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Title

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Journal

Institute of Urban and Regional Development

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Publication Date

1978-11-01

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WHAT DO THEY MEAN?

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November 1978

Working Paper #303

Introduction

This paper is addressing a new theme. From the title, I picture cities being buried in trees, overwhelmed by new wilderness. The conservationists and foresters, it seems, have turned from the defense of nature to the use of nature as a benevolent weapon of attack on the ugly, arid city. I see thousands of enthusiasts moving in from the wilderness with plants and shovels ready to do business. The real meaning of this emergent crusade is as unclear to me as is the meaning of urban forestry, but before this great plantation begins, it seems worthwhile to explore the meanings that trees have for citizens: to place the role of trees and forests in our culture, to see how the concept of urban forestry might contribute to the enrichment of our predominantly urban life.

The gist of this paper will be that trees mean many things to many people, that certain important meanings are being lost, and that the different meanings are at the core of the politics of trees, their management, and design. And for each meaning there is an aesthetic. Trees can be pleasant ornaments, or refreshing experiences, or they can produce tasty fruit. Thus different people, groups, and agencies have a different view about how trees should

look and different concepts of beauty. An understanding of the different meanings might help clarify conflicts and aid in their resolution.

Some Background

The evidence is that the forest was originally a rather sinister place, a terra incognita, impenetrable, dense, fraught with mystery and danger (Jackson, 1975). It was a wilderness beyond the control of man, where he was a small defenseless being. Hänsel and Gretel knew what it was like; so did Frodo. Trees in winter could be overbearing creatures whose gesticulating limbs cast ominous nocturnal shadows. The forest threatened to engulf the small settlements. But men fought back, clearing and taming the forest. It became a resource for food, shelter, and transportation. Trees provided beams, columns, fruit, nuts, wood, bark, sticks, vines, leaves, twigs, and so on. A good tree was one that provided amply.

As the rich became less dependent on day-to-day needs, the forest took on a third meaning. It became a recreational resource, a place where the aristocracy could hunt for their pleasure. The forest was cut through by straight paths, to make the identification and killing of game easier, and thus it was brought under some control.

And finally, the forest and trees were turned by the painter into "landscape," a visual resource to be contemplated as a picture, and worth creating to enhance the views from palaces and country houses.

As the centuries passed, and cities grew, trees and forests became increasingly the ambience and domain of the rich and powerful. Far from being "natural" they acquired social meanings, a connotation of status that has lasted through to the present day. Also, the visual meanings of urban trees have survived, while their other meanings have been sloughed off. Urban trees have become almost uni-dimensional, having only one purpose and meaning. As most of us have no responsibility for growing or caring for urban trees, and since they usually have no productive functions, our relation to them is solely passive and appreciative. In consequence, we have developed a fixed and limiting concept of what a tree is. This concept, which I shall talk more about, is now being used to decide what a tree should be like, an imposition on the freedom and many meanings of trees. This, I think, denigrates the tree and reduces its potential to enrich urban life.

The Many Meanings of Trees

The wonderful thing about trees is that they can play many roles, they have multiple functions. We will group them under sensory, instrumental, and symbolic meanings, because those are the ways we view environments (Appleyard, 1976).

Since the sensory, especially visual, roles of urban trees are the dominant ones, let us start with them. On first thought you might think that everyone loves trees and that your own image of trees is shared by all others. Though trees are among the most

popular elements of the urban environment, quite a few citizens find them to be a problem.

Visual and Sensory Meanings of Urban Trees

Trees as Natural Forms and Masses

Trees are appreciated for their beautiful structures and forms. Growing out from central trunks to smaller and smaller branches, with distinctive clumps of leaves and well-formed outlines, they are usually satisfying to look at in isolation or in groups, a satisfaction which may have simply developed through years of adaptation. One of the more treasured qualities of trees is their organic and changing nature. Their fruit, flowers, and leaves, which sprout and ripen at different times of year, provide an ever-changing celebration of different seasons.

The massing of trees in stands and forests, in arcadian settings or in the cathedral-like dignity of tall groves, provides some of the finest experiences of trees. This appreciative, often picturesque view of trees has been cultivated very much by the landscape painters and the picturesque movement. Its limitations were nowhere so evident as in that study of lay people who were found to prefer picturesque but diseased trees to less beautiful but healthy ones.

