CHAPTER THREE – LEARNING WITH & FROM PEOPLE

Introduction. While I struggled through grades 3-12, not fitting into the neat boxes in the standardized school system, the farther I advanced in higher education the more freedom I found or took for creativity and originality.

College of San Mateo 1959-1961. In 1958 my father was hired to teach a new division of courses in vocational horticulture at the College of San Mateo, a two-year community college in the San Francisco Bay area. So, after graduating from high school in Southern California, my brother Jim, and I immediately drove north to join him and enrolled in the College of San Mateo day program. There were two campuses in those days, an old two-story masonry building where dad's evening classes were held and a WWII grouping of temporary barracks on Coyote Point, a picturesque eucalyptus covered peninsula in San Franscisco Bay where Jim and I majored in art. Jim was interested in fine art photography and I took courses in drawing, color theory and graphic design since there was no architecture program offered. I also attended my father's evening classes in vocational horticulture three nights each week, making a very heavy workload. I repeated beginning algebra twice more and finally passed even though my test scores were poor. By then I could have taught the course. Three of my most helpful academic classes were in public speaking, architectural drafting, and English literature, where our extraordinary instructor, Ms. Wirth, guided my growing ability in written expression.

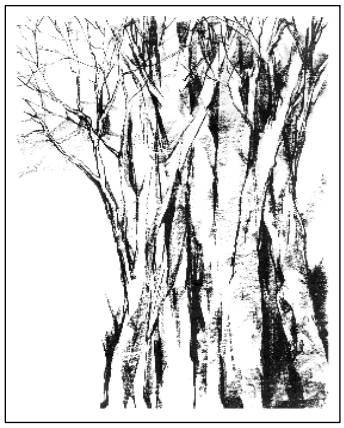
In those days California community colleges were free and living at home also saved on costs. For one summer I collaborated with my father designing and building residential gardens and garden maintenance work. I temporarily took over a gardening route to the healthy suburb of Atherton in the apricot growing south of the San Francisco Peninsula. Today, this is the Silicon Valley computer hub. Durning the second summer I worked for my older brother Phil in his carpentry shop and business in Venice Beach in Southern California and attended the UCLA summer program to complete advanced algebra. This was a turning point. Our young instructor was much more interested in our understanding of algebraic principles than getting all the correct numerical answers, foreseeing the time when handheld calculators would do the actual computations.

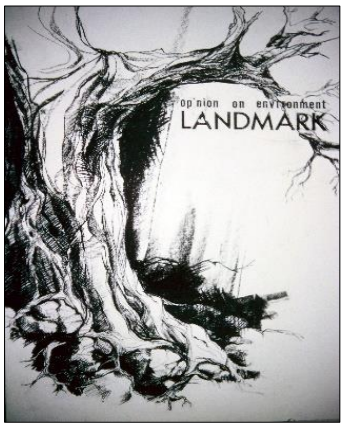
University of California Berkeley 1961-1964. The next step in pursuing my interest in landscape architecture was enrolling in the University of California across San Francisco Bay in Berkeley. In those days California residents had free tuition to one of the world's great universities. Upon beginning classes, I thought I would have a career in professional garden design or designing houses and gardens together. I soon discovered landscape architecture (henceforth LA) including regional and environmental planning, environmental impact analysis, site planning for new towns and residential areas, design of gardens, schools and parks, zoos, and botanical gardens and, yes, zoos.

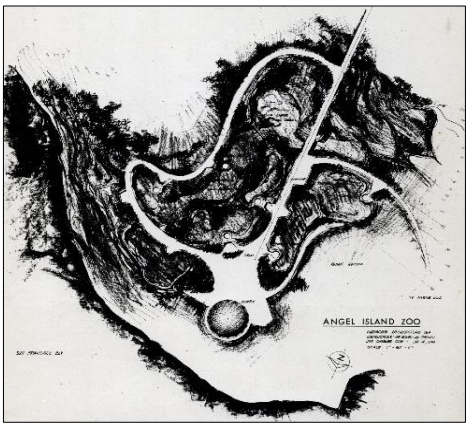
My two years of community college study counted as one year of university level study, so I had three years of study to earn a Bachelor of Landscape Architecture degree. In addition to studios in landscape architectural history, design, site planning. construction, and plant materials, I took two studios in architectural design, required courses in botany and economics and elective courses in soil science and entomology. I also audited courses in geography, etching and attended open university lectures.

