LECTURE 12

In Lecture 11 we discussed the Interaction of People with Nature, as presented in Miller, Chapter 2 and the Interaction of Children with Nature in Last Child in the Woods by Richard Louv. Now, we will focus more on Trees, as the dominant element of Nature.

PSYCHOLOGY OF PEOPLE AND TREES

Why do people like trees? Why do they not like trees? In a practical sense, trees can make people more comfortable, but can also make a mess. But people also have other responses to trees, and Environmental Psychologists, like Richard Coss, have studied the impact of Landscapes and Trees on humans. If you have had Environmental Awareness, PSY 155, you already know a lot about Landscape Aesthetics.

We will review some research that Robert Sommer, and his graduate student, Josh Summit, did in the 1990s here at Davis. Actually, Robert Sommer was the original Environmental Psychologist who developed 155 back in the 1960s, but this research occurred later in his career and that is why it is not included in Miller’s text.

Trees in Landscape Aesthetics

It is clear that trees have evolved very different forms in different parts of the world, depending on environmental conditions where they have been influenced by natural selection. Trees from wet areas, like the Temperate Rain Forests of Northern California, are very tall, like Coast Redwoods, and trees from dry areas, like the Sonoran Desert of Inland Southern California are not tall at all. Rather, they are short and spreading, like a Mesquite in our deserts, or acacias in African Savannahs. Therefore, people from around the world have grown up around very different trees.

Joe McBride discussed research that revealed people moving to the Bay Area, preferred to plant trees like those where they grew up. And is common to see people from the Eastern US move to the Southwest and plant landscapes of large, deciduous trees and Kentucky Bluegrass lawns, even though they are very mal adapted to desert conditions. Gibson (1979) began research on trees, arguing that people were attracted to trees.
that had some useful characteristics. His theory of Affordance was basically very functional. This was followed by Kaplan (1985), who added aesthetics to Gibson’s functional emphasis, and used the term Preference.

Davies (1988) suggested that Attractiveness results from Symbolic Qualities. As well as Physical Qualities. This is supported by the example of the Bo Tree in Buddhist Culture, again learned from Joe McBride. And Altman (1993) suggests symbolisms such as Permanence, Stability, Trustworthiness, Fertility and Generosity to trees.

However, Fuller (1988) points out that trees have been segmented into:

**Roots**, related to the Infernal Domain,

**Trunks**, related to the Earthly Domain, and

**Branches and Leaves**, related to the Heavenly Domain

And trees and forest are important in European children’s literature, as scary, foreboding places. Positive images of forests as places that have value and should be preserved are pretty recent in Western Culture.

**Trees as Art**

Plato originated the idea that beauty can be either natural or created, and Lee (1938) discussed this idea as:

**Expressive beauty** which is found in naturally growing trees, and leading to Romantic Landscapes

**Functional Beauty** which is found in highly pruned trees or shrubs, and was practiced in Baroque Landscapes

Modern Psychological studies almost always show a human preference for the more natural form of beauty
Slides On:

The Angel Oak in S Carolina demonstrates Expressive beauty

The Functional Beauty of the highly landscaped garden in Mallorca

And the Candelabra Redwoods of Northern California demonstrate that Expressive Beauty can take unusual form.

Slides Off

What do students at UC Davis like? Students in ENH101 have been asked to grade the trees they are seeing in labs on the familiar grading scale of A, B, C, D and F.

Slides On

preferred trees

not preferred trees

Slide Off

The Summit and Sommer Experiments paper in room 193, details not on Mid Term, just what is in this lecture.
Summit and Sommer set out to discover WHY people liked some trees better than others. Their initial focus was on how tree form might effect tree preference. The people in their study were 277 undergraduate students at UC Davis. Why not?

Five tree shapes were determined from tree figures from around the world and they consulted with Landscape Architects to insure these 5 forms represented most of the variability in landscape trees. These forms were:

- **Acacia**, sometimes referred to as the spreading, savannah form, familiar in movies about Lions in Africa,
- **Oak**, for the round, short-trunk type of oak, modeled from Quercus rubra, a familiar tree form in Sherwood Forest movies
- **Conifer**, for narrow upright trees, approaching a pointed top, as we see in Ponderosa Pines on California
- **Eucalyptus**, for trees more narrow than the Oak Form, but wider than the Conifer Form, more irregular and with longer exposed trunk,
- **Palm**, for trees with a very long exposed trunk, topped with a small canopy.

These tree forms were varied in size and paired with a 5'10" human figure to evaluate the interactions of tree form with tree size, the human size only for scale

These trees for were also paired with landscape scenes representing social context, to evaluate the interactions of form with context.

Slides on

Acacia form most generally preferred, but Oak form a bit better in Wild Context
Palm is unpopular, but does best in City Context

Conifer form is not popular in any context, even in the Wild?