Trees as Shaped Ornaments

A more problematic, but powerful, role of trees is that of the tree as ornament or decoration. The French more than any other people have treated trees in this way. They have carved, trimmed and

sculpted their trees and hedgerows into cones, cubes, pyramids, walls, spheres, and any other desirable shape. By converting live vegetation into static geometry, they have asserted final human power over a piece of nature. Louis XIV would have the flowers changed sometimes twice a day in the gardens of Versailles. The Japanese, too, shape their trees into quite different forms from those nature intended, though their manipulations are more subtle and "natural." And the tree as ornament continues to thrive. Look at most architectural drawings and models. The trees are often stamped with a rubber stamp, or constructed of plastic balls or cubes of sugar. Each the same size, they are lined up to mark some architectural space or fill some unwanted void.

Though many of us may view the ornamental use of nature as "impure," trivial, and artificial, millions of our fellow citizens like trees as ornaments and decoration. Ornamental horticulture has a huge following, though sophisticated landscape architects today try to distance themselves from the dinky cypresses, the cute flowering cherries, and the fun of topiary. (One of the most delightful parks I have ever visited was in Bombay, where some loving gardener had created elephants, giraffes, tigers, and monkeys all out of topiary.)

It might be argued that this meaning of trees is really a symbolic view, one that sees trees as a medium for expressing our power over nature, and this may be true, though the motives are often more humble. The miniaturization of trees and plants, choosing the

cute and controlling it as decoration, seems to arouse parental feelings in people, feelings of self-identity that in the vast scale and complexity of urban life become expressed in those miles of suburban front gardens.

For those who see trees and plants as ornaments, plastic versions may be an acceptable or even superior substitute. On the lower-income streets of Baltimore, the black ladies are proud of their sidewalk decorations, which often consist of painted split automobile tires filled with plastic flowers.

Trees and Incense and Music

Trees and vegetation exude scents and odors that on the whole are appealing and stimulating. The scent of pine trees, especially after rain, is an integral part of camping in the Sierras. The sounds of rustling leaves, creaking branches, and the whistling wind make their contribution to the creation of a natural ambience which can sometimes screen out, or at least mix with, the usually dominant sounds of traffic. And the birds which nest in the trees supply a lively music of their own, before the traffic begins.

Trees as a Mask over Ugliness

One of the growing roles which trees now play in the city is to hide it. Buildings, junkyards, roads, automobiles, signs, utility poles, and earthcuts are all targets of public disaffection. We do not seem to like what others make. Many would like to cover

buildings up altogether, and try to do so with varying success, using trees and other vegetation. Here it is the densest, fastest-growing trees and shrubs that are required. Their individual colors or qualities matter little.

Trees as a Refreshing Contrast

The gentle greens, yellows and blues of trees, the softer textures and forms of their leaves, filtering and reflecting the light, their ever-changing patterns all provide a much needed contrast to the reds, whites, and greys, the often coarse and barren textures, the hard reflections and glare of the static built environment. They are easier on the eyes. Trees, like clothes, can enticingly hide and reveal buildings in ways that accentuate their assets and play down their problems. Buildings without trees sometimes, though not always, have a naked look.

For those of us who work in offices, factories, or houses all day, the chance to see trees out of windows, to eat lunch or stroll under them in the brief periods we spend outside in our morning and evening commute or our lunch time, are welcome contrasts to the indoor life.

Trees as a Threat to Urbanity

There are small pockets of resistance to trees among those who delight in the defined forms and spaces and the richness of architecture, detail, materials, lighting, and signs that mark the

finest urban landscapes. Venice has practically no trees. Neither do many Italian piazzas. Needless to say, these views are held more by architects than by others, but allied to this group are those whose principal aim is to communicate with the public through signs and billboards. Theirs is an instrumental view. Trees blur the distinctness of urban form, they mask and confuse its messages. Keep them out of the way, or in carefully controlled places. In American cities this is not a widely held view, but I have heard people argue that the pristine quality of San Francisco's streets with their clear direct vistas of the Bay would be spoiled by too much tree planting.