For the first time in my schooling creativity and wholistic, thinking was more rewarded than getting the “right answer.” I now realize how fortunate we were to be encouraged to think for ourselves rather than simply copying acknowledged “masters”. Even today this is rare in design schools. Our LA studios were in the basements of old Agriculture and Giannini Halls, before the present Environmental Design Building was built. Our windows looked out to the ground level. This humble, soil-level perspective provided a logical foundation for our future nature-based and service-oriented profession.

I was fortunate to benefit from thoughtful and innovative faculty, guest lecturers, and studio master’s from the “California School” of design including Robert Royston, Garret Eckbo, R. Burtin Litton and Lawrence Halprin. My second required architecture design studio was with noted West Coast architect Donlyn Lyndon, designer of award-winning Sea Ranch. I designed a passively heated and cooled office building (fifty years before this became common). My building model had working vents to smoke test the model building’s ventilation by blowing smoke through it. He liked my work and told me, “Coe, you’re pretty good. You could be an architect.” I thanked him and replied my future would be in landscape architecture. Neither of us foresee a time when I would bridge both professions, and several more.







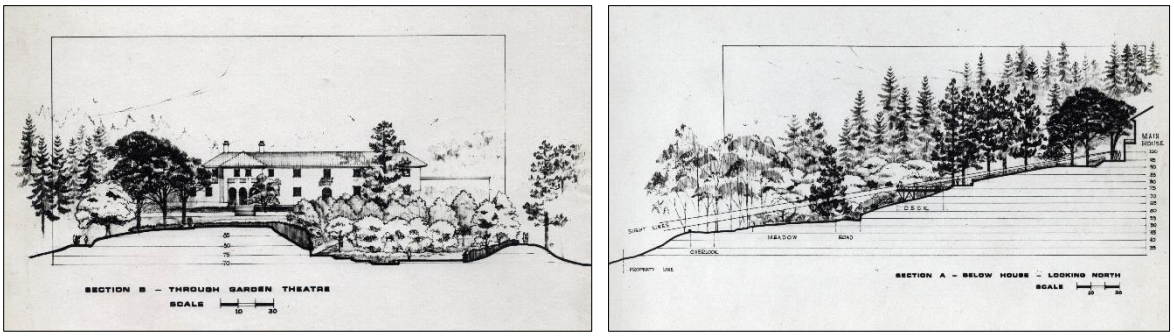


Figure 2. Drawings from student days at UC Berkeley. Upper left: trees using conte crayons. Upper centre: tree drawing used as the cover of a student publication edited by my future wife Susan Webster. Upper right: my first zoo design project as a student, envisioning a domed aviary, native animal habitats on hillsides and an observatory at the summit of Angel Island in San Francisco Bay. Bottom images: two illustrations I drew for Landscape Architecture Professor Geraldine Knight Scott showing her plans for the university owned Blake Estate.

My background in art, illustration, garden design, horticulture and construction gave me a head start on most entering students, so I helped them as much as possible. We arranged to keep our design studio open all night and many of us worked together helping each other as we would later in a professional office. Working all night was common before deadlines. During my final year I worked seventy-two hours without sleep, completing four separate final projects. I came to realize that not only was I again 'in the zone,' but I was also a perfectionist and would work as long as possible to help others while advancing my design and communication ideas.

My only regret from this period was commuting to the university from my parents' house in Colma, south of San Francisco, through the city and across the Bay Bridge an hour and a half each way in heavy traffic for my first two years. I did this to save money, but I could easily have fallen asleep at the wheel and caused a terrible car crash. This time could have been used for studies or sleep. During my final two years I rented a dormer room near the university and saved money by washing pots and pans at a fraternity house in exchange for evening meals. Once I was so sleep deprived, I fell asleep while washing pots and awoke with my face in the soapy dishwater.

During the summer, after my third year of study I got my first job in a professional office, working as a drafter for the San Francisco landscape architecture firm of Osmundson & Staley for a pay of $2.00 per hour.

The highlight of my senior year was meeting Susan Webster (now Susan Coe). Susan was one year after me in the landscape architecture program. We first dated on Halloween in 1963 and have been together for over sixty years.

