From wilderness to plastic plants: How might we get back to wildness?

In human-controlled environments, areas of wild plants are 'translated' into cultivated landscapes to accommodate social, cultural and economic needs. This article explores indoor, agricultural and (sub)urban landscape in the Netherlands, focusing on the use of plants both indoors and outdoors, and reveals anthropocentric, instrumental and unsustainable practices. The article also presents suggestions for alternative, more ethical and sustainable ways of relating to plants in the Netherlands and beyond.

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As I enter my institution, the rows of metal plant pots with artificial 'earth' and 'leaves' that decorate the corridors fit easily within the building's modern aesthetic (Figure 1). When I ask my colleagues what they think of these plastic plants, most of them find them 'nice'. Outside the window of my office there are neat rows of trees along the square with fountains – their lower branches cut off to ease the passage of students and lecturers as they walk into the building through the cafeteria. For the past few years this cafeteria has served 'natural healthy foods' such as kiwi fruit from New Zealand, goji berry juice from China, and avocado-with-walnut salads – all neatly packaged in containers that can be easily discarded into our all-purpose trash bins. The institutional furniture is made from an attractively coloured mix of compressed wood chips and glue – the same substance which lines the interior walls of the building. It is this passage – from home to work, from inside to outside – that my colleagues, my students and I go through everyday, seeing the plants along the way in the shape of exotic fruit or as an ambient decor, a background to the really important things in life: study and work.

Where I live, we are used to manicured lawns and neatly trimmed trees. Where I live, we are used to nice furniture that is regularly changed. Where I live, we are used to food either produced via intensive local agriculture or cheaply imported from all over the world – so we can have avocado-with-walnut salads all year round. I live in a typical developed country that many tourists see as 'green'.

Let me reflect upon this 'green' background.

Plants: Then and now

Traditional cultures used to believe in the profound connection between humans and plants, seeing flora as vibrant beings (Caldwell, 1990; Merchant, 2006) that were active and intelligent agents (Kellert and Wilson, 1993; Hall, 2011; Kopnina, 2012b; 2015b). In many areas of the world, violation

Figure 1. Plastic 'plants' in the author's place of work.

of certain plants was severely punishable (Frazer, 2012). In addition to its provision of essential components for life on Earth and human flourishing through the formation of soil (via the decomposition of plant materials) and air (via the production of oxygen from photosynthesis), wilderness with all its plant diversity has come to be seen as a repository of material for food, fibre or resilience to climate change. Meanwhile, plants have evolved in our lives from independent living beings into crops and providers of recreational areas for urban dwellers (Kopnina, 2013). Plants are used in timber, paper, construction, energy, pharmaceuticals and agriculture. The instrumentalism of our relation to plants is well illustrated by the example of agriculture (Crist, 2015: 248):

> Industrial agriculture occupies extensive territories, after stripping them of their native life and engineering them for the production of grains, protein, oils, and fiber, most of which do not even directly serve as human food but as raw materials for industrial processing. An even larger portion of the globe allotted to livestock grazing is also roundly dominated, displacing wild animals, plants, and natural ecologies.

Intensive agriculture requires massive chemical inputs. What tourists admiring my country's green fields and colourful flowers do not see is what happens after harvest – a depleted ground (Figure 2) that without even more fertilizer might stay barren, as far as growing food goes, for decades.

Yet unsustainable and unethical treatment of the land not only tends to go unnoticed by the public but is also largely invisible in the academy. Instrumentalism, bolstered by constructivism, has led to an overt critique of 'wilderness' and 'nature' as idealizations or mere 'social constructions'. This is illustrated in an extreme way by the *Ecomodernist Manifesto* (Asafu-Adjaye *et al.*, 2015), which sees nature as a means of reaching prosperity. The Manifesto envisions a bright future of "vastly improved material well-being, public health, resource

Figure 2. Intensive agriculture in Groningen, the Netherlands.

productivity, economic integration, shared infrastructure, and personal freedom" (Asafu-Adjaye *et al.*, 2015: 8). In a similar way, Cole (2012) talks about a necessary move beyond 'naturalness' towards 'wilderness stewardship'. Rather than decry lost wilderness, the new conservationists, eco-modernists and eco-pragmatists suggest that we should celebrate and embrace the 'post-nature' human-tended garden that is Earth.

