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Sustainability, virtue ethics, and the virtue of harmony with nature

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This article argues that the dominant sustainable development approach fails to acknowledge the interconnectedness and interrelatedness of social and environmental issues, and that sustainability requires a 'transformational' approach, involving a fundamental change in how humans relate to each other and to nature. The authors propose that virtue ethics, grounded in Aristotle's *Nicomachean Ethics*, provides a framework with which to tackle such a transformation; to redress the human-nature relationship and help foster a more ecological perspective; to facilitate a more holistic and integrative view of sustainability; and to explore questions of how to live and flourish within a more sustainable world. Beginning with an overview of virtue ethics and critique of current approaches in environmental virtue ethics, this article proposes a new virtue, 'harmony with nature', that addresses the interconnectedness of our relationship with nature. This is followed by a proposal for the re-visioning of human flourishing as being necessarily situated within nature. The article concludes with some of the implications of a virtue ethics approach to sustainability, and the new virtue, for both sustainability education and moral education.

Keywords: sustainability; environmental virtue ethics; sustainability education; education for sustainable development, character education

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Introduction

Over the course of the UN Decade of Education for Sustainable Development (DESD 2005-2014), there has been a swell in Education for Sustainable Development (ESD) initiatives, programmes and practices (see UNESCO 2016). However, it has been argued that the majority of ESD approaches fail to adequately address the key issue of the human-nature relationship, of humanity's place in the world in relation to nature, or to tackle questions regarding human flourishing as situated within the larger ecological system (see Bonnett 2007, 707-709). Linked to these criticisms are arguments that ESD has failed to sufficiently challenge the reductionist worldview and instrumental view of nature advocated by the prevailing neoliberal capitalist agenda (Kretz 2014; Huckle and Wals 2015; Sterling 2001).

Sustainable development is a highly contested concept with differing definitions and opinions regarding what is to be sustained e.g. ecosystems, natural resources, or culture; and what is to be developed e.g. equity, economic wealth, or social justice (Kates, Parris and Leiserowitz 2005; see also Hopwood, Mellor and O'Brian 2005; Bonnett 2004). It can also be defined through goals, indicators, values or practice, or a combination thereof (Kates, Parris and Leiserowitz 2005).

To provide an overview of approaches, Hopwood, Mellor and O'Brian (2005) classified the range of views within the sustainable development debate according to 'three broad views on the nature of the changes necessary in society's political and economic structures and human-environment relationships to achieve sustainable development' (Hopwood, Mellor and O'Brian 2005, 12):

- Supporters of the 'status quo' approach hold lower levels of concern for human wellbeing and equality, and the environment than the other approaches. They believe that sustainable development can be achieved within present social and economic structures and that 'adjustments can be made without any fundamental changes to society' (Hopwood, Mellor and O'Brian 2005, 13). Development is identified with economic growth. 'It is assumed that the existing governmental and commercial systems can be nudged towards improvements with use of management techniques such as EIA (Environmental Impact Assessment)...or cost/benefit analysis' (15). Examples include Forum for the Future, EU policy.
- Those who take the 'reform' approach hold mid-levels of concern for equality and the environment compared to the other approaches. They recognise that sustainable development requires major reform of present social and economic structures, but 'they generally do not locate the root of the problem in the nature of present society, but in imbalances and a lack of knowledge and information' (Hopwood, Mellor and O'Brian 2005, 16). Reformers focus on 'technology, good science and information, modifications to the market and reform of government' (17). Examples include 'Green economists' and the 'Brundtland report'.
- Those that argue for a 'transformation' approach hold high levels of concern for both equality and the environment. Supports of this approach 'see mounting problems in the environment and society as rooted in fundamental features of society today and

how humans interrelate and relate with the environment' (Hopwood, Mellor and O'Brian 2005, 21). 'Reform is not enough as many of the problems are viewed as being located within the very economic and power structures of society because they are not primarily concerned with human well-being or environmental sustainability' (ibid). Examples include ecofeminists, ecosocialists, and the indigenous/Zapatista uprising in Chiapas, Mexico.

At present the sustainable development discourse, and subsequent policy, is dominated by the status quo view and in many cases has been used to justify 'business as usual' (Hopwood, Mellor and O'Brian 2005; see also Ehrenfeld 2005). Bonnett argues that 'Brundtland-type'[1] sustainable development approaches 'reflect highly anthropocentric and economic motives that lead to nature being seen as essentially a *resource*, an object to be...exploited' (2007, 710). Hopwood, Mellor and O'Brian (2005, 31) conclude that the status quo approach is inadequate to address sustainable development, as it facilitates 'trade-offs' between environmental and social issues, and thus perpetuates a flawed 'conceptual divide between the environment and humanity' (see also Molles 2010) that fails to acknowledge 'that humanity is dependent on the environment, with society existing within, and dependent on, the environment and the economy exists within society' (Hopwood, Mellor and O'Brian 2005, 29).

Ehrenfeld (2005, 23) argues that thus far 'virtually all efforts to produce sustainable development have been little more than Band-Aids' that fail to address the root causes of environmental degradation and social inequality. Bonnett refers to these root causes as 'underlying motives...that are inherent in our most fundamental ways of thinking about ourselves and the world' (2004, 135), such as a sense of mastery over nature and the false assumption 'that we can somehow 'manage' nature on an increasingly grand scale' (2007, 711; see also Orr, 2004).

Sterling (2001, 23) comments that 'arguably, the root of the 'world problematique' lies in a crisis of perception; of the way we see the world' (see also Orr, 2004). The dominant mechanistic and instrumentalist worldview, which divides the world into humans/nature, local/global, present/future, cause/effect and categorize issues as either 'environmental', 'social', or 'economic' 'belies the essentially unbroken nature of reality' (Sterling 2001, 16; see also Warren 1990/2001). Similarly, Ehrenfeld (2005, 24) argues that the causes of our 'unsustainability' stem from values and beliefs based on a mechanistic view of the world that fails to acknowledge that 'we are clearly part of an interconnected and interdependent system'. Sterling (2001) explains that there needs to be a shift from a dualistic, reductive, mechanistic worldview to an ecological worldview that 'emphasises relationship' (16), and is 'integrative, holistic, systemic, and connective' (23).

Ehrenfeld and Hoffman (2013, 4) state 'sustainability takes a movement to re-examine who we are, why we are here, and how we are connected to everything around us...any change that is short of that scale will not solve the problems we face'. In short, sustainable

development requires a transformational approach, involving a fundamental change in how humans relate to each other and to the environment (Hopwood, Mellor and O'Brian 2005).

How to facilitate such a transformation? This article will argue that virtue ethics, harking back to Aristotle's *Nicomachean Ethics*, is an ideal framework with which to tackle such a transformation; to redress the human-nature relationship and help foster a more ecological perspective; to facilitate a more holistic and integrative view of sustainability[2]; and to explore questions of how to live and flourish within a more sustainable world.

While by no means the first article to take a virtue ethical approach to sustainability (see e.g. Sandler 2006; Hursthouse 2007; Chen 2012; York and Becker 2012; Norton and Thompson 2014; Treanor 2014), it will be argued below that previous attempts at giving sustainability a virtue ethical grounding have either failed to fully address the underlying basis of our unsustainability, that is, a human-nature relationship and worldview, which fails to encompass interconnectedness and the interrelatedness of environmental and social issues; or they have not extended the implications of such a conception to include a more holistic view of human flourishing as necessarily situated within nature. The implications of these arguments for both the concept of environmental virtue and the concept of human flourishing will be addressed.