UC Berkeley was a centre for political radicalism, and the free speech sit-in demonstrations of the mid-1960s surrounded us. But while an observer, my focus was on my studies, being grateful for the opportunities I had rather than pushing for even more freedom. My brother Jim studied fine art photography at the San Francisco Art

institute, including a course under landscape photography icon Ansel Adams. The Height-Ashbury Hippy music and lifestyle scene was nearby, and Jim became the sound technician for the Jefferson Airplane rock band and toured the US and Europe with them.

Vietnam War beckons. I received my Bachelor of Landscape Architecture Degree with Honors and the American Society of Landscape Architects Student Honor Award in June 1964. I applied to the Harvard Graduate School of Design to continue my studies and was accepted for Advanced Entry. This honor meant I could complete the Master of Landscape Architecture degree in one and a half years rather than the normal two-year program. I would attend beginning in February 1965. This was both an opportunity and a problem. My draft board in conservative Southern California wanted to draft me into the Vietnam War and I had passed one military physical examination. If I remained a full-time student, I would continue to be granted a student deferment, meaning I would be inducted after completing my education. However, beginning at Harvard in February meant I would miss the autumn semester and thus I was no longer a full-time student. I went to work in San Francisco for the LA office of Tito Patri, a remarkable designer and employer who gave me considerable design opportunity in our two-person office. I also continued to see Susan in Berkeley. After three months I received the official notice I dreaded, orders to appear in Southern California for my pre-induction physical examination, the first step in being ordered to report for military duty. This was early in the war and years before the student anti-war movement took place across the USA. I was against serving because I had dedicated my career to helping people and the environment. I remembered the ruins of Berlin and its devastated people and refused to support a war destroying people, their livelihoods, and environments. Taking advice from anti-war activists, I waited until just before the scheduled examination and sent a registered letter to my draft board requesting my physical examination be transferred to the Oakland area where I then lived. This rescheduling gained me two months. During the autumn of 1964 I received the date for the preinduction examination in Oakland and again requested a revised examination location in Boston, where I would then be living. In January 1965 I enrolled in the Harvard Graduate School of Design in Cambridge, Massachusetts. Within a week I received an official letter informing me I was immediately to report for induction in the US Army. I sat looking at this notice in shock before I realized there was a second page informing me my military induction was temporarily delayed and assigning me a continuing education deferment.

Figure 3.1966 Master of Landscape Architecture graduating class. Grant Jones, who I would later work for, is shown on the upper left and I am in the second-row centre, the only student with a beard. We had only one woman in our class. Today most graduates are women.

Harvard Graduate School of Design 1965-1966. The best thing about my Harvard education was the quality of my classmates, both as designers and colleagues. The worst aspect of the design program was its Euro-biased, modernist, master-disciple philosophy. Variant, “west coast hippy” opinions were unwelcome. The masters knew what was best for the world and if we emulated them, we would become masters and tell the world what to do. It was also clear that architects were the masters and landscape architects were of little importance, a sentiment supported by our studios being in the basement of old Robinson Hall. This strident modernism was antithetical to my beliefs then and now. I revered the beauty and sustainability of vernacular architecture and landscapes, and believed architecture should respond to landscape and climate and not vice versa.

I quietly revolted, developing the strategy that I would meet every studio master’s project requirement fully, no matter how arbitrary, but in ways that turned their philosophy on its head. For example, one studio project called for students to design a central plaza for the University of Colorado campus. This was a flat area surrounded by important buildings and student destinations. The design style of the day was to create a large kidney shaped raised and planted mound, diverting pedestrians from their otherwise straight paths to their destinations to ornament and break up the otherwise boring space. Students from California like me were not permitted to use curved lines in our designs. This arbitrary requirement was based upon the assumption by East Coast faculty that curved designs originating in California were all we knew. How ironic, when the kidney shaped raised planter faculty had used was copied a California style a decade earlier, and irritating because fellow students from other states had no restrictions placed on them for design cliches popular in their home regions.

My design solution was expressed in two ways. Seen from above, I recorded the most direct pedestrian pathways (desire lines) between all doorways around the plaza and suggested planting in the areas between, as if pedestrians were walking along pathways through a forest. No curves were apparent, satisfying faulty requirements. However, when seen as a cross section, I sloped the planted areas between pathways, so the entire plaza seemed to undulate with subtly three-dimensional curves.

This contrarian strategy required more creativity than simply complying with their philosophy. I learned far more as a result.

