Ruth Scheuing / FLOWERS AND LEAVES: CONSTRUCTING NATURE

Cyborg women weave translucent thought into sturdy cloth and with Arachne still defy the gods.

Nature weaves a digital dream into the text and Philomela has her own web page now.

The Fates still weave with Ada's help on ancient looms and computers

Myths and stories about weavers have long been the focus of my work. Myths give shape to the past and inform our present and future. My involvement with mythic weavers started with Penelope and Arachne, who were able to shape history through their weaving as a powerful recorded language for women. My ideas about myths are about rationalizing the way symbols exert power in a given society so that they flow fluidly from Greek Myths to Fairy Tales, Science Fiction, and Cyborgs.

My interest in Jacquard weaving started in 1997 when I read Ada Lovelace's statement: "The Analytical Engine weaves algebraic patterns just as the Jacquard loom weaves flowers and leaves." Ada Lovelace's unique background in art and science, poetry and mathematics (her father was a poet and her mother a mathematician), reflects my own interests in science, art, and language. Her translation of a text by Manabrea about Charles Babbage's 1843 Analytical Engine contained the above quotation and the first instances of written software. The engine never quite worked, but contained the basic operating principles later used by computers. The process was derived from the Jacquard loom, which used punched cards to store and process complex information as zeros and ones. The Jacquard loom was developed in 1804 by Jacquard in response to demands for

weavings with elaborate imagery, influenced by fabrics brought back to Europe from Asia during the 18th century. Napoleon funded this new technology to fill his empty war chest. The motifs feature elaborate floral designs and thus provide an excellent forum for reinvesting patterning and imagery composed of flowers and leaves with new meanings. They also show unintended developments in technology.

Textiles have long played an important economic role and still do so today with NAFTA and global markets. Textiles reflect cultural exchanges and colonial relationships; they cause trade wars and labour problems. (Ned Ludd was a Lancashire weaver, who fought the use of this new machinery and left us the term "luddite.") Crafts and contemporary weaving are often associated with "traditions" and a romantic view of a past, lost forever. Working with one's hands holds many of the same desires associated with an ideal of untainted nature. In reality, textiles have been at the forefront of technological change. My hand-woven textiles combine the technologies of ancient looms with computers — art made possible through technology.

My relationship with "Flowers and Leaves" evolved over time, influenced by backyard gardening and hikes in local mountains, as well as visits to museums to see historical textiles such as Bizzare and Rococo silks and chinoiseries. I am also interested in exploring issues of "decoration" and its relationship to the "feminine" as reflected in textiles. Muybridge's photographic records from the 19th century show women doing domestic or mundane tasks. By layering these images with re-presentations of "nature" I hope to demonstrate some of the contradictory assumptions about nature, culture, technology and gender roles.

Definitions of nature reveal a range of contradictory meanings. Nature often suggests that which is separate from human activity and is used to project desires seemingly unattainable, thus "nature becomes romanticized, patronized and forever the passive recipient of our desires" (Soper). Donna Haraway in the "Cyborg Manifesto" proposes more fluid boundaries between humans, animals, and machines instead of defining them in opposition. She suggests, "We are all chimeras, theorized and fabricated hybrids of machine and organism; in short we are Cyborg" and "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" (Haraway). Computers and weaving have been connected in Sadie Plant's essay "The Future Loom: Weaving Women and Cybernetics" and her book *Zeros and Ones*, which discuss weaving as digital processing of data. Weaving, of course, is and always has been a digital process.

The images for my weavings were created in Photoshop from various sources, including scans from real plants and books, digital photographs and images from websites. Then, the colours were reduced and translated into weave structures, using JacqCAD or Pointcarré software (industrial Jacquard weaving softwares). The resulting file, containing only black and white information was then uploaded to a computerized Jacquard loom in Montreal at the Centre de Textile Contemporain de Montreal, where I wove initial tests and pieces by hand. Some pieces were also woven by a technician, from files I sent via the Internet.

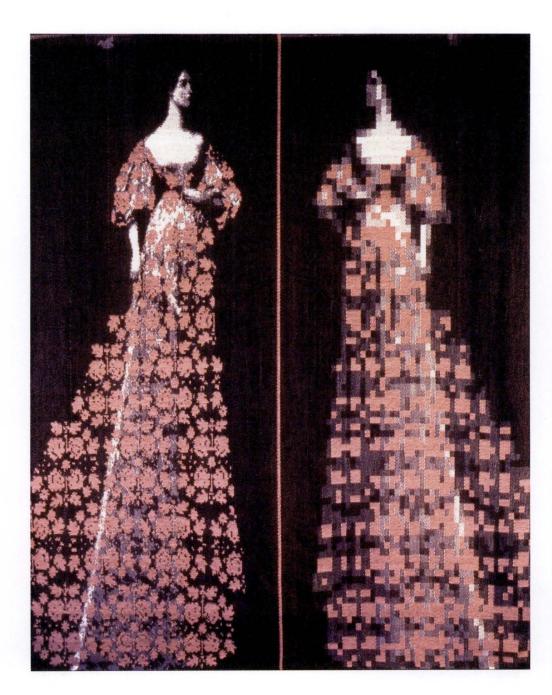
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- Haraway, Donna J. Simian, Cyborgs, and Women: The Reinvention of Nature. New York: Routledge, 1991.
- Plant, Sadie. Zeros and Ones: Digital Women and the New Technoculture. New York: Doubleday, 1997.
- Soper, Kate. What is Nature? Culture, Politics and the Non-Human. Oxford, UK and Cambridge, MA: Blackwell, 1995.

LIST OF WORKS

All works are computer assisted hand-woven Jacquard fabric, cotton

- 1. Flowers and leaves #2: Cyborg women weave transluscent thought . . . , 1998, 72" x 40"
- 2. Flowers and leaves #2: Cyborg women weave transluscent thought . . . detail, 1998, 72" x 40"
- 3. Flowers and leaves #4: Ada Lovelace: Queen of the Engines, 1999, 48" x 40"
- 4. Flowers and leaves #7: Cyborg Descending Staircase, 1999, 60" x 40"
- 5. Flowers and leaves #8: Ada Lovelace: Queen of the Engines I + II, 1998/99, 78" x 40"
- 6. Flowers and leaves #11: cyclamen, 2001, 67" x 40"
- 7. Flowers and leaves #11: cyclamen, detail, 2001, 67" x 40"
- 8. Flowers and leaves #19: green tea, detail, 2003, 62" x 40"



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