Beginning with a brief overview of virtue ethics, the advantages of a virtue ethical approach to sustainability are then explained in more detail and in comparison to deontology and consequentialism in particular. A particular reference is made to the capacity of virtue ethics to adjudicate complex problems with the aid of the integrative meta-virtue of *phronesis*. The limitations of existing approaches to environmental virtue ethics (EVE) are then discussed in the section 'Environmental Virtue Ethics', before the article proposes a new virtue, 'harmony with nature', that addresses our relationship with nature and encompasses the idea of holistic thinking. This discussion is, then, followed in the section 'Human flourishing in harmony with nature', by a proposal for the re-visioning of human flourishing as being necessarily situated within ecological limits. The article concludes in the section 'Fostering harmony with nature – virtue ethics and sustainability education' with an exploration of some of the ramifications of the new virtue for education, in general, and both character education and sustainability education, in particular. At the end of the article, it is hoped that readers will have grasped the relevance of a virtue ethical approach to sustainability that offers a novel take on moral theoretical issues that have so far, in our view, not been addressed satisfactorily in the sustainability literature.

The uniqueness of virtue ethics

Before explaining the need for adding a 'new' virtue to traditional virtue ethical repertoires, it will be instructive to briefly rehearse some of the standard features of a virtue ethical approach to moral theory.

Ethics is concerned with the morality of human conduct and character, and moral theories typically offer us both an account of moral value and so-called normative ethics as

methods of determining a moral course of acting and being. Virtue ethics is one of the three main current approaches to normative ethics, the other two being deontology (e.g. Kantianism), emphasising rules and duties, and consequentialism, emphasising beneficial outcomes, which in the case of the most common consequentialist theory, utilitarianism, is the maximisation of wellbeing (understood either subjectively, objectively or both) (Hursthouse 1999). Virtue ethics, in contrast, approaches the morality of human conduct by emphasising the virtues needed for the development of moral character. The virtues (*aretē*) are seen as multi-component traits of character, and good character is in turn seen as constitutive of – rather than simply conducive to – human flourishing (Aristotle 1985, 44 [1106b15-1107a5], 19 [1098b20-25]).

In the *Nicomachean Ethics*, Aristotle proposes a theory of happiness (*eudaimonia*) – which is better translated as 'human flourishing' since it implies more than mere contentment or pleasure (see for example Foot 2001) – as the ultimate good and ultimate end or goal (*telos*) of human beings (Kristjánsson 2007). Irwin (1999, xvi) explains:

> In Aristotle's view, rational agents necessarily choose and deliberate with a view to their ultimate good, which is happiness; it is the ultimate end, since we want it for its own sake, and we want other things for its sake.

By ultimate end or goal, Aristotle meant that although we may aim for other ends, these ends are sought in the pursuit of our flourishing.

Aristotle then sought to explain in detail what human flourishing consists of. He argued that *eudaimonia* is 'the soul's activity that expresses virtue' (Aristotle 1985, 17 [1098a12–16]). In simple terms, human flourishing entails human activity - including our actions as well as our reasoning and our feelings, desires and impulses - that expresses excellence (virtue) (MacIntyre 1998/2002; Irwin 1985). Aristotle divides the virtues into the intellectual virtues (specifically to do with reasoning and thinking) such as wisdom and prudence (*phronesis*), and the moral virtues (activities other than reasoning) such as temperance or courage (MacIntyre 1998/2002). As such 'Aristotle's *eudaimonia* is a moralized notion; it is impossible to achieve *eudaimonia* without being morally good – without actualizing the moral virtues' (Kristjánsson 2007, 15).

Let us now explore in more detail what the virtues are. Examples of virtues are honesty, compassion and justice – terms we are all familiar with. However, laypeople's typical usage and meaning are likely to differ somewhat from that of virtue ethics. A virtue, on the academic understanding, does not only refer to actions, for instance the act (or action tendency) of being honest. A sense of the deeper meaning of virtue, upheld by virtue ethics, is preserved in the familiar phrase 'patience is a virtue'. When using this phrase, we are not just saying 'you should be patient', we are also implying that patience is something inherently 'good', and even that it is something that needs to be experienced, practiced, and takes effort. The nature of the virtue of patience thus entails not just the act of being patient, but also the prototypical thinking and perception associated with patience, and the feelings, emotions, and

reactions associated with it. In other words, the virtue of patience is comprised of various components, forming a dispositional cluster, such as that of perceiving the need for patience, experiencing patience or 'feeling' it on a regular basis, as well as acting patiently and conducting one's life in a patient manner – indicating a stable and robust underlying trait of character. As Hursthouse explains it, virtue is concerned 'with emotions and emotional reactions, choices, values, desires, perceptions, attitudes, interests, expectations and sensibilities. To possess a virtue is to be a certain sort of person with a certain complex mindset' (Hursthouse 2012, 1). Or to put it in Aristotle's own terms, the virtuous person perceives, feels and does the right things consistently at the right times, for the right reasons and in the right proportion, neither excessively nor deficiently (Aristotle 1985, 44 [1106b21-29]).

A characteristic feature of virtue ethics – as distinct from standard deontological and consequentialist theories – is its essential developmental and educational focus. For Aristotle, knowing what is good is ethically useless unless it is put into action, and it will not be put into action unless the agent has received sustained training in doing so (Aristotle 1985, 40 [1105b5-15]). More precisely, regarding moral inquiry in general, its purpose 'is not to know what virtue is, but to become good, since otherwise the inquiry would be of no benefit to us' (Aristotle 1985, 35 [1103b27–29]). Virtue ethics is thus as much about development towards virtue as it is about virtue itself, and character education – the educational incarnation of virtue ethics – is an integral part of the underlying moral theory rather than a contingent application of it.

As 'patience is a virtue' implies, to be virtuous is an on-going endeavour; it is a way of acting, thinking and feeling – or, more adequately put, a way of being that is gradually being developed through the purposeful cultivation and maintained practice of the virtue. It is precisely this way of *coming to be* a certain kind of person – within the constraints of one's personal and social circumstance – that enables human flourishing and the good life, according to a virtue ethical model.

When exploring the concept of virtue, Aristotle relates the virtues to the vices in order to provide guidance for action and feeling (Aristotle 1985, 36 [1104a12-27]). Although often thought of as the diametrical opposites of the virtues, the vices are more accurately described, in a virtue ethical model, as being 'excesses' or 'deficiencies' in virtue. For example, if courage is a virtue, then cowardice will be the 'deficient vice' and 'foolhardiness' or 'rashness' the 'excessive' vice (Aristotle 1985, 36 [1104a19-23]). The virtue of courage can thus be seen as the 'golden mean' between the two vices, though in reality virtues may often not be exactly at the centre between two extremes (Aristotle 1985, 50 [1109a1-10]). For example, the virtue of honesty may be closer to 'rigid honesty' (insisting on telling the truth even when it can cause harm) than 'dishonesty'[2].

Another important feature of virtue ethics is its reliance on the intellectual virtue of *phronesis* – which can be translated as 'practical wisdom' or 'prudence' or simply thought of as 'good sense' – to adjudicate potential virtue conflicts. Practical wisdom allows us to determine the 'golden mean' in particular circumstances, and it guides us in particular when

we are faced with difficult, complex or entirely new dilemmas (Aristotle 1985, 148-172 [1138b20-1145a13], in particular 153-155 [1140a25-1140b25]). Such dilemmas may, for example, involve the conflicting demands of virtues such as justice and compassion. Practical wisdom enables us to determine what the right reaction or action is in the particular circumstances, and in accordance with the path towards human flourishing (Aristotle 1985, 154 [1140b4-6], see also Hursthouse 2012). Practical wisdom, as the name suggests, is something that comes with experience, although it is also informed by the general theory of what flourishing consists in. More will be said about *phronesis* in the context of environmental virtue ethics (EVE) in the sections 'Environmental Virtue Ethics' and 'Human flourishing in harmony with nature', where the overarching idea of human flourishing will also be subjected to scrutiny.