The Instrumental Meanings of Urban Trees

The roles of trees in practical life have been both positive and negative. The original uses of trees for lumber, fruit, nuts, and herbs remain, but only in their non-urban habitat where extensive monocultures are cultivated for the production of specialized products in vast forests and orchards. Urban trees are usually seen as unproductive. Their utilitarian role in urban life is mostly negative. Trees get in the way; they create problems for those who wish to develop, build, and maintain the city. They are also a source of danger through fire and lightning. The positive utility of urban trees concentrates on their protective qualities, though in recent years their contribution to health through their effects on air and noise pollution have been claimed. The potential roles of trees for

children and as productive contributors to urban life have been virtually ignored.

Trees as Shade, Shelter, and Protection

In the heat of summer, trees protect citizens, houses, gardens, and even cars from the intensity and glare of the sun. In winter they protect us from rain and sometimes from wind. Shade and shelter are among the most frequently mentioned meanings and benefits of trees. They provide a rich variety of shade. One can sit half under or right under, where the leaves are thin or thick. No wonder people gather under or near trees when sitting out, standing, or walking under unpleasant weather conditions. Trees also protect us from noise, though they have to be thickly planted to be an effective barrier. They are also said to diminish air pollution, though here there is contrary evidence.

Trees as Hazard

In the minds of the fire services and victims in the sunbelt cities, trees are a potential fire hazard. The image of urban forests in Southern California must be a very different one from elsewhere in the country. And in the minds of inner-city police, trees are a hideout for criminals. Since Jane Jacobs (1961) changed the meaning of parks in the minds of professionals from pleasant amenities to feared places, trees and shrubs have been vulnerable to the axe. This view is not too distant from the historic fear of

the wilderness, though the sources of fear are fellow humans. Some trees are dangerous because their branches drop off and hit people. They are also dangerous to climb for this reason. Some trees are easier to climb up than climb down, as kittens and small boys and girls learn early in life.

A recent, rather startling report in the San Francisco Chronicle maintained that after seasons of heavy rain, trees added substantially to the air pollution levels in the Bay Area, since the hydrocarbons emitted after a chemical reaction produce ozone (Petit, 1978). This is contrary to the more common view that trees are a benevolent absorber of air pollutants, and is a meaning that may well be suppressed in the urban forestry crusade.

Trees as Polluters

Another negative view of trees evolves from their unwanted wastes. Trees shed leaves, drop fruit, bark, and branches, spray gum, attract dogs, and generally create a nuisance if you want to maintain your city as a clean, pristine environment. And cleanliness for many is a higher value than trees (Appleyard, 1979). This concept of and desire for the clean tree has become one of the dominant policy determinants and sources of conflict in urban tree selection. The fight over whether to have sycamores on Market Street in San Francisco was over just this issue. The "overmaintenance" of urban parks, quickly cleaning up the fruit and leaves, in many ways restricts their naturalness and pleasure for children as well as adults (Gold, 1976).

Trees as Obstacles and Intruders

Trees also grow, and grow into, over, and under other elements of the urban environment. The utility companies are especially resistant to this problem, and have developed a series of regulations about distancing trees from their utility lines in order to prevent root intrusion. In the design of a new community in Hawaii, it was a major effort to find room for any street trees given the location of the various utility lines and outlets. Trees lining highways prevent their widening, so they must be chopped down, unless citizens resist. Many contractors like to "clear the site" of trees, so they can more easily construct new buildings. Some residents, too, worry about roots undermining their foundations, seeing trees as no more than intruders to be controlled. This view has tended to limit severely the size of trees to small unobtrusive dimensions.

Trees as Producers of Fruit, Nuts, and Leaves

But there is the possibility that we could restore some of the historic meanings of trees. Fruitful trees have more to offer than barren ones. The trees which line the main roads of Chandigarh, the capital of India's Punjab, bear fruit. As I remember, they are peaches and plums. It was not clear how they were harvested, but these trees were somehow more meaningful than the barren trees that usually line urban roads. In England, in season, the horse-chestnut trees produce "conkers," hard and beautiful mahogany-colored nuts to be pierced with a hole and strung for use by children

in the game of "conkers." It is an important time of year. Children and adults also enjoy rustling through leaves shed by trees in the fall, making leaf forts and having leaf fights, but most park crews clean these up so quickly that the fun is thwarted. And air-pollution and fire-control laws have eliminated the old garden bonfire with its burning leaves and pungent smoke.

