

THE EDGE OF CHANGE

Introduction

Landscape architecture and plants seem to have an obvious and eternal connection to one another. However if one reviews the history and theory of landscape architecture, the subject of plants in relation to design remains largely un-discussed. Plants, or at least trees are included in plans, however this is because they are seen to form part of the organisation of the design, as a form of geometry. Thus a row of trees is a row (or a line) more than it is a group of vegetative organisms. The historiographical imperative, when it is not simply biographical or chronological, is to understand the form of the design. At a more detailed level, when understanding the nature of this geometry, as the quality of an area, plants are seen as a material, no different from masonry.

But plants are different. They transform over their life, and the life of the design – in many respects they transcend the design. They are more than just colour and texture – their growth is a symptom of time. In terms of landscape architecture, plants are the source of its greatest design difference to other design disciplines such as architecture or planning. Even if thought of as a material, the fact that a material can change potentially gives it the qualities of a magic carpet. That plants are undervalued in the discipline that they make unique is, I would argue, related to two factors: the historical and social development of the profession of landscape architecture from gardening and; the difficulty of discussing something, representationally, that is not static.

Landscape architecture clearly developed during the 19th century from gardening. This development accompanied the change of gardens in scale, as they grew to the size of the English landscape garden. As gardens reached this scale, they began to have a size that was comparable to the urban, and as such became another means to deal with spaces other than architecture in the city. Landscape architecture became “a precise tool of urban planning”. In deploying thousands of trees, the status of trees and plants as individuals, tended with specific care, as gardeners would, diminished. However to grow plants, gardeners were still required. Consequently garden design and landscape architecture became professions in their own right that were separated from gardening, with a status “greater” than gardening. The development of landscape architecture is thus one of a blue collar profession, a working profession, creating a socially superior white collar one. Further along in its evolution, as it became even more enamoured with the urban and its agency within it, garden design too was separated into a separate profession, again below landscape architecture. Despite important work in the garden by the American Modernist landscape architects, such as Church, Eckbo, Kiley and Rose, landscape architecture is now at least two professional steps away from its garden roots.

With the distancing of landscape architecture from gardening, landscape architecture has developed new skills and abilities above and beyond that of architecture to do with design and implementation on these large scales. However, in developing these skills, it has also lost many of the skills of the profession from which it has developed. These lost skills are to do with growing plants, an activity which is related to a practice with a different “time” to that of landscape architecture. As landscape architecture became a profession that worked largely in representation, it developed 2 basic temporal modes in its design process, that attempted to account for the progress of the project: implementation and; maturity. Both of these are predictive, in so far as the design process happens before both of them. At implementation conditions are established, or predicted that will ensure an even growth to the even more predicted maturity, when all the vegetation finally reaches the vision established much previously. The difficulty here is that both these views, implementation and maturity are both representationally static, despite the fact that the entire process of transformation between them is actually dynamic. Such an account of time ignores the value of all intermediate states between these two times, as well as not allowing for catastrophe or chance. Ultimately, it is assumed, the gardeners will deal with all of that.

The French Baroque Garden has a similar scale to that of the English Landscape Garden. It also has even greater formal or geometric properties, is as much (if not more) of a design project as that of the Jardin Anglais. Importantly however, Baroque landscape practice did not subordinate gardening practice, rather actively included it as part of its professional oeuvre. Almost all of the geometry utilised to form the French gardens of this period was composed of vegetation: allees, bosques, parterres. During the development of this vegetation over time, to form this geometry, gardening practices were utilised to give it different forms as it developed, mostly through pruning activity. For the French the techniques of gardening were not separate from a design practice. Major Baroque “landscape architect” Andre Le Notre referred to himself, and was referred to, by Louis 14th as “the royal gardener”. Indeed, his coat of arms, which he designed himself, comprises grass, cabbages and snails. Clearly, despite having worked on the largest landscape and urban projects in the world, Le Notre did not regard being described as a gardener as an insult. It was the core of his practice.