Advantages of a virtue ethics approach to sustainability

It is beyond the scope of this article to provide a thorough comparison of the virtue ethical approach to the environment with those of deontology and consequentialism, especially since that has already been achieved elsewhere.[4] We wish, however, to highlight the major advantages of a virtue ethics approach to sustainability specifically.

Firstly, virtue ethics is better placed to consider sustainability as a *way of life*, a concept related to flourishing, and to situate our fundamental relationship with nature within that concept of flourishing. Treanor states that:

> Our various environmental crises are material and ecological, and they are economic and political, but they are also existential and ethical. They are about what it means to live as a human – understanding our place, possibilities, and limitations – in the world we've been given, along with all the other beings that inhabit it. (Treanor 2014, 19-20)

A virtue ethics approach entails an outlook that asks questions about what it means to live well. By considering what constitutes human flourishing or the good life, and asking how humans should live accordingly, virtue ethics and its subfield of EVE are well placed to address sustainability as a concept, a developing moral aspiration and a way of living. Bonnett (2002, 12) asks:

> What constitutes a right relationship with nature? What should be our basic stance towards the natural environment? ...[T]his not only raises a set of questions about basic understandings of, and motives towards, nature, but also about human identity and flourishing which are also, of course, implicit in any proper understanding of sustainable development.

Bonnett (2007, 720) further argues that by characterizing, and developing in life, what should count as a right relationship with nature, a fuller understanding of what truly should count as human flourishing is thus also developed.

Deontology and consequentialism aim to provide practical moral guidance through either rules, in the case of the former, or trying to maximise good consequences, for example wellbeing, in the case of the latter. The overall focus is on creating guidelines for *right action*, rather than developing a sense of what constitutes human flourishing (Hursthouse 2012). Although deontological and consequentialist approaches would consider sustainable actions in terms of what is 'right' or what would maximise wellbeing, the deeper, more fundamental questions of human existence on earth, in terms of how and what it means to flourish within the wider ecological environment are not a central concern.

Secondly, sustainability can be seen as 'a positive and enriching element of human life... not a restriction but a natural part of personal development and happiness' (York and Becker 2012, 6). Similarly, Treanor (2014, 22) states:

> ...virtue ethics frames environmentalism in terms of flourishing rather than sacrifice and in doing so makes many of the necessary behavioural changes attractive rather than onerous.

As we explained in the previous section, according to virtue ethics, the practice of the virtues constitutes human flourishing (*eudaimonia*). By striving to live a virtuous life, people are treading the path towards wellbeing and a flourishing life. For Aristotle, virtuous activity 'is not only conducive to an independently sought end of *eudaimonia*, but is part of that end' (Kristjánsson 2013, 179). Because virtuous activity can be viewed as 'the actualisation of our true '*ergon*' or functional essence as human beings' (ibid), it contributes to a sense of contentment and fulfilment through feelings which nowadays are characterized as 'flow' (see Kristjánsson 2013, 177-181; cf Aristotle 1985, 287 [1178a5–7]). Within a virtue ethical framework, sustainability can thus be viewed as a means to flourish as a human being, rather than be seen as a set of restrictive or prohibitive regulations. We will return to the idea of human flourishing below in the section 'Human flourishing in harmony with nature'.

Thirdly, virtue ethic theory which suggests that a more deliberate and conscious attention to virtues throughout everyday life will lead to more virtuous behaviour may link to a growing body of research in social psychology supporting the theory that values are not only abstract ideals but also motivators that shape people's thoughts and attitudes, as well as guide their actions and behaviour in certain distinct ways (see Schwartz et al. 2012). There appear to be notable similarities between Schwartz's (1994, 21) definition of values and the virtues. The fact that values are considered trans-situational, they act as guiding principles, they can motivate action – 'giving it direction and emotional intensity' – and that they function as standards for both judging and justifying action, corresponds well to the different components of virtues. Intrinsic values, values that possess inherent worth, such as honesty, compassion, loyalty, forgiveness, justice, equality, true friendship, etc., bear a strong resemblance to the virtues. Prioritising intrinsic values appears to have a notable effect on people's attitudes and behaviours related to social and environmental issues, for example people who prioritise intrinsic values have been found to exhibit more ecological attitudes and behaviours (Kasser 2011).

This interplay between philosophical theory and psychological evidence notwithstanding, it must be acknowledged that values are different constructs to virtues. Most psychologists remain shy of virtue talk, as virtues are generally not considered to fall within the purview of psychology. However, this may be beginning to change however, as both fields gain ground and cross-fertilisation between them increases, for example there is a *Virtue Ethics and Value Instantiation* research project currently running at Cardiff University (see also Fowers 2005).

Fourthly, virtue ethics provides a framework to deal with a myriad of sustainability issues. Since virtues are trans-situational, being applicable across vastly different situations, they are easily adapted to new areas of experience, such as environmental or sustainability issues. Many of the principles considered integral to sustainability, such as equality, freedom, justice, compassion, and non-violence are already considered virtues, and promoted in virtue ethics, or character education.

Environmental virtue ethics (EVE), a subset of virtue ethics, has typically proposed the application of traditional virtues, such as compassion, temperance, and benevolence, to environmental and sustainability issues. Deontology and consequentialism are far more rigid, and application to new areas such as the environment often requires extensive exploration into, for example, what duties humans have towards different natural elements, or whether their environmental wellbeing (however that may be defined) should be considered within the rubric of 'utility' or not. The fluidity of Aristotelian virtue ethics also means that the virtues can be applied in vastly different contexts – something that links to the placed-based, context-specific nature of sustainability. The very nature of sustainability means that in practice it will vary with location and time. Each individual and society will need to determine how to balance the conflicting needs, as well as the conflicting virtues, specific to their local society and environment. However, unlike the feminist related ethic of care approach (we refer here to the stand alone approach rather than as a emphasis within virtue ethics), which seeks to foster relationships of care, virtue ethics still provides a normative framework, in other words definite virtues specific to spheres of experience, as well as acknowledging and seeking to address virtue conflict and complexity of issues through the meta-virtue of *phronesis* or practical wisdom.

Fifthly, *phronesis* or practical wisdom (see the section 'The uniqueness of virtue ethics' above) is essential when it comes to adjudicating the novel and complex problems presented by sustainability. Virtue ethics is often criticised for not providing definite rules to guide behaviour. However, in the field of sustainability, and arguably in the complexity of life generally where multiple-competing needs and 'wicked'[5] problems are commonplace, universal rules are often unable to reflect the intricacy of the issues. Rules can be useful in terms of acting as moral deliberation shortcuts in simple cases, but they are problematic when dealing with complex issues. Utilitarianism in particular is highly problematic when it comes to sustainability, since consequences can often be extended to future generations, or across large expanses of land, making it extremely difficult to determine exactly what action would maximise future wellbeing (and *whose* wellbeing). Additionally, the intractable debate of

whether animals, all livings things, or ecosystems fall under the remit of utility continues. Acknowledging the complexity of many environmental issues, Treanor (2014, 12) states:

> ...any contemporary ethic that takes seriously environmental issues is forced to concede that complex, difficult, and novel ethical dilemmas are precisely the sorts of situations with which we will be increasingly confronted as phenomena like climate change and peak oil play out.

As explained in the section 'The uniqueness of virtue ethics' above, *phronesis* is the practical wisdom gained through experience that ideally allows a moral agent to determine the virtuous action or reaction, particularly when faced with a complex or novel situation. Although based on experience, *phronesis* is inevitably informed by the concept of flourishing, which we will return to in the section 'Human flourishing in harmony with nature' below.

