

## **Requiem for the urban weeds: An exploration of green spaces in Amsterdam**

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### **Abstract**

This article will explore the Cradle to Cradle (C2C) framework for urban environments, focusing on the perception, utilization, and maintenance of parks. The case study explores the perception of urban flora and the value of greenery in everyday life in The Netherlands. The reflection section addresses the difference between conventional and C2C approaches to greenery on the one hand and current green management policies and public opinion on the other hand. The author reflects on how urban planning policies can be better geared towards public awareness of C2C, and towards the implementation of ecologically benign management of urban flora. It is proposed that the implementation of urban green management consistent with C2C is feasible and desirable. It is feasible given the favorable shifts in public opinion in relation to urban sustainability, and it is desirable due to the basic cost-benefit analysis and increased need for urban sustainability.

**Keywords:** Cradle to Cradle framework; green management; plants; urban park; urban residents

### **Introduction**

The Human relationship to plants has been characterized as interconnected, interdependent, and highly complex. In the Anthropocene era, the human relationship with plants has changed. In the industrial urban context, plants – along with other elements of nature – came to be seen as a commodity valued exclusively for their provision of ‘services’ and ‘resources’. The concepts of natural resources and ecosystem services have started to dominate the vocabulary of corporate organizations and policy-makers.

As commodification is becoming increasingly normative, artificial landscapes are no longer recognized as unnatural (Rabinow 1999). Marris (2011) argues that humans have changed the landscapes they inhabit since prehistory, and presently even the remotest places bear the fingerprints of humanity, leaving us no choice but “manage” our planet as if it were a giant garden. Trees and plants are ‘cared for’, ‘monitored’, trimmed, pruned, and chopped. Their foliage is neatly collected in piles and often dumped with other garbage to keep the streets neat, or used for biofuel. The whole industry of ‘optimized weed management’ (Vissoh et al 2007)

has taken root, both in agricultural and urban areas, in developed and developing countries. The modern practice of cultivation of greenery may be in part attributed to the desire to live in accordance with Western standards, with the groomed gardens of Parisian or London aristocrats (and in a simplified form, managed lawns) seen as a sign of civilization.

This process has reduced and transformed complex natural and social phenomena into commodities whose existence encourages the use of monocultures and discourages biodiversity (Sullivan 2009). The use of electric devices to mow lawns or maintain gardens, as well as the use of pesticides, fertilizers, sprinklers, and the elimination of 'useless' weeds, have a negative environmental effect. Nitrous oxide emissions from lawns are comparable to those found on agricultural farms, the largest emitters of nitrous oxide globally (e.g. Townsend-Small and Czimczik 2010).

A number of alternative urban development frameworks have emerged. As Blewitt (2015) has noted, urban design may aim to be ecologically regenerative or restorative. One of the most constructive frameworks discussed in this article is the application of the Cradle to Cradle (C2C) framework to urban planning. This framework models human industry on nature's processes viewing materials as nutrients circulating in either organic or technological metabolisms (McDonough and Braungart 2002).

The objective of this article is to explore urban residents' attitudes toward the position of plants, linking their views to environmental discourse and practices, testing their awareness of alternative frameworks to urban sustainability. This article will focus on the case of urban greenery in The Netherlands, where most flora is managed by different stakeholder agencies or privately owned. In the following sections, the C2C framework will be addressed as an essential component of sustainable urban green management. Consequently, key Dutch institutions concerned with plants and the current mode of green management will be examined. This will be followed by a case study of an urban park in Amsterdam, exploring the many ways in which the Dutch relate to and speak about urban vegetation. The reflection section will address the discrepancies between conventional and C2C frameworks on the one hand and current green management policies and public opinion on the other hand. The following sections will explore the possibility of a shift toward C2C management styles analyzing public perceptions in The Netherlands in order to address the practical challenges of green urban management.

### **Cradle to Cradle framework**

*Cradle to Cradle: Remaking the Way We Make Things* by the American architect William McDonough and German chemist Michael Braungart (2002) serves as a framework to conceptualize a constructive alternative to the conventional industry which uses natural resources for 'cradle to grave' production. An example of the 'cradle to grave' trajectory is the downcycling of a product, such as burning trash or plants to produce energy. From the C2C point of view, burning valuable plant material is wasted for a one-time-use benefit, and results in greater pressure on the environment.

