Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Faculty of Natural Resources and Agricultural Sciences

To Change Everything Without Changing Everything

– Applying Martí Franch's Differentiated Management Methods to Nytorps gärde

Jack Richold

Bachelor's Thesis • 15 HEC
Landscape Architecture Programme - Uppsala
Department of Urban and Rural Development
Uppsala 2020

Title: To Change Everything Without Changing Everything; Applying Martí Franch's Differentiated Management Methods to Nytorps gärde
Swedish title: Att förändra allt utan att förändra allt; Tillämpning av Martí Franchs differentierade förvaltningsmetoder på Nytorps gärde

Supervisor: Vera Vicenzotti, SLU, Department of Urban and Rural Development
Examiner: Lena Steffner, SLU, Department of Urban and Rural Development
SLU, Swedish University of Agricultural Sciences, Faculty of Natural Resources and Agricultural Sciences
Department of Urban and Rural Development, Division of Landscape Architecture
Credits: 15 HEC
Level: Bachelors level, G2E
Course: EX0861, Independent project in Landscape Architecture
Course coordinating department: Department of Urban and Rural Development
Programme: Landscape Architecture Programme - Uppsala
Keywords: Martí Franch, maintenance, gardening, interstitial, succession
Cover picture: View of Nytorps gärde by Richold, J.

Year of publication: 2020
Place of publication: Uppsala
Online publication: https://stud.epsilon.slu.se/

Sammandrag

Medan städer förtätas, går obebyggda områden med tvetydiga värden förlorade. Sådana platser möjliggör för en ny form av grönområden samtidigt som de innebär en utmaning, då deras upplevda värde måste höjas samtidigt som platsens särart ska bevaras. En metod för formgivning genom förvaltning som landskapsarkitekt Marti Franch använder i Girona erbjuder en möjlig lösning. Metoden använder först och främst enkla skötselmetoder som klippning och hamling för att skapa attraktiva, tillgängliga landskap som är billiga att implementera och utveckla. I detta kandidatarbete analyseras Franch's metod, och huvudpunkterna lyfts innan metoden anpassas till en specifik plats i Stockholms närförort: Nytorps gärde. Anpassning görs med tillämpning av forskning kring förvandling av åkermark till skog, biodiversitet och Roland Gustavssons teori kring skogstruktur och form. Dessa delar kombineras sedan för att skapa en skötselplan för en del av gärdet. Arbetet påvisar att Franchs metod kan anpassas till förhållanden i svenska städer med förbehållning att mer forskning behövs kring den offentliga uppfattningen av sly och undervegetation i stadsparker.

Abstract

As cities densify, unbuilt areas of ambiguous value are being lost. These sites present opportunities for creating a new type of urban green space but increasing their perceived value without damaging a site's particular qualities is challenging. The method of design through maintenance that landscape architect Martí Franch is using at Girona presents one possible solution. It uses primarily extensive maintenance methods, such as mowing and pruning, to create attractive, accessible landscapes which are cheap to implement and develop. In this dissertation, Franch's method is analysed and the key points drawn out. The method is then adapted to conditions at a specific site in Stockholm's suburbs (Nytorps gärde) by the addition of research on woodland succession on grassland, factors affecting biodiversity, and Roland Gustavsson's theory on woodland types. These elements are then synthesized to create a maintenance plan for a section of the site. This paper demonstrates that Franch's method is unquestionably adaptable to suburban sites in Swedish cities with the proviso that more research is needed in the areas of public perception of and response to both woodland regeneration and woodland undergrowth in urban parks

Contents

Introduction

With the building boom continuing in Stockholm and throughout urban Sweden, many residual green spaces in the metropolitan area are presented (in this case by the municipality) as inaccessible non-spaces, lacking proper function, life, social value and ecological worth (Stockholm stad 2020). At the same time many of these spaces, certainly in Stockholm's functionalist inner suburbs, are over-maintained (in terms of resources used for extensive maintenance) and under-utilised. Nytorps gärde, an area of trees, rocks, gravel football-pitches and oversized swathes of cut-grass in south-eastern Stockholm provides a good example of this kind of space with its short lawns banked by unplanned woodland regrowth. Nytorps gärde does indeed feel like a space without a plan or clear identity, which is explained by the fact that it is composed of land left undeveloped to form the corridor for a major road. A plan for the road was proposed in 1958 and only finally abandoned in 1991 (Tillväxt, miljö och regionplanering 2014). Since then apartment blocks and preschools have sprung up on the field (see fig. 1) and in 2019 the city of Stockholm approved the building of 600 new homes with schools and shops on, primarily, the western half of Nytorps gärde (Stockholm stad 2020). All of this underlines how a lack of perceived intrinsic value leaves places like Nytorps gärde extremely vulnerable to development.

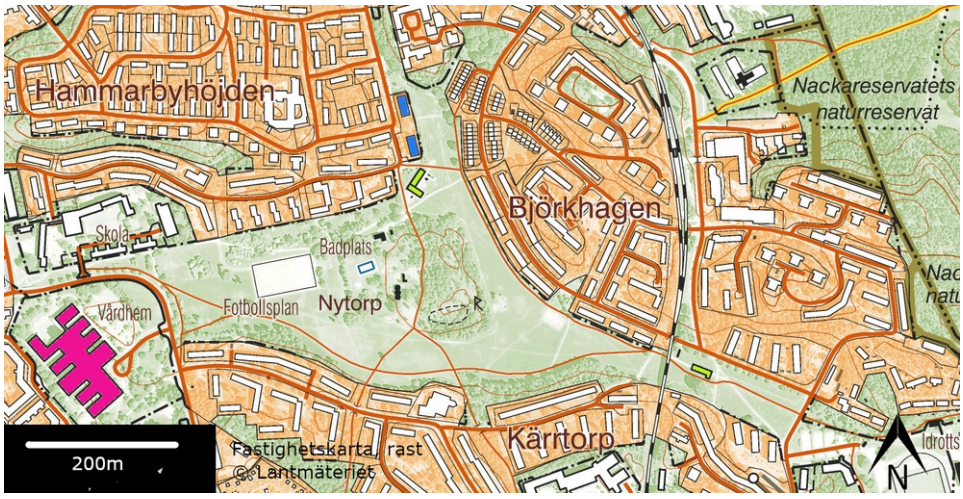


Figure 1. Map of Nytorps gärde showing all new building on the field since the surrounding suburbs were built in the '40s and '50s: Dalens hospital (pink, post 1981), two apartment blocks (blue, post 1991), and two pre-schools (bright green, post 2011)

