Negotiating Authenticity and Climate Change in Heritage Gardens

**ABSTRACT**

With this paper we explore and discuss the priorities of and possible goal conflicts between authenticity and climate change in heritage gardens. How can climate change mitigation, adaptation, resilience, and cultural heritage conservation be combined in heritage gardens? Our study was guided by the following research question: How do gardeners negotiate climate change and authenticity in heritage gardens? From Rachel Carson’s *Silent Spring* in the 1960s through to the 2002 report *Gardening in the Global Greenhouse* and the recent *Gardening in a Changing World* in 2022 mankind’s impact on the environment and the emerging climate change has been the focus of increasing attention. By investigating and interviewing multiple gardeners our objective was to pinpoint common challenges, as well as what can be learned from one another within the field of gardening and heritage conservation. The case study method was adopted for this study, involving three head gardeners in the United Kingdom. Interviews were conducted with Joseph Atkin at Aberglasney Gardens, Claire Greenslade at Hestercombe Gardens, and Steve Lannin at Iford Manor about their expertise and knowledge. The gardeners expressed concern regarding climate change and the challenges it poses. The interviewees shared their experience with drought, reduced use of pesticides and herbicides, and the peat legislation in relation to their role as head gardeners. We argue that authenticity and the traditional gardening practised before the advent of power tools, plastic, peat issues, and uninformed transportation can be part of the solution to loss of biodiversity and climate change. This paper identifies some of the obstacles encountered in relation to negotiating questions of authenticity and climate change in heritage gardens.

**Keywords:** authenticity, climate change, heritage gardens, craft.
INTRODUCTION

From Rachel Carson’s *Silent Spring* in the 1960s through to the 2002 report *Gardening in the Global Greenhouse* and the recent *Gardening in a Changing World* in 2022, mankind’s impact on the environment and the emerging climate change has been the focus of increasing attention (Carson, 1962; Bisgrove & Hadley 2002; Moore, 2022). In the past decade, extreme weather has become more common around the globe, and large numbers of people have experienced this climate change (Steffen et al. 2018; Kron et al. 2019). Examples of this include the severe drought in Sweden in 2018 and in the United Kingdom in 2022, both of which had a direct impact on heritage gardens. There is a notion that gardeners as professionals are obliged to be part of mitigation, adaptation, and resilience in relation to climate change, which might be fair since gardeners work directly with nature. Still, a garden is not something natural, it is man made. The call for change in relation to garden norms and practices comes from within the horticulture sector as well as from the general public. This is especially evident in the current trends of rewilding and naturalistic gardens, focusing on drought resistance and biodiversity.

Our point of departure in this paper, as indicated by the title, is the definition of heritage conservation as *negotiation*. (Smith 2006; 2009). We adopt this definition as we see heritage conservation as a negotiation between cultural heritage values and climate change. The paper explores how this negotiation takes place in situ by different gardeners in the United Kingdom. There are many obstacles that gardeners have to contend with, among them the question of resources and economics. However, the problems are especially challenging when it comes to heritage gardens. The research question guiding this study was formulated as follows: How do gardeners negotiate climate change and authenticity in heritage gardens? In *Gardening in the Global Greenhouse* the authors state that garden conservation must be redefined because of climate change (Bisgrove & Hadley, 2002). Today, we can add that loss of biodiversity is an additional factor that necessitates such a redefinition.

In all cases, managing gardens is about managing natural processes, including the human desire for change. Extreme climate change will make such changes commonplace and so challenge the way we think about our historic gardens, what we expect of them and what we mean by conservation. (Bisgrove & Hadley 2002, p. 74).

We are now living in the ‘future’ predicted in the report by Bisgrove and Hadley. One of the authors (Grönlund) interviewed three expert head gardeners from heritage gardens in the United Kingdom, discussing their work as professional craftspeople.

This study seeks to contribute to the understanding of, and between, head gardeners as craftspeople who navigate the complexities of managing biodiversity and climate change, while preserving the authenticity of heritage gardens. By examining the practices, challenges, and successes of these professionals, we hope to uncover valuable insights that can inform future conservation efforts.