The following essay will discuss a French Renaissance/Baroque garden, Chateau Courances, that was initially thought to have been designed by Le Notre, but turns out to have been earlier than him. Courances includes all the main ingredients of the Le Notre Baroque Garden, but has a greater and different emphasis on the vegetative, particularly trees, and a sensibility that has variously been described as “intimate” and “romantic” by garden historians, because of the role that these trees play in inflecting the nonetheless rigid geometry. After describing the geometric design of the garden, this essay will attempt to discuss the use of trees in the design. It will also discuss the range of gardening practices that happen “in time” of the garden, that consolidate or render this geometry, showing that rather than being subsidiary to the design, these practices are integral to the sense of the garden at “maturity”, despite or perhaps because of their seeming invisibility. In doing so, it will attempt to come part of the way to creating an integrated account of landscape design and gardening practices.

Description of the Garden

The Chateau Courances is a 16th century French water garden, initially laid out in some semblance of the form it is now by Cosme Clause in 1548, along with his sons who were Grand Masters of Water and Forests (effectively government ministers of forestry and water). Over the next hundred years the Gallard family further developed the garden, acquiring additional land and establishing the general architectural features of the house and the garden. Between 1677 and the 18th century, the Chateau had various owners, each who struggled to keep the garden in its original form, until Anne-Marguerite Catherine de Gallard systematically renovated the gardenⁱ, using architects and engineers to develop the water works of the garden to her own specification.

While the garden at Courances has generally been attributed to Andre Le Notre, however as Penelope Hobhouse has noted “if it (Courances) was done by Le Notre, then he was in an uncharacteristically intimate mood at the time”. Documents held by the current owners of the estate reveal instead that the young Le Notre and his father (both gardeners) were in fact asked to provide a quotation for the maintenance of the garden in the 17th century, and were never finally commissioned to do any work there. The current owners rather suggest that this “French Renaissance Water Garden” may, in turn, rather have influenced Le Notre in his subsequent development of the French Baroque Gardenⁱⁱ. In the late 18th century a section of the garden was turned into a Jardin Anglais, finally returned to its original (and current) form at the turn of the 20th century by Achille Duchene, who dug out all the water features. In the recent description's of the garden, by Mosser and Bourdin, much of the design innovation of Courances is firmly located with the various owners of the garden. Thus to search for a single author is a historiographical convenience: what is actually remarkable is that owner after owner was able to develop the garden in such a continuous and coherent manner that it seems completely to be the work of an individual.

Courances is a wet site, edged to the north by the river Ecole, which was deviated at various points in the garden to fill the various “pieces d'eau”. The garden is developed along a clear North-west – South-east axis, which generally to the north of which comprises the water garden, and to the south productive forestry. The following description will proceed from the south-west along this axis.

The entry to the Chateau is on the main road between the towns of Moissy and Courances, to which the main axis is perpendicular, crossing a moat that runs along the boundary road. Originally this axis extended another 2 kilometres away from the Chateau to the north east, which is still visible through mature trees that remain. Along the axis, is a road to the Chateau which is bounded by grass and then long canals. The canals themselves are edged with rows of large plane trees (the *Platanes simples* to the north and the *Platanes doubles* to the south). Arriving at the Chateau complex, the main axis is crossed by another transverse axis that forms the front moat to the Chateau and continues south to organise various service buildings and the Chateau church. To the north this cross axis defines the eastern edge of the *Salle d'eau*, a large rectangular pool (edged by large plane trees) that provides an edge to the northern portion of the Chateau complex. The Chateau complex is surrounded by a moat that continues as a canal further south along the transverse axis toward the Church. The island of the Chateau is completely paved in front, with a complex portacochere that also forms a ceremonial stair to the first floor of the Chateau. The Chateau itself is a long rectangular building parallel to the transverse axis, articulated by a series of semi-towers along its façade. On the island, to the rear of the Chateau, facing the main garden itself, is an ornate *parterre de broderie* implemented by Achille Duchene. The Chateau island is able to be kept completely private by the use of the moat, with current visitors, deviating round the island to the north, along the base of the *Salle d'eau*, however in doing so the critical view from the Chateau west, over the *parterre*, along the main axis is denied to visitors.

The square of the island sets up the transverse axis, and in turn elements to the north and south of the island address the island rather than the longitudinal axis. The element to the north is the *Salle d'eau*, and to the south is a terrace containing a horseshoe (with the open end addressing the chateau) canal, behind which is an elevated semi-circular pool and water feature, the *Baigneuse*. Like all the other water features at Courances, the *Baigneuse* is a simple, naturally reticulated spout type. Throughout the garden a single spout ornament is used, which is a grotesque exaggerated fish, that seems almost Chinese. To the West of the *Baigneuse* is a much older feature, the *Dome*, which is buried in the forest behind, and is currently being archaeologically restored. The transverse axis is approximately 600m long.

