TREES AS DESIGN ELEMENTS IN THE LANDSCAPE¹

by Anthony Tyznik

Why, we ask, in the rationality and emotion of man is there a lingering love for trees? Why can't we discount them as nothing more than nuisances that break up sidewalks, interfere with construction, drop leaves and twigs, and cost cities great sums of money to plant and maintain? Is there a hidden value, perhaps without measure that we cannot see, but deep within our hearts feel? Questions continue to surface often without answers.

Each of us values a tree for different reasons, because our experiences with them vary. Who has not realized an endearing, childhood, love-relationship with some tree; a particular, special tree that left indelible feelings deeply engrained in our memories. Maybe it was not a lovely tree that rated "ten" on some calculating scale. Perhaps it was only a crummy tree by such standards, but each of us knew that its value and charm came from the joy it provided to a child.

Its branches held a rope-swing which cradled a child, gliding with closed eyes, shrouded deep in fantasy. Its foliage moving against the sky cast near hypnosis on those lying motionless in its shade. The comforting branches welcomed climbers, tree house builders, and daring acrobats. When we were ill, a friendly branch peeked in the window to wish us well.

Who among us has not picnicked in its shade, shuffled through its leaves, listened to the wind in its crown, relished its shelter against rain and storm, huddled on its sunny side away from a chilling wind, pondered its reflection in the water, sniffed its blossoms, admired its autumn foliage, listened with fear as the night-wind moaned and howled through its winter crown, and cried when it was cut down?

Our hearts are older now, and we are more rational about our choices; but the memories linger with a strange fascination, urging, leading, and impulsively directing our attention to the need for trees.

There is no question but what our homes and our cities could benefit by more trees. The severity of rigid architecture, befuddling signs, stark parking lots, blinding reflections and unbearable temperatures tell us so. Most of us sense this need, and should do something to implement it.

Since the mass of trees make such a visual impact on the viewer and the environment, consideration should be given to them as design elements. Of all living items in the landscape, trees are the most obvious. Individually and collectively, they provide features that enhance the visual landscape and provide liveability and wholesomeness to the human environment.

Conscientious landscape architects, planning agencies and civic groups have long wrestled with the lack of aesthetic, functional landscapes in our cities and villages. Feeble attempts at ordinances to provide landscaped projects have failed. Why? Perhaps we have not given the landscape sufficient credence. "A tree is a tree," is the phrase we commonly hear. The question that should be asked is, "Just what is a tree?"

The underlying components of a tree are its vegetative parts; roots, trunk, branches, buds and leaves. The designer studies these parts to see how they contribute to or affect the line, form, texture, color, and density of the tree. He must become familiar with them to be articulate in his design expression like a writer becomes familiar with words to be fluent with his expression. The focus must then be placed on each of the parts to gather information vital to design. Attention is directed to: form — the general configuration, branching habit and average size of the plant; bark on the trunk and branches - color, surface texture - smooth or rough, thick or thin, peeling, mottled, scaley, fissure depth; twigs - density, color, texture - fine or coarse, smooth or fuzzy; **buds** — size, color, shape and surface texture; flowers — size, color, simple or double, when present, how born-single or in clusters, shape of

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cluster; **leaves** — size, shape, color on both surfaces, surface quality — (shiny, dull) simple or compound, number and closeness, petiole length, leaf margins — (smooth, wavey, cutleaf, lobed), persistence; **fruit** — color, season, texture, kind, durability, persistence; **roots** — type, position in the soil. Some trees exhibit a uniqueness about them that attracts attention and affects emotions. They differ from other tree species and even their own. This unique quality is referred to as character or personality and is revealed in its vegetative parts, habit of growth, uniqueness of maturity, texture or color.

Carefully selected and positioned in a composition, a plant with a distinctive expression can "spark up" or bring new vitality to an otherwise unimaginative grouping. Character plants can be used as contrast to other plants and architecture or they can be used as specimen plants or living sculpture. They can magnify the scale of a composition when used in mass. A word of caution, however, since a plant's character can be so intriguing that it gets used indiscriminantly to mar good and appropriate compositions. Purple leaf plum is an example. Its appealing foliage causes it to be abused, because everyone wants one whether it fits the design or not. One plant or a few can delightfully accent a composition whereas many beat it into noneffectiveness and monotony.

Plants lacking a distinctive character in one season may exhibit it in another. The seasonal design features must be anticipated and incorporated into landscapes to provide continuous aesthtic influences. Winter reveals the structural form, bark and twig texture and features otherwise concealed by summer foliage. Exquisite compositions of subtle color, branching patterns, and textures result in winter. Spring exploits the potential of floral displays and delicate foliage colors. Maturing foliage of varying greens accented with other leaf colors and ripening fruits represents summer. Fall responds with warmth and cheerfulness. The trees seem to capture the warmth of the low-angle sunlight and display it in the color of their foliage; yellow, red and brown. Silhouettes are stronger and shadows longer. The challenge to design with trees for all seasons is unparalleled. Trees should be looked at carefully

to make sure that we have used everything they have to offer.

