DEVELOPING COOPERATION BETWEEN LANDSCAPE ARCHITECTURE AND HORTICULTURE

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The concerns that I wish to address are ones I have been discussing for a decade. As a student at the University of Georgia, I was in the Department of Landscape Architecture and the College of Agriculture. It is interesting to note that at that time, I did not know a Department of Horticulture existed at The University of Georgia. Unfortunately, this is still the situation on a number of campuses today. At both Georgia and Harvard, the landscape architecture student is taught plant material by a member of the landscape architecture faculty. Yet at many other schools, horticulture faculty teach such courses.

I was introduced to academic practice at Cornell University as a faculty member in the Department of Ornamental Horticulture. Because I was somewhat foreign to the group, it was a strange and interesting situation which I entered. I was an artist and they were scientists. In any event, experience showed each could strengthen the other by working together — we needed each other. The experience at Cornell was extremely broadening. During my stay, I learned about the expertise, needs and desires of horticultural scientists. I did not learn enough, but I did learn some.

Since arriving at The Ohio State University in 1972, I have worked to foster a working relationship between the Department of Landscape Architecture and the Department of Horticulture. We feel such a linkage is critical and continually strive to strengthen and even enhance our working relationship. Unfortunately, such a relationship requires the active support and interest of several faculty in both areas. Each of us must be willing to take the extra time required to set up classes which include study and faculty from the "other" department. Each of us must consider the suggestions and constructive criticism of those from the "other" area. Each of us must be willing to spend time learning about the commercial and academic practices of the "others". Yet, even on the Ohio State University Campus, we find little reciprocity for such efforts.

Many students, after a summer work experience with a landscape architect tell horror stories involving an unfortunate experience with nurserymen. I try to tell students that to base perceptions and attitude on single incidents is a sad, serious mistake. Michelangelo left us a great many very beautiful works of art. Without his hammers and chisels and granite, Michelangelo would have left no great sculpture. As a landscape architect, my hammer, chisel, and granite are the people who make up the landscape industry — the horticulturists, field production personnel, landscape contractor, and landscape maintenance personnel. Without them, my work will not get built. As President of the American Society of Landscape Architects, I have been trying to transmit this attitude to other landscape architects throughout the United States.

Unfortunately, a great deal of additional work must be done in order to build better working relationships between the two disciplines. We need a reciprocal effort from the horticulturist.

The landscape architect

I like to think of Landscape Architects as creators of gardens. In my dictionary, garden is defined as: 1) A plot of ground where herbs, trees, flowers, and vegetables are cultivated. This is the definition a majority of the American public thinks of when the word garden is mentioned. There are three other definitions for garden in my dictionary: 2) A rich, well cultivated region, 3) a public recreation area and park, and 4) an open air eating or drinking place. If each of my landscape architectural projects becomes a rich and well-cultivated recreation area or park for eating, drinking and meeting your fellow citizens, I will have done my job well — I will have created a garden. Unfortunately, as a result of Sputnik, a great many landscape architects trained in the era of the 1960s and practicing or teaching today have tried to divorce themselves from the classical roots of landscape architecture. They have denied the need for the relationship to the horticulture industry.

Let's take a look at the landscape architect today. Unfortunately, most people in the horticultural industries see only the tip of the iceberg. There are between 20 and 25 thousand graduate landscape architects in the U.S. We have a national organization called the American Society of Landscape Architects (ASLA). It is the only national organization representing the profession. ASLA unfortunately has only about 5,000 active members. While this is a relatively small percentage of the gradate landscape architects, the number represents more than a 50% gain since 1976. ASLA has 40 local chapters, one in virtually each state. There are 38 landscape architectural licensing laws. In my judgement, we need 12 more. We need to change from title law to practice law in 17 states. I do believe, because of the technical knowledge and specialized training required to accomplish most landscape architectural projects today and the subsequent impact on the public health, safety and welfare the individuals practicing landscape architecture should be licensed. Others working with the land have not proven through examination they have the required skills or knowledge to properly protect the public.