Trees as Wood

There are barely enough trees in cities to consider them as a serious source of timber. Indeed, most people protest the cutting down of any one. But perhaps there are times when trees are seen as some source of wood. After a freeze a few years ago in Berkeley, the eucalyptus on the hills were cut down and anyone could take what firewood they could carry away. Many cities give away all their wood chips as mulch, and some wood from felled trees is used by specialty craftsmen and furniture makers. If there were enough trees in urban forests, the production of lumber might be at least symbolically restored.

Trees to Climb and Hide in

The use of trees for hiding goes back beyond Robin Hood and Charles I. Today it is mostly children who use trees for this purpose, a very important one for them. The testing of physical skills, the chance to go where adults cannot or would not, the building of tree houses--these are perhaps the primary meaning of trees for the young, though it is a quality adult tree-planters rarely think about.

It sometimes looks like vandalism and abuse. Another group, unfortunately, also uses trees and shrubs for these purposes--criminals. While for dogs, small boys and girls, trees are toilets.

Trees to be Planted, Cultivated, and Managed

Plants, vegetables, and flowers demand more care in their cultivation and they grow more quickly; but trees do require attention and can therefore be seen as a natural plant to be cared for. The planting, pruning and shaping of trees can give great pleasure. As I understand it, this epitomizes the urban forester's view of trees. He or she knows everything about the management of trees. Urban forestry may indeed mean the better management of trees more than the planting of urban forests. But more of the forester's view later.

Unfortunately, in the modern city, trees are cared for by some public department so that few people are involved with trees in this way. For this reason, most people have a rather distant and passive relationship with trees.

The Symbolic Meanings of Trees

Trees have a number of meanings beyond their practical use and the immediate pleasures they offer. These meanings are rarely discussed and usually ignored by professionals, yet they are sometimes the fundamental motivating reasons for attitudes toward trees, for they are bound up with personal and group identity, power and

status, with the politics of trees, and with our very concepts of the world around us.

Trees as Innocent Symbols of Nature

Apart from the sky, and sometimes water, trees are the primary and last representatives of nature in the city. In this sense, they are a constant reminder, not only of the world out there beyond the city, but of our distant past. Many see them as anchors of stability in the urban scene. These feelings are so strong that people will fight if particularly symbolic groupings are threatened. The Elm Tree Riots in Stockholm focused on a cluster of elms around a teahouse in one of Stockholm's parks, which the transit authority wanted to uproot. In Cambridge, Massachusetts, several people chained themselves to the sycamores along Memorial Drive when the Highway Department wished to fell them. This view of trees demands that they be authentic, natural. The thought of trees as ornaments, of plastic trees, is abhorrent to such a view.

Trees are increasingly seen as innocent, fragile, endangered species, demanding our concern and pity. Among the elements of the urban environment they are probably loved more than any other. This groundswell of affection for trees is the most powerful thing that urban forestry has going for it. Finally, this emerging view of trees has gone so far as to propose that, as one of the new minorities, they should have their own rights. Trees should have legal standing, for human beings will never care for them sufficiently unless they

have the protection of the law (Tribe, 1976).

Trees as Symbols of Self

Trees have personalities (Carney, 1976), and it is likely that people identify with trees that have similar or complementary personalities to themselves. The sheltering nature of trees, so frequently mentioned, suggests their parental nature. Old trees look wise. Young saplings are fresh and growing. We feel sad for trees that look sick.

Some people do not like trees that are greedy, grow too fast, shed leaves everywhere. Some view the eucalyptus in California, which seems to run out of control, as such a tree. They see it as a weed, though others enjoy its free wild nature. Many professionals dislike the little round bulbous urban trees that are small and submissive. Yet residents may identify strongly with them. Those trees which people plant in their front gardens or want along their streets are intimately bound up with their self-image and perceived lifestyle, not a light thing to tamper with.