The Cradle to Cradle (C2C) does not describe sustainability as it is usually defined in terms of eco-efficiency. It suggests that industry must protect and enrich ecosystems and nature's biological metabolism while also maintaining a safe, productive technical metabolism for the high-quality use and circulation of organic and technical nutrients. C2C suggests that being less bad is not good enough, and calls for a radical revision of current production methods to imitate natural abundance rather than slowly depleting resources by applying short-term eco-efficiency measures (Kopnina and Blewitt 2014).

C2C proposes that 'waste equals food', in which only true renewable sources of energy (wind and sun) are used, and plants are left to their core 'business' as the givers of life. McDonough and Braungart use the metaphor of a cherry tree to show how plant 'waste' exemplifies this principle:

Consider the cherry tree: thousands of blossoms create fruit for birds, humans, and other animals, in order that one pit might eventually fall onto the ground, take root and grow. Who would look at the ground littered with cherry blossoms and complain, "How inefficient and wasteful!" The tree makes copious blossoms and fruit without depleting its environment. Once they fall on the ground, their materials decompose and break down into nutrients that nourish microorganisms, insects, plants, animals, and soil. Although the tree actually makes more of its "product" than it needs for its own success in an ecosystem, this abundance has evolved... to serve rich and varied purposes. In fact, the tree's fecundity nourishes just about everything around it.

In using this metaphor, the authors inquire: What might the human-built world look like if a cherry tree had produced it? Instead of being designed to be wasted or recycled, McDonough and Braungart argue, products should be made in such a way that they could be infinitely reused.

The application of this framework for the green urban environment is well summarized by the example of the ubiquitous lawn which is planted, doused with artificial fertilizers and pesticides 'to make it grow and keep it

uniform – all so that they can hack and mow what they encouraged to grow. And woe to the small yellow flower that raises its head!’ (McDonough and Braungart 2002:33).

In reflecting on the fact that a polished lawn or ‘managed environment’ has become a sign of civilization, domination over ‘weeds’ is experienced as esthetically pleasing to the cosmopolitan urban dweller, McDonough and Braungart reflect that such systems typically tend to reproduce cradle to grave systems. Plant growth is seen as ‘waste’ and not as nutrients potentially essential for renewing the earth’s natural nutritional composition.

As in the case of biomimicry (Benyus 2002), urban design, in this case, mimics natural processes. As McDonough (2014) has reflected in the case of urban farms:

Urban farms are transforming inner city spaces – rooftops, infrastructure, streetscapes, building skin – into generative ecologies that support the lives of people, and pollinators too. They are bringing into cities, and into plain view, the natural systems that sustain urban life.

In this view, noting that the plants produce gets discharged, no waste is useless, and urban greenery is treated as a great asset which needs to be fully supported rather than depleted.

### **Dutch plant management**

Pertinent to the case of urban parks in the case of biofuels marketed in The Netherlands as a source of sustainable energy (<http://english.rvo.nl/subsidies-programmes/gave/dutch-biofuels-policy>). Biomass in the Netherlands is collected from, among other sources, from green waste including yard trimmings, clippings and the organic residues from gardens and parks. In the year 2009, 38% of the collected green waste was processed in The Netherlands into biomass for energy production (<http://www.compostnetwork.info/netherlands.html>).

One of the most significant organizations in the Netherlands responsible for forests, grasslands and other natural areas is Staatsbosbeheer which is commissioned by the Dutch government (<http://www.staatsbosbeheer.nl/>). As a public organization, Staatsbosbeheer ‘contributes to the production of environmentally friendly, renewable resources such as timber’ (sic!). Aside from timber, Staatsbosbeheer is involved in the restoration and development of natural and cultural landscapes as well as commercial activities, such as developing and renting land and vacation homes in ‘nature areas’ and maintenance.

