

From Agronomy to Landscape & Greenway Planning

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Abstract

This paper describes the evolution of my professional career, which parallels the evolution of landscape and greenway planning in the United States and indeed around the world. But prior to the describing this evolution, I felt the need to describe my roots, which led me to become both, a landscape and a greenway planner.

Naturally one can become a planner from any profession, any field. Yet, I felt fortunate to come to it from agronomy, which introduced me well to the “living environment”. As landscape architects we have always modified all planning implementation which may be minor or major changes (modifications).

I became a landscape planner twenty years before greenway planning became known in the United States. The difference between landscape and greenway planning is simple: landscape planning plans for 100% of an area, while the focus of greenway planning is primarily dealing with the fragile portions of the drainage areas such as wetlands, overly steep areas and ridgelines.

The majority of our landscape planning research and publication resulted in detailed methodology, supported by our interdisciplinary research team, with expertise in natural social sciences and engineering. In contrast, greenway planning has been supported primarily from the natural sciences, hence greenway planning is more focused and simpler than landscape planning. Our landscape planning teams have been supported at the University of Massachusetts by 12 departments throughout the campus during the 1970's and the 1980's. In contrast, greenway planning which we have been involved with since 1985, we can do independently under our landscape architecture/regional planning department.

All greenway planning I was involved in has been done in collaboration with a colleague within my department or with Hungary. More specifically during the 1990's I collaborated with Jack Ahern which resulted in a book, entitled *Greenways: The Beginning of An International Movement*, and published by Elsevier in 1996. Similarly, my collaboration with Robert Ryan during the past decade resulted in two special journal issues. *Landscape and Urban Planning Journal* published our first special issue under the title “International Greenway Planning” during May 2004. The same journal published our second special issue during April 2006 under the title “Greenway Planning around The World”. Both of these special issues are book size publications: The 2004 publication is 342 pages long and our 2006 publication is 297 pages long.

Our current and most recent collaboration is international. Our university from the United States is currently collaborating with the University of Corvinus of Hungary.

At this writing we are preparing our conference to be held in Budapest. We are working with 126 individuals or teams around the world. We plan to select as many presenters as possible for presentation in July 2010 in Budapest. The final presenters selected, must be able to come to Budapest. While we are optimistic that the majority of the people selected will be able to submit a publishable paper and on time, we will find out only later the people who will attend in July.

We are confident that this collaboration will be a successful one, both in numbers & in worldwide representation. Equally important is the fact, that at this time we have a truly diverse and well represented list of landscape and greenway planners from all around the world. Please note, our first greenway planning book of 1996 was identified as the beginning of an international movement. Today, the 121 people around the world with whom we have worked in preparation of this international conference in Budapest prove that landscape and greenway planning is a global phenomenon. Its influence has grown significantly in just two decades.

Prior to this conference the University of Massachusetts team organized two symposia on greenways in the United States in 2004 and in 2007. This time we joined with Corvinus University of Budapest to organize a larger conference with an expanded topic with a focus on landscape, greenway planning and designs. This was done to satisfy the expected interest of our European colleagues, who are contributing significantly to this conference.

The thesis of my paper is that my early experience in agronomy has helped me significantly in my professional life, in both landscape and greenway planning. My first exposure to agronomy was through my luck to be born into a farming family. Many of you know that Olmsted Sr., the father of American Landscape Architecture had an experimental farm on Staten Island, NY prior to becoming a landscape architect during the 1860's (Fábos, Milde and Weinmyer, 1968). As the son of a farmer, I was born into an environment which dealt with farming and I was exposed to knowledge about plants and animals.

On the highly complex and diversified farm of my father in Marcali, near Lake Balaton in Hungary, I learned about large animals, including horses, cows, sheep and pigs, and even about butchering pigs to feed our families. Naturally we also had small animals, including chickens, ducks and geese. In summers I was introduced to plowing the fields with a tractor, helping to maintain the grapes and harvesting apples and grapes. I learned about an important business of my father's, to manage the threshing of all grains with a threshing machine as we served the farming community of our town, Marcali. My father took his threshing machine from farmer to farmer to ease the farmer's labor to separate the grains from the straw efficiently using this huge threshing machine.

But our farming and farm machinery put my family into a category, which was called "a Kulák family" in 1949, and we were labeled as "enemies of the society" at large by Stalin's Soviet government, who occupied Hungary from 1945 onward (Fábos memoir, in Press). Our farm was confiscated, my father was jailed and

eventually we were forced to leave Marcali. My job during my father's time in jail during 1949-1951 was to downsize our remaining farm and to survive on a couple of hectares of land, which was left for us at that time. But after my father finished his two years in internment camp and jail, he was released, and made a final decision with us, to move away from Marcali to a place where people did not know us as Kuláks. So we moved to the northwest side of Lake Balaton where nobody knew us and we were able to get state jobs.

