

Grounding New Narratives of ‘Plantness’ in Botanic Garden Design. A place for art-based research?

Dawn Sanders

Faculty of Education, University of Gothenburg, Sweden
dawn.sanders@gu.se

Abstract

Through two examples of artworks, both historical and contemporary, water-colour and installation, this article considers possibilities for art-based research to ground new narratives of ‘plantness’ in botanic garden design. In so doing the author suggests that art can open windows on a little-known world; and confront the human viewer with narratives that provoke them to re-calibrate their ideas about, and feelings towards, plants. Thus, questions are also asked of landscape architecture and the ways in which it might respond to such art-based research works and considers emergent questions for design practices wishing to make ‘Life as Plant’ more public and specific.

Attraverso due esempi di opere d’arte, sia storiche che contemporanee, acquerelli e installazioni, questo articolo considera le possibilità della ricerca basata sull’arte per fondare nuove narrazioni sulla ‘pianta’ nella progettazione dei giardini botanici. Così facendo l’autore suggerisce che l’arte può aprire finestre su un mondo poco conosciuto; e confrontare lo spettatore umano con narrazioni che lo spingono a ricalibrare le proprie idee e sentimenti nei confronti delle piante. Pertanto, ci si interroga anche sull’architettura del paesaggio e sui modi in cui potrebbe rispondere a tali lavori di ricerca basati sull’arte e si considerano le questioni emergenti per le pratiche di progettazione che desiderano rendere ‘La vita come pianta’ più pubblica e specifica.

Keywords

Botanic gardens, art-based research, narratives, plant collections.
Orti botanici, ricerca artistica, narrazioni, collezioni di piante.

The model for modern botanic gardens arose from sixteenth century Italy, in locations such as Pisa, Padua, Florence and Bologna (Staffleu, 1969), thus Italy has an important role in the history of botanic gardens and their aesthetics. How the botanic garden invites visitors in, and the ways in which it provides opportunities for meaning making, in terms of design, display and orientation, has been extensively examined in the literature (see, for example, Sanders, et al 2018). We know that botanic gardens are “complex places... and visitor motivations are often not associated with education *about* plants, but rather concern contemplation *among* plants” (Eriksen, Sanders, 2020, p. 16). In this article, I reflect on the possibilities of art-based research to ground new plant-based narratives in botanic garden design.

Before entering the garden, I would like to discuss an important historical artefact in the history of how plants are represented in European artworks; a watercolour, painted in 1503 by the German artist, Dürer, *Das Grosse Rasenstück* (fig. 1). Like Pavord (2003), Mabey, (2010), Collishaw and Aloï (2018), I consider this painting to be a significant moment in the representation of plants in European art history:

In making this painting, Dürer creates a realistic window on a very ordinary group of living plants, but in taking the “worms’ eye view” (Pavord, 2003) he brings us, the human viewers, deep into the world of

plants and allows us to view the structural complexity of each blade and stem and makes public a subtle palette of greens. In this realism we can identify many of the species portrayed, such as Cock’s-Foot (*Dactylis glomerata*), Dandelion (*Taraxacum officinale*), Smooth Meadow Grass (*Poa pratensis*) and Greater Plantain, (*Plantago major*). Thus, this is not generic greenery, but a carefully executed visual record of different types of plant. Each plant, through his painterly rendition, is accorded its singularity. Dürer’s excursion into the aesthetics of commonplace plants opens a window on a little-known world. In making this ordinary world public Dürer creates a contact zone between human and plant and, I believe, offers us a critical juncture in the history of artistic representations of ‘Life as Plant’ (Sanders, 2022, p. 276).

What Dürer does with his painting is to embed new meanings onto an ordinary group of plants, which some might call ‘weeds’. For me, the power of this small painting is its ability to transport the human viewer deep into this group of plants, to enable them to contemplate plants from within the throng of the turf not from the far-away angle of traditional landscape painting. Looking from this “breathing life” into the turf (Collishaw, Aloï, 2018, p. 255) perspective we might then ask the question; how can art-based research, in the 21st century, offer similar but different aesthetic experiences within botanic garden spaces, in ways that “unravel the simplistic dynamic of public display-for-recreation?” ([https://snaebjornsdot-](https://snaebjornsdot-103)

tirwilson.com/category/projects/beyond-plant-blindness/) and deepen attention towards 'Life as Plant'? Furthermore, how can landscape architects work with artists to ground these new narratives into such spaces and provoke the question to garden visitors: where can a single plant take you?