Sixthly, the education, cultivation and maintained practice of virtue are integral to virtue ethics, as explained above. York and Becker (2012, 7) argue that:

> ... sustainability is not just a question of proper theoretical knowledge (e.g. scientific knowledge about the mechanisms of certain ecosystems), but also a question of proper action, and that there is a gap between both. Theoretical knowledge may be an important prerequisite, but it will not directly result in motivation to act properly and in accordance with this knowledge. From a virtue ethics perspective, proper action requires the cultivation of respective virtues...

Virtue ethics acknowledges that knowledge of the virtues alone (or what we could call mere 'virtue literacy') does not necessarily result in a person acting, reacting, thinking or perceiving in a virtuous way. People's concerns are often not reflected in their actions – rational thought alone is a poor predictor of behaviour (Narvaez 2014). Whereas deontological and consequentialist approaches rely primarily upon rational thought to determine behaviour, virtue ethics provides a framework with which to purposefully develop more psychologically deep-rooted affective characteristics that are conducive to flourishing. As such, virtue ethics acknowledges that developing the virtues, and therefore producing change at both the individual and societal level through emotional sensitisation, takes time and practice. The development over time of the multiple components of virtue – reasoning, perception, emotion and action – constitute the motivation for, and the habit of, virtuous action (In relation to the importance of emotion see Narvaez 2014; Hursthouse 1999).

As discussed above, *phronesis* is an essential part of virtue ethics, and therefore development of practical wisdom is as much a part of an education in the virtues as cultivation of the virtues themselves – the two in fact are inextricably linked. The ability to learn from experience and to apply that experience in new and unique situations is an essential component of any education for sustainability. Similarly, the ability of individuals and societies to consider, and their practice of asking, fundamental questions regarding humanity's existence, and means of flourishing, within the wider ecological system will become more necessary as sustainability issues mount. These integral elements of virtue

ethics clearly link to the on-going sustainability debate and the 'excellences' needed to address sustainability issues.

Regarding the human-nature relationship, virtue ethics, being also concerned with feelings, is better placed than deontological or consequentialist approaches to tackle the issue of a more affective-based connection to nature and encouragement of a less anthropocentric view (Carr 2004; see also Cafaro 2001). The fostering of a deep connection with nature indicates a change in character rather than principle (Carr 2004, 225). More will be said on the importance of emotions in relation to nature in the following sections.

We will now address the subfield of virtue ethics, environmental virtue ethics, and argue that, thus far, it has failed to adequately address the interrelatedness of environmental and social issues.

Environmental Virtue Ethics (EVE)

Around the turn of the millennium, Environment Virtue Ethics (EVE), a subfield of virtue ethics, began to take shape as an alternative means of addressing environmental issues through the cultivation of virtues relating to the environment.[6] As outlined by Hursthouse (2007, 155), EVE proposes the application of traditional virtues such as compassion, temperance, benevolence, etc., to the 'new field of our relations with nature' (see also Sandler 2006). Additionally, there have been arguments made for the creation of new virtues that deal explicitly with our relationship with nature, e.g. Hursthouse's (2007) 'being rightly oriented to nature', York and Becker's (2012) 'attentiveness', 'respect for' and 'care of' nature, and Treanor's (2014) outlining of 'simplicity'.

However, thus far EVE has failed to adequately address the interrelatedness of environmental and social issues. In this sense, although many approaches encourage a high level of concern for the environment, they fail to promote a truly 'transformatory approach' to sustainability, since they do not explicitly connect environmental issues with social issues (Hopwood, Mellor and O'Brian, 2005). In that sense, a core insight of Aristotelian virtue theory – that virtues are not isolated and domain-specific but 'hunt in packs' – is lost.

Many environmental virtue ethicists are well aware of the interrelatedness of issues, for example Sandler (2006, 259) links peace and opposition to violent conflict to environmental issues:

> ... since warfare and violent conflict compromise the availability of basic environmental goods. They often involve the destruction of wilderness, wildlife and agricultural lands...Growing sources of international and intranational tensions are scarce environmental resources and environmental refugees.

However, despite this realisation, Sandler (2006) creates a 'typology of environmental virtue' whereby virtues are categorised according to whether they apply to the 'environmental

sphere'. Sandler reframes familiar virtues, such as frugality, compassion, and humility, within an environmental context. Using this approach, a human characteristic (or virtue) can be categorised as an environmental virtue due to a variety of different reasons or outcomes, for example, because it leads to the maintenance of a healthy environment, or because it facilitates a beneficial relationship with an environmental entity. The problem here is that the spheres of environment and society are still considered somewhat independent – certain virtues apply to the environmental sphere, but others, presumably, do not. This approach fails to depict society, and indeed individuals, as existing as a nested system (Capra 2005; Sterling 2001) within the environment, whereby individual virtues are enacted within the larger sphere of society and in turn the larger sphere of the environment (see Nuyen 2008 in relation to Confucian ethics, who asserts 'the social is embedded in the natural' (195)).

Similarly, although Treanor (2014, 55) explains:

'...consider the three broad areas of ethical concern: the self, others, and the environment. Although we can distinguish between individual virtues, social virtues, and environmental virtues – or individual flourishing, social flourishing, and environmental flourishing – doing so can only be accomplished by an abstraction that is illusory and potentially misleading. In reality – that is, in the context of actual lived human lives – all three of these areas are intimately related and intertwined'.

In *Emplotting Virtue: A Narrative Approach to Environmental Virtue Ethics*, he offers an alternative typology of virtue that categorises virtues as contributing to predominantly individual, societal or environmental flourishing. Treanor's examples of individual, societal and environmental virtues are temperance, courtesy, and holistic thinking respectively. Those familiar with sustainability models will recognise the similarities between Treanor's model of virtue, with the overlapping circle (or spheres) of individual, societal and environmental flourishing, and the model of what is now considered 'weak' sustainability – which is promoted by the status quo approach to sustainability - whereby economic, societal, and environmental sustainability are represented by overlapping circles (Hopwood, Mellor and O'Brian 2005). The problem with both these models is that they fail to acknowledge that the individual exists within society, and society exists within the environment (ibid). This is represented in the 'strong' model of sustainability, which depicts concentric circles, or 'nesting systems' with the economy nested within society, and society nested within the environment. This is the model aligned with a transformatory approach to sustainability. Sterling argues that 'Socio-economic systems must be regarded as subsystems of the encompassing biophysical system' (2001, 32).

Both Treanor and Sandler separate out traditional and new virtues into different spheres, or categories. But we would argue that such separation is part of what the concept of sustainability is trying to correct as misleading or even arbitrary. All spheres interact, either directly or indirectly. Social issues impact on the environment, individual issues impact on both society and the environment, and the environment impacts both individuals and society. Social breakdown leads to environmental destruction, for example in war, or due to a lack of resource management; and lack of environmental health leads to social unrest, for example a lack of water or food often leads to social instability. Individuals and their interactions are

situated within these dynamic systems, and seemingly unrelated actions and reactions can, particularly collectively, impact on the other spheres.

Treanor (2014) later argues that it is helpful to think of the spheres of application when confronted with moral dilemmas, and that the limited inclusion of environmental issues in virtue ethics, particularly within academia, warrants a specific, separate, focus (56-57). Clearly a focus on environmental issues in virtue ethics is to be encouraged, however the separation of environmental virtues and flourishing from individual and societal virtues and flourishing runs the risk of reinforcing the dominant, non-holistic view of sustainability, and fails to offer a truly transformatory approach.