Relating this to environmental education, pedagogical researcher Karen Malone has argued that 'wild nature' merely represents "Western middle-class sensibilities of an idealized child–nature encounter" (Malone, 2016: 399). Following this, it is reasoned that environmental education should no longer focus on wilderness but on people. In fact, it is argued, we should abandon the idealized concept of wilderness when teaching our children because, after all, 'children *are* nature' and the distinction of *human* and *environment* is a false dichotomy (Malone, 2016).

Objection to objectification

Counteracting this abandonment of wild nature are views emphasizing that, far from wild nature being created by Western middle-class elitists, nature has actually created all of us. According to the 'Land Ethic' (Leopold, 1949: 224–225): "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." The Land Ethic has inspired deep ecology (Naess, 1973) and accounts of ecological justice that emphasize equality between species (Devall and Sessions, 1985). In these perspectives, respect for nature is central (Taylor, 1986), and wilderness is an intrinsic good that should be inviolate (Rolston, 1983; Koechlin, 2009; Crist, 2015; Piccolo, 2017).

Significantly, while agreeing about the need to deconstruct the dichotomy between humans and nature, critics of the concept of 'wilderness' rarely consider the logical and practical implications of their position. Merely erasing the dichotomies between the human and the natural domain does little to address the highly exploitative and essentially immoral use of nature (Kopnina, 2016) and does not trouble the anthropocentric inscriptions of power manifest in (sub)urban parks or food-growing gardens (McKenzie and Bieler, 2016). Just dissolving the nature–culture dichotomy can lead to naturalizing, and in effect justifying, the anthropocentric 'take-and-no-give' cycle (Batavia and Nelson, 2017).

While living in harmony with nature by learning to share may sound facile, it is in fact an ardent call for becoming a symbiotic member of the biospheric community. The logical and practical implication of this call is that the planet needs to be divided on the basis of species' natural resource requirements (Mathews, 2016), and not on the basis of 'superior species' logic. Of course, human beings are part of nature, in evolutionary and biological terms. For that matter, the malaria virus and its mosquito carrier are also part of nature. The real question is: what justifies exclusive one-species rights?

Harmon (2009) and Hall (2011) argue that, because plants constitute the bulk of our visible biomass and underpin all natural ecosystems, they should not be placed outside of moral consideration. Ecocentric scholars demand that the intrinsic value and autonomy of ecosystems, including plants, are maintained to safeguard the ecosystem integrity upon which all life, including human life, depends (Rolston, 1983; Doak *et al.*, 2015; Crist *et al.*, 2017).

This autonomy can be justified for plants on the basis of a number of arguments developed by animal rights advocates Tom Regan (1986) and Peter Singer (1977), including appeals to sentience and other capabilities. Recent work has shown that plants possess complex abilities to signal, communicate and remember, and may even feel pain (*e.g.* Chamovitz, 2012; Marder, 2013). Plant neurobiology demonstrates that plants are complex organisms capable of perceiving and responding to external information, and anticipating forthcoming hazards and stresses (*e.g.* Falik *et al.*, 2011). If more forms of natural life than just humans

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and other animals share these capacities, then the discussion of political and legal rights for natural life becomes intertwined with questions about 'freedom'. The kind of freedom exalted, for example, in the *Ecomodernist Manifesto* cannot be achieved while non-human beings and places suffer, being "extinguished, constricted, enslaved, managed, or treated as objects" (Crist, 2015: 254). And, indeed, as human and non-human justice is intertwined, "what suffers by the exact same token is the dignity of the human that humanism holds so dear" (Crist 2015: 254). For this reason, Stone (1972; 2010) and Marder (2016) compare the emergence of the awareness of plants as persons to movements promoting social liberation and basic human values.