To the rear of the Chateau, the longitudinal axis continues south west as an open grassed passage between forested bosques of poplars. This forest and the axis itself are bisected by other axes to the north and the south. From the Chateau, after the rear moat, along the axis is a large rectangular pool called the *Miroir*, the furthest end of which is semi-circular, surrounded by grass, with classical sculptures on the edge between the forest and the lawn. Further along this axis from the Chateau is an elliptical pool, the *Dauphin*. From here the axis gradually narrows, creating a tapering grassed, tree edged area called *Pelouse des trois Graces*. Finally the axis terminates with a circular pool called the *Rond de Moigny*, the furthest half of which is surrounded by stepped terrace with a sculpture. By this point the axis has become much more intimate and enclosed, and this terrace looks into and over wild forest and the Ecole river. The total length of the longitudinal axis is roughly 1500 metres, with 1000 metres of that length behind the Chateau.

The area to the north of the longitudinal axis appears to be a mass of forest which is criss-crossed by allees and canals, and is the most developed of the garden areas outside the main Chateau complex. Its northern edge is the Ecole river.

From the Chateau, this area is entered from the Allee de la Table, which extends diagonally from the north east corner of the Chateau moat, named after the circular area in its centre which is edged by stone seats. This allee terminates at a four way intersection. North of this intersection is a large hexagonal pool, the Gerbe, surrounded by sculptures and smaller trees, which is also the start of another axis, the Allee Catherine, which then extends back to the main axis, intersecting with the west end of the Mirroir. Directly opposite the end of the Allee de la Table is the Grand Canal, which is just off parallel to the main longitudinal axis. Interestingly, because the end of the Allee de la Table is not on the same alignment as the Grand Canal, and also because the Gerbe is also set back from this intersection, one must explore this junction to get a sense of these parts, and when one does, this space feels labyrinthine and complex, despite the relatively simple geometry. This gives the intersection some presence in its own right.

The Grand canal is 600 metres long, with the trees or forest edge very close to the canal itself, giving the canal an intimacy that belies the scale of the canal itself. Moving along the canal, away from this intersection, the character of the adjacent forest becomes wilder, and as one approaches the end, the canal edge is quite rusticated, and seemingly part of the wild forest, rather than the highly controlled other end. To the north of the canal, and also around the Gerbe, the Ecole river is clearly visible in a seemingly rusticated, natural state. This contrast between the clearly artificial canal and the natural river is an unusual contrast, one that makes clear the connection between the natural system and its use in the gardens manipulated hydrological schema.

A quarter of the way along the length of the Grand Canal, another axis crosses the canal back to, and across the main longitudinal axis, called the Allee de Creve-coeur, aligned with the south-west end of the Dauphin pool. Along this allee, between the Grand Canal and the main longitudinal axis, is another canal called the Nappes, which steps down from the longitudinal axis, via a series of overflowing rills. Because this allee is aligned with the sun, despite its being constricted and smaller than the Grand canal, this area has an open and light feel that is in contrast to the grand canal. Sculptures of lions are at each side, and each end of the Nappes. Once it crosses the transverse axis, this allee terminates with a semi-circular colonnade. A further axis crosses from the south west end of the Grand Canal to meet the Rond de Moigny. Like the other allee's, this axis continues to the south. The area to the south of the longitudinal axis is dedicated strictly to forestry although is still bisected by axes. This area once had more features, however has not been renovated, and is not open to general garden visitors.

In attempting to understand Courances as a French Baroque Garden (although the owners are keen to regard it as a French Renaissance water garden), this lineage is clearly present in the organisation of the garden, in its geometry and in the type of elements it contains. However its vegetated character and sense of space are clearly different to what one might expect from other Baroque gardens of the period. This is the intimacy that is alluded to by Hobhouse, which is worth explicating. Contemporary French garden historians refer to this sense as “Romantic”, but more than anything else, it is probably its contrast to the magisterial character of the Baroque garden that defines Courances. This difference is clearest in terms of the use of vegetation, the scaling of the spaces surrounding the geometry and the microclimatic qualities that result. Much of this, I would argue, has to do with the imperatives of maintenance over the last 100 years which has resulted in a stripping back of the garden to its most basic components.