Slides off

These are excellent examples of how to actually design experiments involving human preference, defined as the average preference over a large sample of people. The preference is for one tree over another tree. Obviously, this does not address human preferences for groups of trees in one landscape compared to another landscape. That would be another experiment; probably a very difficult one. It also does not consider that a tree form may be more desirable when paired with other tree forms, as a different context. Another difficult experiment.
MARKETING THE URBAN FOREST

So why have we been discussing urban attitudes people have about nature? About trees? One reason is “Because they vote”. We need to convince people that the Urban Forest is worth their investment, just as education, police and fire protection, and hospitals are worth our investments. We need to persuade elected officials and the people who elect them, that the Urban Forest is also important. To many, flowers and trees are amenities, but not necessarily critical to our well being.

Product Marketing

Marketing has made enormous inroads into our social fabric for just over 100 years. It began, and is still dominated by Product Marketing. Just turn on your TV!

A leading researcher in the area named Rogers, states “Most People do not make decisions to change their behavior based on factual evidence.” In decisions about purchasing, people need to believe they are doing the right thing. The key word is Believe.

Social Marketing

Social Marketing, differs from product marketing in that we are trying to persuade people to change their attitudes and social behavior. In social marketing of the Urban Forest, we attempt get the public to buy into the Urban Forest rather than buy Coca Cola. But some of the techniques are the same. Here, we want to sell them on changing their behavior. We would hope to reduce vandalism and other forms of tree damage, and increase public willingness to support tree planting and care, even if it means taxes.
Some models of Social Marketing stress the following:

1. Know the problem
2. Know the Audience
3. Right Strategy
4. Right Message
5. Evaluate the Message
6. Evaluate the Results

Another important element in Social Marketing is TRUST. It may work well to recruit people from the community that are highly respected, and will be trusted to present the message. In addition, in all marketing, well known people, often celebrities, are very useful.

People who like the movie actor, Harrison Ford, will tend to be convinced just because of his persona. He is a hero, and we like to trust our heros.
Urban Forestry

In Urban Forestry, we need to educate the public about the benefits of trees in the Urban Forest.

Our Agenda, for example that the B/C ratio is high, may not be their Agenda.

People tend to ask: What is in it for me? (Or my children, or ...) Why should I care? I live in the City, not in a Forest.

To Persuade:

Find out “where they are”, And “meet them there”

For example, they may not understand much, or care much, about trees, but the idea that they may contribute to a more desirable place to live, may be where they are, and where you can do business. Most people would like to leave some kind of legacy, and it might be much more altruistic than having a building with their name on it.

Marketers always find themselves in a competitive environment, but it is important to keep positive. We see lots of negatives in political marketing, and that may keep someone from voting in a way you don’t want, but experts say it does not work in product marketing. However, there has been an increase in negative product marketing in fairly recent years. Especially the ridiculing of a competitive product in a humorous way.

That means it is best to avoid the pitch that “horrible things will happen” if we do not support the Urban Forest. Instead, we have an “incredible opportunity”....
Animals in the Urban Forest

People like animals, and most are emotional drawn to one kind of animal or another:

Birds, Dogs, Butterflies, Frogs, Toads, Lizards

and Art in the Urban Forest also draws people into an awareness of the Urban Forest. What animals and art really do is Increase the Benefits that we have not yet put into the equation. These are not dollars, but have value nonetheless.

Slides on

animals

art

Slides off

BREAK
HORTICULTURAL THERAPY

Horticultural Therapy is not always considered a part of Urban Forestry, but I would like to see it included. Many of the benefits that plants have in the Urban Forest are utilized in therapy programs, and I think we all experience therapeutic benefits from interacting with plants, although these plants may more often be in gardens than trees along streets. And, like animals and art, it draws interest in trees along our streets and in our parks, so, for me, it is all U F

Horticulture as Therapy, ed, Simson & Straus, if you are interested, it will be in room 193

In Chapter 3, Rebecca Haller, divides Horticultural Therapy programs into:

Vocational, focus on Employment

For many individuals, some preparation for behavioral readiness is needed before horticultural skills can be taught. Individuals may have mild or severe developmental disabilities or may have issues that have landed them in jail.

The settings for vocational programs can vary depending on the individuals needs, from a sheltered program to industry positions with assistance, such as coaching. Examples of settings include schools, workshops, correctional facilities, and private companies involved in horticulture.

They involve rehabilitation and learning a skill-trade

Therapeutic, focus on recovery from Illness or Injury

Typically individuals recovering from a serious illness, or from surgery, or an injury, can benefit from horticultural therapy in addition to medical and physical therapy.

Settings for these programs are hospitals, including psychiatric hospitals, and long term care facilities often serving the aging population.

These programs range from very short term recovery after an operation to long term programs involving hospice care.
Social, focus on Quality of Life, Wellness

These programs are often associated with programs for Seniors, but many of the same social techniques are found in Community Gardens, not generally thought of as Therapy. We can all benefit from interacting socially with people we enjoy, and gardening in a popular, common interest that can help bind a community.

Often there is overlap between these categories, e.g. they all should lead to increased well being. And for horticultural therapy to be effective, it needs more than love of gardening and a wish to help others. The most critical need id professional psychotherapy. People are more complex that plants.

Now, lets see the Video, Growing Hope, Santa Cruz Homeless Project

Questions or Comments?. 