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Landscape Garden

Notes from the Lectures of Prof. A. S. Welch
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Lecture 1st

There is a great difference in persons in regard to what is beautiful. Some kind of beauty every person feels. And there is hidden beauty which is seen by the few. It is useful that the eye be cultivated to appreciate the beauty of art. The human eye is ever seeking for beauty, and when fails to find it the spirit is depressed. External beauty is universally sought this can be seen in man having a pride for dress. The industrial are for usefulness and convenience; the fine arts for beauty. The painter, sculptor, musician and poet must have an idea of the beautiful and grandeur.

Landscape painting is a fine art and its purpose is to increase the beautiful. The emotions of beauty are the L. S. is a combination of what even a broad piece of land may present to the eye namely; water, trees, grass, flowers, rocks, hills, valleys, &c. We improve a landscape by with drawing from it what ever is repulsive and heightening the beautiful. L. G. is divided into two kinds 1st The old system or geometrical system is formal and unnatural. It did not heighten the natural landscape

but reduced it to a geometrical shape, clipped the trees into sugar loaf form, irrespective of shape of land made the roads into straight lines divided land into squares, rectangles triangles &c, gave a stiffness which was out of all harmony of true shape & taste

Modern or natural style Lines gently curved every thing in nature is curved Excessive formality is to be shun in L.L.

The two styles have different effect on the eye. One beautiful and the other picturesque. In the beautiful the characteristics are gentle. All its lines are gentle curves, nothing violent in its objects, every thing unattractive is with drawn from it, meekness, simplicity, uniformity and a moderate degree of variety. Beautiful landscape will present gentle waving lines therefore for this must use round headed trees arranged in natural groups. A gentle waving surface composed of moderate hills & valleys cleanly kept lawns, flower, shrubbery

Picturesque Landscape is one of the following characteristics, out line broken, irregular composed of angles, unique, striking, elements startling, whole landscape will lack neatness and precision. There should a harmony between building and ground that is a gothic house trees pointed and striking

Grouping — nature sets her trees in irregular groups and this should be followed out in the landscape garden. No three trees should be in a straight line. A gentleman who was laying out a landscape in order to prevent this had an Irish man

to take a basket of potatoes from which he would take several and throw them over his head and where ever a potato fell he would plant a tree. There should be a variety in number and position of each group and different distance apart. Harmony between groups 1st in general out lines of trees. 2nd in foliage - in color ^{and} shape of leaves. There are three kinds in regard to forms of trees, 1st Round as the forest trees. 2nd Oblong as Lombardy poplar which ~~send~~ shoots upwards. 3rd Spiral shaped

What trees will group well together? Most of the deciduous trees will stand in groups which will effect the eye pleasantly as hard maple, soft maple, red ^{and} white elm, black ^{and} white walnut, hickory &c all the oaks, limes, cottonwood. but the Lombardy poplar ^{and} willow weeping will not. Hard maple is the best ^{and} elm next. They are slow, hard, ^{and} leaves are compact ^{and} nice. Silver maple less beautiful but more available because of the rapidity of growth. To make a quick home make use of silver or soft maple. Elm is a pretty grower. There is not much difference between red ^{and} white elm in beauty. They are subject to an insect. The limbs of the elm are spreading ^{and} graceful. Black ^{and} white walnuts do not transplant easily. Dig a trench around them one year before transplanting. cut off side roots from one to one ^{and} a half feet from the trunk then fill trench ^{and} leave till next year. This operation will draw out a multitude of fine rootlets put the tops back

cutting back helps the sap and form of tree Hickory forms an egg shape, thick, dark green foliage; is a slow grower, and hard to transplant. The best way is to grow from seed or transplant when yearlings. The white oak is the most majestic tree, round spreading top. Low round head but oblong and long fresh leaves. We must cultivate and follow our own tastes.

When you want to produce harmony in trees which forms the same group three things must be considered 1st general outline of the trees 2nd Shape of leaves 3rd Color. Those of the 1st division may be grouped when nearly similar. And groups of too great difference much be far apart. In colors there is quite a difference willows light green, maples dark green, sycamore light green. Grouping should not have contrast of colors. The general rule is, out of line and similarity of color and shape of leaves.