The realization of this intrinsically fair world can be called revolutionary in the way it would uproot the structures of dominance and oppression. But just like with any other revolution, there will be those who feel threatened by this new liberation. Abbott (2008) and Haines (2008) ridicule concepts of 'plant dignity' arguing that the development of medicine and food may be jeopardized by the 'absurd' demands of 'plant lovers'. In an article revealingly titled 'The silent scream of the asparagus', Smith (2008) asserts that the idea of 'plant dignity' is a "symptom of a cultural disease that has infected Western civilization, causing us to lose the ability to think critically and distinguish serious from frivolous ethical concerns." Yet because most of our industrial activities are extractive, we have become the only species on record that takes more from the environment than it gives back. While we often speak of nature as a system of cut-throat competition, we forget that symbiosis, or interdependency between multiple species, is also part of nature. Much talk of 'humans as part of nature' fails to notice how perverse our own industrial nature has become. But recognizing this interdependency is only the first step in recognizing our obligations. What is really a 'cultural disease' is the way we tend to consider ourselves the only important life form. Curing this disease will not be easy.

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In cities, it would be easy not to worry about the trees 'decapitated' by the municipality's chainsaws. It would be easy to limit urban 'wildlife' to 'pigeons and parks' (Derby *et al.*, 2015). Children could play football on artificial turf made of synthetic fibres that look like grass without worrying about carcinogenic substances. It would be easy to bite into that perfectly formed, shiny red apple without worrying about industrial fertilizers and pesticides, and the millions of tons of other apples discarded because they did not pass the stringent food controls. It would be easy to ignore the plastic plants as I walk towards a classroom to teach a course in 'Sustainable Business'. It would be easy to think that my students and their children will inherit a beautiful and just planet. But it would be a lie.

Alternative ways of valuing plants

One of the most important frameworks for rethinking our relationship to plants, in terms of both ethics and sustainability, is the cradle-to-cradle (C2C) framework developed by McDonough and Braungart (2002). This framework uses the metaphor of a cherry tree to explain how human production could be radically reformed if it was based on natural cycles. The cherry tree produces abundant fruit, blossoms and leaves. Its 'waste' supports multiple species, including bacteria, fungi, plants and animals. In turn, birds and animals carry the seeds to new localities and, by excreting them, help those seeds to spread. Worms transform rotten cherry leaves into fertile soil. In each case, the 'waste' becomes the cradle of new life.

By contrast, in the modern Dutch economy all waste is incinerated, thus transiting from cradle to grave. Our incessant cutting, pruning, tending and other 'management' of greenery does not allow even small-scale biodiversity in the form of plants and insects to flourish (Kopnina, 2015a). This 'management' testifies to the dominance of an anthropocentric, hierarchical and essentially immoral and unsustainable cradle-to-grave model. Bioethics (UNESCO, 2005) and ethics supporting plant dignity (*e.g.* Stone 1972, 2010; Federal Ethics

Committee on Non-Human Biotechnology, 2008; Hall, 2011; Marder, 2016) offer useful guidelines for action. In agriculture, for example, a new (or rather, traditional) way of farming including permaculture and other ecologically informed strategies is advocated (*e.g.* Erisman *et al.*, 2016). In city planning, urban rewilding and ecological restoration bring multiple benefits such as clean air, a reduction of anxiety and stress, and a boosting of our immunity (Slavikova, 2017). The good news is that reversing this trend should not be difficult. In fact, *not* having to mow one's lawn, to give just one example, could mean saving on energy bills and saving our own energy for other more useful endeavours.