Interstitial spaces

Various terms can be useful here in evaluating the value judgments applied to non-places, landscapes that don't fit within clear categories. For Jorgensen and Tylecote (2007), *interstitial spaces* are urban places where landscape change is driven by "spontaneous growth of vegetation through natural succession" rather than by human intervention (Jorgensen & Tylecote 2007, p. 453). For Clement (2015), it is wildness, diversity and neglect that define the *tiers paysage* (third landscape) as a category. Gandy perhaps offers the most conceptual definition. For him, the *unintentional landscape* is

> not a primal landscape in the sense of 'wild nature' serving as an object of aesthetic contemplation, it is not an idealised landscape that conforms to some pre-existing conception of the innate relations between nature and culture, and it is not a designed landscape allied to particular social or political goals. It is a landscape in spite of itself. (Gandy 2016 p. 434)

Nytorps gärde, a landscape in spite of itself which is to say: a landscape that does not fit within any normative idea of what a landscape is or is for, largely lacks the visible, spontaneous wildness of interstitial sites or tiers paysage. Instead it is a mostly spontaneously generated landscape with its management emphasising order, boundary and control; an extreme form of Clement's field project—"a friche, its natural impetus held in check, recycled each year by an autumn scything" (Clement 2015, p. 104). Perhaps it could be best described, to adapt Jorgensen's term, as an arrested interstitial landscape, where large resources are spent holding a spontaneous landscape in check even though, with the road building abandoned, there is no longer a clear reason for doing so.

Unintentional landscapes are, according to Gandy (2016), innately unsettling because of their partial detachment from "pre-existing aesthetic or cultural expectations" (ibid. p. 436). Jorgensen and Tylecote (2007) argue that this detachment can have positive consequences, and that interstitial spaces

> are not prescriptive: […] Consequently these places fulfil a multiplicity of different roles for different people. They are places to take short cuts, walk the dog, wander about, gather blackberries, hang out, light a fire, dump rubbish, sleep rough, take drugs, ride a motorbike, build a den or chop down trees, to give but a few examples. (Jorgensen & Tylecote 2007, p. 455)

Nytorps gärde does have elements of a non-prescriptive space and this makes it valuable to many, but this lack of prescription is, as Jorgensen and Tylecote note (ibid.), also what causes these places be perceived as dangerous, off limits, in need of being made "safe" (Stockholms stad 2020).

However, both Gandy (2016) and Jorgensen and Tylecote (2007) identify something valuable about these kinds of sites that could indicate a new model for urban parks and green spaces. For Jorgensen and Tylecote (ibid.) this is based on their ability to spontaneously develop "wild nature," the "freedom and flexibility they offer to human thought and action" and "above all the ways in which human

and natural agency have become enmeshed over time." (ibid., p. 457). This, they argue, provides a strong argument against their erasure:

> Instead of conceptualizing derelict urban sites as terra nullius, containing nothing of value, and clearing them in readiness for future development, their intricate topography of human structures and artifacts, natural growth and decay, could be treated as the basis for future site planning and design. (ibid.)

Cues to care

A challenge with using spontaneously developed nature in a design is, in its raw form, it can be read as untidy, even unsafe (Ignatieva *et al.* 2017). Nassauer (1995) argues that in order to make such landscapes attractive we have to learn to translate "ecological patterns into cultural language […] (design) orderly frames for messy ecosystems" (ibid. p.162). Neatness provides signs of sociable human intention which indicate that the landscape is safe and in use, not neglected or "awaiting development" (ibid.). Interestingly, the extensive maintenance of Nytorps gärde does not seem to have given the site much protection from development. Nassauer (1995) provides suggestions for embodying neatness or "cues to care" in the landscape such as mowing, painting, bold patterns and bird feeders.

Martí Franch and maintenance as design

Martí Franch is a landscape architect who's work suggests one possible way of preserving the positive qualities of interstitial sites like Nytorps gärde (Jorgensen & Tylecote 2007) while designing orderly frames for messy ecosystems (Nassauer 1995). His design for the landscape around the city of Girona (Franch 2018) is based on drawing on the landscape by using simple forms of extensive maintenance.

Maintenance is central to all landscape architecture but is rarely the focus of designs. The use of models and draughting tools within landscape architecture has meant that is has been easy to lose sight of the essentially dynamic, reproductive nature of plant material. Raxworthy (2018) credits modern architecture's focus on abstract space and form with a downplaying of the non-tectonic elements of landscape architecture: an unwillingness to deal with the fact that "spaces […] change over time as the plants that defines them change" (ibid. p. 12). Although landscape architectural theory that recognises the difference between living and tectonic forms is not unusual (see Robinson 2004, for example) it is rarely examined directly. Both Hedfors (2014) and Raxworthy (2018) have recently created terms for the dynamic principle of living materials: *tropism* and *viridic* respectively, both defined against the rigidity and static nature of tectonics. However, the fact that they are creating new terms for the principle is in itself symptomatic of the unexamined nature of the concept within the discipline of landscape architecture. Raxworthy (2018) argues that, by its nature, technical drawing encourages a tectonic worldview. Gardening, by contrast, fosters an

understanding of unpredictability, individuality and change in a landscape (Raxworthy 2018).

Franch's method, by creating design through extensive maintenance (framing, opening and lifting through judicious cutting and mowing, creating rooms and paths) draws the attention to the temporal, explosive dynamic of vegetation and the complexity and beauty that can be achieved by designing in an interactive way with the changes in a landscape over time (Franch 2018).

Major voices within this tradition of landscape-architecture-as-gardening include Gilles Clement, whose theory of *jardin en mouvement* (garden in movement) advocates responsive design-through-maintenance, an intervention in a space that leaves diversity intact (Clement 2015).

