being) elevates both ourselves and the person or thing that is honoured (Rasmussen, 2021).

References

Abram, D. (1997). The Spell of the Sensuous. Perception and Language in a More-Than-Human World. New York: Vintage Books.

Akjuluk, T. & Erkaeva, N. & Rasmussen, D. & Martusewicz, R. (2020). Stories of Love and Loss. Recommitting to Each Other and the Land. In H. Bai & D. Chang & C. Scott A Book of Ecological Virtues: Living Well in the Anthropocene. University of Regina Press, 233-252.

Armstrong, J. (1995). Keepers of the Earth. In T. Roszak & M. E. Gomes & A. D. Kanner Ecopsychology. Restoring the Earth, Healing the Mind. San Francisco: Sierra Club Books, 316-324.

Bai, H. (2009). Re-animating the universe: Environmental education and philosophical animism. In M. McKenzie, H. Bai, P. Hart & B. Jickling (Eds.), Fields of Green: Restorying Culture, Environment, Education (pp. 135–151). New Jersey: Hampton Press.

Berry, W. (2005). The Way of Ignorance. And Other Essays by Wendell Berry. Shoemaker & Hoard.

Bonnett, M. (2021a). Environmental Consciousness, Nature, and the Philosophy of education. Ecologizing education.

Bonnett, M. (2021b). Environmental Consciousness, Nature, and the Philosophy of education: Some Key Themes. Environmental Education Research 25(1–2).

Bonnett, M. 2016. Environmental Consciousness, Sustainability, and the Character of Philosophy of Education. Studies in Philosophy of Education 36(3).

Bonnett, M. (2019). Towards an Ecologization of Education. Journal of Environmental Education 50(4-6), 251–258.

Bonnett, M. (2009). Systemic Wisdom, The "Selving" of Nature, and Knowledge Transformation: Education for the "Greater Whole". Studies in Philosophy of Education 28, 39-49.

Bommarito, N. (2021). Buddhist Humility. In M. Alfano & M. P. Lynch, & A. Tanesini (Eds.) The Routledge Handbook of Philosophy of Humility. London and New York: Routledge, 236-244.

Cafaro, P. (2015). Environmental Virtue Ethics. In L. Besser-Jones & M. Slote (eds.) The Routledge Companion to Virtue Ethics. Routledge, 427–444.

Fromm, E. (1986). Man for Himself. An Inquiry in Moral Psychology. Ark.

Gerber, L. (2002). Standing humbly before nature. Ethics & environment 7(1), 39–53.

Hatten-Flishner, J. & Martusewicz, R. (2017). Ecofeminism and education. In G. Norbit (ed.) Oxford Research Encyclopedia of Education. Oxford university press.

Hare, R. (1996). The Paradox of Moral Humility. American Philosophical Quaterly 33(2), 235-241

Hewitt, J. P. (2017). The Social Construction of Self-Esteem. In C. R. Snyder & S. J. Lopez & S. C. Marques (eds.) The Oxford Handbook of Positive Psychology, 3rd edition.

Locke, J. (1995). Second Treatise of Government: An Essay Concerning the True Original, Extent, and End of Civil Government (*Tutkielma hallitusvallasta*). Tampere: Vastapaino

MacIntyre, A. (2007). After Virtue: A Study in Moral Theory. 3rd Edition. University of Notre Dame Press.

Margalit, A. (1998). Decent Society. Harvard University Press.

Marglin, S. (2009). The Dismal Science: How Thinking Like an Economist Undermines Community. Oxford University Press.

Martusewicz, R., Edmundson, J. & Lupinacci, J. (2015) EcoJustice Education: Toward Diverse, Democratic, and Sustainable Communities (2nd Edition)

Merchant, C. (1989). The Death of Nature. Women, Ecology, and the Scientific Revolution. San Francisco: Harper & Row Publishers

Nadelhoffer, T. & Wright, J. C. & Echols, M. & Perini, T. & Venezia, K. (2016). Some Varieties of Humility Worth Wanting. Journal of Moral Philosophy, 1-32.

Nietzsche, F. (2007[1887]) The Genealogy of Morals. New York: Boni and Liveright. https://archive.org/details/genealogyofmoral00nietuoft/mode/2up

Peterson, C. & Seligman, M. E. P. (2004). Character Strengths and Virtues. A Handbook and Classification. New York: Oxford University Press

Plumwood, V. (2003). Feminism and the Mastery of Nature. London: Routledge.

Polanyi, K. (2009). Great transformation (Finnish translation: "Suuri murros"). Tampere: Vastapaino.

Pulkki, J. (2021a). Ajatuksia ekoindividuaation kasvatusfilosofiasta. Sosiaalipedagoginen Aikakauskirja 22, 43–62. DOI: 10.30675/sa.90594

Pulkki, J. (2021b). Ekososiaalinen hyve-etiikka. Aikuiskasvatus 41(2), 102–112.

Pulkki, J. (2017). Kilpailun kasvatuksellisista ongelmista. Tampere University Press. https://trepo.tuni.fi/handle/10024/102261

Pulkki, J. (2016). Competitive Education Harms Moral Growth. In M. A. Peters (Ed.) Encyclopedia of Educational Philosophy and Theory. Springer.

Pulkki, J. & Dahlin, B. & Värri, V. M. (2016). Environmental Education as a Lived-Body Practice? A Contemplative Pedagogy Perspective. Journal of Philosophy of Education 15(1), 214-229.

Pulkki, J. & Varpanen, J. & Mullen, J. (2020). Ecosocial Philosophy of Education: Ecologizing the Opinionated Self. Studies in Philosophy and Education 40, 347–364. https://doi.org/10.1007/s11217-020-09748-3

Rasmunssen, D. (2021). Private conversation.

Richards, N. (1998). Is humility a virtue? American philosophical quarterly 25(3), 253–259.

Sandler, R. L. (2013). Environmental Virtue Ethics. In H. Lafollette (Ed.) International Encyclopedia of Ethics. https://doi.org/10.1002/9781444367072.wbiee090 S

Sewall, L. (1995). The Skill of Ecological Perception. In T. Roszak & M. E. Gomes & A. D. Kanner (Eds.) Ecopsychology. Restoring the Earth Healing the Mind. San Francisco: Sierra Club Books, 201-215.

Shiva, V. (1996). Resources. In W. Sachs (ed) Development dictionary. A guide to knowledge as power. Johannesburg, London, New Jersey: Witwaterstrand University Press & Zed books Ltd, 206–218.

Snow, N. E. (2021). Theories of humility. An overview. In M. Alfano & M. P. Lynch & A. Tanesini (eds.) The Routledge handbook of philosophy of humility. London: Routledge.

Tanesini, A. (2018). Arrogance, Anger and Debate. Symposium 5(2), 213–227.

Weber, M. (1946). Essays in Sociology. Translated, edited, and with an introduction by H. H. Gerth and C. Wright Mills. New York: Oxford University Press.

Värri, V. M. (2004). Transsendentin merkitys kasvatuksessa. In R. Jaatinen & P. Kaikkonen & J. Lehtovaara Opettajuudesta ja kielikasvatuksesta. Tampere: Tampere University Press, 15–25.

White Jr, L. (1967). The Historical Root of Our Ecological Crisis. Science 144, 3767, 1203–1207.