In November 2014, a group of researchers from three disciplines; educational sciences, art-based research and plant science received a three-year grant from The Swedish Research Council (Vetenskapsrådet); *Beyond Plant Blindness: Seeing the importance of plants for a sustainable world*. The grant enabled the researchers to consider the ways in which sensoric experiences, in botanic gardens and related spaces, might assist, in this case student teachers and public visitors, the development of their understanding of plants. Critically, the project placed art-based research at the heart of the study and asked the question: by looking through an artistic lens is it possible to appreciate/identify/acknowledge plants in new ways? Three installations were developed by the artists, Bryndís Snæbjörnsdóttir and Mark Wilson, as a response to research work concerning biological aspects of plant life; narratives such as reproduction cycles, survival mechanisms, and competition strategies were considered. This art-based research was informed by meetings with co-researchers in scien-

ce (Bente Eriksen) and education (Dawn Sanders and Eva Nyberg), along with extensive interviews with curatorial staff and support from horticultural staff at Gothenburg Botanic Garden, Sweden. From this work, three installation sites in the garden were identified: Floras Rike Gallery (seed portraits), Stolpboden (Searching for Stipa #1) and a rain shelter (Searching for Stipa #2). In making these installations the intention was that art might "help us to think about our relationship with plants in new and productive ways" (Aloi, 2020, p.30).

Motivation for foregrounding the seed in the fourteen portraits displayed in the Gallery (fig. 2) was primarily to make a move away from flowers, as an aesthetic focus. The artists wished to make visible an often-unseen part of the plant lifecycle, the seed. To add to the depth, and richness, of these seed portraits they used scanning electron microscope (SEM) images, taking care to represent the colour as seen (Snæbjörnsdóttir et al., 2020). In this way the seed, in all its complexity is revealed and exposed to human view. In addition to the portraits, the same seeds were planted, and labelled, in pots, in a specially designed and constructed tank with accompanying growlight. A horticulturist from the botanic garden, Marika Irvine, attended to the emergent seedlings' needs. The viewers of the installation needed to ma-

Fig. 1 - Albrecht Dürer - *The Large Piece of Turf*, 1503 - Google Art Project.





Fig. 2 - Snæbjörnsdóttir/Wilson (2017) *Scans, Seeds and Stories* installation at Floras Rike Gallery, Botaniska. Reproduced with permission.

ke conceptual connections between the seed portraits and the labels on the pots, thus moving between seed and seedling; representational and living forms of the plants.

The second installation (fig. 3) consisted of a large (14 metres long) highly magnified seed awn of a *Stipa pennata* (European Feather Grass). The awn is a complex structure, which required 29 individual scans under the electron scanning microscope at Chalmers University of Technology, Gothenburg, Sweden. The artists then had to carefully connect each scan, using photoshop, before the final image was ready. In making the awn a focus of artistic attention the scale-jumping from tiny seed to 100 x magnification makes facing this artwork a confrontation to the human viewer, as Sigfúsdóttir (2020) notes: “In this work, one cannot help but see- and with such a confrontation comes the facilitation of greater conjecture” (p.90). In our research on responses to this artwork it seemed participants in the study reacted to this scaling-up by questioning and re-calibrating their impressions of what they were seeing, to the point that they were provoked to consider if indeed what they

were looking at was plant or animal (Sanders, 2020) thus creating the ‘greater conjecture’ Sigfúsdóttir (2020) considers. This, we believe, has design implications for how scaled up imagery is used in botanic garden landscape architecture and interpretation. The third installation was situated in a rain shelter. Large plexi-glass portraits (fig. 4 and fig. 5.) of a tangled meadow in South-Central Sweden, in which the remaining individuals of a struggling Swedish community of *Stipa pennata* survive, serve as windows into the Rock Garden where a *Stipa* lives: “unable, because of its uncertain provenance, to be returned or seeded to the wild – which means it is now both culturally and botanically frozen; bounded by its identity as a scientific specimen” (Sanders, 2020, p. 46).