A group of gardeners and landscape architects centred on the University of Sheffield (the group known colloquially as the Sheffield School) share many similarities with Franch, although in this group—more traditionally—the design and planting of a site is still a major part of any project (Hitchmough & Dunnett 2004) In addition, a central pillar of the school is the use of exotics to create dramatic aesthetic effects (ibid.). However, as with Franch (2018), the maintenance is of central importance and the planting design evolves (and is expected to evolve) over time in an interactive and serendipitous way in reaction to the maintenance regime.

Franch's ideas (2018) also have strong similarities with both maintenance in Dutch *Heemparks* (Koningen 2004) and Roland Gustavsson's (2004) work on urban woodland design, although—again—in both cases landscapes are carefully planned and planted before interactive maintenance begins. This is the essential difference between Franch and these traditions (which he to some extent shares with Clement): in his method (Franch 2018) there is no planting design, the maintenance is the design tool, enhanced with small insertions such as seating in the landscape. The difference between Clement (2015) and Franch is that Franch seems essentially pragmatic, Clement mystical; it is hard to imagine Franch creating an avant-garde monument like Derborence island, as Clement has at Parc Henri Matisse—as described by Gandy (2013).

A difficulty with projects based on Clement's *jardin en mouvement* theories (2015) or the Dutch *Heemparks* (Koningen 2004) is that maintenance staff require a much greater level of knowledge and skills to successfully respond to the landscapes than is expected or required for most landscape maintenance regimes. Franch's method partially solves this difficulty by employing primarily extensive maintenance methods (mowing, cutting, weeding) as opposed to the more intensive, technically more challenging methods of horticulture. This means that staff in Franch's projects, the work brigades, require less technical skills initially then would be required in a *Heempark*, although they are still heavily involved in the design of the project and are both expected and encouraged to interact sensitively and actively with the landscape.

Although limited to subtraction, the extensive methods used by Franch can over time create extremely complex, varied landscapes (Franch 2018), with increased woodland clearings, complex edges, paths through meadows, trees pruned for

climbing, and so on, that encourage and allow children's play, habitats for multiple species, and so on.

What makes Franch stand out from most gardening landscape architects is the approach he shares with architect Alexandre Chemetoff (Chemetoff 2009), Chemetoff advocates a “frugality” (ibid., p.82) in which

> You have to learn to accept what is there. Our intervention is so slight that it could almost be dispensed with. This minimum intervention, however, produces a maximum effect; it completely transforms the site and restores its value.” (ibid., p. 85)

This transformative minimalism, combined with a strong attachment to the social complexity and messiness of places, what Chemetoff calls their “history, their necessary filth, their diversity and their ambiguity” (ibid.): makes this approach extremely sensitive to and protective of the complex layers of what’s already on site.

For Chemetoff, the truly ecological design is one that keeps people central (ibid., p.87) and rehabilitates the actual rather than using new resources (ibid., p.83). He explicitly rejects the kind of ecological design which “in order to become virtuous, requires great expense.” (ibid., p. 83).

So Chemetoff’s design, and by extension Franch’s, links the ecological and social in a way that prevents the use of ecological design as an “adjunct to the exigencies of real estate speculation,” as Gandy (2016, p.437) puts it. It can maybe present a model for how to preserve and work with the qualities of interstitial sites that Jorgensen and Tylecote found so valuable (2007).

Aim

My aim has been to investigate how Nytorps gärde, and by implication other interstitial sites, could be transformed by quite small, cheap changes into a space that preserves its current qualities (established successional shrubs and trees, non-prescriptive space, community use and attachment, long sight-lines and views) while making the space more visible to, and valued by, its inhabitants and within wider power structures. Is it even possible to transform Nytorps gärde with limited funds without damaging what ecological and aesthetic qualities the landscape already possesses? One possible solution is suggested by Martí Franch's maintenance plan for the outskirts of Girona (Franch 2018) which offers a new approach to the problem by reversing the traditional hierarchy of maintenance and design.

Question

How can Franch’s maintenance plan for Girona be adapted to suit Nytorps gärde and what could this adaptation look like?

Method

In order to answer the question posed above, I carried out the following steps in the following order:

Franch has not published an exhaustive account of his method but his 2018 article Drawing on Site: Girona's Shores (Franch 2018) gives plenty of information that a maintenance plan can be extrapolated from. I condensed this article to provide extensive maintenance methods for Nytorps gärde that could then be further adapted to local conditions.

I then drew on relevant research and theory to make Franch's method more applicable to the site conditions on Nytorps gärde. My choice was based firstly on what I felt was close to the spirit of Franch and could add to or support his method (research on biodiversity), and secondly to areas of knowledge that fell outside his method (Franch 2018) but that would be useful in adapting it to conditions at Nytorps gärde, including research on woodland types, spontaneous succession, and effect of users on site vegetation. For the second category, I tried to find relevant theories and practices that agreed with the empirical data and also meshed with Franch's spirit.

Finally, I analysed four representative areas of Nytorps gärde and designed a connecting plan to demonstrate how an adapted Franchian maintenance plan could look. The plan is based on site visits, sketches and photographs and is limited to a 10 year period. This design can, like Franch's pilot projects at Girona be seen as indications towards preliminary "'sketches'" (Franch 2018, p. 56), where the removal and regeneration of vegetation are a form of "drawing on the site itself" (ibid.).

Literature analysis

Summary of Franch's method

Under Franch's differentiated management system, the entire trophic landscape is divided into mosaic-patches that are extensively managed in one of four ways: as forest (undergrowth cleared once a year with a string trimmer), shrubland (pruned with shears every five years), high meadow (cleared once a year with string trimmer), or low meadow (mown six to eight times a year) (Franch 2018, p.60). The maintenance is carried out by a work brigade who are actively involved in the design process.

The areal breakdown of these landscape types for Girona is claimed as

> 50 per cent […] almost unmanaged as forest and high meadow, 25 per cent is managed as high meadow, 25 per cent is mown regularly […] as low meadow and can be used by citizens. (Franch 2018, p.60)

The choice for where each of the four extensive methods is to be applied is largely determined by a differentiated management design plan, an if/then tool, that is itself built up by the brigade's praxis and is summarised below (Franch 2018, p. 63). Not every situation is prescriptive and considerable leeway is given to the maintenance group. According to Franch, the plan "sorts out 60 to 70 per cent of the standard conditions in Girona's shores and requires no further design." (ibid.) Categories that are mentioned but do not occur at Nytorps gärde have been omitted here.