To design with trees, it is necessary to consider not only their form, character and seasonal aspects but also their line, color and texture. Line is the visual expression of trunks and branches revealed as horizontal, upright, oblique or weeping. Compositions resulting from line can produce soothing or jarring effects on emotions depending on the selection.

Texture is the degree of coarseness or fineness, or roughness and smoothness of an object. It can be sensed visually from past tactile associations. Textures result from the size of leaves, branches and buds, the spaces between them, the coarseness of bark and the variations of light and shadow. In composition, they attract and relieve monotony by contrasts.

Color is the result of light. It is the wave length which is reflected that produces the color that we see. The brilliance is affected by the leaf surface and the intensity of the light. Smooth, glossy foliage is more reflective and brilliant than that which is rough and dull.

What do trees do for the landscape? Charles Dudley Warner said that until he saw Annapolis at low tide, he never realized how much it added to the looks of the river to have water in it. The same might be said of trees in the landscape. (The Landscape Beautiful, Frank A. Waugh, 1910).

Planting is intended to enhance architecture, not hide or compete with it. Vines can soften its lines, plants can create a base for it and trees can frame it; for all are in fact, only a part of a larger design conception. (Gardens Are For People, Thomas D. Church, 1955).

Trees are for people. Our childhood memories remind us that in the intimate and human-scaled landscape, trees of all the elements produce the strongest visual and emotional bond between man and his environment. Other features of nature, mountains, lakes, oceans, deserts, great rocks, stir us and fill us with awe, make us afraid or humble, but a tree we understand and can allow to become a part of us. (Gardens Are For People, Thomas D. Church, 1955).

The inadequacies of poor and average architecture become offensive without trees. Imagine our

developments, homes, parks and streets totally devoid of trees, it makes us sense more than physical discomfort. Our whole being is affected by the void, and we feel the underlying need for trees.

The practical and economic value of trees is generally understood. We know, at least in part, that they absorb noise, dust and dirt; they consume carbon dioxide; cool our homes, yards, and streets; protect against wind; provide nesting sites and food for birds; and hold our soils.

The aesthetic value is understood less. The childhood love is there. We feel the need and make efforts to plant. The understanding of composition escapes us, and the evidence is visible in the honogenized landscapes that everywhere engulf us. The same species are used in the same way block after block and city after city. Why? Isn't the aesthetic character of a community

worthy of greater concern? Why not group trees of varying forms into interesting arrangements to avoid the lollypop effects along our streets and front yards? Why not arrange them for eyecatching line, texture and color combinations? Can't the dimensions of open areas be enhanced by trees embracing volumes of space and punctuating them with accents of strong shadows? Why not stimulate man to a new height in his appreciation of trees?

The foregoing questions can and are being answered by a better understanding of the land-scape where trees along with architecture and other vegetation are used as elements of design to produce cohesive, wholesome environments for man's pleasure and comfort.

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A Contributed Abstract

ARBORICULTURAL RESEARCH AND EDUCATION

Education at The University of Michigan consists of three-credit urban forestry and arboriculture courses. Many related courses in landscape design, etc. are also available. Research in the School is varied and among other projects includes: 1) the occurrence and effect of girdling roots in Norway maple; 2) inventory and computerization of the urban forest; 3) the role of girdling roots and pathogéns in maple decline; 4) barriers to urban forest recreation among handicapped, poor, elderly, and minority citizens; 5) prediction of urban forest recreation trends; 6) safety and security as affected by urban forest site design; 7) application of remote sensing to urban forestry; and 8) psychological perception of the urban forest. *Harrison L. Morton, School of Natural Resources, The University of Michigan, Ann Arbor, Michigan.*

ABSTRACT

Turner, T.R. 1980. Alternatives to silvex for broadleaved weed control. Weeds Trees & Turf 19(1): 42, 47, 56.

The Environmental Protection Agency has temporarily suspended many uses of silvex (2,4,5-TP). Because of this ban, many questions have been asked concerning broadleaved weed control. Most broadleaved weeds which were controlled by silvex can be controlled by either 2,4,-D, dicamba, MCPP, or a combination of two or all of these materials. Chemical alternatives to silvex for some of the broadleaves weeds commonly found in turf are shown in Table 1. Often, combinations of the herbicides listed in Table 1 provide better control than the individual herbicides alone. Too much dependence has been placed on using herbicides to cover up what may be the result of bad management. Good management will certainly not eliminate the need for herbicide applications, but it will greatly reduce the seriousness of weed problems that could eventually occur.