Another organization active in maintenance and park activities is Vereniging Natuurmonumenten (Organization Nature Monuments), established in 1930 and working with regional organizations such as Provinciale Landschappen (Provincial Landscapes, <http://www.de12landschappen.nl/>). Vereniging Natuurmonumenten had 355 sites under management in the year 2010, with a total area of 1029.51 km<sup>2</sup>, it also owns 1700 buildings, of which 250 were provincial or national monuments. Similar to Staatsbosbeheer, Provinciale Landschappen promote development, maintenance, commercial and public use of green (urban) spaces, referring to plants in official documents as ‘objects’, ‘resources’, and ‘services’.

Other stakeholders directly involved in urban planning and greenery include Agentschap voor Natuur en Bos (Agency for Nature and Forest, <http://www.natuurenbos.be/nl-BE/Natuurbeleid/Groen.aspx>), which produced a number of policy documents including Harmonisch Park- en Groenbeheerplan (Harmonious park- and Greenery management plan). Similarly, the language used in this policy document is replete with bureaucratic and technical terminology referring to flora as means to public recreation, health, and commercial activities. For example, this document lists the following elements of ‘groenobjects’ (green objects) which can be identified in order to be situated within administrative, geographic-cartographical and judicial domains: Land- of Natuurinrichting (land and nature refurbishing); Gewenste bosstructuur (desired forest structure); Natuurontwikkelingsplan (nature development plan), etc. ([http://www.natuurenbos.be/nl-BE/Natuurbeleid/Groen/Harmonisch\\_Park\\_en\\_Groenbeheer/Beheerplan.aspx](http://www.natuurenbos.be/nl-BE/Natuurbeleid/Groen/Harmonisch_Park_en_Groenbeheer/Beheerplan.aspx)). Municipality of Amsterdam (gemeente Amsterdam) is mostly responsible for provision of greenery in Amsterdam. The Dutch urban sociologist Daalder (2012) has recently commended the municipality for making Amsterdam ‘one of the greenest cities in Europe’. In 2013, the European Green City Index appointed Amsterdam the fifth ‘greenest’ city in Europe (<http://www.iamsterdam.com/amsterdam%20top%20five%20greenest%20city>). The Municipality documents referring to greenery refer to flora as ‘resources’, ‘services’ and as means to public recreation, health, and commercial activities.

Such institutions and documents point out how parks can be maintained and managed (for a large part paid out of tax money) and how the products and services of this management can be returned to the public through regulated use. The following section will explore how Amsterdam visitors and residents of Westerpark actually perceive the urban greenery.

## **Materials and methods**

This research involved the reflection on societal changes and current perceptions (How do people think about plants?). Also, this research reflects the Why question addressing and the practical (Why is it happening and How it can be otherwise?) consequences of commodification. Thus, the case study approach including

observations and interviews was used because it is “the preferred strategy when ‘how’ or ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context” (Yin 1994:1).

The research of plants in the urban spaces involved a twelve month period (May 2012 – May 2013) of observation of activities of park maintaining employees and visitors within the 14-hectare park in the West of Amsterdam Westerpark and areas adjacent to the park, as well as in-depth interviews with visitors to the park).

The researcher visited five areas of the park: 1. Kinderboerderij (petting zoo); 2. Het Woeste Westen (‘Wild West’) children recreation area; 3. Wetlands area; 4. Pond area; and 5. Westergasfabriekterrein (Westergas factory area used for cultural activities such as cafes and movie theatre). The researcher (or assistant) visited these areas every two weeks taking notes on 1. The types and condition of plants; 2. Maintenance activities of the park workers; 3. Recreation activities of the park visitors.

The interviews were conducted in and around the park area with 37 people, who were randomly selected and interviewed throughout the year, including 20 park visitors, 11 neighborhood residents, and 6 park workers. Since this case study was qualitative, the obvious limitation of this sample is its validity as the randomly selected visitors and residents are not necessarily representative of the whole population. However, since the objective of this research was to explore residents’ attitudes toward the position of plants, linking their views to environmental and ethical discourse and practices, the main focus lies in individual perceptions.