It is not surprising therefore that angry conflicts can erupt over which kinds of trees a city should have.

Trees can be identified with city and national identity. We think of the chestnuts of Paris, the cypresses of Rome, the plane trees of London, palms in Hawaii. Trees have also been adopted to identify parts of large-scale community developments such as Levittown, Pennsylvania. The choice of trees in these cases may be relatively

arbitrary, but as time goes by, the very distinctness that they give to a city grows into a powerful contribution to its identity.

Trees as Alien Symbols

Trees could be seen as an instrument whereby conservationists or professionals impose their values on the city. Since trees are the most subtle symbols of their planters or creators, this may seem far-fetched. But remember that the police uprooted the fledgling plants in People's Park, and the vandalism that is perpetuated on trees must be by people who have no feelings of identity with them. Trees cared for by local authorities take on a certain bureaucratic character. In most cities residents must obtain permission from public works departments to plant trees on their own streets. If urban forestry comes to be seen as another government program, the chances for people to identify with it are lessened.

Those who espouse the ethic of "ecological integrity" can find trees everywhere that are "out-of-place." A recent planning report in northern California suggested that exotics be removed from a particular region. Palm trees are a favorite target of such campaigns, especially in northern California.

Palms are a nice instance of how a tree can become a degraded symbol. Palms have always been associated with an earthly paradise, but that paradise has become accessible to mass tourism. Palms now appear in all the tourist literature about the South Sea Islands and the Carribean. Now people want to bring them home. They want

their paradise a bit closer at hand. In southern California country clubs, palms are planted at windswept angles to convey a semblance of tropical authenticity. They have become souvenirs, rather than real trees, and yet many feel strongly about them. Mrs. Theresa Yianilos is one of these. She came to San Diego from Buffalo 20 years ago, dreaming of the palm trees and paradise. Recently, over a hundred palms were uprooted along San Diego's shoreline by the Port Authority. The reasons given were potential disease and their inappropriateness. The Port Director described them as "doric columns lined up like Burma Shave signs." Mrs. Yianilos termed it a "massacre" (the San Diego Union, 1978). It turned out that the landscape architect came from northern California. I remember being told by a well-known Bay Area architect that palms should never be used in northern California because they were vulgar examples of southern-California tastelessness. Many San Franciscans feel that the palms in Union Square should not be there.

Trees as a Social Token

As I said before, trees and forests have historically been the domain of the upper classes, except in the case of Robin Hood and a few other guerrillas. It is the upper-income districts of American cities that contain the trees. There is the case of the black boy in Chicago who, when taken into a tree-endowed neighborhood, could not believe that black families lived there because it had trees. The amount, age, and density of trees in some cities correlates directly

with wealth. In the richest suburbs the trees obscure the houses, in the middle-income suburbs they balance each other off, and in the inner-city neighborhoods, they are a rarity.

The poor, then, are deprived of trees. Many indicate that they would like them, although they are not their highest priorities. Jobs, education, reduction of crime, traffic, and other nuisances, trash collection and other services, are all important, but trees and greenery are wanted too. They want what the middle class have, and since many are closer to rural origins than the middle classes, their feelings about nature can be very strong.

Certain social groups do not identify with trees. A few years ago San Francisco planners wanted to plant trees in the respectable Sunset District. They were firmly told to keep out. Trees would mess up the place. The same view has been expressed in Australian public housing projects.

A movement to provide the poor with trees--"Trees for the Poor"--could have other pitfalls. They could be seen as an empty token for what they should be getting, a symbolic substitute to pacify them. In somewhat the same way that urban parks in the 19th century were conceived by the upper classes as places where the workers could let off steam and engage in "healthy" pursuits, trees and urban forestry could be an imposition of urban foresters' values on an indifferent working class. Or it may be that while we now admire wilderness and forests, they still prefer the ornamental or formal concept of trees and gardens that mark middle-class parks and homes. Too much should not be promised. The concept of urban forests

could lead to some disappointment when the results turn out to be shrimpy, fragile trees that have only a 50 percent chance of survival. This does not match the images of the urban forest or the mature trees that are being sold in many tree-planting programs.