For distant grouping requires similarity of outline. Ex. groups made near the group college requires greater care, that the groups harmonize in all three principles but a group standing on the hill on the back part of the garden would require trees of similar outline but color and form of leaf is less important. Look at the grove it is the outline which affects us.

Evergreens grow their leaves as they shed them therefore they are always green. The white pine will not group well with other trees because of its somewhat striking

appearance White Pine is a cone shape tree, very beautiful when young & majestic when old Arbor Vitae irregular when young, very regular when old Growing about twenty-five feet high in shape of cylinder, does not group well with other trees i.e. to formal The Norway Spruce is a cone shape, limbs growing to the ground, tree large when old, groups well by its self also with very good effect with balsam fir Balsam fir is a very handsome tree when young cone shape when old scrawny irregular, groups well with self & Norway spruce The Austrian & Scotch pines are very similar in out line, form of leaf, habit of growth, both rapid growers strong, healthy, endure well our winters groups well together, not so handsome as other evergreens, rough in out line but on the whole for landscape gardening in Iowa ~~they~~ are the most available All the evergreens except the two last are harmed by our Iowa winters

Box Elders will not group with maples on account of compound leaf The highest trees should be near the center and so on down the out side being the smallest It is not desirous that a group should be regular in form like the out line of a tree It should give an irregular sky-line, generally descending from the center Great pains should be taken that the groups should not be monotonous White ash will group well with white & black walnut Elm with all birch except white birch. Chestnut &

burr oak will group White oak goes alone

Vista is an opening between trees which are near at hand so as to give a glimpse of the more beautiful scenes that are at a distance and the horizon ~~is~~ should be seen. The horizon may change. In order to judge the proper place for a vista a person stand in front of the house and observe where the most beautiful horizon is to be seen unless there is some more important feature at hand. The number of vistas depend upon the landscape and scenery and the distant horizon which can not be changed; ~~in~~ other things being equal the vistas should run through depressions. We group for the earliest possible effect so we must have quick growing trees as Silver maple, Green & White ash, European Larch, Linden, Austrian & Scotch pine. For immediate beauty group close so that space will be filled. When they become too thick cut out. Shuttery is useful in that it brings the skyline to the ground. A lawn should not be a plantation of trees. The skyline should present an irregular drooping from the center of the group.

The rear or back part of grounds has no comparative importance, but it is important to have trees back of the house. Better to have most of the trees especially if large back of the building. May have one or two vistas back of house but they are not important but on account of wind shelter would decide let them be few.

That faculty of the mind is the most

important in laying out a landscape. In the order of importance is aesthetically the sense stands as follows: smell, taste, touch, hearing & sight. This is the general acceptance as to dignity. But the sense of smell should be placed below taste.

If we notice the process of picture making in our mind we will notice that the sense of smell is is unimportant. For there are many many thousands of tastes but the mind can reproduce but very few & those are very indistinct, so that we may disregard the sense of smell upon the workings as products of the imagination & the same is true in regard to the sense of smell. Sense of smell & taste are not intellectual for they are possessed by the brutes.

Touch is quite complex and serves various purposes. It may be considered as furnishing no material of importance for the imagination.

Hearing is an intellectual sense & we can produce a great variety of sound with considerable accuracy. But it is seldom used by the imagination for pictures. So that we must look to the last sense for material in production of mind pictures.

Light is the highest sense in the production of pictures by the mind. In order to gather material for the complex & complete picture in the eye mind a

a good eye is necessary & also a mental habit which exhausts the object upon which we look & gives exact impressions of the object upon which we look. That some see little or comparative nothing of the beauties which surround us is very evident or at least they do not appreciate them. Some do not see the beauty but only the useful or which minister to some of the lower faculties. As an Irishman looks at a grove of young trees he admires the fine shillalahs. Some see in a fine forest nothing but timber & in a water fall nothing but the greater water power &c. While we should see the the useful we should appreciate the beautiful.