Visitors to Westerpark and residents were approached in different areas, with interview lasting approximately an hour, sometimes followed by a follow-up interview if the respondent desired to go into more depth on the topic. The subjects of in-depth open interviews ranged from the activities undertaken by visitors of the park or by residents’ of urban green areas (in the case of park workers, professional activities); wishes for improvement or maintenance of park or green spaces; wishes for alternative recreational activities; and perceptions, opinions of and values attributed to plants in the park, green areas in the neighborhood, and plants in general. For the purpose of this research, the latter set of questions was the most important as the researcher attempted to elicit both responses about concrete areas, as well as about perception of urban flora and the value of greenery in their everyday life.

People approached for interviews were selected using convenience sampling as the researcher was primarily interested in exploring respondents’ perception of vegetation and trying to establish on how these perceptions

are related to practices and policies of urban vegetation. The interviewees were asked to provide basic demographic details, such as age and employment (two have refused and were not considered in this sample). Most interviews were recorded and transcribed. Respondents' gender and location of the interview were recorded by the researcher.

### **Area descriptions and observations**

Generally, wetlands and pond area contained the greatest variety of plants, while petting zoo included the largest open grazing field, Wild West the largest recreational field and Factory area itself mostly has urban attractions such as restaurant, cafes and show facilities. Plants include old growth trees such as poplars and willows as well as newly planted trees such as aspen or birch. Between the period of January 2012 and January 2013, the researcher observed 24 trees being cut, 79 trees' branches were cut and 19 new trees planted. Large areas are covered in cultivated grass (Figure 1, newly cut tree).

Maintenance activities of the park workers occur regularly, with different park specialists targeting different areas (for example, the gardeners are more likely to seasonally work in wetlands areas; while cleaners are found daily in the metropolitan factory area). Recreation activities, as well as socio-demographic characteristics of the park visitors, vary according to the area (for example, petting zoo attracts more families, while Factory area is mostly visited by young professionals).

In the Kinderboerderij activities undertaken by mostly families with young children included interaction with farm animals (normally facilitated via the staff). This petting zoo was also frequently visited by expatriate families from Amsterdam. One of the members of the group described the facilities in an online meeting announcement: 'There is a little playground, and there are other free public playgrounds very close by. There is a child-friendly cafe called Pacific Park very close as well. There is a toilet. Beware: the place is rather dirty though and grass has not been cut for a while ([https://groups.google.com/forum/?fromgroups#!topic/moms-and-tots/\[Anonymous\]](https://groups.google.com/forum/?fromgroups#!topic/moms-and-tots/[Anonymous])). The grass area was used for two functions: grazing and hay provision for the animals, and recreation area for visitors, which was open all seasons.

The Het Woeste Westen (The Wild West) recreation area encourages children to 'explore the wilderness, build huts, collect wildflowers (which is actually prohibited in most Dutch parks), and be a true nature adventurer' as part of an environmental education program or privately organized 'nature parties' (<http://www.woestewesten.nl/>). Het Woeste Westen hosts a 'cabin' fit with all modern amenities including

supply of non-compostable plastic cups from which 'wilderness tea' can be drunk out of 'camp firepot' heated by the fire lit by using commercial logs from the supermarket or – in the autumn and summer – branches cut off from nearby trees. Winter events included in-hut-activities such as nature-themed games, including video presentations, and occasional ventures into the open to 'probe the ice', as was seen in the 'activities log' kept in the 'cabin' office (Figure 2, office building).

Wetlands area near the pond area is designated as a 'nature area' or Natuurstergebied ([http://www.zoetermeer.nl/sport-vrije-tijd/parken\\_3397/item/westerpark\\_27739.html](http://www.zoetermeer.nl/sport-vrije-tijd/parken_3397/item/westerpark_27739.html)). The area of about 500 square meters is defined by tall grass, intercepted by walking paths and inaccessible marshy areas. The pond area is accessible via wooden planks and contains information displays about wild flora and fauna (mostly small birds, reptiles and amphibians) of the area. These areas were not well-visited (an average of twenty people in the peak summer period), the visitors being couples, groups of children, and occasionally recreational drunk and drug users. The area was maintained five times during the period of observation: the tall grass was cut, the shrubs and bushes were trimmed, and the pond area was cleared by removing nearby plants and trash.