There are 40 accredited landscape architecture programs in the U.S. Programs, not institutions or departments, are accredited by ASLA. This is less than half of the 90 U.S. programs which teach major courses in landscape architecture. It is expected that 4 or 5 additional programs will be accredited in the next couple of years. More than half of the accredited programs are associated with land-grant colleges. I see the 1980s as unique period for these programs to address change. The 1980s will not see a significant decline in student numbers at most land-grant colleges and universities. Landscape architecture programs may be little affected by declining enrollment or shifts in interest, because the vast majority of landscape architecture programs work under a quota system, and admit a limited number of students each year. Currently, only 25 to 50% of the students applying to Landscape Architecture programs are admitted. About 1,200 individuals graduate with a Masters or a Bachelors degree in Landscape Architecture each year.

If we were graduating 2,000 to 3,000 students per year we would still not be meeting the market needs. Students seem to think a recruiter is not knocking on their door that there are no jobs available. Evidence suggests there are probably more jobs than graduating students; however, the students must take the initiative and go out and seek employment. In my opinion, hiring practices in landscape architecture and the "Green Industry" are handled in an archaic manner. It is extremely difficult for students to find the available jobs. They must go to strange areas of the country, pick up the yellow pages and start knocking on doors -- an extremely inept and inefficient way of recruiting. The industry currently places the burden of finding a job on the student and then complains qualified people are not available. To obtain qualified graduates, the industry must learn to visit and recruit on campuses.

Another concern in landscape architecture is the diversity within the profession, itself. In landscape architecture there are currently several hundred professionals who call themselves regional landscape
analysts. These individuals deal with the analysis and a planning of tremendously large areas. Others of us design rather small landscapes and understand plant materials fairly well. The resulting diversity creates a good bit of confusion, as all of these individuals go by the name of landscape architect.

Landscape architects practice in many ways and at all levels. The largest employers in the federal government are the National Park Service and the U.S. Forest Service. The Bureau of Land Management, the Federal Aviation Administration, the Department of Housing and Urban Development and others also employ landscape architects. If you will find landscape architects working for departments of natural resources, departments of transportation, utility commissions, and various other organizations. At the local level, landscape architects are frequently found serving as parks and recreation directors and on park department design staffs.

In private industry, many landscape architects work in the tradition of private consulting firms. Many private offices, particularly the larger firms, are multidisciplinary and will have landscape architects, civil engineers, architects, city planners and others on their staff. Another accepted area of practice for landscape architects is the design-build firm. Increasing numbers of The Ohio State University Landscape Architecture graduates are going to these types of firms. To this end, we encourage the co-op student to start at the end of a shovel. Students who later go into a private design office or government agency, (which is likely), will carry with them an appreciation for what they are asking others to do. Some graduate landscape architects are currently pursuing traditional nursery production roles also.

Landscape architects work on all scales of projects, from the tiniest to the largest. Some landscape architects, such as myself, enjoy working on small projects. In residence, you might have a 10 x 20 court to a 10 acre “estate”, plant materials are extremely critical. At the other end of the spectrum is the landscape architect working with the Forest Service and the Bureau of Land Management dealing with a million or more acres at a time. Plant materials for these people may be a Sitka spruce forest. When a landscape architect deals exclusively with large scale planning operations, knowledge of horticulture unfortunately atrophies. Such a professional simply does not have time to remain current in the use of individual plant materials with all of the other demands on his or her time.

I do not believe we will see significant change in the types of professional employment or projects Landscape Architects will pursue in the 80s. However, we will see significant changes in the technology we use. It is my feeling that, in the near future, we will see landscape architects very seldom drawing. We have a new tool — the computer. (A faculty member asked me recently to look at a drawing on a TV screen where 10,000 trees had been drawn in 35 minutes. He asked me if I would like to see the scene in the autumn, winter, spring or summer and how much breeze I would like to see. I asked him for a gentle breeze in the fall. To my surprise, the leaves turned color and “cat paws” coursed across the screen. This is nothing more than a tool replacing older tools such as T-square and triangles. It does not change what the landscape architects do, only how they do it.