Allee's and Trees

In the Baroque garden, a peculiar situation results from the use of axes in relationship to forested areas. While in fact the axes are often created first, and then the areas between axes are planted out with trees, what eventually results is a sense that the axes cut through, rather than create the edges

of forests. In other words the vegetation seems to be a mass pushing out into axis, indeed a total mass interrupted by the axes. The garden seems to have been cleared out along these axial lines. The role of trees is thus to define the edge of this mass, as much as they are specimens, or conditioners of the microclimate of the resultant space, even if they do have this effect. The trees are subservient to the axis.

At Courances on the other hand, it is probably the trees themselves that are most impressive. The axes create opportunities for meaningful trees, that is the trees dominate the axis. By meaningful trees, I mean trees that have value as specimens, and where the focus of the axis is on the quality of those trees. Most importantly, meaningful trees thrive in their situation, and that situation allows the inherent characteristics of those trees to develop and be exhibited. In the context of the planting design of a row of trees, several factors will determine the synergy between the trees themselves and the geometry of the line, particularly spacing of the trees, which includes both the spacing of trees in the line, but also the proximity of lines together.

Ecologically, trees thrive by being able to grow on the basis of competition. Forest trees, in particular, must compete against each other, and indeed all vegetation in an area, for light. During their growth, they attain height to first compete against herbs and understorey vegetation for light. Once they achieve a certain height, there is a scenario's that may result. At a tight density trees will keep growing vertically to gain a height advantage, to get as much light as possible. Once they reach that height, that is, a height where they have unadulterated access to light, the tree canopy will develop in breadth to gain maximum photosynthesisable surface area of leaves, by spreading. The extent of their spread will be determined by competition, where the physically adjacent tree canopies will literally stop the further spread of the tree. However, after a certain spacing, where trees are far apart, trees will not grow as tall or as wide, but will effectively become balls. This is because they are not competing with anything, and thus can create a smaller, but denser canopy to create maximum leaf surface area. Thus, to gain height in trees used horticulturally some level of competition is necessary. The form of the tree will also be determined by this competition. Trees closely spaced will grow tall and straight until they reach a height where it is useful for them to spread. Slightly wider spacing may give a similar height, but also allow an earlier broadening of the canopy. Very widely spaced trees will be not as high, but will develop a denser canopy. Therefore tree spacing in landscape design is an art of setting conditions for resulting tree form over time.

To return to the role and qualities of trees in the Baroque garden, tree selection and spacing have an important role in defining the axis. While alignment itself is the central quality of the use of trees in the axis, that is a continuous and repetitive continuity where all trees are equal in their role and where individuality in a tree in an axial planting is discouraged, another important characteristic of a species for use in the axis is the quality of its leaves, and how those leaves regenerate after pruning. Trees provide an edge to the axis. While tree trunks give a kind of periodicity or rhythm to that edge, density of leaves is an important quality in determining the rigidity of that edge. Specifically, the trees at the edge of the axis create with the side of their canopy a continuous plane along the edge of the axis, defining the axis as a volume of a tunnel. This is done by clipping leaves along the edge, from which the tree responds by creating more stems and leaves. Other techniques such as pollarding are used to ensure that mature trees maintain lots of green stems and leaves low down in the trees overall height. Trees are planted relatively close together so that this edge surface can be continuous. Almost exclusively the species used is Horse chestnut (*Aesculus* spp), which has a leaf made up of multiple leaflets in a palmate arrangement. With pruning, this species creates a wall of leaves, so long as the upper canopy does not dominate in the photosynthesis process. Importantly for this discussion, the formal habit of the tree as a whole is less important than its leaf production, except in so far as the habit gives that surface a great height. This height gives the surface an important vertical dimension.

At Courances however plane trees are largely used for the allee's and axes, which have an entirely different character. While planes can also be pollarded and pruned for maximum leaf surface, they tend to look messy and gaudy, because of a combination of leaf arrangement and leaf colour. On the other hand, planes develop a quite beautiful habit over time that comprises tall arching branches, particularly with some competition. Further pruning of lateral branching along these arching branches emphasises this arching quality. Correspondingly the activities undertaken on the trees along the allee's at Courances tend to be of an arboricultural rather than horticultural type. The trees are shaped formally with operations aimed at developing the formal qualities of the individual trees that make up the allee, via their branching. On the other hand, in the Baroque garden, trees are dealt with for their leaves and the plane of foliage across trees is the main imperative, and horticultural activities of pruning, effectively shaving leaves, are prioritised.