Trees as Obscure Latin Names

It could be argued that botanists have mystified trees by giving them Latin names, that trees have become part of a secret conceptual system which removes them from public access. While the Catholic Church is giving up the use of Latin, the natural sciences continue to thwart the public in its effort to comprehend their trees. This may seem farfetched, and yet I have found others with the same feelings. I am sure there are substantial scientific reasons for calling a pine tree pinus sylvestris, but it removes the tree from the consciousness of the ordinary citizen. It begins to look like a scientific defense mechanism to keep the public out. Perhaps this is unimportant to the public, but if it does get in the way of their involvement there are two strategies; one is to drop the system or play it down, the other is to try to educate the public to it.

On the other hand, I have heard of Latin names being used to by-pass a Parks and Recreation Department which didn't want to have fruit trees.

Trees as Education

Trees can tell us much about the world. They are the primary indicator of the seasons in many cities. They are perhaps more important in the snow- and frostbelt cities for this reason, where they stand dormant for much of the year, their bare branches like ghostly figures waiting for spring to come. As spring approaches, people look expectantly every morning to see if the trees will herald the end of the long winter. At last the hint of a bud appears and soon the final flowering, one of the great moments of the year. The rich and full summer of growth, the slow, colorful turning of the leaves and final shedding in the fall complete the year's cycle. The varieties of life that find habitat in trees can also be a resource for educational study.

Trees as Jobs and Economic Value

Trees provide jobs for foresters and landscape architects, and potentially for unemployed inner-city residents. This role of the tree as a job means that trees become easily bound up with the self-identity of professionals. We believe trees to be important, we choose a career which is identified with them, and pretty soon we begin to have a deep emotional investment in tree issues. The pressure to "sell" trees to a sometimes indifferent public can overwhelm their other meanings. Foresters, beware.

The role of trees in the job market is one of the arguments given for inner-city tree planting (Wade, 1978). The question will

be, how many jobs for urban unemployed are trees likely to provide in the long run? If it is no more than a token, the promises should not be too exaggerated.

The mercenary view of trees, the "bottom line," is that trees do tend to increase property values in residential areas that have them. This does make trees of some interest to developers who normally see them as obstacles to fast construction.

Trees with No Meaning

Finally there seem to be many people for whom trees have little or no meaning. For them trees are seldom present, go unnoticed and unthought of. They live in the distant background of lives concerned with other things. For these people trees are a low priority. They are indifferent to the significance and meaning of trees. Some may be more concerned with their own survival, others may never have experienced the benefits of trees or experienced trees at all, still others may feel neutral toward trees. The size of this group, their receptiveness to the planting of trees, and their degree of apathy are more or less a mystery since they are unlikely to voice themselves on the subject. Yet they may be a very important group to learn about.

Other groups who ignore trees are professions like engineers or disciplines like economics, where trees simply do not enter the design calculations or the matrices of benefits and costs. Screened out of the conceptual view of the environment, they are thus ignored.

Including them will require reorienting certain expert views of the world.

Meanings and Aesthetics

Now, each of these ways of looking at trees has its own aesthetic. For the person who enjoys the sensuous qualities of trees, those with most intense hues, or textures, or the purest of forms, or the most dramatic cantilevers will be the most appreciated. For those who see trees as polluters, the clean tree is the most beautiful; for those who climb trees, the tree with the most challenging and complex climbs and the best views from the top may be the epitome of beauty; the person who sees trees as natural symbols will admire the trees that best express the processes of nature.

Trees as a Captive of Our Meanings

While each of us views trees in a certain light, depending on our upbringing or our role in the urban environment (as public official, professional, private citizen, or member of an interest group), we have difficulty in comprehending their other meanings. Most of us have tunnel vision; trees have only one or two meanings; trees have become emasculated.