A comparative analysis was undertaken of the various gardens selected for the case study.

CASE STUDIES

The following head gardeners were interviewed: Joseph Atkin of Aberglasney Gardens, Claire Green-slade at Hestercombe Gardens, and Steve Lannin at Iford Manor. The gardens were chosen based on their historical significance. Aberglasney Gardens, a garden trust in Wales, is famous for its 17th century Elizabethan gardens; Hestercombe, an 18th century landscape garden designed by John Bampfylde, is currently applying for museum status; while Iford Manor – a 20th century garden and one of the first Italian-Japanese gardens created by the architect Harold Peto – is today a family home. The selected gardens all employ different forms of funding with a view to highlighting the role of economic sustainability.

All the gardeners work with different conditions and draw on their individual preferences and experiences. Moreover, they all agree that changes need to be made to address the issue of climate change. If a plant dies due to changed climate conditions, there is no use in replacing it with the same variety. Instead, the gardeners argue that entire plantings may need to be torn out in order to create a
new one ‘in the same spirit’ as the original – one that requires needs less water during the extreme summer droughts that are anticipated. Both Atkin and Lannin made reference to the spirit of the garden. In the interview Atkin described the walled garden at Aberglasney, created by the famous writer and garden designer Penelope Hobhouse. The garden has been suffering from box blight, and to solve this problem the box hedge that used to create the frame of the Celtic circles has been exchanged for *Rhododendron micranthum* – ‘bloombux’, a prunable dwarf rhododendron. To Atkin, this is not in conflict with against the spirit or idea of the garden itself. He had the following to say about the Hobhouse garden:

The garden was Penny's idea. The exact plant in which spot is not that important. It's the idea and the spirit of the place and the idea of having that Celtic circle that could be viewed from the top, from all those different angles. The sightlines which aren't quite there, and centre and stuff like that. That's what Penny's garden is. (Atkin, 2023)

![Celtic circles late summer, Buxus, September 2021](Emma Grönlund 2021. The walled garden at Aberglasney. [Photo].)(Figure 1). Celtic circles April, ‘Bloombux’, April 2023 (Nigel McCall 2023. The walled garden at Aberglasney. [Photo]).(Figure 2).

The notion of spirit is also important for Lannin, who works at Iford Manor outside Bath, whose garden dating from the early 20th century was never completed. He and his team make use of the Manor’s picture archive to recreate the atmosphere and spirit of the garden, but with plants that are adapted to the new climate. With the terrace, they have even started to anticipate the dry summers expected as a result of climate change.

The way it was replanted a decade ago was presuming it would be watered pretty much every week in summer. And that’s not something we want to carry on. So we’re changing the planting, to cope with drought. But in actual fact, Peto’s garden was supposed to feel Italian, which are generally hot and dry gardens. So the style of planting, that you want to put in, if [it’s] not the same, are recognisable within the same kind of genre (Lannin, 2023).

Both Lannin and Atkin expressed the opinion that there is no end date when it comes to the creation of a garden. However, while they have similar opinions, their underlying reasoning differs. Atkin argues for innovation and renewal of gardens for the sake of the workload of the gardener, whereas Lannin is prepared to go to greater lengths in favour of keeping the plants and doing what he can with ecological methods. At Iford they have few of the original historic plants planted by Peto himself, but they use preventative and conservatory methods to clone exact replicas of Peto’s plants, which Lannin
believes is important. By contrast, Atkin believes it is better to introduce something new that will thrive in the current circumstances.

The third garden in this study, Hestercombe Gardens, is the only garden with an antiquarian on site. The antiquarian works together with the garden team in developing new areas of the gardens. The garden team at Hestercombe follow the practice of the French architect and author Viollet-le-Duc. When it was discovered that the original surface of an old painting of the gothic alcove had been painted over, they took the decision to restore the original to honour the original garden designer, Bampfylde’s, idea. They also started building an Elizabethan water garden, traces of which were first identified in an old map. Next, they looked for remnants of the original water garden in the landscape with the help of geologists and hydrologists. Once they had enough evidence to support the claim they started the construction of the new Elizabethan water garden.