The width of axes and allee's is also a form of tree spacing, and engages the growth responses to competition described above. Generally the width of axes in Baroque gardens (such as Versailles, Vaux le Vicomte, Sceux, etc) is much greater than the height of the trees that make up the edge of the axes, further emphasising the scale of the axis. Because the trees on the edge of the axis define the edge of a mass of forest at the same time that they define the axis, their role as a row of trees is subservient to both of these senses. At Courances however the width of allees is less than the height of the tree's, so the row encloses the axis. Because the spacing of trees is greater across the axis than along it, the trees naturally also grow into the gap created by the axis, arching into it. This creates a tunnel, rather than an open void along the passage of the allee's.

One of the important things that trees do is to create microclimates. Microclimate is an ecological term that describes small and localised variations in the overall climatic qualities of an area, for example, particular spots where local physical conditions change the climate from that of the overall area. This can have a range of causes that mostly combine 2 or more factors, for example topographic shape and aspect/orientation, leading to either hotter or cooler local conditions. Trees commonly create microclimate by shading the ground or understorey below them, having effects on the temperature and humidity. The effects of microclimate can be profound, changing temperatures up to 5 degrees. While an ecological term, microclimate is an important experiential quality of gardens, and in climates such as Australia is a major rationale for the development of gardens in the first place. To continue with the comparison between the baroque garden and Courances, in the Baroque garden microclimatic effects of the edge trees on the axis have minimal effects on the overall microclimate of the axis, though they do create shade immediately adjacent to the edge of the axis. At Courances, on the other hand, the trees create an overall microclimatic quality to the whole allee – cooler, and with a dappled quality to the light. This combination of sculptural form of trees and microclimatic qualities of allee's goes a long way to explaining the sense of “romance” and intimacy.

There are however precedents within the Baroque gardens of Le Notre (or rather parallels, since we have established that Le Notre was contemporaneous with the development of Courances) for this kind of intimacy, in the character that he gave to his transverse axes. While the longitudinal axes of his projects tended always to have this magisterial character, with open spaces, long axes, visual effects and further spatial augmentation with parterres, the transverse axis was a both a contrast in feel, as well as an experiential interruption to movement down the longitudinal axis. At Vaux le Vicomte, the transverse axis is at a significantly lower level such that it is effectively invisible when viewing along the axis, and is just before the famous anamorphous sculptures, edged by the sculptures of Hercules, set into the front of the parallel stair. When walking along the axis, once the transverse canal is met, the walker is forced on a deviation that takes a kilometre to go round a canal that is only 5 metres wide. Moving in either direction along this canal, the walker moves into areas which are wilder and more rustic, more dominated by trees, and that terminate on one end with a mill where the canal joins the river, and with an arched bridge at the other. Similarly at Chantilly

and at Sceaux (both by Le Notre), the transverse axis terminated in a much looser, more rusticated and naturalistic intersection between the hyper-artificial Baroque axis and some sort of natural condition. This creates a moment where one can really appreciate a before and after condition, a contrast between the artificial and the natural.

In a sense a major difference between the English landscape garden and the French Baroque garden is that the English garden utilises trees in such a way that their qualities as trees, rather than simply as geometry is emphasised. Indeed the predominance of the Jardin anglais in Europe was accompanied by an interest in the diversity of trees, and in tree collection, which was very much a response to the seemingly geometry dominated French garden. What is particularly interesting about Courances is that it manages to combine the geometric interest of the Baroque garden with the interest of the English garden in specimen trees. It thus transgresses clear definitions of either type. It is interesting to speculate on whether this is because, during its history, the garden was of each type at different times. Perhaps the trees along the allees were allowed to grow naturally during the time of the English garden.