Meadows are to be mowed with geometric paths and forms. Existing paths in meadows are to be complemented with mown "asymmetric lateral strips." Trees in meadows are to have rooms of low meadow mown around them

Vestiges (of heritage such as ruins) are to be revealed by clearing.

Singular trees and flora and sedums are to be enhanced by clearing of competing vegetation.

Obscured views are to be opened up by removing low branches or entire trees.

Shrubs are either to be left to grow or pruned every five years to stabilise growth.

Invasive species are to be removed from the site. Rubbish is to be removed from the site.

Differentiated management is intended to serve as a basic maintenance regime to be added to by interventions requiring more resources such as path laying, site furniture, etc (ibid., p. 67).

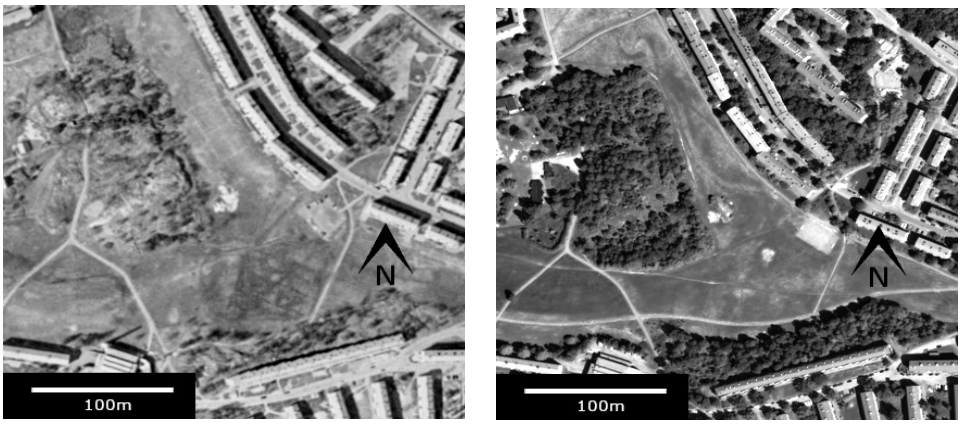
"Confetti" is a term Franch uses to describe "ad-hoc micro-interventions (that) celebrate the site's specificities and show and share appreciation for the site" (ibid., p. 68). "Confetti" is created by the if/then methods as well as by more costly interventions (such as artworks or railings)

Franch notes that his management is "highly site-specific, intermingling design, construction, and management" (ibid., p. 56) and so it would seem against the spirit of Franch to use the tools from Girona as a rigid set of rules for Nytorps gärde with its own highly specific site. However they do provide a solid jumping off point.

Adaption of Franch's method

Woodland types as a design tool

Nytorps gärde is in a very different condition to the landscape Franch found at Girona (Franch 2018). Instead of an overgrown site that needs to be made accessible, we have a heavily managed, site with well used areas that needs to be regenerated. Views need to be closed and rooms need to be created through vegetative growth rather than, as is the case at Girona, simply carved out of the trophic landscape. Nytorps gärde also consists largely of short meadow and woodland with a cleared understorey, and the divide between woodland and lawn is always abrupt. The woodland on the site consists, as well as I can judge, of a fairly stable and relatively young successional woodland made up mostly of birch and aspen with notable amounts of pine, oak, wild cherry and goat willow (note the explosive development of the woodland from the limited extent in 1960 to a thick canopy in 2011 in figures 2 and 3). In order to approach these different design conditions strategically, we need new terms and concepts. The methods of landscape architect Roland Gustavsson fit comfortably together with Franch's. Gustavsson sees forest regeneration as an opportunity as much as a problem (Gustavsson 2004) and has developed a palette of woodland types that can be used as models for designing recreational landscapes.



Figures 2 and 3. Ortfoto, Lantmätariet copyright 2020. Arial photograph of the central section of Nytorps gärde in 1960 (left) and 2011 (right). Note the dramatic increase in tree canopy cover over this period.

Gustavsson rejects the modernist use of woodland as a purely structural element and encourages the revival of old woodland terminology and a review of traditional woodland types as a way of providing ideas for new recreational forms, such as a sivi-pastoral or open, grassy woodland based on traditional forest grazing (ibid. pp.188-9).

The existing woodland at Nytorps gärde is currently closest to Gustavsson's "light high" type (ibid., p. 205) but could probably be extensively developed into the "many layered" type over time by opening up clearings and allowing under-

vegetation to grow in thickets. Indeed, the many layered woodland type, according to Gustavsson, does not "normally [...] exist by natural processes but is instead a combination of historical, multi-functional and complex management methods" (ibid. p. 207). The woodland areas on the site are wide enough to be able to create interior qualities (through, for example, glades) and could accommodate multiple paths.

Although there is not really the room to try to create a three-staged edge as Gustavsson describes it (ibid., p. 211), The woodland edge can still be made more complex and inviting by cutting grass wedges into the wood and pulling out "'out-drawn' [...] tips of shrubs or trees, solitary trees" and so on. Here, according to Gustavsson, the edge path is particularly important (ibid.).

Gustavsson's half-open landscape or small-scale mosaic type provides a model for how areas of lawn could be transformed, creating a stretched extension of the woodland edge with light-loving species able to achieve an "open-grown" character (ibid., p. 210). This landscape type would provide a varied transition landscape that would complement and mediate between the current extremes of low meadow and light high woodland.

The woodland types described above (there are more, but these are perhaps the most relevant) encourage us to think about the possibilities inherent in each one and the transitions between them. Gustavsson's types (2004) can therefore be useful in planning a landscape with more open glades and closed thickets, more individual trees and shrubland extending into low meadow, and more complicated edges to woodland. The next question is whether extensive management alone can create these landscape types, for which we need to turn to research in woodland regeneration and spontaneous succession.

