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# Nature as Code **Ruth Scheuing**

### Introduction

In order to explore 'nature as code', I will look first at the complexities involved in naming and defining "nature" and the assumptions that have historically associated women with nature. I will focus on historical gardens and floral patterns in textiles as cultural constructs of nature. Specifically I will focus on the differences between French formal gardens of the seventeenth century and the picturesque and naturalist English gardens of the eighteenth century. I will examine how these gardens are reflected in textile designs that use floral motifs. Finally, I hope to provide some explanation of the influences of industrial and technological innovations.

Much has been written about women painting flowers, as well as the representation of flowers and their symbolism, so I will not reiterate it here. My interest is to explore representations and codes of meaning, as a language of interpretation, to be examined, in order to uncover that which is hidden in cultural forms and images.

I work in textiles with a specific interest in how textiles function as objects through their historical, social and cultural associations. To this effect, I have altered or deconstructed men's suits by removing threads selectively. I have also constructed women's dresses that are based on nineteenth century dress patterns by using aluminum flashing. Floral designs used in women's dresses and in fabrics for the home such as upholstery and curtains are my most recent area of research. The images will show how the more ordinary and innocuous aspects of textiles influence my approach to textiles.

Recently I have started to work with computer assisted Jacquard weaving <sup>1</sup>. As a result I started to look closely at the development of the Jacquard loom and historical textiles from the period of its development. The Jacquard system with its punched cards was developed in 1800 in France to produce complex imagery of flowers in woven textiles that could compete with imported designs. This suggests that the pursuit of flowers can produce advanced technical change. Ada Lovelace recognized this potential in her often quoted comment of 1843: "The analytical engine weaves algebraic patterns just as the Jacquard loom weaves flowers and leaves."<sup>2</sup>

Today, as in the early nineteenth century, Jacquard weaving raises questions of what is natural and what is cultural. Contemporary hand-weaving traditions are strongly influenced by William Morris and the Arts and Crafts movement of the late 19th century and their reaction to the technological and industrial changes. Moving to work against many of the harsh and dehumanizing conditions of the industrial revolution, Morris proposed that the natural was defined as good, and what was seen to be artificial, that is industrial or commercial was deemed bad. With the availability today of computerized Jacquard weaving that is able to replace hand weaving, the same questions are asked, but now we have the advantage of hindsight and history with which to answer them. For better or worse, crafts and fiber/textile arts have been associated with the natural or nature. Recent experience from the hippie era demonstrated how lumpy hand-spun yarns, with their natural look, replaced their commercially produced counterpart. But what constitutes good or bad technologies: the back strap loom, the floor loom, the Jacquard loom, automated looms or a computerized loom? How can we, as textile artists, comment on nature, given this complex resource.

### **Constructing nature**

Looking at definitions of nature reveals a range of contradictory meanings. For the scope of this presentation I will focus on nature or the natural as our physical environment or surrounding landscape. What we mean by nature can range from a park, a land reserve, a rural farm or wilderness. "Our own urban gardens both belong to nature and keeping it at bay." <sup>3</sup> It is consequently likely impossible to find land that can be considered natural, that is untouched by human intervention, consequently is all nature cultural?

Nature is an expression of culture; it constructs nature, according to specific whims and desires, and reflects a socially and culturally constructed environment.

Nature often functions as a concept to suggest that which is separate from human activity and is used to project desires seemingly unattainable, particularly today with the concept of nature as an untouched environment that is disappearing. Nature is then romanticized, patronized and forever the passive recipient of our desires. In today's technologically charged environment, nature is asked to balance stressful lives by identifying an environment that is untouched by humans. "Going back to nature" might be attractive, but may not be an effective tool to save nature. There is also debate on whether or not nature has to be saved, or if nature has always been dynamic and a changing force and condition, part of a human world yet guided by its own inner processes.<sup>4</sup>.

Scientific manipulation of nature has helped humanity in fighting diseases, and in improving and increasing agricultural production, but it can also create monster plants with unknown potential. Nature is usually seen as a highly moralizing force, except in situations where farmers or fishers have to battle its forces to survive, or when tornadoes destroy whole communities. Our sexual conduct, we are taught ought to be natural, although we are also taught to control our instincts, in fact, this is often considered the main purpose of a "civilizing" culture.