While tree usage is different at Courances, the geometry of the allée is maintained through another device that it does have in common with the Baroque garden, that is the use of ground level hedges. In Baroque gardens such as Versailles and Vaux, hedges that are scaled to the height of a person are used to continue the plane of the axis to the ground. Because even the horse chestnuts, with their leaf density, do not produce leaves right down to the ground, hedges, normally of Box are utilised to deal with the ground level evidence of the axis. These are planted in front of the larger trees, in alignment with the upper plane. Generally, these hedges are between waist and shoulder height, then there is a gap where the trunk is visible, before the upper edge canopy of trees is used. This gap is important because it allows visual penetration from the allée into the “mass” of the bosque or forest, an important factor in gaining the sense of the forest as a mass, and thereby that the allée cuts through it. At Courances, therefore, the hedge (obviously as well as the tree alignment) is utilised as as the formal defining feature of the edge of the allée.

It is important to quickly note what changing seasons do at Courances, noted during visits in both summer and winter. Essentially the surfaces remain the same, though growth slows, as do the hedges, however obviously the mainly deciduous trees lose their leaves. The loss of leaves of trees causes a change in the sense of space of the garden and its dimension. With full foliage the forest fragments (bisected by allée's) obscure spaces behind them and increase visitation experiences such as surprise. However in winter, viewing through trees allows the overall organisation of the garden to be more clearly visible, the apprehension of which is its own kind of pleasure. It opens up the parti of the garden to visibility, as well as an engagement with the interior of the bounded forest fragments. Overall, with the loss of leaf of trees, the garden seems smaller, not so much in height as in its area, and distance between parts.

Horticultural Activities and Form

In considering the role of trees in the geometry of gardens, it is easy to think of them as mature entities, but more difficult to understand their progression over time to that point. However, from the above discussion it is clear that trees actually grow to the state in which one sees them now, and they do this with the oversight of owners and gardeners, who conduct operations on them to give them particular forms and qualities. In focussing on geometry as designers and garden historians, it is easy to forget that such geometry arises as much from ongoing “maintenance” activities as it does from initial design conception. The terms maintenance suggests that the design has primacy, and the garden is kept to the intentions of that design. However in a garden such as Courances, that is over 500 years old, there is obviously no individual vision that can be “maintained”, particularly at Courances where there is no identifiable designer in the first place. Rather, subsequent garden

patrons and workers must work from the garden as it is at that time, seeing it as a form of evidence for ongoing work. Gardening operations, that is, ongoing activities that guide the growth of the garden over time will ultimately develop any sense of what the garden “is” at any given time of visitation.

The Baroque garden is very intensive in terms of horticultural operations. Most of these operations are confined to the allee and its edges, and are aimed at dealing with the vertical and horizontal surfaces, that make up its open U shape. These activities include mowing of the ground surface if grass, or raking if gravel, and pruning of hedges and also of trees to form the vertical plane. However on the interior of the bosque, forestry activities maintain the bosque as a commercial forest. These activities are much less regular than those of the horticultural type, and are aimed at growth and transformation of trees rather than their control. Here too density is important in so far as it will encourage tall and straight trees. In the forest the understorey is unimportant because it is effectively concealed from the allee by the lower hedges, unless that understorey inhibits the growth of the trees. Additionally, the contrast between the heavily controlled allees and the wild interior of the bosques is also important as a device to give meaning to the garden. For the sense of the “cut” of the allee, a wild, uncontrolled nature is required. It is worth remembering that forests have an important folk-lore value in Europe, and that the expansion of urbanism accompanied the development of rationality during the enlightenment. Correspondingly a definite and clear contrast between the cultural and the natural was a device to demonstrate this rationality. The sublime wildness of the forest was a vital component of the manipulation of nature in the garden. On the other hand, this could be as simple as that there is no necessity to control something that is not really visible: like not worrying about the neatness of concealed timber work in construction. It is thus a type of economy.