The Harvard Graduate School of Design (HGSD) program was excellent in large scale subjects like regional and environmental planning. Professions like forestry, hydrology, ecology, cultural history, and settlement patterns informed landscape scale planning. These subjects and more were integrated by landscape architects, who had professional understanding of each field, into long-term sustainable development plans. Here multidisciplinary team collaboration and communication skills replaced the patriarchal design master's direction. We were inspired by a visiting environmental planner Phill Lewis, a landscape architect who promoted the "environmental corridor" concept and contributed to the origins of geographic information systems (GIS) technology with his concept of using transparent overlays of mapped natural and cultural resources for environmental planning.

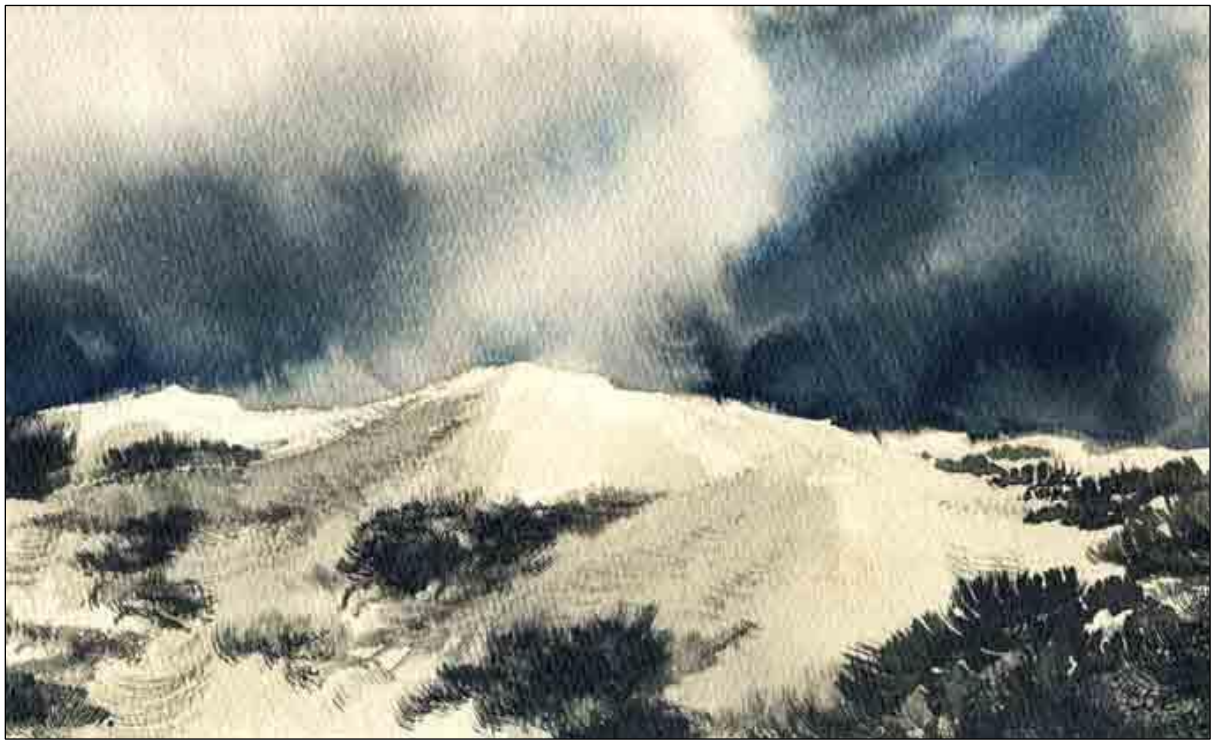


Figure 4. My 1965 watercolor of coastal dunes on Cape Cod.

One faculty member, Mr. Peter Hornby, took an early interest in me and invited me on an introductory winter drive up the New England coast. I had the opportunity for summer employment in a large prestigious Boston architectural office but on Peter's advice chose to work for the landscape architectural office of Carol R. Johnson. In the future Carol's office will become a leading, multi-award-winning firm, but that summer there were only the two of us. As with my work for Tito Patri the summer before in San Franscisco, I learned from Carol about the business side of the work. And I witnessed first-hand how poorly female professionals were treated, especially by male engineers in city departments. Her perseverance was and remains inspirational and I am gratified by her later success.

By the summer of 1965 Susan had graduated from UC Berkeley and joined me in Cambridge, Massachusetts, having arranged employment with the old Olmsted Associates office. Her income helped support us both while I was a student. During weekends we explored New England, hiking, camping, and canoeing in landscapes vastly different from those of Southern California where we grew up.