Western culture reflects Judeo-Christian values of nature, "man is made for the sake of God, that he may serve him, and the world is made for the sake of man, that it may serve him." <sup>5</sup> . Ecology denounces a human dominion over nature and questions the privileging of our own species over others, and the fact that we have placed ourselves *outside* nature or more precisely *above* nature.

Postmodern theory examines the symbolic aspect of nature as a tool for suppressing other cultures, of maintaining class and gender status through definitions of what is or is not natural. It also questions the way in which history and tradition, regardless of factual

truth, are seen as natural and thus good. Thus older farming practices might be seen as natural, even though many peasants died of starvation, while others enjoyed literally "the fruit of their labour."

Feminist positions are ambiguous in their association or identification of women and nature. The earth as mother, or nature as female is an argument in support of ecology and is a reaffirmation of female powers. We can also look at nature constructed as other similar to Simone de Beauvoir's analysis of women as other, which has shaped contemporary feminist analysis. Accordingly both women and nature are viewed as outside the domain of culture and power. Unfortunately this identification also supports traditional roles, and hinders women's ability to participate fully in innovations in culture and technology.

To counteract this trend, Donna Haraway proposes fluid boundaries between humans, animals and machines instead of defining oppositional or binary positions. She questions how each is used by the other: "Nature and culture are reworked; the one can no longer be the resource for appropriation or incorporation by the other". And as she continues: "We are all chimeras, theorized and fabricated hybrids of machine and organism; in short we are Cyborg"\_. "The Cyborg myth subverts myriad organic wholes, in short, the certainty of what counts as nature - as a source of insight and promise of innocence - is undermined, probably fatally." <sup>6</sup>

The appealing conclusion is Haraway's trickster solution, the Cyborg, genderless and part machine, part flesh, part science and part myth, is born as the offspring of military and patriarchy to join together exactly those forces that have been traditionally placed in opposition: women and technology, nature and culture.

Recent protest marches against the World Trade Organization in Seattle have shown the benefit of internet communications in disseminating information quickly, cheaply and efficiently to produce results. Haraway's Cyborg could be seen to include women with protease, men with pace-makers and kids with cell-phones glued to their ears, and this textile artist typing away at her computer and communicating across the Web to her own kind.

# Constructing gardens and floral textiles: representations of nature in the seventeenth and eighteenth century

Gardens and parks symbolically recreate nature because plants are seen to produce the natural environment and even exotic plants can be grown in Northern countries, by taking them inside for the winter. Floral designs in textiles are a step further removed from nature, as the designer is free to invent whatever plant-like construct is deemed appropriate and/or beautiful. I have decided to isolate specific historical juxtapositions, because the changes dramatically illustrate issues that still exist today.

Gardens throughout history are symbolic representations of nature. They construct nature into roughly three overlapping areas or concepts: first, paradise, a spiritual retreat or Arcadia. Secondly, gardens are places for contemplation and the admiration of beauty. Finally, they also exist to demonstrate ownership, wealth and power.<sup>7</sup>

Flowers and plants as fabric patterns and designs represent imaginary constructions of nature. Textiles used in interior design, such as curtains and upholstery, bring nature inside. Floral designs on women's dresses place women in the realm of nature, particularly when we compare them with the more somber, plain male suit. Floral elements range from realistic depictions of nature, to abstractions of nature as universal geometric forms, and depictions of unnatural or fantasy images. Therefore gardens can be defined as one level removed from nature, and floral design at two levels removed.

Seventeenth century classical French gardens displayed royalty's power over both people and nature. Nature was transformed into a work of art. Classical French gardens were influenced by Renaissance gardens in which the perspective square or rectangle suggested divine order imposed on earthly chaos.

Sculpted plants were set in geometric arrangements, to look like walls, parterres or embroideries. Tapis vert (green carpets), topiaries, knots and mazes were constructed of precisely trimmed evergreen plants such as box wood. The emphasis was on vistas from above or high vantage points; this also reflected a military approach to garden design as it allowed for grand overviews. These gardens were settings for the king's private wanderings and public entertainment. Le Nôtre is best known for designing the gardens at Versailles for Louis XIV and the earlier Le Veau. He added his own emphasis, by creating wide and open allees, radiating in all directions with military precision. He leveled hills, detoured existing streams and created water settings, felled trees and imposed a rigid geometry onto the land. Sculptures, often representing the pagan forces of nature, played an important role. Flowers filled allotted spaces; they were collected from all over the world and while their presence is described in the literature, they are not very evident in the surviving garden designs.