Effect of site users on vegetation

In contrast to the terrain surrounding Girona that had almost entirely been abandoned for recreation, Nytorps gärde has some areas that are well used in its current state. This means that attention needs to be paid to current patterns of use and movement since since any maintenance scheme that doesn't take these factors into account will likely be ignored and trampled. Removing areas for dog walking, for example, or blocking off a desire line with a high meadow, needs to be undertaken strategically and consciously in order to succeed. A sensible approach might be simply to treat spontaneous paths and desire lines in the current landscape as key elements in the new design, treating them and working with them as part of an action-orientated design (Gustavsson 2004, p. 191).

Research on urban woodland in southern Finland (Lehvävirta & Rita 2002) has found that while *Picea abies* numbers declined in fragmented urban woodlands, species including *Populus tremula*, *Betula spp.,* and *Sorbus aucuparia* increased in relation to increased visitor numbers. *Betula spp.* and *Populus tremula* even flourished in proximity to schools! The study also found that dead wood had a positive effect on woodland regeneration. In terms of meadow areas, dogs and recreation were judged only to have a minor effect on the grasslands health (Klaus 2013).

Difficulties with adding and not just subtracting

So what can we expect from a combination of spontaneous succession and extensive management when designing a site? According to Prach and Pyšek (2001), spontaneous succession would likely be a successful strategy here for replacing areas of the current low meadow with woodland which could then be shaped by extensive methods to resemble the desired woodland types:

> (Our) main conclusion is that spontaneous succession can be relied upon in restoration projects except in the case of extreme, especially toxic substrata. To leave a site to allow spontaneous processes to revegetate it is especially advantageous if the disturbed site is small, surrounded by natural vegetation, and if site conditions were not principally altered by the disturbance. Spontaneous succession is cheap and spontaneously revegetated sites usually exhibit higher natural value." (Prach & Pyšek 2001, p. 55)

How long would forest regeneration take? Prach (2003) in his studies on disturbed sites in Central Europe assessed that, in general, once sites are left to regenerate, the first woody species appear before the eighth year and maximum cover is achieved by the twentieth year. The process is faster on sites with secondary succession and moderate conditions, both of which apply to Nytorps gärde (Prach & Pyšek 2001). Here, there is also the accelerating factor of the many pioneer woody species that surround, even overhang, the areas to regenerate (Prach 2003). We can therefore tentatively assume that woody species would appear within 1-5 years with maximum cover occurring within a decade.

However, the period between the appearance of woody species and their development into a woodland open enough to enter and enjoy will undoubtably take at least a decade, if not longer. Gustavsson et al. (2005) are sceptical about the use of spontaneous woodland regeneration in urban forests since, although directed interference in woodland generated by spontaneous succession has advantages of minimal investment (ibid. p. 375), in practice "It may take decades before natural regeneration of trees will occur and develop in a way attractive to visitors." (ibid.).

Studies of ecological restoration in human disturbed habitat found that while ruderals could occasionally inhibit the establishment of tree species and subsequent forest succession, this generally happened only under extreme conditions (very wet, very dry, very acidic, etc) which do not apply here (Prach *et al.* 2001).

Increasing biodiversity

Recent research in north-west France (Chollet *et al.* 2018) suggests that urban grasslands cut only once a year exhibit higher plant diversity (between 15% and 62% more) than both short lawns and meadows mown more than once a year (the last two types giving comparable results). Franch's (2018) characteristic Girona combination of high meadow as barrier and low meadow as room or path thus maximises both plant diversity and usable space for people on a site. Sward height (as well as flower abundance) was also found to be a key factor for the species richness of butterflies and bumblebees in Swedish meadows (Milberg *et al.* 2016), so a high sward in an urban meadow may achieve the same result.

Assuming that the two standard Swedish municipal categories of lawn maintenance still apply (Ignatieva *et al.* 2017) Franch's method would not need a new categories but would simply incorporate both the meadow-like and conventional lawn as they currently occur, while increasing vastly the amount of meadow-like lawn in use.

Urban meadows, although they may struggle to gain "rare or otherwise ecologically desirable species" (Klaus 2013, p. 666), are protected from non-native invasive species by annual mowing, although this is insufficient to control highly competitive graminoids if the meadow has high nutrient levels (ibid.). However, the grassland areas of Nytorps gärde are unlikely to have high enough nutritional levels to cause this problem.

As mentioned above, Franch's management of woodland involves either clearing all undergrowth annually or leaving it entirely unmanaged. Totally clearing the understorey in urban forests to allow public access is common practice in Sweden (Heyman 2010) but has a serious negative effect on forest bird densities. A study (ibid.) where half of the understorey was left intact in patches suggests that clearing only 50% of the understorey would facilitate public access to woodland without having any significant negative effect on breeding forest bird densities.

Finally, continuing any form of management over time generally results in an increase in species diversity and community stability (Gustavsson et al. 2005, p. 375), which is an argument for continuing the same maintenance regimes in the same areas over a longer periods.

Result

Design of selected areas

The proposed maintenance plan for a section of east-central Nytorps gärde concentrates on four areas (see fig. 4) that provide an interesting and representative mix of landscape types and problems.

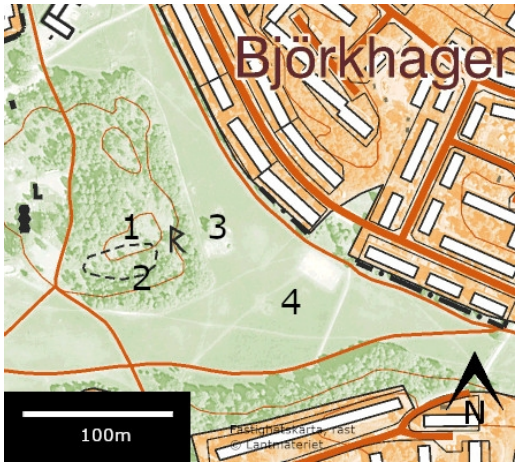


Figure 4. The section of Nytorps gärde to be analysed for a maintenance plan after Franch with four areas of particular focus: 1. searchlight foundations; 2. south-slope wood; 3. island mound; 4. central lawn. A prehistoric grave site is marked with a dashed oval.