Additionally, if EVE is to become more than just a fortuitous application of virtue ethics in a separate, limited sphere (such as, say, virtue ethics within engineering), and is to become an essential component of the general virtue ethics approach itself, then it needs to take a more explicitly holistic approach to both sustainability and virtue ethics.

In many ways, these criticisms parallel those made by ecofeminism against the deep ecology movement. While the deep ecology approach offers a profound change in the humanity-nature relationship, calling for a recognition of the intrinsic value or inherent worth of non-human nature (Naess 1989/2001), it has been criticised for failing to adequately address 'the connections between environmental issues and problems and human social and political reality, or the "social" sources of "ecological" realities' (Cuomo 1998/2001, 77). Similarly, while Hopwood, Mellor and O'Brian (2005, 22) consider deep ecology transformatory, in that it is highly ecocentric and advocates a fundamental change in how humans relate to the environment, they do not consider it a transformatory approach to *sustainable development* since, as an approach, it is primarily concerned with the environment, and social and equality issues are only briefly mentioned. From a virtue ethical perspective, this approach neglects the essential 'unity of the virtues': that virtues are instruments in the same 'orchestra' where *phronesis* is the conductor (Irwin 1999, 254).

EVE, and subsequently any virtue in relation to the human-nature relationship, needs to explicitly acknowledge that the environment and society are interrelated, and adhere to a nested system model of sustainability – thus offering a transformatory approach. As stated in the introduction, this will require a change in perception and worldview.

A new way of thinking

With the above in mind, we wish to propose a new virtue, 'harmony with nature', that directly concerns the human-nature relationship, but that also aims to foster a 'new way of seeing the world and thinking – in terms of relationships, connectedness, and context' (Capra 2005); an ecological way of thinking that is holistic, systemic, and connective (Sterling 2001). We consider this suggestion to be fully in line with Aristotle's own flexible specification of virtue as any medial dispositional reaction, contributing to human flourishing, occurring in a salient, unique domain of human affairs. New circumstances can create new 'salient, unique' domains of this sort; in this case the unprecedented strain put on nature in today's world.

The new virtue, harmony with nature, builds upon Hursthouse's (2007) proposed virtue of 'being rightly oriented to nature', as well as drawing from the field of ecofeminism. In the following section, we will outline Hursthouse's virtue, before we demonstrate how the new virtue expands upon this to incorporate ideas from ecofeminism and sustainability, such as holistic thinking.

'Being rightly oriented to nature'

Hursthouse (2007) proffers the virtue of 'being rightly oriented to nature', drawing on Paul W. Taylor's (1981/2001) 'respect for nature', which involves sharing a common bond with nature and recognition that humans are members of earth's interconnected web, or community, of life. Hursthouse argues that such an attitude must be recognised in virtue ethical terms since acquiring such a disposition towards nature 'would involve a radical change in one's emotions and perceptions and one's whole way of perceiving and responding to the world, of one's reasons for action and thereby actions' (2007, 163), and as such cannot simply be adopted through a rational process, or simply developed as an add-on to existing virtues, but must be cultivated and habituated as a unique virtue 'beginning in childhood and continued through self-improvement' (2007, 164). She describes how teaching a child to understand, appreciate, care for, and feel wonder for nature begins to shape a particular mindset relating to the natural world (Hursthouse, 2007, 164-165).

She suggests that 'being rightly oriented towards nature' involves an:

...indefinite range of reasons taught for responding, in the broadest sense, to nature, in certain ways. These include, at least, wondering at, looking hard at, finding out more about, rejoicing in, understanding why other people spend their whole lives studying, being anxious to preserve, not dismissing or ignoring or destroying or forgetting or assuming one can always put a price on...everything in the natural world. (Hursthouse 2007, 167)

We wish to draw attention in particular to Hursthouses's mention of wonder, as we feel this is an important component of the human-nature relationship. Wonder and awe are often associated with the realisation or sense of being part of something larger. Awe has been found to involve a 'sense of selfhood as less separate and more interrelated to the larger context of existence' (Bonner and Friedman 2011, 224). It involves awareness of both vastness (complexity and infinity) and connectedness (ibid). Ivanhoe (1997) explored awe in relation to nature and concluded that the humility produced as a result of wonder counteracts human arrogance towards nature, and warns against the objectification and disenchantment of the world. He also proposed that the feeling of oneness with nature, namely the belief in being part of the larger ecosystem of the earth, helps humans avoid irrational and damaging behaviours, such as ecosystem destruction, as well as offering aesthetic and satisfying feelings (Ivanhoe 1997, 114).

Hursthouse considered wonder such an important component of the human-nature relationship, that she considered '...being rightly disposed with respect to wonder – i.e. being

disposed to feel wonder the right way, towards the right objects, for the right reasons, to the right degree, on the right occasions, in the right manner, and to act accordingly' (2007, 162) – could itself count as a virtue. Carson (1965/1998) had previously argued humanity needed to contemplate nature and know a sense of wonder and humility. She urged adults to nurture the childhood sense of fascination and wonder for nature, and that the development of 'feelings' in children is in fact more important than teaching facts, since a sense of wonder would motivate a child to want to learn. However, as Hursthouse admits, wonder is not uniquely concerned with nature, and so she went on to propose the virtue of 'being rightly oriented to nature' that 'incorporates just that part of right wondering which is concerned with recognising the wonders of nature' (2007, 162).

Feelings of awe and wonder are an essential component of any virtue addressing the human-nature relationship. Wonder of the natural world is not only associated with feelings of aesthetic appreciation, rejuvenation, fascination or delight, but as described above, involves being part of something larger than the self, a sense of being part of a complex ecosystem. These emotional elements are integral to the motivational aspects of virtues.

Hursthouse's virtue of 'being rightly oriented towards nature' reflects the myriad aspects of a virtue dealing with the human-nature relationship. This is perhaps why Sandler and Treanor took a category approach. However, it is not uncommon for virtues to be complex. Take justice for example. Justice involves a sense of fairness, the ideas of retribution, dignity and rehabilitation; it involves other virtues such as a sense of deservingness and compassion; as well as the emotions of righteous indignation and anger. In practice, justice in today's world involves in depth knowledge and consideration of a great deal of information. The virtues are developed over time, through purposeful cultivation and habituation. Therefore, their complexity and nuance is learned and developed through life experience, which itself is complex.

We now wish to go about expanding Hursthouse's virtue to include 'holistic thinking' and to accentuate the idea of 'dynamism'. In doing so, we wish to emphasise a holistic and encompassing view of the human-nature relationship, as enacted through individuals and societies, as well as link to the ideas in (living) systems thinking, which Capra (2005, 22) described as 'sustainability in the language of nature'.

The virtue of 'harmony with nature'

To recap, we have argued against EVE accounts that consider virtues to occupy certain discrete spheres. While being logically grounded in a certain domain of human experience, the virtue that we propose to call 'harmony with nature' ideally traverses and encompasses all personal, social and political spheres. Moreover, it involves a broad mindset: a certain way of construing ourselves and the world in which we live.

A virtue that concerns the human-nature relationship must involve an awareness that we, as individuals, exist within a functioning society that exists within nature. We must be aware of the extent of such a relationship. A sustainable relationship with nature involves not

just the recognition that we are part of a larger ecosystem, but also a deeper, more complex understanding that nature is inextricably linked to society as a whole, as well as to individuals. A virtue concerning our relationship with nature needs to include the perception and reasoning that nature encompasses all of society, and therefore permeates all aspects of our lives. This realisation and awareness is crucial to sustainability.

Ecofeminism - which likens the 'mastery' approach to the environment (see also Bonnett 2007) to the suppression of women and other minorities - emphasises relationship, connection, and interdependence, and affirms that humans are members of an ecological community, but are also separate entities in some respects (Warren 1990/2001; Plumwood 1991). Kretz (2009) talks of 'open continuity', whereby human identity or self-concept is very much intact, but also acknowledges that 'we are situated in ecologically relevant wholes of which we are a part' (131).