Westergasfabriekterrein area at the time of observation contained nine cafes, two restaurants, one movie theatre; two clubs also used as cafes, and a large outdoor exposition space (<http://www.westergasfabriek.nl>). The trees lining up the promenade walk between the buildings were decorated by lights and on two occasions supported advertising balloons and served as lean-to support for the posters. The narrow grass areas were mowed five times during the observation period. Flower beds near cafes were maintained at the end of the summer, most of the flower bulbs and soil being extracted to be replaced in the next season. The area was the most visited in the park, with sometimes more than a thousand visitors per day for special events such as fashion, or art and technology expositions. Visitors could be classified as young professionals, families, and non-Dutch tourists.

The surrounding area of Westerpark included residential streets of Amsterdam West. The sections below summarize the observations and interview results. In 2012, green areas, including Westerpark and other parks such as Erasmuspark, accounted for about 9% of accessible public space. The brochure of Municipality Amsterdam, district West titled 'Green in the West' describes the 'greenery' as 'important for clean air and recreation' and 'consisting of important tree structures, trails, parks, green squares, inner yard ecology as well as the green in the street' ([www.west.amsterdam.nl/.../groen\\_in\\_west\\_mail-05-04-2012.pdf](http://www.west.amsterdam.nl/.../groen_in_west_mail-05-04-2012.pdf)).

Condition of the gardens during the observation period differed greatly, depending on individual residents' care. What the researcher found remarkable during the observation period that an average of 10 house plants per week was taken out with the garbage, some of them in good condition, others dried up or kept in too small pots. The researcher also observed that some plants were 'rescued' by other residents, being picked up and taken home to be cared for.

## **Interviews**

The qualitative data obtained through observations and in-depth interviews were used to the texture and demonstrate how differently people conceptualize their relation to plants in order to provide a link between different management practices and policies on urban vegetation and residents' understandings of urban plants. Visitors to the park were approached at random in different areas, with the location of the interview serving as a conversation 'opener', followed up by concrete questions about the park or surroundings and more general questions about the value of plants for the interviewee. A couple interviewed in the Westergasfabriek area, for example, was asked about the value of cultural activities in the park first, then about Westerpark itself and then about green areas in general. Generally, there was no large difference between people interviewed in different areas, aside from the obvious differences in the functionality of the facilities they were using. Opinions, perceptions, and attitudes differed individually, rather based on socio-demographic characteristics or the chosen location of the respondent. For example, the researcher could not conclude that visitors to the wetland area were greater flora lovers than visitors to the cultural center. There was however a correlation between residents who had a kept garden and those who did not as far as their positive attitudes to greenery are concerned.

Both park visitors and residents tended to equate green areas with 'nature', concern with artificiality were not expressed, and management of plants in terms of mowing grass, pruning, trimming, cutting off branches of trees, weeding of wildflowers, etc. was seen as normative activities. The very normalcy of park maintenance is well-illustrated by the following quote from the male visitor of Het Woeste Westen area, who has just dropped his son off at the 'ranger's hut' for a children's party:

'I think it's great that they [park employees] maintain this area. It makes it safe and clean... Children cannot trip over roots or anything, they learn the value of the environment, and learn to appreciate beautiful areas like this one... I come here often myself, without [my son] and I see how hard these people [Het Woeste Westen employees] work to keep this area – see, they just built a new picnic area, and they keep nature accessible and clean'.

This statement is reflective of a number of ways in which the value of nature is equated by park visitors with safety, accessibility, cleanliness, and other qualities that may be actually opposed to what another park visitor, a female interviewed at the entrance of the park, associated with 'wild nature', which was seen as 'hostile' and 'unaccommodating'. This visitor also thought that 'letting nature go wild' in Westerpark could potentially lead to 'contamination' (while the respondent had trouble explaining this term, aside from vague references to possible diseases that wild plants and animals attracted by these wild plants may carry or 'bacteria' that might develop in the non-treated water that could be harmful), and public danger (with particular reference to areas where urban gangs may gather due to density of plants, or bicycle paths that would be overgrown). This visitor emphasized the importance of maintenance activities in providing public safety and convenience, as exemplified by this statement.