1. Searchlight foundation

Figure 5 (left, as now). Figure 6 (right, proposed): Views have been opened up, rubbish removed, paint applied. Photograph: Richold, J (2020)

On the highest point in the woods, two concrete searchlight foundations from the Second World War, one circular and one square, provide seating and vantage points (see fig. 5). However, they are almost invisible from the path, partially overgrown and filled with glass and other rubbish. Following Franch's either/or plan (Franch 2018), these are vestiges which should be revealed. This would involve cleaning up rubbish and removing encroaching scrub and some successional trees to make visible from the outside and reveal views from the inside (see fig. 6). Perhaps painting could make the forms more visible, emphasize geometry and signal a cue to care (Nassauer 1995). If the foundations are still hard to see from the nearest path due to the curve of the hill, a painted line or similar can be used to lead people up.

2. South-slope wood

Figures 7 and 8. Figure 7 (left) shows the Salix play area. Figure 8 (right) shows the south-slope wood (right of photo) viewed from the south-east. A drawing on photograph shows the desired small-scale mosaic type landscape after approximately 10 years. Photographs and drawing: Richold, J (2020)

A light area of woodland with oaks of various ages, aspen and bird cherry, and a spontaneous play area (see fig. 7) in the Salix stands that edge onto the lawn. The spontaneous path should be reinforced visually by opening up vegetation at the entrances to invite people into the wood.

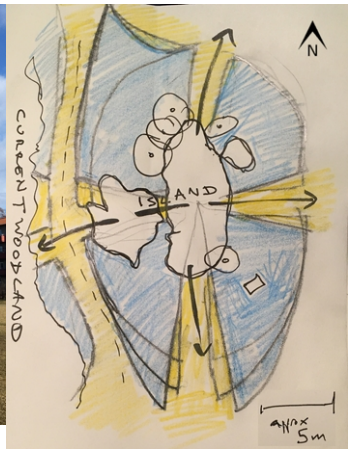
The wood contains a prehistoric burial-site (see figure 4) consisting of seven stone circles (Riksantikvarieämbetet 2018) which are partially overgrown with young deciduous and pine trees. The graves should be kept clear of young trees to preserve their integrity but at the same time they should be left to be discovered by users rather than being aggressively flagged.

The play area could be improved and flagged by, moving some of the dead wood (to a nearby area of woodland), adding bee-hotels or similar to signal its worth and as a cue to care (Nassauer 1995), or transformed by small art pieces, again to draw attention to forms and demonstrate cue to care.

The area of grass that borders the south side of the wood would be left unmown for 3-5 years. until trees and bushes have established themselves sufficiently for a

number of them to be selected to mature with allowance for loss. This as a way to expand the woodland edge, and stretch it into a small-scale mosaic type landscape (Gustavsson 2004) between the woods (see fig. 8 and fig. 13). The species selected would depend on what establishes, but fast growing deciduous trees and shrubs with light shade and flowers would be favoured initially in order to create an attractive and functional woodland fastest: dog rose, elder, guelder rose, birch, aspen, goat willow, rowan. Most of these species are found in the adjoining woodland which would speed their appearance (Prach 2003). Two or three geometric low-meadow paths would be maintained running east to west and one north-west to south-east (see map of desire lines in fig. 13).

3. The island mound



Figures 9 (left) and 10 (right). Figure 9 (left) shows the mound from the south with spontaneous picnic table. Figure 10 (right) shows the plan of the island mound for extensive management with low meadow paths (green) surrounded by unmown areas (blue). Photograph and drawing: Richold, J (2020)

The rounded stone mound is a rest stop and low vantage point.which has been equipped with a picnic table by what looks like private initiative, marking its desirability (see fig. 9). From here, spontaneous paths lead west into the wood. The mound is has a few aspen and hawthorn bushes around its edges (see fig. 10) and is surrounded by a low meadow. There are mysterious traces of previous use with cast-iron eyelets and riveted plates fastened into the rock.

Linking the mound to the middle wood by surrounding it with a small-scale mosaic landscape (Gustavsson 2004), giving a few more trees around the mound, could provide the location with light shade and a more contained sense of space, without it becoming overshadowed or feeling unsafe. The woodland would be expanded in the same way as in see previous section (south-slope wood). Since the mound needs to remain accessible during the long regrowth period, access paths will be kept as neat low-meadow wedges extending out on all four sides (see fig. 10). Trees resulting from regrowth will not be allowed to block views in or out of the mound, if necessary lower branches can be removed, and fast growing species

that cast a light shade such as birch, aspen and rowan will be given priority close to the island (see fig. 12).

It would be nice to draw attention to the metal vestiges in the rock. Perhaps they can be painted a brighter colour or a climbing rope be attached for children?

4. Central lawn

Figures 11 (left) and 12 (right). In figure 11, looking north, the island mound lies in the centre of the photograph with the south-slope wood behind. Figure 12, looking south, shows the planned bands of meadow on the central lawn and the small-scale mosaic landscape establishing itself around the island mound (right of photo). The bands would lead through to a circular area of low meadow, marked in both photos by the May Day bonfire (red arrow). The drawing is based on the landscape after approximately ten years, but some kind of high meadow will hopefully be functionally established after one year. Photographs and drawing: Richold, J (2020)

Nytorps gärde contains areas of low meadow that are extremely large in relation to the number of site users (see fig. 11). People very rarely stop in the middle of the lawn areas unless there is a temporary object there, such as the May Day bonfire. Using extensive methods would allow us to create a series of geometric rooms and paths that would create usable social and sitting space, encourage the development of meadow plant and insect communities (Gustavsson *et al.* 2005), and be visually striking, marking a cue to care (Nassauer 1995). Parallel paths (see fig. 12) would draw the visitor towards a circular low meadow large enough for group celebrations and other activities but small enough to be a felt as a contained space. Sight lines would be preserved over the high meadow which would vary in height over the year.