### Illusion, fantasy, and other unnatural monsters: from Rococo to Neoclassicism

The Bizarre style peaked around 1700 to challenge established design principles by using deliberate asymmetrical designs, fantastic creatures and the incorporation of architectural elements and rock formations. The resulting Rococo style was also influenced by the grotesque. Developed in Italy in the sixteenth century these images depicted human figures, plants and animals that did not conform to natural laws of proportions and size, rather they used many fantastic composites of human, animal and plant life. The grotesque balanced fear and humour in ways that did not permit clear interpretation between the real and the imaginary. The Rococo even more so exploited an inherent tension between representations of nature and aspects of pure decoration. Chinoiseries added an exotic appeal influenced by new ideas from Asia. Rococo challenged the laws of nature and what would be considered "Crimes against Nature". <sup>8</sup>

Eighteenth century gardens emphasized naturalism and Romantic notions of the sublime and the picturesque. They placed nature in an exalted state, where it served as a tool of transcendence. Their designs were influenced by images of oriental gardens, which had recently reached Europe. The picturesque gardens emphasized curves, open lawns and variations in the landscape. There were no clear boundaries between house, garden and surrounding nature. They invented invisible boundaries or trenches, the so-called 'haha's'. Irregularities were emphasized in opposition to traditional definitions of beauty, balance and symmetry. Gardens and estates also start to represent land ownership of the rising bourgeoisie.

According to E.J. Gombrich "all criticism of the Rococo is against transgressions of the rules of reason and of nature". <sup>9</sup> Rococo's emphasis on excess in ornamentation, pleasure, innovation and fantasy was challenged by both English and German advocates of the more restrained Neo-classical style. They castigated its Frenchness as foreign and feminizing. When Christopher Wren visited Versailles he found it "crowded with little Curiosities of Ornaments ... and work of Filigrand and little Knacks; the Women make here the Language and Fashions, and meddle with Politicks and Philosophy." <sup>10</sup>

Nationalist protective measures established through trade tariffs are evidence that these design/style issues were taken seriously on an economic level. Eastern art was criticized as Sarat Maharaj pointed out in Ruskin's comment about Arachne's tapestry with its ivy leaf motifs,"their wanton running about everywhere".<sup>11</sup> Ruskin stresses Arachne's eastern excesses in her imagery, her lack of self-restraint, orientalizing and effeminate imagery vis-a-vis the classical Greek order represented by Athena. Ruskin therefore sees justice in Arachne's condemnation for her trespassing on good taste.

Constable believed that "since nature was the clearest revelation of God's will, the painting of landscape, conceived in the spirit of humble truth, could be a means of conveying moral ideas." Both Constable and Wordsworth believed "that there was something in trees, flowers, meadows and mountains which was ... full of the divine ... and both were inspired by a dream of paradise, and sought to create harmony between man and nature".<sup>12</sup>

Neo-classical views in Britain argued for a return to simple classical styles; "in decoration regular shapes, whether straight, square, round or oval, are preferable". German's were warned that "the decline of good taste in various arts among several of our neighbors is coupled with a decline in the decency of manners".<sup>13</sup> Roccoo was seen as being admired by the wrong people: women, foreigners and the nouveau riches.

The natural look was carefully constructed as many of Humphery Repton's watercolour drawings show. He constructed movable sections that allowed a client to see both the 'before and after' views.<sup>14</sup> Landscape needed to be improved in order to fit expectations and often a plain settings became more dramatic. Landscape was shaped to mimic paintings or literary references, and painters were consulted in the creation of new gardens.

### Industrial change and the Arts and Crafts movement

It is of interest to me to see how industrial change might have influenced these reactions. Before the industrial revolution, ornamentation was a sign of status, but industrial processes were well suited to mass-produce complex detailed work using the Jacquard loom and various mechanized looms and printing processes. The middle and lower classes were able to afford highly decorated objects and so the simple and hand-made object became a socially and morally progressive status symbol. Owen Jones promoted Greek stylized design of flowers as idealized designs; they were to be flat, regular and repeats and also followed Pugin's prescriptions "that pattern should not be realistic or call unnecessary attention to itself."<sup>15</sup> This would mean walking on a bed of flowers. Ruskin felt that Renaissance style required intellect rather than emotion for its enjoyment and he supported the latter.