Ecofeminism stresses the need to view environmental issues in relation to social structures and social inequalities. Cuomo (2005, 205) argues that many environmental issues, such as global warming:

> ...involve not just human chauvinism, but the relationship among very complex and specific social and ecological phenomena (such as capitalism and science). But nature-centred views that understand humans to be an undifferentiated species, and that therefore focus only on questions about how and why 'humans' do not adequately 'value' nature, cannot ask key questions about the relationships among complex eco-social histories or institutions.

Similarly, many indigenous cultures, for example the Kichwas of Ecuador, incorporate the concept of the individual being part of the community, with that community being both human society and the environment. More will be said about these cultural approaches in the following section on flourishing.

Treanor (2014, 60) describes the importance of holistic thinking, commenting that it 'implies the recognition of interconnectedness and interdependence'. Sterling (2001) argues that the current, dominant way of thinking in Western industrial countries is mechanistic and reductionist – we are more concerned with how individual parts of a system work than with how they function together as a whole. In relation to sustainability, Sterling explains that, conversely, thinking in terms of the whole system involves 'widening and deepening our boundaries of concern'; recognising 'broader contexts in time and space' and including ''the other' in our thinking and transactions' be that neighbour, community, distant environments and peoples, non-human species or the needs of future generations (Sterling 2001, 53). Sterling (ibid) also explains that people need 'the disposition and ability to recognise and understand links and patterns of influence between seemingly disparate factors in all areas of life' and the 'disposition and capability to think and act integratively and inclusively'. He explains that 'the key assumption in this approach remains that we need to 'see' differently if we are to know and act differently' (Sterling 2001, 52). Holistic or whole systems thinking,

then, should be considered a perception component of the virtue of 'harmony with nature', as well as involving thinking and acting based on that perception.

In terms of the action component of the virtue harmony with nature, acts must reflect the concept of sustainability as a non-fixed, changeable, context-specific phenomenon. UNESCO refers to this as a 'dynamic balance' (UNESCO 2003). Ecological systems are in constant flux; therefore sustainability is an on-going process, not a fixed state. It involves adaptability and responding to change. For example, maintaining ecologically sustainable human resource use is necessary, but that level of use will change over time, shifting in response to environmental or social changes such as a change in river flow or the emergence of a new social practice. Virtuous action must be seen as occurring within this 'dynamic system' (Sterling 2001; Capra 2005) – ever-changing, dependent on time and place (see also Hannis 2015). As with sustainability, acting virtuously in relation to nature will be different in different circumstances, in different environments, with different people, and at different times. Kristjánsson (2007, 37) describes 'a dynamic appreciation of the uniqueness of each particular situation'. *Phronesis* is crucial in navigating the application of such a comprehensive virtue, and we will return to the central role *phronesis* plays in our relationship with nature and in sustainability below.

We propose the name of 'harmony with nature' for our new virtue, which better represents holistic thinking and the concept of continual change than previous alternatives, and also emphasises the fact that humans are encompassed by nature. Conversely, 'disharmony with nature', with its negative associations, is a felicitous term to represent emotional reactions often experienced in relation to environmental damage or misuse, for example littering, deforestation, or oil spills, in other words the vice of being disharmonious with nature. A mechanistic, instrumental, non-ecological worldview and thinking, which contribute to such behaviours, would be the *deficient* vice of the virtue 'harmony with nature'. Conversely, an excessive vice, could be the inability to see the world in a mechanistic way at all, in other words, the inability to simplify, or compartmentalise, to think in a linear way, and to adopt instead the mindset of romantic aestheticism towards nature. Like the virtues of honesty, or gratitude, the 'golden mean' is arguably closer to the excessive vice than the deficient vice (Aristotle 1985, 50 [1109a1-10]).

'Harmony with nature' has the advantage of being an internationally recognised and established term to describe a sustainable relationship with nature. In 2009, the United Nations General Assembly (UNGA) initiated international negotiations on the principles of harmony with nature. Member states have called for 'holistic and integrated approaches to sustainable development that will guide humanity to live in harmony with nature and lead to efforts to restore the health and integrity of the Earth's ecosystems' (UNGA 2013) and have acknowledged that 'devising a new world will require a new relationship with the Earth and with humankind's own existence' (UNGA 2014). In December 2014, the UN General Assembly adopted the sixth resolution on harmony with nature, calling for a more ethically based relationship between humanity and the Earth' (ibid). Although references to virtue ethics are absent from UN harmony with nature documentation, the call for a more holistic

and integrated approach to sustainability, a new relationship with nature, and a rethinking of humankind's existence, can, as shown above, be interpreted through a virtue ethical lens, giving it more theoretical and moral gravitas.

To summarise, what would a person who could be said to possess the virtue of harmony with nature be like? As Hursthouse (2007) points out, it is difficult to imagine in detail what living in harmony with nature would be like, since the prevalent neoliberal society is so oriented towards disharmony. Since we are talking about fundamental changes in human interrelations and the human-nature relationship, and a transformatory approach to sustainability, this is not surprising. However, we can say that such a person would think, perceive, feel, and act in accordance with an ecological worldview, a way of thinking and of seeing the world that recognises the complex network of relationships that surround us, that recognises that we are part of a larger ecological system and that feels wonder and fascination towards that natural world; that acknowledges the interrelatedness of the individual, society, and environment, and that is aware of the ever-changing nature of life and therefore understands the need for continual change in themselves. It is a virtue that is at the same time transpersonal (directed at ideals beyond mere human selfhood) but also firmly grounded in the human life-world and in our relationship with the environment that we inhabit.

Phronesis and harmony with nature

The awareness of the interconnectedness of society and the environment, and the concept of dynamism, as part of the virtue harmony with nature, will inform how the intellectual virtue of *phronesis* guides us, particularly when faced with complex dilemmas or conflicting virtues. Using van Wensveen's example of the virtue of generosity coming into conflict with 'the sustainability of ecosystems' through the gifting of unsustainable goods (2001, 232), if we take harmony with nature as a virtue, then *phronesis* would allow us to recognise that we must balance our generosity with being harmonious with nature. In terms of dynamism, Bonnett (2004, 139) describes how the 'ever-changing countenances of things' requires sustainability thinking to constantly evolve, to 'enable new interpretations [and] apprehend new relationships'

Since harmony with nature will influence our perception of human flourishing as situated within the environment (see 'Human flourishing in harmony with nature' below), being harmonious with nature will be ever-relevant, though likely only poignantly so when it comes into conflict with another virtue.

This is similar to more familiar virtues, such as honesty: it is relevant in most situations to some extent, but it has become so natural, or at least default, in many circumstances that many of us only pay attention to it when it comes into conflict with another virtue, or desire. Harmony with nature is a little different as it is still not part of most people's moral 'autofocus'. However, since *phronesis* guides us towards human flourishing, if our conception of human flourishing includes the knowledge that such flourishing must occur in harmony with nature, within sustained ecological systems, then *phronesis* will guide us towards such flourishing.