Another example of the perception of the dangerous wild is given by the dog owner in the Westergafabriek area of the park, who reflected that 'picking up dog poo' is one of the 'public responsibilities', and although he resents the chore, it is 'quite understandable that nobody wants to ground polluted... not just in the streets, but in the park'. Otherwise, the visitor reflected, people can get seriously sick.

Some support can be easily found in favor of some of these arguments – for example, in urban settings, criminal elements might be drawn to more secluded (or overgrown) places, and the prevalence of dog excrement on the city streets could indeed lead to public health hazards and hindrance. However, what is remarkable about those statements, is that the idea of natural processes – in which animal excrement fertilizes the ground, for example; or in which 'overgrown' bushes and fallen leaves help maintain healthy soil and protect tree roots from freezing in the winter – is overlooked.

A few park visitors have noticed that tree branches were often cut. One middle-aged Dutch male has reflected that probably the city council 'gets money for this... these are used as biofuels'. The researcher was not able to verify this information, but in further conversation with the same park visitor it emerged that his attitude toward biofuels is positive and he thinks that 'it is a good thing that the park can pay for itself'.

What also emerged from the analysis of conversations and observations is that some city residents take an altruistic approach to plants, 'rescuing' some dumped domestic plants from garbage containers and taking them home. A particularly touching case of well-meant anthropomorphism was observed by the author when a little girl wrapped up the branch of a tree in a scarf she has found, commenting that 'this way the tree won't get cold'.

## Reflection

Observing urban residents' relationship with plants through recreation or gardening, the author also noted that some of them felt protective of the plants or felt the need to 'take care' of them, even if this care actually meant getting rid of some plants through weeding. Observations also revealed that some residents have occasionally abandoned healthy house plants and that other residents 'rescued' these plants from the street, revealing the variety of actual behaviors toward plants. For example, one female resident provided the researcher with a link to this story:

Big or small, with or without flowers, thorny or soft, though one thing in common; unwanted. All are welcome at Rachelle Klaassen's home turned into a plant shelter in the western part of Amsterdam. Rachelle, 24 years old and a graduate of the Design Academy in Eindhoven, found it too heartbreaking to see people throwing out or neglecting their plants and decided to start a shelter. When a plant comes in she patches it up until the plant is ready for a new owner. At the moment, cactuses are all over the place, because the owner, an old woman, passed away recently. The granddaughter found Rachelle's [website](http://www.firstofaugust.com/foa-people/people-and-their-plants-rachelle/) and called if she could take care of them. Rachelle took all fifteen, including a really ugly and dirty one, looking like an octopus (<http://www.firstofaugust.com/foa-people/people-and-their-plants-rachelle/>).

Another female resident interviewed after the trees were cut in her street after planned re-pavement of the street in March 2013 (Figure 3, tree removal at Barentszstraat), told the researcher that she 'felt sad for the trees' and found it 'such a waste'. One of the residents has painted a crying face on the tree stump (Figure 4, crying tree).

## Discussion

Returning to the discussion of C2C, 'managed environment' in The Netherlands plant growth is both managed and is seen as 'wasteful' rather than credited for renewing the park's natural nutritional composition. We notice that green urban planning and management currently exercised in Westerpark perpetuates 'cradle to grave' system which seems to have taken root in both management public perceptions of greenery. At this strange cultural conjunction, public perception is geared towards artificiality. In the words of Anderson (1997:497):

To domesticate the wild is to draw it into the boundaries of the known, to "fix" it into an (it is hoped) secure state. Yet ... this is no transhistorical process of evolution's unfolding, but a

political activity embedded within concrete human practices. It has diverse underpinning moralities, contradictory manifest forms, and is open to rupture and reversal.