Beauty is inexhaustable & is only limited by the capacity to observe and appreciate. It opens out into space & opens out into the universe. The process of forming mental pictures is quite complex & the pictures are not the reproductions of those observed by the eye but all of the material used are taken in by the eye & the elements are elaborated into an almost endless variety of forms or pictures. In landscape gardening we see & remember the elements & the imagination makes new combinations thus producing an entirely new picture. If we strive to produce a landscape there is no art but the production of nature but the art consists in producing by imagination a true imitation from material collected by the eye from nature. Suppose we settled down on a prairie home which showed a variety &

liantly in surface lines but other wise bare. The first thing is to put the imagination to work in making a picture how it should appear in the future ^{and} the form of this must be decided by the grounds. The next step, which may, ^{and} no doubt will be, a long one is to proceed to the realization of the picture of the fancy. The picture must be completely in the mind before the realization is commenced. There is too much commencing with out any definite end in view. Some are able to form complete pictures in the mind while others are not. There is but one way which ever particular piece of ground may be best ornamented viz by a completed preconceived plan in the mind. The reproduction of the object in the eye is never perfect ^{and} in general perception is more definite ^{and} distinct than conception.

May 11 - The idea exists before the reality. Every human art is first formed in the mind but the material is taken from nature. Nature stands related to God as art to man. Nature had to exist in God's mind before he could create it.

Every product of the fine arts as music, paintings, poetry &c must be of the quality of beauty.

In this country the house should face the east ^{and} or South. The face on the east should project so as to protect the south.

There are two conditions of water viz. still ^{and} running. Running water is the more beauty. There is beauty in motion. There is a sensation

for the upward, downward, horizontal & curve motion. The last is the most beautiful. As in the example of a ball of fire in the air if it went directly upwards then it would be sublimity. Motion of heavy bodies that is swift is sublime. Motion in general has a good effect in beauty. A smooth, clear glassy surface of a lakelet, sea or ocean is a beautiful object because of its extent. If the same quantity was in motion it would be more beautiful. A slow stream is beautiful, swift one picturesque & a cataract sublime.

Art is superior to unassisted nature. The power of every poet, artist & musician &c. lies in the power of his imagination.

Turner's painting of "The Burning of the Parliament House" is truly wonderful. The focus of the picture is about six feet in front of it. You can in its focus see right in to the burning building but if you stand in any other place than the focus it looks like a blotch of mixed paints daubed on a canvas.

Roadmaking - Cinders although not so beautiful in color are better for roads. For the bottom stones about the size of half bricks are excellent. In the beautiful the roads should be of a gentle curve while in the picturesque they should be more acute. The approach that is the drive from the public highway to the house should strike the public road at an acute angle, the

often being on the side next to the town
It must have length ^{and} every where depart
from straight lines by gentle curves. There
must be reason by nature of ground or adorn-
ment for every curve which must be uniform
yet have variety. Should see the public road
by glimpses. Let roads run in low land if
nature of grounds will give cause for the
turns you may depend upon them entirely, then
ornament by planting afterwards. Turf all borders
set out groups of trees along the curves
if grounds are extensive there should be two
approach roads. Or if small let the road
approach along front of dwelling; make
an ellipsis as  in the center of which must
be a flower garden. Or else drive around the
house in which case there must be a four
foot border all round next to the house.

To keep ground around tree moisten
- 1st diminish evaporation by clipping off long
branches. 2nd Mulching, Saw dust is the best
compost from barn yard is good. 3rd If no
rain with warm water, water very heavily the
evergreens once. Scoop out a sink ^{and} after
watering pull back the dry dirt so the sun
will not bake it. Then mulch & leave tree.

There are two kinds of flower gardens
In one of which the whole ground is worked
^{and} cut up into forms as hearts, circles &c
paths numerous and narrow as the eye
strikes the black soil there is no pleasant
back ground. The other method is to
use the borders of roads, walks, terraces &c
for a flower garden. The borders of being

used to define the direction of roads or walks. Strips of prepared grass along side of roads. The width of which must depend upon the breadth of road. The advantage of this kind of a garden is that it has the eye has the contrast of the green grass and the high colors of the flowers. Make occasional touch which should be of the same width. Cut away the turf and leave the intervals between beds untouched. All this must not be behind your taste. Cut line distinctly; do not get lost on the turf; Spade deep and well; use compost of barn yard; also ashes;

There should be great care in the harmony of flower colors; contrast be apart. Some colors will harmonize. Red, blue and yellow are the primitive, primary or pure colors. By the combination of these make all other colors.