General maintenance plan

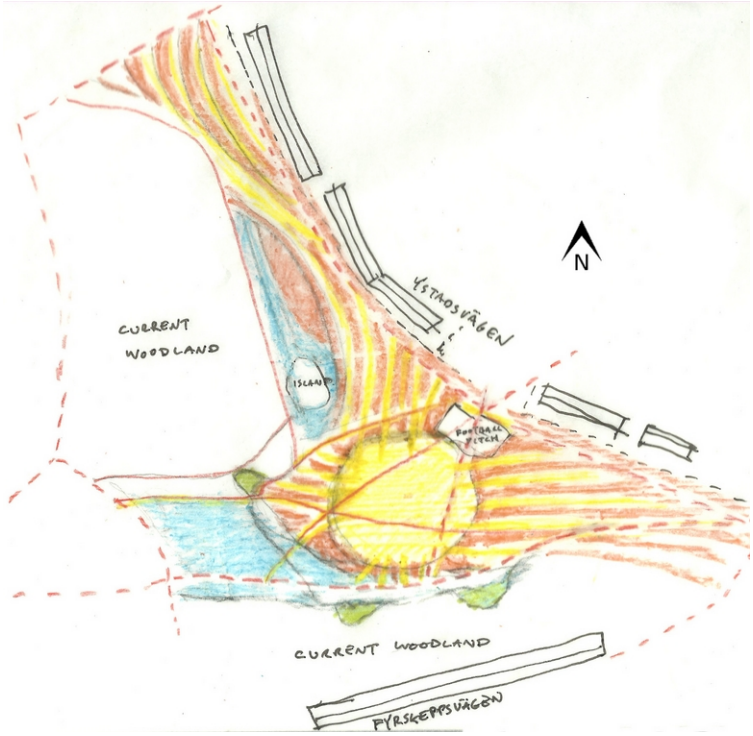


Figure 13. Maintenance plan (not to scale) for edges of woodland and central lawn showing high meadow (red), low meadow (yellow), unmown area for woodland regeneration (blue), woodland for some trees to be removed (green). Paths are also marked, both paved (dotted lines) and spontaneous (solid lines). Drawing: Richold, J (2020)

In the maintenance plan, most of which is illustrated in figure 13, geometric bands and rooms of low meadow (mown 5-6 times a year) would be cut through stands of high meadow (cut once in late summer). Some areas would be allowed to regenerate through spontaneous succession to woodland, with some of the trees and shrubs that establish themselves to be selected for preservation while surrounding growth would be mown in a geometric mix of high and low meadow, evolving over time and in response to which trees and shrubs are preserved. Once singular trees have reached a certain robustness and height, low meadow rooms can be created around them. Some areas of current woodland would have trees removed to complicate the woodland edge (Gustavsson 2004), let in more light to form glades and encourage diverse understorey vegetation and begin to create vertical layering within the woodland (ibid.). Woodland understorey would be allowed to regenerate to 50% of ground cover where light levels allow to encourage nesting birds (Heyman 2010). The aim would be to extend and diffuse the woodland edge into a small scale mosaic type landscape (Gustavsson 2004).

Paths, both formal and spontaneous, would be preserved and, where unpaved, mown as a wide strip of low meadow.

Vestiges, in this case the searchlight foundations and metal remnants on the island, are to be cleaned and made visible where necessary. Paint can be used to draw attention and show cues to care (Nassauer 1995). Rubbish and invasive species are to be regularly checked for and removed.

Discussion

I think that, an adapted version of Franch's method—as far as this research is able to show—would make it possible to transform Nytorps gärde with limited funds and without damaging what ecological, architectural, and aesthetic qualities the landscape already possesses. As discussed earlier, Chemetoff (Chemetoff 2009) has an approach that tends to preserve and add perceived value to those in-baked, messy, hard to discern qualities that interstitial landscapes like Nytorps gärde often possess (Jorgensen & Tylecote 2007). At least even if this approach were tried and failed it would be cheap and non-destructive. Much of course will depend on the public reaction to the aesthetic results of this fairly new type of landscape maintenance, and that is a factor which falls outside the scope of this study.

Due to the unconventional approach of this method which collapses the hierarchy of architect and maintenance worker by proposing that the two groups design collaboratively, it is important for any architect making such a proposal to show a professional profile and approach in order to calm the fears of both clients and maintenance staff.

The next step in the design process would be to engage with the current management team for Nytorps gärde and develop a more concrete design and maintenance plan with them, through actively walking and marking the landscape. Guidelines such as Franch's If/then guidelines at Girona (2018) would be established for different maintenance areas. For example, guidelines for the minimum and maximum dimensions of the central lawn, its placing and the width of approach paths to it would be laid down, as would be when in the year to mow path and meadow areas. Once a maintenance plan was ready, it would be implemented with regular monitoring carried out by the landscape architect and maintenance team in order to incorporate happy accidents into the design or alternatively correct unforeseen problems. There is an obvious difficulty in trying to create a ten year maintenance plan for an approach that defines itself as being a form of gardening, acting on vegetation and responding to its growth (Franch 2018). Research without praxis like this paper can only indicate how a plan might begin to develop and so is necessarily vague since a lot of the design will depend on which trees establish themselves, which desire lines are blocked, and so on.

I think that using Gustavsson's forest types as design tools (Gustavsson 2004) fits Franch's approach and takes a step towards adapting Franch to a more forested

landscape, with a reservation that the more elements that are added to Franch's method, the more its simplicity (that which makes it accessible and adaptable) is lost. However, there *is* clearly reasoning, research and valuation behind Franch's method, it's just presented largely opaquely in his article (Franch 2018). Drawing Franch's method from this single source that was designed as a showcase and not a users' guide, has perhaps distorted his approach. Unfortunately English language sources on Franch are limited. Future research or Franch himself can provide a more accurate or comprehensive representation of his working method

Although the research suggests that the adapted Franchian methods would (or could be used to) increase biodiversity (Heyman 2010; Milberg *et al.* 2016; Chollet *et al.* 2018), I have not had time to grapple with the slippery issues of wildness and biodiversity, the contradictions within them, and Franch's relationship to this. Again, this has had to be left to future study.

According to the literature, woody plants could establish themselves on the lawn area quickly if mowing ceased (Prach & Pyšek 2001)and the resultant growth could be extensively shaped into a variety of landscape types. I found no research that suggested that this approach wouldn't work as a way of generating usable vegetative growth. Instead, the challenge would be how to keep the landscape looking cared for (Nassauer 1995) as it developed from grassland to woodland, the early stages looking untidy and quickly blocking sight-lines and adult access. As noted earlier, Gustavsson *et al.* (2005) share this reservation. An alternative in sites like Nytorps gärde would be to concentrate on the meadow types, understorey and glades and not attempt woodland expansion. This would still have all the advantages of Franch's method.