At 16 hectares (40 acres), Hestercombe Gardens are extensive. While herbicides are still used there, the team have been changing their approach and are currently testing new methods. We will just spot spray what needs to be done, which is a big change for us. For example, when we used to clear brambles in the woods, they used to spray the whole thing and let it go black and horrible. So now instead we strim it, rake it off, and then when the shoots come up, we can spot spray and it doesn’t look awful. And it’s not as invasive. Does it work well? Does it look as spotless? No. And actually, that’s one thing I’d say when you look at the old photographs of Hestercombe in 1904. Yes, it’s so sharp. [...] then you look at the old pictures, they were immaculate. But then there were 17 gardeners just weeding. (Greenslade, 2023)

It is interesting that Greenslade brings up the matter of historical accuracy. This is a perfect example of the fact that sustainability and historical values do not go hand in hand — although it is really economical sustainability that is the culprit here. It is certainly more environmentally sustainable to employ 17 weed-pulling gardeners than to have a lawn that is kept spotless lawn through the use of herbicides,
even though it is certainly not economically sustainable (see Fig. 3). In fact, leaving the ‘weeds’ in the
lawns is the most environmentally friendly option, but at the cost of historical authenticity.

At Iford manor, things are a little different. Here they try to work completely organically and
therefore go out of their way to weed manually and use organic alternatives. Lannin had the following
to say on the topic.

Herbicides – we don’t use any at all [...] I think in terms of soil health long term, I’m not convinced as to
how well things like glyphosate are going to break down in the soil into harmless things. I think I’d rather
not chance that [...] In terms of pests here, our major issue at the moment, like lots of folk have, is box
moths, as we’re using sort of pheromone traps and things for that. And we’re using a biological spray for
that. That sort of feels like a choice we had to make, because we’ve got a lot of box here. We’ve basically
got a box woodland on the hill. So the garden is not defined by the box, but losing a great chunk of the
box would really change the feel of the garden for quite a long time. But again, technically we’re being
organic about that, because nothing that we’re using is chemical. (Lannin, 2023)

Lannin dares to do what few others have done: he lets unruliness be part of the garden’s spirit and
atmosphere. Still, he toes the line in a very thoughtful way, choosing the areas in the garden where it is
worth putting in the extra work to preserve its historical authenticity and spirit. This proves that a garden
with enough funding can be managed in an organic way, balancing the natural and historical values,
while trying to enhance both.

At Aberglasney, both pesticides and herbicides are still in use. Atkin argues that if the client
requests a spot-free garden, then one’s job as head gardener is to deliver on that. As a gardener, one is
keenly aware of how quick the visitors are to notice unsharp edges and weeds in the gravel. Furthermore,
while weeding, one neither wants to disturb the gravel and pull up dirt where new seeds
can grow, nor spend a lot of time on it; especially not in large gardens where there is always a lot going
on. Atkin estimates that one hour of chemical weed killing is worth between £500 to £1000 pounds in
manual labour; these numbers are based on trials with his garden apprentices.

Water is the other significant issue that every gardener brought up. The summer of 2022 saw
temperatures of 40°C and higher for a long period of time, and many of the plants were already suffering
from caused during the summer of 2018, which also saw record high temperatures. In this sort of
climate it is not viable to continue watering. On this point, the gardeners agreed that there needs to be
a change in the plantings so that they can save the water for old, important, or rare plants that are
significant for the heritage of the garden. All the gardeners agreed that if something cannot survive the
heat without a lot of watering, it should be taken out or left to die, for purposes of sustainability.

Another issue that all gardeners were struggling with is the peat ban that comes into effect in
2024. Peatlands are powerful carbon sinks and store large amounts of carbon due to their slow
decomposition process, preventing the release of CO₂ and methane into the atmosphere. The negative
consequences of disturbing or draining peatlands are numerous – for example, increased greenhouse
gas emissions and loss of biodiversity. It is for this reason that the sale of peat products will be banned
in the UK in 2024. The gardeners that were interviewed expressed a lack of knowledge and experience
in gardening without peat.