Human flourishing in harmony with nature

Section II of the UN report entitled 'Living Well in Harmony with Nature' (UNGA 2014), introduces the concept of 'living well', which has been gaining popularity over the last 10 years. It is based on the traditions of the indigenous peoples of South America, for example the Ecuadorian Kichwa concept of *sumac kawsay,* meaning a fullness of life within a community, together with other people and nature (UNGA 2014, 4). The UN report references Eduardo Gudynas (2011):

> The term living well includes the classical ideas of quality of life, but with the specific idea that well-being is only possible within a community...the community concept is understood in an expanded sense to include nature. Living well embraces a broad notion of well-being that encompasses harmonious cohabitation with other humans and nature. (UNGA, 2014, 4)

The idea of living well (*Vivir Bien*; 'good life' in Spanish) has also been incorporated into the constitutions of Ecuador (approved in 2008) and Bolivia (approved in 2009) (Gudynas 2011). 'Healthy flourishing of all in harmony with nature' is a key goal in the Ecuadorian 'National Plan for Good Living for the Republic of Ecuador (2009-2013)' (Secretaría Nacional de Planificación y Desarrollo 2010). In the Bolivian constitution, *Vivir Bien* 'is included in the section devoted to the ethical and moral principles describing the values, ends and objectives of the State' and is defined using the *guaraní* ideas of 'harmonious living (*nì andereko*), good life (*teko kavi*), and the path to the noble life (*qhapaj nì an*)' (Gudynas 2011, 442-443). The ideas of *Vivir Bien*, *samac kawsay*, and harmony with nature have obvious links to the virtue ethical concept of *eudaimonia*, or human flourishing, which can also be understood as 'living well'. The concepts of the good life and living-well are of course central to the virtue ethical approach. Although virtue ethics acknowledges that human flourishing must necessarily be situated within a well-ordered society (Aristotle 1941), it has thus far typically neglected to incorporate the idea that human flourishing, and societal flourishing, must necessarily be situated within nature.

We would like to propose that virtue ethics, both practically and theoretically, needs to reflect the interconnectedness of society and the environment, in-line with changes in other fields that are responding to the beginnings of a paradigm shift towards a more holistic and ecological view of the world (UNGA 2014; Sterling 2001).

Virtue ethics must interpret human flourishing as situated within society, situated within the environment. This theoretical adjustment can be viewed as representing the transformatory approach to sustainability. Individuals are the moral agents, but the individual enacts the virtues within society, which in turn functions within the larger environment. The virtues are not categorised according to certain spheres of relevance or application, since humans are contained within, and are part of, the larger systems. Human flourishing in harmony with nature will reflect the society and environment of that time and place, be context-specific, and dynamic in nature.

We want to emphasise that, although human activity is situated within environmental limits, since harmony with nature is a virtue rather than a mere restriction upon human behaviours, it can be viewed, as discussed above, as contributing to human flourishing. Living harmoniously with nature will contribute towards our wellbeing (see Hannis 2015).

As already indicated, other environmental virtue ethicists have addressed the need for the virtues to take account of sustainability. Let us finally address van Wensveen's (2001) proposal that ecosystem sustainability should be a criterion for any genuine virtue, in other words 'a genuine virtue includes the goal of ensuring ecosystem sustainability' (p. 233). She argues that 'a genuine virtue includes the goal of ensuring necessary conditions for its cultivation' (ibid) and that ecosystem sustainability is one of those necessary conditions, being crucial for both human flourishing and survival. Indeed, as Treanor (2014, 60) states: 'no individual or society can flourish in a severely degraded environment'. However, there is a problem with taking a 'criterion-for-virtue' approach to the issue of human flourishing within the wider environment, in that a mere logical criterion does not necessarily furnish an individual, or indeed society, with any specific *motivation*. The fundamental moral salience of virtues is, by contrast, constituted by their capacity to incorporate emotions and, hence, produce motivations (see Narvaez 2014, also Kristjánsson 2007).

Van Wensveen's (2001) argument to consider ecosystem sustainability as relevant to every virtue, and therefore each virtuous action, certainly captures the permeability of sustainability into every part of life, but such a dramatic change in perception and feeling surely requires a virtue in itself. As Hursthouse (2007, 163) argues, in reference to Taylor's respect for nature, such an attitude towards nature cannot occur 'through a rational process'. Van Wensveen (2001) addresses this motivational concern by stating that since all the virtues are cultivated and habituated over time, the criterion in question can also be included in this cultivation. However, the motivational quality of a virtue is bound up with the thinking, feeling, and perceptive components of that specific virtue (see Narvaez 2014; also Hursthouse 1999, 2007; Kristjánsson 2007). Hursthouse (2007) argues that such a radical change in the way we perceive the world necessitates a change in emotions, perceptions, reasons for actions and thereby actions, and is such a complete transformation of character, that it must be considered, and cultivated, as a unique virtue in itself.

Fostering harmony with nature – virtue ethics and sustainability education

It has been argued above that virtue ethics and the virtue of harmony with nature provide a transformational approach to sustainability. As previously stated, virtue ethics is inherently developmental and educational in focus. We will now explore how we might foster the virtue of harmony with nature, along with the other virtues, in order to address sustainability. This could easily give rise to a separate essay. Although such an essay will need to await another day, some initial considerations are outlined below.

Let us begin by stating that sustainability education needs to embrace the teaching of the virtues, and vice versa.[6] Over the course of the UN Decade of Education for Sustainable

Development (DESD 2005-2014), there has been a swell in Education for Sustainable Development (ESD) initiatives, programmes and practices (see UNESCO 2016). Much emphasis has been placed upon developing individuals' critical thinking, creative problem solving, and democratic participation skills – all vital to sustainability. Yet those efforts often fail to address the *motivational* aspect of behaviour. It is wrong to assume that by developing students' critical reasoning skills, students will 'act morally as a simple consequence of knowing how to act morally, or even of just knowing how to articulate convincing moral judgements' (Kristjánsson 2010, 398). The virtues cannot simply be adopted through intellectual exercises; they must be cultivated and habituated experientially and affectively over time.

Bonnett (2004, 144) similarly criticises the focus on 'action competence' as putting too much faith in rationality, firstly because he questions the ability of students to make rational choices in light of the powerful influences present in a neoliberal society - Kretz (2014) for example talks of the incessant promotion of individualism, consumerism, and competition – and secondly, because he believes 'modern rationality is itself not neutral but expresses certain aspirations towards the world (notably to classify, explain, predict, assess, control, possess and exploit)...such rationality that has led to our current environmental predicament'. Action competence needs to be accompanied by an ethical framework.

Despite the fact that 'development of values' is often mentioned as a key aim in ESD literatures (UNESCO 2016; Breiting et al. 2005; Bennedict 1991), there seems to have been very little focus on the value cultivating aspect of ESD. Although there is a general sense that values play a role in sustainability, in creating sustainable citizens, educators appear unclear on how they should be approached or taught (see Bowden 2013) and often fail to distinguish between virtues and merely cognitively held values.

In recent years, there has been a worldwide resurgence of interest in moral education, in its various guises (Kristjánsson 2013). Schools are beginning to recognise that in order to create flourishing individuals and societies, education cannot be based on purely academic aims; instead what is needed is a more holistic education that also addresses the moral character of the students. Despite this increase in moral education, academic boundaries continue to separate sustainability education and moral education, and thus far they have run parallel to each other, without any substantial convergence.

Virtue ethics provides an ideal framework for addressing sustainability. It provides adaptable guiding principles, i.e. the virtues, that can be fostered and enacted to confront a variety of complex, 'wicked problems'[8]. Virtue ethics, and its education counterpart character education, must embrace sustainability by including a new virtue for our relation with nature, such as harmony with nature, and by situating human flourishing and living well within the larger ecological environment.

We will now briefly discuss four approaches where character education and sustainability education can join forces.

School climate & exemplars

The culture of a school, or institution, undoubtedly has an effect on those that attend it. In relation to flourishing, Bonnett (2007, 710) states:

> ...in many ways the issue is not primarily one of formal curriculum content as of the general culture of the school (and, of course, society). It is a matter of the underlying versions of human flourishing and the good life that are implicit in the ethos and practices of the school as a community and how they connect with life 'outside'. This ethos both invites direct participation in certain ways of going about the world and conditions the spirit in which the curriculum is taught and received.