Harvard University is known for the quality of guest speakers, and two were especially important to my future work. The first was a Brazilian architect who demonstrated how much better adapted their old colonial buildings were to their tropical climate and culture than the celebrated modernist International Style buildings of Brasilia. These could not be repaired locally and forced residents into elite utopian rather than culturally appropriate social groupings. His views strongly supported my vernacular design philosophy. The second speaker of note to me was a young American landscape architect named Mr. Joe Volpe who had graduated before me and had worked briefly in Brazil. Listening to him planted a seed in my thoughts that someday I could visit and work in Brazil as well.

My studies at the HGSD culminated in a master's thesis, a semester long independent study. Given my wide-ranging interests, I was unsure what subject to select. I found my answer while attending an informal drawing class at the old Franklin Park Zoo in Boston. I heard a great commotion coming from the old elephant house. Upon entering, I saw three chained elephants fighting, the chains prevented them from hurting each other physically, but their emotional distress, bellowing, screaming, and the resulting smells were appalling. The keeper was leaning helplessly against the wall. I asked, "Why are they fighting?" He answered, "Because they're chained". "Why are they chained?" "Because they fight" he answered. I resolved to use my thesis to find answers for preventing this needless abuse and chaos.

Figure 5. My 1965 photo shows two of the three chained and fighting elephants at the old Franklin Park Zoo.

Even though I had another semester before beginning my thesis, I immediately began to study wild animal behaviour to improve zoos. My early work included learning about the ancient history and evolution of zoos and the writings of pioneers in wildlife behaviour including Konrad Lorenz, Nikolaas Tinbergen, Frank Fraser Darling, Desmond Morris, George Schaller, and the founder of zoo biology Heini Hediger. Jane Goodall, Dian Fossey, and Birutė Galdikas begun their studies of wild great apes in 1960, but their work was not yet published. Before the beginning of my final term, I suggested my thesis subject to my faculty advisor. He responded with two discouraging facts: 1) no one could make a living designing zoos (in those days); 2)

no one on the HGSD faculty could advise me on this obscure subject. After initial discouragement, I realized the obvious: Harvard University has resources beyond those offered by Design School faculty. I recalled from my recent readings the names Washburn and DeVore, who had studied baboons in East Africa. Professor Irven DeVore, a founder in the field of evolutionary anthropology, was a member of the Harvard faculty. I knocked on Professor DeVore's office door, introduced my area of interest and he generously became my advisor. He not only provided reading lists to familiarize me with terms and practices of behavioral psychology but also attended my thesis presentation and spoke well of it while my design faculty advisor had fallen asleep. My thesis, titled "Artificial Habitats for Captive Animals", described and graphically presented a comprehensive range of animal behavioral strategies supported by expert quotes and citations. I recommend that zoos be organized around naturalistic representations of bio-climatic zones or biomes, following the systems developed by Heinrich Walter. My paper was research dense, seventy-page outline for a full book never published. Instead, I submitted it in outline rather than narrative form. This exhausting work has been entombed in my files ever since Harvard returned it to me, but the information learned, and strategies gained have lasted a lifetime. My work was appreciated by the Harvard GSD with the award of the Weideman Traveling Fellowship. I was able to delay this travel with my wife Susan until after our US Peace Corp Volunteer service described in Chapter Eight.

Move to Philly - 1983. Seventeen years after graduating with my master's degree I again found myself at an Ivy League university, but this time as an Assistant Professor of Landscape architecture. In about 1979 Professor Ian McHarg, then Chairman of the Department of Landscape Architecture, Graduate School of Fine Arts at the University of Pennsylvania, began offering me a teaching position in his department. At this time, I was enjoying working with Jones & Jones in Seattle (see Chapters Seven and Nine). I was now a junior partner, and not keen on leaving our Bainbridge Island lifestyle. As Westerners, we were not keen to relocate to the US east coast. However, I eventually became interested in university teaching and Ian McHarg was internationally respected in the field of ecologically based regional planning from the sales of his book Design with Nature. As an environmental planner, he wanted me to bring this ecological emphasis to teaching at the project design level. As a historical footnote, my Harvard classmate and later employer Grant Jones presented is thesis on ecologically and culturally based regional planning in June 1066, predating Ian's publication. Ian attended, which stimulated him to hastily publish Design with Nature before others like Grant or Phil Lewis beat him to it.