In the second and third installations, Searching for Stipa #1 and Searching for Stipa #2 different aspects of ‘plantness’ (Darley, 1990) were highlighted. In Installation two a detailed, highly magnified *Stipa pennata* seed awn was made “public and specific” (Sanders, 2020, p.46), whilst in installation three the struggle for survival, in a densely competitive throng of species, was focused upon. Altogether these three

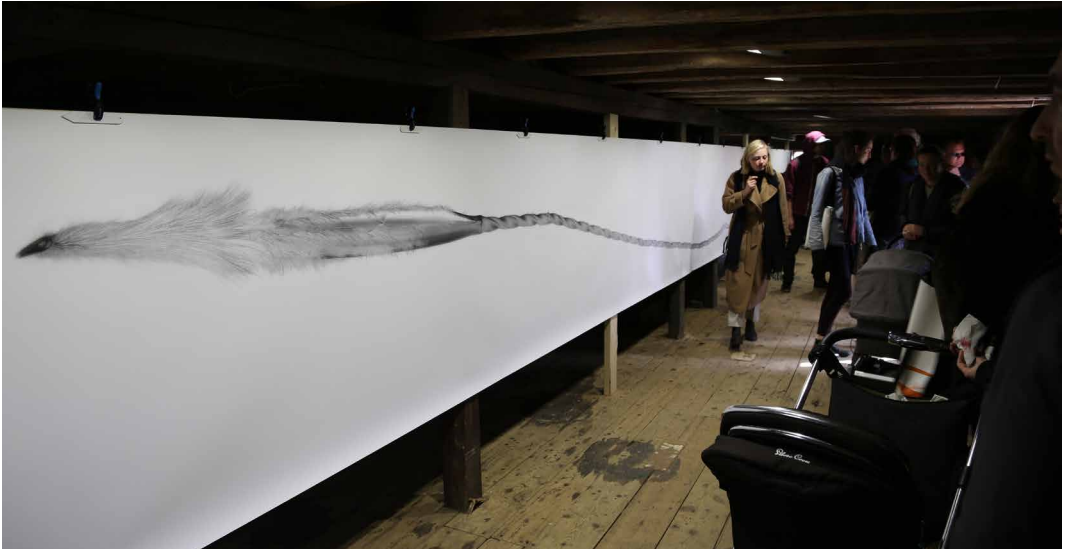


Fig. 3 -Snæbjörnsdóttir/Wilson (2017) *Searching for Stipa* #1 (1.5m x 14m) installation in Stolpboden, Botaniska. Reproduced with permission.

installations form a narrative which demonstrates: “a palette of experiences of ‘Life as Plant’-narratives tracing seeds to full-grown adulthood both in, and beyond, the botanic garden” (Sanders, 2020, p.46). In an era rife with plant extinction (Nic Lughadha et al., 2020) botanic gardens have a role to play in communicating ‘Life as Plant’ to their visitors. The ways in which this is done impacts on the depth of ‘contact zones’ (Broglio, 2011) between visitors and the landscape architecture and interpretative design. Given the range of physical changes currently happening to the climate and the planet, and the impacts these changes have on biodiversity, we need “methods, as never before, by which to assist humans in seeing significance in the lives of plants” (Eriksen, Sanders, 2020 p.16). For, as Solnit (2021) has argued, “close attention itself can be a kind of sustenance” (p. 96). Our transdisciplinary research project suggests that in bringing art-based research into the botanic garden visitors are provoked to enter into the world of plant-life and think about plants and respond, both in thought, and feeling. In the reactions of our participants to the installations we can see that they:

[...] saw beauty but also stopped to think about biological diversity and how different plants are to humans. Changes of scale, and extremes of size, appeared to provoke fascination; in high magnification, details appear that are not visible to the naked eye, and a seed is no longer just a seed; it is a unique object with a story to tell. A story that is often invisible in a human-centric world. Sometimes, as in the case of the enlarged *Stipa* awn, extreme magnification creates confusion even in the identity of the object being witnessed, and the viewer might wonder if they are indeed viewing a plant at all. This de-stabilisation is key to the affectiveness of contemporary art; for audiences the strategic implementation of uncertainty opens a new space of the imaginary, where re-appraisal, even to a small degree, inevitably must occur. Confusion can lead to questions, and hence sensitise the viewer to educational (and restorative) affordances (Eriksen, Sanders, 2020, pp. 18-19).

In taking these visitor narratives forward could landscape architects ground art-based research more centrally in their praxis, specifically when considering the importance of garden visitors seeing the significance of plants for a sustainable world? How might landscape architecture form deeper conceptual



Fig. 4 e 5 - Snæbjörnsdóttir/Wilson (2017) *Searching for Stipa #2* installation in the Rain shelter, Botaniska (installation detail). Reproduced with permission.

alliances with contemporary art that considers 'Life as Plant', and what might the outcome of such alliances be for designed spaces, such as botanic gardens, their visitors, and the plants within?

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