However, the possibility of creating a persuasive, winning aesthetic for a regenerating landscape in the early stages of spontaneous woodland succession, does not seem to be impossible even if the exploration of it needs to be left to future research and practice. Just as stands of high meadow are becoming an accepted part of urban green spaces (Ignatieva et al. 2017), I believe that young woodland stages could also become desirable if framed carefully, both visually and conceptually.

.

References

Chemetoff, A. (2009). The projects of Grenoble and Allonnes or the economy of means. *JoLA - Journal on Landscape Architecture*, vol. 2009 (2), pp. 82–89

Chollet, S., Brabant, C., Tessier, S. & Jung, V. (2018). From urban lawns to urban meadows: Reduction of mowing frequency increases plant taxonomic, functional and phylogenetic diversity. *Landscape and Urban Planning*, vol. 180, pp. 121–124

Clement, G. (2015). *'The Planetary Garden' and Other Writings*. Philadelphia, Pennsylvania: University of Pennsylvania Press. (Penn studies in landscape architecture)

Franch, M. (2018). Drawing on site: Girona's shores. *Journal of Landscape Architecture*, vol. 13 (2), pp. 56–73

Gandy, M. (2013). Entropy by design: Gilles Clément, Parc Henri Matisse and the Limits to Avant-garde Urbanism. *International Journal of Urban and Regional Research*, vol. 37 (1), pp. 259–278

Gandy, M. (2016). Unintentional landscapes. *Landscape Research*, vol. 41 (4), pp. 433–440

Gustavsson, R. (2004). Exploring woodland design: designing with complexity and dynamics - woodland types, their dynamic architecture and establishment. In: Dunnett, N. & Hitchmough, J. (eds.) *The Dynamic Landscape : Naturalistic Planning in an Urban Context*. London: Routledge, pp. 184–215.

Gustavsson, R., Hermy, M., Konijnendijk, C. & Steidle-Schwahn, A. (2005). Management of Urban Woodland and Parks — Searching for Creative and Sustainable Concepts. In: Konijnendijk, C., Nilsson, K., Randrup, T., & Schipperijn, J. (eds.) *Urban Forests and Trees: A Reference Book*. Berlin, Heidelberg: Springer, pp. 369–397.

Hedfors, P. (2014). Tropism and tectonics - fundamental principles of space formation. *Journal of Landscape Architecture*, vol. 9 (2), pp. 64–71 Routledge.

Heyman, E. (2010). Clearance of understorey in urban woodlands: Assessing impact on bird abundance and diversity. *Forest Ecology and Management*, vol. 260 (1), pp. 125–131

Hitchmough, J. & Dunnett, N. (2004). Introduction to naturalistic planting in urban landscapes. In: Dunnett, Nigel, H., James (ed.) *The dynamic landscape : naturalistic planning in an urban context*. London: Routledge, pp. 1–22.

Ignatieva, M., Eriksson, F., Eriksson, T., Berg, P. & Hedblom, M. (2017). The lawn as a social and cultural phenomenon in Sweden. *Urban Forestry & Urban Greening*, vol. 21, pp. 213–223

Jorgensen, A. & Tylecote, M. (2007). Ambivalent landscapes—wilderness in the urban interstices. *Landscape Research*, vol. 32 (4), pp. 443–462 Routledge.
Klaus, V.H. (2013). Urban Grassland Restoration: A Neglected Opportunity for Biodiversity Conservation. *Restoration Ecology*, vol. 21 (6), pp. 665–669
Koningen, H. (2004). Creative management. In: Dunnett, N. & Hitchmough, J. (eds.) *The Dynamic Landscape : Naturalistic Planning in an Urban Context*. London: Routledge, pp. 256–292.
Lehvävirta, S. & Rita, H. (2002). Natural regeneration of trees in urban woodlands. *Journal of Vegetation Science*, vol. 13 (1), pp. 57–66
Milberg, P., Bergman, K.-O., Cronvall, E., Eriksson, Å.I., Glimskär, A., Islamovic, A., Jonason, D., Löfqvist, Z. & Westerberg, L. (2016). Flower abundance and vegetation height as predictors for nectar-feeding insect occurrence in Swedish semi-natural grasslands. *Agriculture, Ecosystems & Environment*, vol. 230, pp. 47–54
Nassauer, J.I. (1995). Messy Ecosystems, Orderly Frames. *Landscape Journal*, vol. 14 (2), pp. 161–170
Prach, K. (2003). Spontaneous succession in Central-European man-made habitats: What information can be used in restoration practice? *Applied Vegetation Science*, vol. 6 (2), pp. 125–129
Prach, K. & Pyšek, P. (2001). Using spontaneous succession for restoration of human-disturbed habitats: Experience from Central Europe. *Ecological Engineering*, vol. 17 (1), pp. 55–62
Prach, K., Pyšek, P. & Bastl, M. (2001). Spontaneous vegetation succession in human-disturbed habitats: A pattern across seres. *Applied Vegetation Science*, vol. 4 (1), pp. 83–88
Raxworthy, J. (2018). *Overgrown: practices between landscape architecture and gardening*. Cambridge, MA: The MIT Press.
Riksantikvarieämbetet (2018). *L2013:1725 Gravfält*. Available at: https://app.raa.se/open/fornsok/lamning/c7922c7e-75b5-46d9-9c70-ed6cb8e82a71 [2020-04-25]
Robinson, N. (2004). *The Planting Design Handbook*. 3rd. ed. Abingdon: Routledge.
Stockholm stad (2020-01-13). *Nytorps gärde utvecklas*. Available at: https://vaxer.stockholm/projekt/nytorps-garde-utvecklas/ [2020-03-08]
Tillväxt, miljö och regionplanering (2014). *Regionplanering 1958-2001*. Stockholm: Stockholms läns landsting. Available at: http://www.rufs.se/globalassets/h.-publikationer/tmr_regionplanering_historia.pdf