We are struggling being peat-free – I think lots of people are; because the nature of the peat-
free compost that you can buy – it lacks the qualities that peat has [...] So we’re trying to find a solution
to that. I think [...] it’s going to be a mixture of homemade compost, and probably some top soil, along
with the proprietary stuff that you buy on order, because the leaf mould we create here is really good
for retaining moisture. (Lannin, 2023)

**DISCUSSION**

As stated in the introduction the following research question guided this study: How do gardeners
negotiate climate change and authenticity in heritage gardens?

While the British and Welsh gardeners are acutely aware of their role as cultural heritage
professionals and conservators, the general consensus is that the environment has to come first. How-
ever, they are more or less open to driving the change of gardening practice to more environmentally friendly methods. As professionals, they have a role to play in relation to the general public and the businesses from which they buy their plants, substrates, and machines, namely, to provide education about and drive the change.

Economic sustainability plays a significant role in all gardens. Environmentally sustainable practices such as manual weeding and pest control cost more money because they are less time efficient. Ultimately, it often comes down to how many gardeners one can afford to have on one’s team, as both Atkin and Greenslade pointed out. Moreover, norms and ideas about neatness also play a role in this regard. Both authors of this article gained their gardening experience in Sweden and can therefore compare the UK cases with their Swedish experiences. In Sweden the craft research shows us a different approach. A skilled crafts person may be as efficient with traditional tools as one with electrical tools. A good example is the scythe. Leaving meadows to grow during the season benefits the climate with lower emissions, biodiversity, and historic authenticity. It also has hidden benefits such as a quieter, more historically informative visitor experience and a long life expectancy of the tools.

One of the main challenges in the UK is drought, and many gardeners conclude that constant watering is unsustainable and decide to change their plant material. This is in line with the new rewilding and naturalistic trends – it may increase biodiversity and sustainable practice, but may compromise historic authenticity. Nevertheless, this can be understood as part of the redefinition of garden conservation in times of climate change foreseen by Hadley and Bisgrove (Hadley & Bisgrove 2002). Another challenge is shifting to peat-free soils. As heritage gardeners, we want to emphasise that looking to history might provide solutions to modern problems. There was a time before peat, when gardens did not overflow with imported annuals, but consisted of locally produced plants, tools, and soil.

As stated above, in the UK entire plantings may be torn out to create a new one. This approach clearly favours climate resilience above cultural historical values in the actual plant material. However, other approaches are unrealistic in times of climate change. When analysing the approach of the UK head gardeners interviewed in this paper it seems that they are more open to making changes with plant material in order to adapt to climate change than Swedish gardeners, as long as such changes are in line with the spirit of the location. Perhaps this attitude has to do with two things: the heritage conservation legislation in the UK and the extent that climate change is present in heritage gardens in the UK. The situation in Sweden is different with regard to these two aspects.

In Sweden, the heritage legislation for listed gardens is inherited from the established and inert cultural heritage. There is no room for life, change, and death in this legislation (Riksdagen 1988). Since change is a vital aspect of the very nature of gardens and landscapes the legislation does not completely fit the protected objects. From a legislative perspective, this has led to a single focus on cultural heritage values in heritage gardens in Sweden. The UK legislation seems to deal more effectively with climate change and loss of biodiversity, whereas the Swedish legislation possibly safeguards the cultural heritage values more effectively – at least as far as the built environment is concerned.

One potential pathway for the redefinition of garden conservation is to use historic practices and plant material as possible solutions to contemporary problems (see Seiler, 2020). Can historic gardening methods promote biodiversity and mitigate the negative impact on the environment? Can historic plants – for example, the exotic plants in an 18th century landscape garden – be suitable species in a future with more droughts and extreme weather? As garden professionals, we have thus far examined each issue in isolation: authenticity, climate change, and biodiversity. We argue that authenticity and the traditional gardening practised before the advent of power tools, plastic, peat issues, and uninformed transportation can be part of the solution to loss of biodiversity and climate change.

In this paper, we have identified some of the obstacles that impede negotiating authenticity and climate change in heritage gardens. Our study identifies a need for a new dynamic approach when these two issues are examined simultaneously. Such a dynamic approach might reveal that one issue can provide solutions to the other.
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