How does this all come about? It is the result of the ways in which we think. For instance, in our perceptions of trees we may develop a concept of what a tree is like so that we can recognize one at a moment's notice. This concept can be found in the drawings

of children, and more so in those of adults. Trees on these drawings often have a trunk like a straight thick stick with a round ball of greenery above. Other tree drawings have branches, coming out from the main trunk, a stereotype more obvious in the winter than in the summer. As we develop this stereotypical tree, it becomes idealized. That is the tree we expect to see and that is the tree we would like to have. Clearly, millions of people have an idealized stereotype of a tree in their minds. It is a kind of fixation. The stereotypical tree is mature, aged, sheltering, clean, perfect in form, isolated, without scent, wildlife, or change. It neither grows nor does it shed leaves. It is regular and medium-to-large, more usually deciduous than evergreen. It is the tree you see drawn on all the street trees and "trees for people" literature. The architects' and planners' view of trees is similar. Remember the lines and groups of styrofoam balls on architectural models, or the stamps used to represent trees on architectural drawings. Engineers avoid this problem by not representing them at all.

The problem is that when trees do not meet this ideal model, we are disappointed. It takes up to twenty years in many parts of the country for most trees to fit this model, a long time to wait. And so there is this sense today that trees are too slow in growing to our ideal. We spurn the shrimpy young saplings and bushes; they get vandalized and abused. People want instant old trees.

Trees have been devalued in other ways. Their other functions as producers, as places to hide and play in, have been taken away.

They are not wanted. They are left as decorative ornaments. Like poodles, they must be kept clean, groomed, unable to express their own nature. The Japanese even prop them up in splints like cripples (Koestler, 1960).

So it is the trees that conform to the stereotype which get selected, the cute trees, those that stay the same, that do not shed leaves. I think of London's plane trees. They always seemed neutral to me, uninteresting, fruitless, and unchanging. Each year they would be brutally pruned to remain the same size each summer. They could not be climbed, their branches were too high. And so many urban trees have lost much of their "treeness." It is only one step to plastic trees. What can we do about this? We have to break the stereotype of the urban tree. The label "urban forestry" may help this, but what about "urban orchards," "urban farms," "urban wildernesses" too?

Trees in the Urban Forest?

The meaning of trees is created partly by the context within which they are planted and cared for. The planting of trees in the urban context has been and can be carried out in any of several styles, each derived from a particular aesthetic ideology, each with its own language, which are known to landscape architects but perhaps not to foresters. We shall discuss four of these.

The formal language of the French and Italian urban landscape style, exemplified in Paris and Washington, treats trees like

soldiers. They line boulevards and avenues, surround plazas, form up in groves, in neat architectonic style. The trees relieve the monotony of long straight walks, and mask the mediocre buildings, while revealing monuments along the axial views. When the trees used are soft in shape, the formality is pleasantly modified. Where formal trees are employed, the place can look like a game of chess. Formal trees have been clustered around formal buildings throughout America, from campuses and capitols down to the little cypresses guarding the entrances to French- and Colonial-style houses. Trees reinforce their aloofness, monumentality, and status.

The informal picturesque English landscape style, with its composed views, gentle slopes, asymmetry, and mown lawns, usually employs the grandest of trees in clumps and clusters, partly immersed in the forest background, occasionally standing out as isolated landmarks. This sensitive taming of nature originated around English country houses. By the time it entered the city in urban parks it became pure and often delightful artifice, to be found at its best in the works of the Olmsteds. The picturesque tradition has enveloped most of our parks, campuses, the grounds of suburban office complexes, and subdivisions. Its informality and unpredictability create a sense of mystery and escape from the hard-edge structured city.

Another style, not so widespread, can best be called the "arboretum" landscape, in which trees and shrubs of various species are gathered in one place for educational purposes. In most cases