Pragmatically, decisions need to be guided both by non-anthropocentric ethics and realization of trade-offs necessitated by human industrial development (Evans and Clark, 2017). For example, the consumption of plants and plant-dependent organisms is a biological necessity for humans. But choices – in terms of both sustainability and ethics – need to be made about which use of plants is more justifiable and which is less so. While this might sound like a patronizing set of environmentalists' demands, eating local and seasonal vegetables instead of imported food, for example, is not such a high price to pay. It might be more difficult to avoid urban tree cutting as, despite what many people believe, this may be not just aesthetic ('keeping things neat'; Figure 3) but also commercial. In countries like the Netherlands, green 'waste', together with tons of Canadian wooden pellets, is incinerated to generate 'renewable' energy. Indeed, the supposedly sustainable policy of substituting wooden pellets for coal leads to depletion of biomass (Wohlleben, 2015). Similar issues can arise with tree felling too, and this may also be presented as a benevolent activity (Brown, 2017):

> At university we were told that cutting down trees was good for the environment. That we are renewing forests. I believed it [...] it took time to get that brainwash out of my head. The wisdom has been to cut down a big tree so the younger trees have more space to grow [...] but apply that to human society and [...] it would be OK to kill the parents? The children will have more space in the house afterwards?

There will be cases when cutting down some trees may be, on balance, the right course of action from an ecocentrically holistic perspective – to help, for instance, in the conservation of threatened sunlight-dependent forest insects – but in many other cases, harvesting is being conducted at a scale and in a fashion that gives no thought to the intrinsic value of non-human life.

Public awareness about practices that are unsustainable and unethical can help to move policy-makers and energy companies to reconsider their priorities. An alternative in this case can be quite simple: switching to true renewables, sun and wind, and allowing trees to do what they have done for millennia before humanoid apes learned to walk upright – grow, die, and in their death become the cradle of new life. Another possibility is bringing nature back into environmental education by teaching students to look beyond anthropocentric framing (Kopnina, 2012a) and encouraging them to question our modern aesthetics of (sub)urban landscapes and built environments. We must also move towards reducing demand through conserving and doing with less.

Without wild experiences, we risk our children moving even further into the

Figure 3. 'Tidied trees' near Amsterdam, the Netherlands.

'extinction of experience' in a wilderness-less world (Pyle, 1993). To avoid this, we need to acknowledge the intrinsic value of nature. The starting point is to learn to recognize the 'voices' of non-humans – or at least the voice of humans that speak for them. Henry David Thoreau, a transcendentalist writer and naturalist, could see the sap flowing beneath the bark of the trees. When he wrote that the poet loves the pine tree as his own shadow in the air, he was speaking about himself (Higgins, 2017). Or, as Indian poet Rabindranath Tagore (2009: 256–7) has written in describing the fictional character of Balai:

> His worst troubles arouse when the grass cutter came to cut the grass, because he had watched countless wonders in the grass; small creepers; nameless violet and yellow flowers, tiny in size; here and there a nightshade, whose blue flowers have a little golden dot at the center; medicinal plants near the fence [...] seeds left by birds, sprouting into plants, spreading beautiful leaves. All those were cleared with a heartless weeding tool. None of them were prized trees of the garden, there was no one to listen to their protests.

We do not have to be trees to know how trees feel and what they want. After all, one does not have to be a woman to oppose sexism, and one does not have to be of an oppressed race to reject racism. And no, we do not all need to become 'tree huggers'. Neither do we all have to go around hugging women, black people, gay people, or members of other groups that suffer discrimination. Perhaps our children can learn that caring for plants includes the ability to just let them live.

"We do not have to be trees to know how trees feel and what they want."

Strategically, the 'plant whisperers' need to recognize that their 'opponents' – whether these be 'post-nature' researchers who deny nature's objectivity, or merely a neighbour who keeps cursing the withered city poplar because of the birds that live in it and dirty his car – are all people who love their children and grandchildren and wish them a healthy future. It is essential to find a way to talk with others about scientific realities and ecocentric values in order to protect the future for all living citizens of this planet. Luckily, I can do my modest bit through teaching and writing.

I return home from work after a graduation ceremony, where hundreds of cut flower bouquets were dealt out. Next time we should give our graduates something more lasting than flowers that will wilt in a few days. Single flowers in bud vases, perhaps, or small potted perennials to be taken home and planted. ■

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