Ian tried to recruit me annually and by 1983 I decided to accept this full-time university teaching position. Jones & Jones were moving away from the zoo work, and managing partner Ilze Jones, once instructed me sternly when returning from project travel, "Don't bring back any more Midwest Zoo work!" While I enjoyed city park and national park design, the zoo field was in much greater need of improvement. Still, I didn't want to break ties with Jones & Jones, who had become a second family. So, when I left Seattle

for Philadelphia it was on a medium-term basis. I agreed to teach for only four years, and I returned to work with J&J during the following summer.

University of Pennsylvania Design Studios. In negotiating my position, I stipulated my intention of teaching for only four years and not seeking tenure for a permanent position. This facilitated my hiring since the university had a limited number of tenured openings. I enjoyed teaching at the master's level. Students were more mature and many had professional tools to develop and express their ideas well. My main responsibility was as a "studio master" for four upper-level design studios per year. This involved finding and arranging a willing client and suitable site, developing the student program (schedule, interim and final products, reference books, field trips, guest speakers and such) as well as spending two afternoons each week with the students in addition to trips. Every studio I managed was completely original. As an example, in my first semester I managed a joint studio with the architecture department in the dilapidated Civil War Era industrial and worker housing area of North Philadelphia, in this case in the Puerto Rican Barrio. Recalling my Peace Corps favela experience I met with Puerto Rican community leaders, most of whom were women, who had developed community gardens on vacant lots. The people I met in North Philadelphia grew up in small farm communities in their homeland. They knew how to grow food and use informal community gardening meetings to quietly manage their barrio. As in my earlier Brazilian university teaching experience (Chapter 8), my upper-class students were afraid to enter the barrio. I assured them that we would be guests of respected community leaders. I don't think my use of Mexican and Brazilian-accented Spanish was very understandable to Puerto Ricans but hoped they appreciated my efforts to communicate in Spanish. The architecture students developed community housing concepts while the LA students designed community gardens, learning from our Latina clients. When the studio ended I invited community leaders we collaborated with to our Ivy League campus to observe and comment on the students' final presentations. Afterwards we shared a meal of Puerto Rican empanadas I had picked up in the Barrio that morning.

This design studio demonstrated my respectful approach, so different from the imperialist master-designer philosophy I had encountered among some faculty at Harvard: 1) Respect, listen to and learn from your clients and their communities. 2) Design to meet their needs (and not just yours). 3) Design local user-friendly systems and features they identified, can afford to build, and maintain. 4) Try to communicate in ways the clients understand. 5) Build bridges, in this case between the Barrio and the university.

The following year we ran a similar studio with the North Philly African American community with good results. In both cases I'm sure the students learned more from the communities than the communities learned from the students. Other design studio subjects I developed included designing a learning garden for the University Museum, with its worldclass collection of Mezo-American knowledge and antiquities, and projects

at the Fairchild Botanic Garden. In addition to teaching design studios, I attended Fine Arts faculty meetings and sat in during presentations given by students in other departments. After sharing my opinion of the shallowness of the architecture studio led by popular “post-modern” architect Robert Venturi, a leader of what I consider a frivolous style-of-the-day, I was not invited back to their department.

The Pros and Cons of Teaching. I mentioned earlier that I had never worked for a large corporation. The University of Pennsylvania is a large educational corporation, but our Fine Arts Department seemed more like a small company with the corporate advantages of excellent employment benefits such as medical and dental care and retirement investment programs which I had never previously had access to. For the first time in my career, I was able to accrue savings.

What didn’t I like about teaching at Penn? Ian McHarg was an international celebrity and charismatic spokesman for environmental planning. He was not a good administrator, and funds were limited. The result was he saved operating costs by only having adjunct lecturers, which is professionals working in private offices and only coming in for their studios and visiting lecturers. The problem with this was that, as the only full-time professional staff, I had duties such as arranging chairs and studio spaces, setting up and taking down student exhibits, designing and posting posters, counseling students and arranging local guest speakers. A related problem was that Ian used the same adjunct and visiting lectures and studio masters year after year and most simply repeated previous lectures and projects with no additional preparation. Students were putting forth their best efforts; several adjunct faculty members were not.