this creates a peculiar aesthetic cacophony (heightened for us laymen by the indecipherable name tags). Some suburbs, I think of Berkeley, have grown into this style. Each homeowner plants his preferred species--the climate allows anything from pine to bamboo--and the resulting ensemble resembles a disorganized arboretum, a natural counterpart to the cacophony of downtown high-rise buildings, not unpleasant but . . . curious. This mode of landscaping has been raised to an organized style by Roberto Burle Marx, the Brazilian artist-landscape architect. Here, the species are grouped and clustered by their formal qualities and disposed in vibrant contrasts to each other, the character of each species intensified by the grouping. But these styles of landscape organization have, except for the last, begun to lose their life. They do not seem quite appropriate for today's American society. They are too purely visual, control nature more than we would like, univalent instead of multivalent. There is a fourth possible style, one that is suggested by our title, urban forestry, that is the "wilderness" or ecological landscape. Wilderness-type areas have virtually disappeared from our cities, except where there are sharp terrain differences, as, say, in Washington's Rock Creek Park, or San Diego's canyons, or the forests around suburbs. But the Dutch are experimenting in their housing projects with such landscaping. Trees, brush, and shrubs are planted en masse to create an urban forest. The clean-cut lawns and park-like surroundings of former housing projects are replaced by sand or gravel paths and wild flowers. Strangely, the Russians,

because they have almost no landscape architects, engage in a similar type of wilderness landscaping. Their housing projects are surrounded by a thick underbrush of trees. I was told that they have to have so many acres of green space, and this is their way of fulfilling the standard. Such mini-wildernesses or forests within the city can provide a more real sense of nature and escape from the hard urban environment and encourage the massive return of wildlife. Much depends on the future level of crime within cities.

It is not clear to me how pure the structure of such ecological communities can be when the history of urban sites has been submerged for years under development, but inspection of historic maps or studies of similar sites could yield guidelines for such planting. There may be other ways of structuring the urban landscape. The planting of orchards, the development of urban farms and urban homesteads with farm animals, vegetables, allotments, could suggest other ways of viewing trees, for instance, as part of hedgerows or wind breakers, or acoustic barriers. The roles trees can play, their selection and location will depend on these larger concepts of how urban open space is in future to be used.

How Does Meaning Affect Urban Politics and Policies?

I am doubtful whether all the meanings of urban trees have been captured in this paper. But a number of policies are suggested.

Whose Trees, Whose Forests?

Ultimately the political question is whose trees, which meanings will prevail? In American cities the visual meaning of trees has been in conflict with the views of practical men who see them as obstacles, redundant, or at best ornamental. There is a common feeling today that the ornamental view of trees is not sufficient reason to defend trees against the developer or to justify large expenditures for them. All the other meanings are now being added to strengthen the case for trees, to view them as "essentials" rather than just "amenities" (Gold, 1977). But ultimately, urban foresters and landscape architects will need to understand the tastes of the different urban sub-cultures and decision-makers if urban forestry is to make a significant cultural contribution to urban life.

This paper suggests that more thinking needs to be done. How prevalent are some of these meanings? Who holds them? Where do they conflict? Is there really a groundswell for urban forestry, or is there apathy or even hostility? What's the market? And what should it be? What are the most effective modes of public communication and education?

Enriching the Meanings of Trees

The many roles of trees should be recognized and encouraged. Since they serve many purposes for different groups, we should learn more about what these groups, especially the less articulate, like children and the deprived, want from trees.

Combating the Negative Meanings of Trees

Resistance to the richness of trees comes from those who have to maintain them (Parks Department), those who see them as obstacles (developers, highway and utilities agencies), those who see them as criminal hideouts (police and criminals). Strategies must be found to counter these reductionist views of trees. Besides direct protection and expansion of the roles, the careful location of trees in low maintenance zones (mini-forests), the clustering of utility lines, means of urban forest surveillance (such as the mopeds used by the San Francisco Police Department in Golden Gate Park) are examples.

Community Cultivation

Programs which encourage the community planting and care of trees could enable the public to learn about more dimensions of trees, to respect and care for them, to come closer to them, to enjoy their manifold meanings. The principal blocks to this involvement may be the tree management professions and departments themselves. Too often Parks and Recreation and Public Works Departments are oriented to professional control, minimal maintenance, and minimal public "interference," rather than sharing tree management with the public citizenry. Another obstacle is the now in-born passivity of the public in relation to public trees.

And still there is the nature of the tree itself. People can be aroused enough to participate enthusiastically in tree-planting programs, but then follows the long slow haul of several years,

during which many may die before they reach desired maturity. The visible rewards of maintenance and care take a long time coming, often long after the planters have gone. On the other hand, as symbols of the interdependence of communities and generations, trees can provide us with rewards beyond those of individual satisfaction.

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