Nature/gardens projected needs and fears that stemmed from the process of urban change and industrialization. People turned to nature out of fear of the modern world.

### Conclusion

Interesting parallels can be made between the rise of Neo-classicism and resulting historical eclecticism of the late eighteenth/early nineteenth century and postmodernism today. Both look at the past for inspiration, and they are influenced by a sense of moral outrage in relation to current conditions. Both respond to technological changes: one to the industrial revolution, the other to changes caused by the electronic and information age.

Postmodern practice emerged in the twentieth century with technologies, computers, television mass media and the World Wide Web. They allow for an even wider distribution of images and goods, and thus also cause a reflection of history and the context of making objects and images that reflect on nature. Both movements reacted to problems created by new technologies: labour-issues, social concerns, mass production and changes in nature and the local surroundings.

There are real needs that we hope nature will satisfy, but we also question nostalgic qualities projected onto an ever transformed nature. Nature can no longer be the sum total of our projected desires; this can not help "it/her/him/us". Nature cannot be defined in terms of the artificial enclave or the parks which humans have set aside from the everyday world. All of it is nature, the good, the bad and the ugly, and the way we construct gardens and floral textiles today may uncover some of the conscious processes involved.

#### Notes

<sup>1</sup>The illustrations are Photoshop files; they were created by the author, from a variety of historical sources, manipulated in Photoshop, then translated into Pointcarré software and woven on a Jacquard hand loom in Montreal at the Centre de Textile Contemporain de Montreal.

<sup>2</sup> Joan Baum, *The Calculating Passion of Ada Byron* (Hamdon, Conn.:Archon Books, 1986), 71.

<sup>3</sup> Kate Soper, *What is Nature? Culture, Politics and the non-Human* (Oxford UK & Cambridge, Mass: Blackwell, 1995), 2.

<sup>4</sup> Soper, 126.

<sup>5</sup> Soper, p23.

<sup>6</sup> Donna J. Haraway, Simian, Cyborgs, and Women: The Reinvention of Nature (New York: Routledge, 1991), 151.

<sup>7</sup> the information on the history of gardens is informed in primarily the book by Penelope Hobhouse, *Gardening Through the Ages* (New York: Simon & Schuster, 1993).

<sup>8</sup> Neil MacInnes, "Crimes against Nature" in material matters: the Art and Culture of Contemporary Textiles. ed. Ingrid Bachmann and Ruth Scheuing (Toronto: YYZ Press, 1998).

<sup>8</sup> E.J Gombrich, *The Sense of Order: A Study in the Psychology of Decorative Arts* (Oxford: Phaidon, 1979), 21.

 $^{10}$  Gombrich, 123.

<sup>11</sup> Sarat Maharaj, "Arachne's Genre: Towards Intercultural Studies in Textiles," in material matters: the Art and Culture of Contemporary Textiles. ed. Ingrid Bachmann and Ruth Scheuing (Toronto: YYZ Press, 1998), 158.

<sup>12</sup> Kenneth Clark, Landscape into Art, (New York: Harper & Row, 1979), 151.

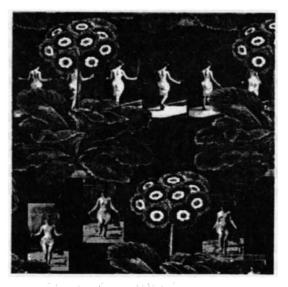
<sup>13</sup> Gombrich, 22-24.

<sup>14</sup> Gabrielle van Zuylen, *Paradise on Earth: The Gardens of Western Europe*, trans. Mark Paris (New York: Harry N. Abrams, 1995), 91.

<sup>15</sup> Gombrich, 34.



Flowers and Leaves #1: "The analytical engine weaves algebraic patterns just as the Jacquard loom weaves flowers and leaves." Ada Lovelace, 1998, computer assisted hand-woven Jacquard fabric, 40x 40". (detail) Ruth Scheuing



Flowers and Leaves #9: ...when Women Skip (in) Paradise, 2000, computer assisted hand-woven Jacquard fabric, 54 x 40". (detail) Ruth Scheuing Nature weaves a digital dream; Flowers culture a garden in cyberspace when women skip (in) paradise