Despite these shortcuts, university tuition continued to rise. Professor McHarg talked students into taking out long-term loans far beyond their future earning power to repay. This high-cost situation had several outcomes. 1) Most students were foreign nationals from wealthy families or with support from their governments. This cultural diversity was wonderful for both American and foreign students. I certainly enjoyed working with many wonderful international students. 2) Unfortunately, many students who could afford the high tuition were admitted without the required undergraduate academic prerequisites. These were required to have had some training in design, graphic communication, and other skills taught in American undergraduate programs, but many did not. In addition to my regular teaching load, I was required to teach remedial drawing classes, which I enjoyed, but received no additional pay. Students could have taken such training at local vocational schools for far less cost to themselves.

My major grievance was that at the beginning of each term studio masters, including noted visiting landscape architects such as eminent British garden designer Sir Peter Shephard, presented their studio subjects and the students selected their favorite studios. If too few students signed up for my proposed studio it was canceled, and my preparations wasted. Proposed field trips and guest speakers were cancelled. By then I had a reputation among advanced students as being demanding, while the guest speakers were known to be easy-going. Some visiting international professors were the

best choice for some students. The result is that for much of my time I became a support figure for the student's selected studio master. This was easy, but it hardly used me to my potential. As a significant example, and the reason I decided to resign, occurred after I met with a group of severely disabled students learning computer coding in a special off-campus facility. Some had such limited mobility they could only be moved about on a wheeled gurney, yet all were keen students. I asked the small group if any were willing and able to join my students in doing a disability access study on the University of Pennsylvania campus. Four agreed. I then organized a design studio offering this unique collaborative study opportunity. I knew that many people feel uncomfortable around strangers with disabilities or other unfamiliar characteristics. From my own experience I also knew this discomfort disappears with familiarity, once you get to know people as people rather than as anomalies. Further, I realized that upcoming legislation, the Americans with Disabilities Act (ADA) of 1990, would require landscape architects to be knowledgeable in this subject. Also, I long supported the concept of Universal Design, inclusive design that work for everyone. Comfortable ramps providing access for people in wheelchairs are also convenient for people pushing baby strollers, for example. At the beginning of the semester, I introduced this design studio option to the Penn students. Sadly, only one signed up. As a result, I had to cancel the studio and go back to the disabled students and their instructors and regretfully tell them my Penn students did not want to collaborate with them. This should have been a required design studio for all landscape and architecture students.

Puerto Rico Field trips. I resigned from my full-time position as Assistant Professor after my agreed four years of full-time teaching but remained available as an adjunct lecturer. I agreed to lead two summer Tropical Ecology Field Programs to Puerto Rico. I traveled with a tropical ecologist and soils expert who conveniently also organized everything, so I only needed to deal with the design studios. The first thing I learned is that my Mexican-Portuguese accented Spanish was not understood in Puerto Rican any more than it had been in the Puerto Rican Barrio in Philadelphia. However, I was able to translate Puerto Rican Spanish for my students.

The first year, January 1988, we designed a beachfront park on the eastern end of the island below El Yonque Peak and National Park. During the second Puerto Rican field studio the following year we drove to the semi-arid southwestern coast west of Ponce. Here the students developed the master plan for Guanica Nature Park. This is where the endangered estivating toad Sapo Concho lives in limestone crevices and breeds in seasonal puddles in their car park. There is also a relic grove of ancient *lignum vitae* (*Guaiacum sanctum*) trees growing slowly on limestone bedrock. *lignum vitae* is one of the hardest of all wood species and highly valuable. In addition to developing a park master plan with the Park Ranger, the students also wrote and illustrated a booklet of rare plants and animals found there. Both the master development plan and guidebook were published and used by the park.