We will also see a change in products during the 1980s. More emphasis will be placed on energy efficient products, water conserving planting schemes, lower maintenance.

Needs of landscape architecture

Landscape Architecture needs support from horticulture in the 3 areas of your academic practice: 1) teaching, 2) research, and 3) extension.

We need horticulturists who understand and have an appreciation for design. They need not be able to do the design themselves, but they must have an appreciation for and an understanding of what the landscape architect is trying to accomplish. We need horticulturists who are willing to construct what the landscape architect has designed. One difficulty in residential design is finding contractors willing to build and install the plan which I draw. Perhaps even more important are individuals willing to maintain the design I have built. The best design in the word is not properly maintained. Many horticulturists find it difficult to construct the idea I put on paper. They frequently do not wish to become involved in construction at all, forcing the landscape architect to deal primarily with general contractors. Individuals calling themselves landscape contractors often only install plant materials. Unfortunately, plants normally represent 20% or less of the total contract price for landscape projects.

We need changes in the way plant identification is taught at the land-grant institution. Family and genera are important to a landscape architect, not twigs or buds. Only in the situation where a tree can be identified in no other manner should twigs and buds be employed. Where identification is truly critical, teach landscape architecture students to hire horticulturists to confirm identity.

We hire other specialists, such as engineers, lighting and irrigation specialists. Why shouldn’t we hire horticulturists as well? We need substantial greater information on how plants grow and where they perform well. We also need information on how they should be planted and maintained in the landscape. In the urban situation, plants are frequently not intended to be specimens. We often want to know how fast we will have canopy and how close the trees can be planted. We use plants for specific roles in the landscape. Many horticulturists have a blind spot and feel that each and every plant should be designed, specified, and grown. This is simply not practical or desirable in most landscape settings.

We need to change the concept of maintenance. I don’t think that either landscape architects or horticulturists can do it alone. Maintenance, in my judgement, is the wrong word. You maintain your old truck. You care for your child. You maintain your old shoes. You take care of your new suit. We need to teach people to care for their plantings.

We need to encourage landscape horticulture faculties to participate in landscape architecture design courses. Horticulture faculty can and should be used as studio critics to assist students in learning how plants can be used. This is something that we have not done in our department for a couple of years — basically because of changes in the horticulture faculty. I hope that we will be able to institute this kind of interchange again in the near future.

In the research area, we need more time and effort spent in areas other than production. I admit to a certain prejudice when saying, if there was not another dime spent on learning to produce plants during the next 10 years, I would not care. What I need is research on how to install a plant on the roof of a 4-story apartment building, in a city side- walk, or on the edge of highly polluted streets? How should I plant trees along the edge of highly polluted streets? How should I plant trees so that they can be maintained in shopping centers? I don’t see this type of research. Landscape architects should not be doing this kind of work — horticultural scientists should.

We need to open additional dialogue with horticulturists in determining the types and character of plants needed in contemporary settings. It is virtually impossible to find plants which will mature at a 3 to 4 foot height in Ohio. Only a few such plants exist and stocks are extremely short. We have only a few extension specialists who work with people outside the nursery industry. We need extension personnel who are willing to work with landscape architects, engineers, and other to establish and identify plants which will do well and be used in creating landscapes for tomorrow. Extension personnel traditionally have worked with the nursery production industry and have forgotten their prime constituency, the American public. Does it make sense to work only for the farm community when each farmer has only one vote? Perhaps it is better to work with such garden clubs, which in Ohio, have more than 160,000 members. We need more programs directed toward school boards, park commissions, city officials and other major users of plant materials.

Summary

If anything is to be accomplished between landscape architecture and horticulture, we desperately need to establish a dialogue, a dialogue to establish a spirit of understanding and mutual respect. Each must respect the professional pride, skills and accomplishments of the other. I am a landscape architect, I am not a horticulturist. I need you as a horticulturist and I believe in some small way, because I am different, that I can assist you.