Bonnett (2004, 145) talks of institutions providing 'invitations to engage in an orientation that is exhibited as valuable in the thought and action of those with whom they rub shoulders and in the practices of the institutions in which they live'. Essentially, he is saying that institutions, schools or indeed work places, and those within those institutions, need to act as exemplars of sustainability. Exemplars or role models are a central idea within virtue ethics, and school climate is often discussed in relation to sustainability. Virtues can be, and indeed are even if unintentionally, demonstrated by the staff and school, for example by the way they approach issues and practices, but also by their behaviour, and the kinds of behaviour that are deemed acceptable. In terms of the institution as a whole, virtues can also be made explicit, for example the school could make 'equality' the virtue of the month or term, and orientate lessons and assemblies around it. Another approach from character education, would be for the school to adopt a core set of virtues that it wishes to focus on permanently i.e. 'our school values are honesty, integrity, and respect'.

Biesta (2011, 97-98) argues that the 'desire for democracy does not operate at the level of cognition and therefore is not something that can simply be taught. The desire for democracy can, in a sense, only be fuelled'. He asserts that individuals need to learn democracy, and develop their desire for it, through their participation in, and subjective engagement with democracy in 'the contexts and practices that make up their everyday lives, in school, college and university, and in society at large' (Biesta 2011, 6). In this way, individuals will learn to value democracy and desire to act as democratically responsible citizens. These claims could be transferred, *mutatis mutandis*, to sustainability also. Indeed, Biesta's views mirror those held by environment educationists such as Paul Hart (2000).

Experience in nature

Let us return to Hursthouse (2007) who presents a picture of the child who is brought up to be rightly oriented to nature. Hursthouse describes how such a child would have the interconnectedness of nature explained, or rather revealed, to them by parents or teachers, while exploring and experiencing nature and developing a sense of wonder and awe for it. As discussed above, a sense of wonder is crucial to the virtue of harmony with nature and is something that perhaps, as York and Becker (2012) suggest, can only be experienced in a

natural environment (see also Bonnett, 2004, 145). However, that does not necessarily mean that a city dweller cannot foster the sense that we are part of the larger ecosystem – it is still possible to discover where the city's drinking water comes from, what local factors affect the weather, and to find local wildlife, however limited that may be.[6] However, as Orr explains, sustainability entails 'reweaving the local ecology into the fabric of the economy and life patterns...restoring local culture and our ties to local places' (2004, 147). A first step towards this, perhaps, is to maximise purposefully reflective time spent in natural environments, to seek out nature when we are confined to more urban environments, and to raise awareness of the links between our everyday lives and the wider environment. In support of this, there is a growing body of research that shows time spent in nature increases the likelihood of viewing one's self as a part of the natural world (Cheng and Monroe 2012, Schein 2014), as well as providing benefits in relation to the general areas of wellbeing, cognitive processes, social skills, emotional/behavior issues, and ethics/attitude towards the natural world (Gill 2014).

Also, by purposefully striving to take the environment into account when making choices, we can demonstrate its importance to those whose budding moral sensitivities we are helping to cultivate.

Phronesis –Exploring social and environmental connections through dilemmas

Phronesis, as stated previously, is something that develops with experience. One way to develop *phronesis* is by engaging pupils with dilemmas or case studies, through which they can explore the complexities and conflicting virtues that occur in real life, especially within the sustainability field. By using virtue ethics as a framework, issues can be explored through an ethical lens. Bonnett (2004, 145) suggests that students should be encouraged to identify and critically examine the nature of social practices and their underlying motives, and suggests 'reflecting on experiences and practices in which students participate', or that 'impinge on their concerns'. He also suggests examining literature and art in a similar critical fashion.

Citizenship and the 'intellectual', 'civic' and 'performance' virtues.

Finally, we would like to briefly mention the 'intellectual', 'civic' and 'performance' virtues that are included in the theory of virtue ethics. These are virtues that relate closely to ideas within the sustainability field, and to the concept of 'action competence' in particular, however, they differ from the more familiar 'moral' virtues, such as compassion or honesty, in that they 'derive their ultimate value from serving morally acceptable ends, in particular from being enablers and vehicles of the moral virtues' (Kristjánsson 2015, 17). Examples of 'intellectual', 'civic' and 'performance' virtues are critical thinking, citizenship, and resilience, respectfully. *Phronesis* is also considered an intellectual virtue. These are clearly important for sustainability – Sandler (2006) included them in his typology of environmental virtue in relation to environmental activism and stewardship, and Ferkany and Powys Whyte (2011) argue for the need to develop participation and problem solving virtues in order for future citizens to tackle 'wicked problems'. However, intellectual and performance virtues are

morally neutral, in other words they can be used towards virtuous or vicious ends, and thus must be cultivated alongside the moral virtues.

Both sustainability education and moral education are linked to citizenship. The concept of being a good citizen needs to be informed by sustainability. Virtue ethics provides a framework to examine citizenship through both the civic virtues and the moral virtues, including the virtue of harmony with nature.

The above gives a brief overview of educational possibilities for the coming together, of virtue/character education and sustainability education. However, further research is needed in this area, both in school contexts and in society at large.

In summary, it is hoped that this article has shown the relevance and advantages of a virtue ethical approach to sustainability; how we might foster the virtue of harmony with nature and a holistic, ecological worldview, alongside other virtues, in order to address the complexity and wicked problems inherent in sustainability issues; and has briefly shown where character education and sustainability education can interconnect and contribute to a transformational approach to sustainability.

Notes

1. The 'Brundtland Commission' (formally known as the WCED (World Commission on Environment and Development), chaired by Gro Harlem Brundtland, produced the 'Our Common Future' report which contains the often cited definition of sustainable development: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, Ch2)

2. Although we are reluctant to give a single definition of sustainability, since by its nature it varies with context, we will follow Sterling's (2001) lead and align ourselves with the definition given by Meadows, Meadows and Randers (1992, 209): "A sustainable society is one that can persist over generations, one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or social systems of support". However, both sustainability and sustainable development are used throughout the article in relation to other authors whose definitions will almost certainly differ.

3. Aristotle's theory of the golden mean contains various complexities which cannot be explored here. For example, some spheres of human activity do not admit of a mean (such as murder); the concept of a mean must be understood qualitatively (mean of good reasons for an activity) as well as quantitatively (mean between too much or too little of the activity); and the mean is considered to be relative to individual constitution, so for example temperance in eating is not the same for the athlete and the academic.

4. For an excellent discussion on the problems with taking deontological and consequentialist approaches to environmental or sustainability issues, see Chapter 2 of Brian Treanor's *Emplotting Virtue* (2014). For a general comparison of ethical approaches, see Hursthouse (1999, 2012).

5. Ferkany and Powys Whyte (2011, 331) defined a wicked problem as 'A problem can be described as wicked when it involves deep disagreement and distrust among policymakers and stakeholders (even over how to formulate the problem itself), high degrees of scientific uncertainty, and a lack of any set of solutions that will not be harmful or disadvantageous to someone in some relevant way'.

6. Louke van Wensveen's (2000) *Dirty Virtues: The Emergence of Ecological Virtue Ethics* marked environmental virtue ethics as a distinct field of study. She argued that the language of environmentalists was often implicitly virtue-based, and then applied this language to virtue ethics theory.

7. The teaching of intrinsic values can, arguably, be used as an alternative to the teaching of virtues.

8. Urban environmental education is a growing sub-field of environmental education that seeks to connect students to the local environment, and often includes community efforts to introduce green areas.

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