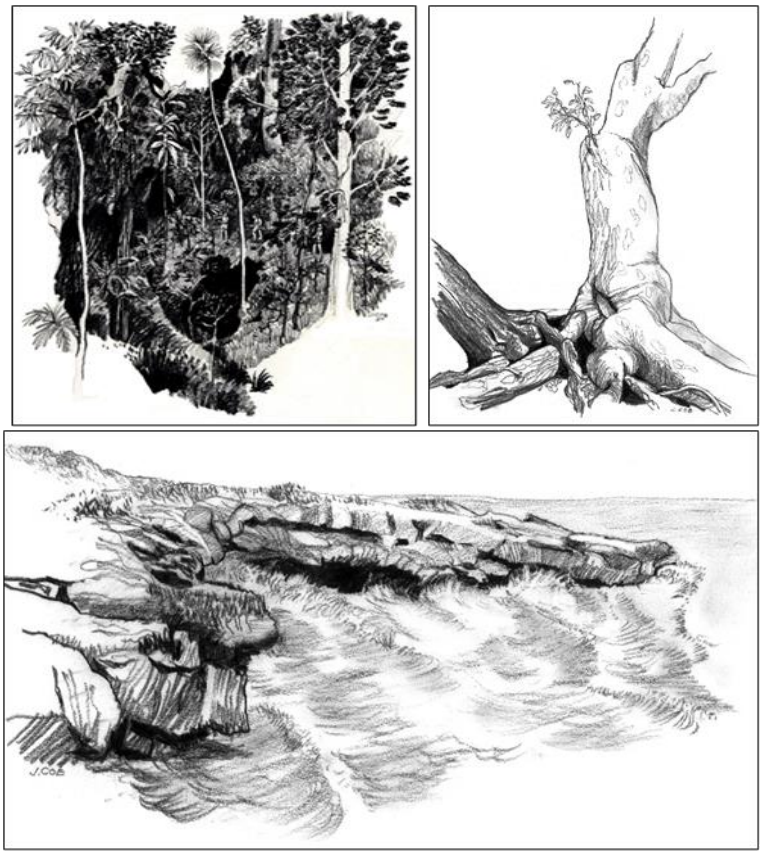


Figure 6. Upper left: imaginary karst rainforest landscape I sketched on the flight home from Puerto Rico. Upper right: Lignum vitae tree in Guanica Nature Park. Below: limestone shoreline in southwestern Puerto Rico.

I was later invited to lead our landscape architecture students on a third summer tour, this time with eminent American evolutionary ecologist Professor Daniel H. Janzen to the Guanacaste dry forest research site in Costa Rica. Sadly, the trip was cancelled for lack of sufficient students. I had never visited Costa Rica, and this would have been a lifetime experience and chance to spend time with one of the heroes of modern ecological research.

Conducting weekend Charettes. Later, during the 1990's while working with my Philadelphia design firm CLRdesign, I greatly enjoyed visiting university departments of landscape architecture and conducting weekend charettes, and design sketch problems. Zoo design studios are popular with students, although few go on to work on a zoo design project. My purpose was to use this subject to encourage students to pay deeper attention to the needs of humans during their future professional work. My experience was that when people design for other people, they often make assumptions about the wants and needs of future users work based upon their own untested opinions or popular stereotypes. However, when designing for zoo animals, they realize that studying the natural habitats and behaviors of the species they design for is important.

I introduced the studio to the students on a Friday afternoon. They were provided with a list of popular animal species resident in several biomes. For example, the African tropical forest would contain gorillas, mandrils, elephants, and leopards. The African savanna would include lions, giraffe, rhinoceroses, and gazelle. A coral reef could be home to clown fish, moray eels, reef sharks and coral animals. Each student picked a species. I then introduced the project goal with the instruction: “Design yourself a garden of paradise of you are a lion, elephant or clown fish.” I defined a paradise garden as the natural habitat in which their chosen species evolved over millions of years. Students had the afternoon and evening to do research in the university library (this was before the internet, Professor Google and Wikipedia were available). Friday night and Saturday morning each student prepared a quick sketch of their animal’s paradise based upon their research, which they presented to the group. Saturday afternoon students formed into teams based on shared biomes. Their task now was to design as a team the shared paradise where each of the species could share. And a further point, they had to add an additional species, occasional human tourists. To communicate their design each team would build a table-sized model on brown craft paper using modelling clay and anything suggestive of their landscape they could find on campus. These were intended to be temporary models displayed and photographed the next day and then discarded. Teams began Saturday afternoon and presented their models to university faculty Monday morning.

I conducted these workshops at five American universities. The most imaginative teams were from the University of Virginia. Students dressed in appropriate costumes, with the African savanna team dressing in safari gear. The Africa rainforest team ranged through their building borrowing all the indoor tropical plants they could find to surround themselves and hide behind during their presentation. The leopard dressed in black and draped herself over a small table to make her presentation.. The coral reef team used common candy types like jellybeans to simulate colorful corals. As a summary, I admonished the students that they must use the same openminded research and creative fun when designing “paradise” projects for human users as they had for designing gardens for exotic wildlife.