It is interesting to consider the interior of the forests in terms of this control. Initial planting of the Bosques, or a replanting, comprise rows of trees that roughly run in the alignment of the trees at the edges. However during the growth of the interior of these forest segments, they are effectively let go, and are subject to the ecological pressures and conditions of the forest rather than those of horticulture. Correspondingly the forest regenerates naturally, with a reasonably developed understorey of shrubs, herbs and ramblers, and with a large and diverse population of fauna, including deer and moles. As an Australian, the approach to the biodiversity of these forests is interesting because it is at odds with that used here. In Australia, to use “natural vegetation” in a project is to attempt to reinstate the pre-white settlement flora endemic to a site. However, at Courances (and indeed in many European gardens and projects) the flora is basically cosmopolitan, that is, it is from a diverse range of locations throughout Europe, that has moved around according to human settlement, and which has survived according to the opportunism of the species to be able to compete and regenerate within new locales. Effectively these cosmopolitan species are weeds, by Australian criteria, since they are not endemic. That said, the species are generally specific to similar climatic areas in Europe, and a healthy percentage of them are endemic to the area. Importantly, just because the species are weeds does not mean that they are literally less biodiverse, in terms of numbers of different species within a given areas. What is important here, however, is not the floristic origin of the species, but the fact that they can regenerate self-sufficiently in the specific situation of the garden. Thus, outside the the allee, and inside the forest, the mass of the forest determines its own growth – it looks after itself. This regeneration is the main criteria of appropriateness since the maintenance activity is confined to the edges. The state of the forest is allowed because it is a type of economy. In terms of regeneration, the criss-crossed forest's maintain a healthy perimeter to area ratio, that is, they minimise perimeter and maximise area, leading to a very stable interior condition. To Australian eyes of course, one would not know whether it was indigenous or not, however in an Australian designed landscape a similar situation would be regarded as weed invasion and would be unacceptable, and would also look wrong to us.

The range of operations undertaken form a matrix of periodicities in the garden, that are tied to the natural cycles at play in the garden. In summer, sweeping of leaves may be daily; mowing will be frequent, perhaps fortnightly. Pruning of hedges may be bi-monthly. Pruning of trees perhaps annually. Inspections of trees in the forest may be annual, and felling every 15-20 years. If we think of these activities in terms of the allee and the forest, then the form of these spaces is much more active than the line of them may appear. In section, these periodicities are a spatio-temporal phenomena in the garden, with the greatest levels of activity, at the greatest level of frequency, at the ground level centre of the axis, where turf is mowed. Moving out from here, the hedges require slightly less maintenance, the trees less again, moving into the forest where very little is done apart from allowing it to grow and then harvesting the trees much later. Consequently we could say that those areas that are most visible to humans, and that impact on their traffic through the garden receive the greatest attention.

As well as those maintenance strategies that produce visible results in terms of defining the edges of the allees, through interacting with vegetation, there are also a whole range of techniques utilised at Courances as a response to the change of seasons within the garden that are essentially invisible. These strategies are aimed at maintaining a consistent surface on the ground level, for grass, water and paving. Leaves are collected at all times of the year by tractor pulled rakers, but obviously most in autumn. These leaves are thrown over the hedges into the forest fragments, which has over time elevated the height of these areas behind the adjacent edges. In winter, much work is done on the water bodies throughout the garden. As water freezes both in the catchment generally as well as in the garden, the water level drops overall. Sluice gates in canals, as well as at points of access to the river from them are shut down. The stock of fish (mostly carp and gold fish) are isolated to the moat around the Chateau. With canals drained, earth moving equipment is used to remove silt that has built up in the preceding year.

During the 20th century, with changes in the quasi-feudal system in aristocratic system and in labour economics, the maintenance regime at Courances has become simplified. Canals once further articulated the edges of allees, which were filled in with garden beds during the influence of the Gardenesque in the 19th century. However in the 20th century these too were removed to leave the simple turf and hedge configuration that we see today, now only visible by a swale along the edges of the allee, between the turf and the edge. This is because the amount of staff that the Château could employ for garden maintenance has radically reduced, and has been replaced by mechanised maintenance. As the owner told me, nothing exists in the garden proper that cannot be maintained by a tractor: gang mowers for the turf, and pruning with power shears on an arm for the hedges. Correspondingly the current “simple” and “intimate” nature of the garden is less to do with deliberate design decisions than to do with the changes in the nature of employment in France right now. This has resulted in a reduced form language in the garden, confining it to water, grass, hedge and trees. Garden areas, with diverse planting, and the parterre de broderie are confined to those on the Chateau island.

In reducing the diversity of treatments in the garden, such that all allee's are basically identical in their treatment, other environmental factors come to the fore to define the character of specific allee's, notably aspect and microclimate, as mentioned earlier. Correspondingly, the orientation of the allee, and its dimension will determine its feel. This is in effect a greater sensitivity to the inherent nature of the climate of the area. The uniformity of treatments is a benchmarking device to read these conditions.