Formulae of colors $3y + 5R + 8B = \text{White}$
 $3y + 5R = \text{Orange}$. $3y + 8B = \text{green}$. $-5R + 8B = \text{purple}$
Double the $y = \text{citron}$. Double $R = \text{russet}$ in ^{light} ^{regiment}
Any color will harmonize with another color when if both were united would be white or nearly white i.e. any color will harmonize with its complementary.
Scarlet is red slightly tinged with yellow
Red lightly tinged with blue is crimson and if more blue than it is violet. Nature affords more discords than harmonies.

Cutting approach roads - the ground size of buildings & extent of road travel will influence the width of road.

It may vary from ten to fifteen feet
A broad road makes a good effect, is
convenient but expensive
Mechanical work of laying out a
road - First survey carefully the ground
with the ~~eye~~ eye Follow the general rules
already given viz. should run in depres-
sions ~~and~~ curve lines Provide your self
with a great many stakes about 3 feet long
Take with you a person of good taste
& a small boy to carry & drive stakes All
stakes must be set by the eye; mark out
one side first Place yourself at the
house & your friend some distance
from the house one the imaginary road
the boy between you, have him move from
side to side, back & forth till he finds the
place where you and your friend agree
that the stake should be set; when this is
set, set others in same manner ~~and~~
fill in between stakes so that when all are
set that they will be about six feet apart
Be careful not to have the curves are not
too violent Lay off other side of road
by means of ropes or chain Then mark out
with spade and remove ~~and~~ fill in about
4 inches of gravel The best roads are
made by leaving lowest in middle ~~and~~
digging a little drain along the center
the road is filled up so that about every
six rods silt ^{wells} are put in, the surplus water
flows into these ~~and~~ the silt settles the water
and flows through a pipe into the main
drain in the center of the road Silt

wells require cleaning every six months
This kind of road is excellent but very expensive.

Paint the house white only when it is in the bed of green foliage then it does show beautiful. But unless there is plenty green the white attracts too much of the attention. Also with green, light, brown drab slate or straw color is good. Brick red looks well in foliage but it soon becomes dingy so do not paint your house too delicate or too gray. Lint is red and white, shade is red and blue, while tinged is any color with a primary color.

Human habitation is an interesting study. The various steps of building shows the various progress of humanity. The different style of architecture among savages was proportion to the climate. For example the Grecian architecture which at one time attained the highest excellency and became the predominating architecture, derived its features from the fact, early Grecians built their rude hut by laying logs horizontally and parallel. First they thrust out the four corner posts next placed roughly hewn block of stone was used for a pedestal, then put a like block on top for which they afterwards substituted the capital. There was placed a log on top of the posts this became the architrave. The frieze was just above this and the cross shafts which holds the roof is the cornice. The post is divided

into base shaft ^{and} capital that which the column supports is called the entablature. Grecian roof is flat ^{and} used for temples. Five orders grew out of it ^{and} these were determined by the capital. Doric is two squared. Corinthian is most highly ornamented. Ionic simple circled. Composite is half way between the Doric ^{and} Corinthian. Tuscan differs from the Doric by being more slender.

The Tuscan style is flat roof - abundant piazzas, windows elaborate with bay windows heavy cornice but must be in proportion to the size of the house - lines horizontal round curved lines - gentle curves in roads ^{and} walks level or gentle rolling eminence. The Gothic which sprung up in the middle ages is composed of straight lines. Characteristics are sharp roof, arches pointed, narrow high windows window caps peaked, windows divided, chimneys on ridge pole, doors high, massive ^{and} in a deep recesses - numerous piazzas ^{and} porticos cornice well projecting ^{and} highly ornamental.

General remarks Let your house either highly ornamented all over or else plain through out. Windows plenty on the south side of house. Keep every thing in neat order.

Landscape Gardening has been an exceedingly interesting study not that I have really learned much but that it will set me to thinking.

End

June 14th 75 D.A.C.
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