Historically, Merchant (2006) identifies the Enlightenment as the period when science began to atomize, objectify and dissect nature, foretelling its eventual conception as inert. Other scholars have evoked Christian spirituality and religion to remind people of their unequal relationship to plants. As John Muir has remarked, decrying the destruction of old-growth forests:

Any fool can destroy trees. They cannot run away; and if they could, they would still be destroyed,—chased and hunted down as long as fun or a dollar could be got out of their bark hides, branching horns, or magnificent bole backbones. Few that fell trees plant them; nor would planting avail much towards getting back anything like the noble primeval forests. During a man's life, only saplings can be grown, in the place of the old trees—tens of centuries old—that have been destroyed. It took more than three thousand years to make some of the trees in these Western woods,—trees that are still standing in perfect strength and beauty, waving and singing in the mighty forests ... God has cared for these trees, saved them from drought, disease, avalanches, and a thousand straining, leveling tempests and floods; but he cannot save them from fools (<http://www.theatlantic.com/ideastour/nature/muir-excerpt.html>).

Returning to the here and now of urban environments, there is little discussion in the literature how Muir's lament translates into the public as well as policy-makers' perceptions. The commodification of urban greenery threatens to become – if it has not done so already – the global ideal of urban planning. Clearly, extractive relationship to plants is quite different from C2C's perspective that seeks to emanate natural systems and calls for respect of biodiversity (Tennant and Brennan 2015). An alternative vision – as well as implementation – is not that difficult to achieve. An obvious solution at the practical level is just 'letting nature do its work' and not trim, cut, fertilize, etc. any of the plants in the park. In its simplest relation to urban greenery, the C2C framework would imply: 'Leave the plants to do their work'. This will require a certain shift in public perception.

Given the temporary nature of shifts in public opinion and the brevity of present admiration of polished lawns, such a shift is possible. In fact, when financial costs of park maintenance, including the number of personnel, materials, and technology needed to actually maintain the greenery, are calculated against no costs involved in simply letting plants (and weeds) grow, a public policy decision can be easily supported by the basic cost-benefit analysis. While in the Dutch (and in increasingly global settings) a process of

normalization of 'de-wilding' is in place, it is also possible to conceive alternative nature which accommodates urban greenery in its biodiversity.

Consequent research can delve into evidence on all sides of the cultural-sociological positions and try to determine how different visions of greenery can be approached or perhaps changed (for example through environmental education programs) in a way that places more value on plants autonomy and human appreciation of plants' multifaceted values. Integrating different visions may lead local-level policymakers to realize that they can both save money AND achieve protection of green spaces by NOT undertaking maintaining activities. Counteracting the increasingly globalized view of what a civilized and wealthy city landscape should look like, there is an increasingly prominent wave of concerns with environmental ethics, sustainability, and C2C. These concerns may – and hopefully will take precedence over grooming practices that are illustrative of the 'cradle to grave' model.

## **Conclusion**

The objective of this research was to explore residents' attitudes toward the position of plants, linking their views to environmental discourse and practices. This article has addressed the discrepancies between conventional and Cradle to Cradle (C2C) frameworks on the one hand and current green management policies and public opinion on the other hand. Recalling Amsterdam Municipality documents, we note that 'green objects', 'land and nature refurbishing', 'desired forest structure', 'nature development plans', seem congruent with actual reality that park visitors confront in Westerpark. While park visitors witness activities such as cutting, mowing and fertilizing in the park, these activities are not seen as either ethically problematic or distortive of natural ecological balance and environmentally unhealthy.

An alternative framework for sustainable management strategies of urban green spaces was proposed, emphasizing the importance of leaving urban plants, unmanaged, unmaintained and returning human urban dwellers their true sense of the 'natural'. Implementation of urban green management consistent with C2C is not difficult to achieve, given the temporary nature of shifts in public opinion as well as basic cost-benefit analysis.

The author reflected on how urban planning policies can be better geared toward public awareness and recognition of C2C, and most importantly towards the implementation of alternative management of urban flora which allows plants to 'go wild'. It is the author's hope that in leaving the confounds of Amsterdam city park and present time, to quote Anderson (1997:483), 'the relaxation of rigid oppositions of civility and

wildness; and ultimately, a human Self more conversant with its own wild side, de-domesticated and unbound' will be possible – not just in one particular area but in all urban planning and human appreciation of all plants.

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