High maintenance actually manipulates specific habits, tropisms and growth responses in plants that are related to a plants response to stress, particularly death. Indeed this is actually the basis of horticultural practice, and it draws upon species responses to difficult conditions that have favoured it in evolution. Horticultural technologies have developed that specifically engage responses to

damage, mostly simulated by different types of pruning, most of which result in greater shooting and leaf density, the same response of which is used in the maintenance of grass, shrubs and trees in the Baroque garden, regardless of which technology is utilised to undertake that pruning.

Courances, like the Baroque Garden, seems to be less about change than it is about holding change at bay, at least in terms of the day to day maintenance of the garden (or other intervals). However maintenance is derived from a continuous control of growth, and as such it could be argued that high maintenance is actually a high engagement between people and plant growth. This view is in contrast to the dominant view that allowing uncontrolled growth is the most “respectful” approach to natural process. As such the Baroque Garden is actually more involved with change and natural process than is the wild garden. Intervention in nature is a fundamental aspect of humanity's definition of itself. Intervention is also an inherent part of plant growth, with plants having developed many mechanisms to deal with that intervention, some of which have become critical to plants abilities to regenerate. Gardening represents the most active and positive engagement that people can have with the natural world, and one that should be increasing not decreasing.

Conclusion

The 19th century French Philosopher, Henri Bergson, discussed time and change. In critiquing the way that Western Philosophy accounted for time, and its effect on things, he characterised its account as “difference by degree”. That is, that Western Philosophy generally saw change as linear, where something effectively becomes “more” what it is over time. It does this to prioritise some “essence” over the effects of time. On the other hand, he proposed that what time actually did was to create “differences in type”, that is, that something was paradigmatically different after the effects of time. It was a totally different thing.

This is an important distinction, that landscape architecture could do well to remember, and that Courances demonstrates. In its traditional modes of thinking of time in terms of implementation and maturity, landscape architecture proposes locations of plants on the basis of an “extruded” view of growth. This extrusion is effectively a cone, starting at a small circle, at implementation, that grows uniformly to a large circle at maturity. However during the potentially 100 hundred year (or in Courances, multiple hundred) growth process that really occurs, a whole range of different states will occur that will seem continuous, and that for owners and visitors will be what they experience. They will never see maturity, they will just see now, as it is at that time. The concept of maturity is a representational convenience for designers. For gardeners however, only the base line location and an eidetic sense of what the garden “is” are relevant to the ongoing work of the garden. At Courances, it is horticultural and gardening decisions that are responsible for the qualities of trees that have transcended their simple initial axis reinforcing role. Without those decisions the unique qualities that Courances has would not be present, and it would probably not be noteworthy.

Gardening will ultimately determine the qualities of a design, as a material and experiential entity, whether those gardening decisions are visible or not, or even absent, if something is deliberately left alone. If one considers design as a thorough envisioning, then those qualities are critical. Indeed to abdicate the responsibilities for qualities would be down right negligent of a designers, demonstrating a very limited vision. To regard gardening as simply maintenance clearly demonstrates the arrogance and vanity of landscape designers: maintenance implies it was “right” to start with, and that everything afterwards is done to correct what happens to that initial vision. Such a view of design is not only static, but also loses the potential for transformation that time offers. This is a value adding, rather than damaging process. Without it landscape architecture is much less interesting, and much less unique. Time is fate and pathos, but it is also luck and serendipity.

With its involvement in all the qualitative aspects of an implemented landscape design, gardening is

in fact a design practice, but one that has no real representational language, because it engages the subject directly, unmitigated by representational convention. That landscape architecture is so distant from this direct one to one engagement with its subject may arise because it has come to regard its own representations as its site. It has become enamoured with the two dimensional medium that was always, and remains, a convenience to understand the physical world. While the imperatives of “low maintenance” landscapes are increasing, there is a tendency to emphasise plant selection as the critical horticultural decisions that landscape architects make. This however has the potential to further distance landscape architecture and gardening. It also exposes the designer to a greater potential for catastrophe, and total failure of species. With the ever increasing interest in process, morphogenesis and change in architecture and culture generally, landscape architecture must look to its historic relationship to gardening to develop a unique, interactive approach to change, rather than remain stuck on trying to simulate it two dimensionally.

- i Olivier Poncet (Cournaces Brochure) p 16 - 19
- ii Personal communication with Valentine Hansen