14.1 Going Native

Chapter 10

Design of Interactive Devices

CS 598

Steve Harrison
14.1 GOING NATIVE
Caleb Jones
“But at another level, understood as our own species’ means of adaptation, technology is natural too. In this sense, our homes and highways and management information systems are as natural as the nest a bird builds. They are forms of adaptation within a living ecosystem.”
• Technology may seem unnatural – as a step away from a simpler, “natural” existence. However, from a certain perspective we adapt and technology is our evolution. We change the ecosystem to suit us, instead of adapting ourselves to the ecosystem.

• The basis of all design is an unseen order. This order appears in nature and we are slowly realizing and taking note of this order. Therefore, we must learn about our environment so that we may better understand this order.
“going native” originally referred to Englishmen who integrated themselves both in dress and behavior to the Indian culture before the British occupation.

It has now come to mean the use of complex natural systems as a basis for design of artificial systems, and as such ecological principles have become relevant to human design.
• We cannot, then, reject technology outright. Even those opposed to it miss electricity when it is out. Instead we should and will strive to recreate the resilience and wastelessness of nature. Our unnatural technology then begins to resemble nature therefore become natural.

• With our current and future technologies, how we design our technology to interface with our environment becomes the most important factor.
• Before you read this, what did “Going Native” mean to you?

• Do you think that technology is natural – in that it is our evolution – and is it becoming more natural in the sense that it resembles nature and is tending towards a perfect synchronization with nature?
Technology is an element of human nature, therefore it is “natural”

This implies a design strategy:

- mimicry of biological systems (ecologies)
- increase in applied intelligence
13.1 Digital Ground: **Accumulating Value**

- **Mimicry of biological systems:**
  - closer observation, more precision
  - copy resilience and wastelessness

- **Technological implementation:**
  - distributed sensing, local memory, pattern recognition, and feedback control systems
Janine Benyus:
“the question is not whether our technology is natural, but whether it is well-adapted.” -- page 211
What uses of technology reflect this idea: “Only mad dogs and Englishmen go out in the noon-day sun”?

If we accept the proposition that technology is part of human nature, how to we assess “fit”?

What is the difference between adaptation and appropriation?
Planning Ahead

- for Wednesday: on-line reading CHI papers
- no class Friday or Monday; use time wisely