My father, who had significant mechanical skills, got a job in irrigation pumping water with a huge tractor in the large vegetable fields at a state farm in Balatonederics. I was assigned to assist an agronomist on the same state farm which was also responsible for animal husbandry. A few months later I was reassigned to Balatonakali, where the government decided to plant a vineyard of two hundred eighty hectares in size. There, I became an undercover agronomist, protected by my father's agronomist friends to oversee the planting of this huge vineyard.

At that time, in 1951, I had only three years of high school level agronomy schooling, yet I was entrusted by my father's contact with the job of an educated agronomist, hence my status described above as an undercover agronomist. I had to be a fast learner to survive in this position, where I was paid as a farm worker while I had to manage all phases of land preparation for planting a vineyard with a workforce which grew from around hundred to over two hundred at its peak.

As I am reflecting on this risky position, perhaps the management aspect of this job was the greatest learning opportunity for me during my 2 years long tenure there. I was only twenty years old at the time of the starting of the management of this work force. Within six months, we had to hire another hundred people. Together with my visiting supervisor, who came to see me from Badacsony weekly, we had to design an assembly line like system, which enabled us to plant this huge two hundred and eighty hectare land into a vineyard. The preparation of the land was the first step to do. It included plowing the land to the depth of seventy centimeters with two huge steam engines, which pulled the huge plow back and forth between the two steam engines that were around 50 meters apart. But then the compacted tracks of the engines had to be turned over by hand.

By spring of 1952, the majority of the land was turned over and we were able to stake out the parcels for planting the vineyard. This process was similar to planning of a subdivision. But instead of houses, we had parcels of around five hectares each. These large parcels were separated by wide paths, which provided the machinery and carriages an access to the parcels.

When we staked out the parcels we could start the planting starting around March. Here, we implemented our assembly like system, as follows: we selected two strong men to stretch out a thin wire cable. On the cable there were 27 marks, one and a half meters apart where 27 men made holes of sufficient size and depth. As soon as the holes were made 27 plants were dropped into the holes by young women workers. Then the planting line moved forward to make the holes for the next row. Behind them another twenty-seven men stepped forward to tie each plant in two

places, first down where the roots were and then at the top part of the plant. As soon as the men had tied the plants, a line of another group of young women stepped forward to saturate each plant with water. Then others came to cover the plant vines with little mounds, to protect them from drying out by the sun. Another hundred people continued to work on the preparation of the soil for planting the hundred hectare size almond orchard and cleaning the rocky surfaces so the machine could cultivate the soil surface.

It is easy to see from this description that the management of this huge workforce and especially that assembly line process was a significant achievement at the age of twenty. It also shows that people, when the need arises often can rise to the occasion. I felt I learned in a year what normally would take perhaps a decade to do so. But after this huge achievement, the government discovered my background as a “son of a Kulák”, and I was drafted to spend two years in a slave labor camp, followed by two years of jail, working in a coal mine. At my release, I was able to resume miraculously my former position as an agronomist, until the start of the Hungarian Revolution in October, 1956. This event forced me to escape to avoid further oppression.

I was most fortunate to end up in the United States, where I finally could attend universities, to earn a BS degree at Rutgers and a professional degree at Harvard University. Then, I was able to get a teaching job at the University of Massachusetts, in 1964. Six years later I was able to spend my seventh year to finish all course work at the University of Michigan towards my Ph.D., which I successfully completed in 1973. This new learning expanded my view of the larger landscape, and I began a major research period during the 1970's. After returning to the University of Massachusetts in 1973, I was able to organize and manage a research team under the name of METLAND. Our research was generously funded by the government during this “environmental decade” in an era during which money was easily available. I felt that I was the right person at the right time, or just lucky after several years of struggle during my earlier years.

To survive and even to excel, we published with my research team three book size research bulletins, numbers 602, 637 and 653. (See references listed with the names of the coauthors). Among the dozens of excellent assistants, the three persons who did the most substantial assistance were Chris Greene, Stephanie Caswell and Spencer Joyner. These people were truly amazing and made the 1970's a very successful and most memorable time. These three research bulletins were also the result of a highly complementary interdisciplinary team of eleven co-principal investigators including: Dr. Raymond Bradley on Climatic Research; Dr. Carl Carozzi on Ecological Research; Dr. John Conrad on Economic Reserves; Dr. Donald Doehring on Geologic Research; Dr. John Foster on Resource Economic Research; Dr. Carl Jakus on Noise Hazard Research; Professor William MacConnell on Land Use Classification; Professor Joseph Mawson on COMLUP Application; Dr. David Sears on Model Building Procedures; Dr. Paul Shuldiner on Evaluation Procedures and finally Dr. Ross Whaley on Social Suitability issues in Planning.

This was an impressive interdisciplinary team which provided our research assistants with invaluable advice and a credibility which was essential to make our publications acceptable. To achieve a greater distribution of these works, I summarized these efforts in two books, Planning the Total Landscape: A Guide to Intelligent Land Use, (Westview Press, 1979); and Land-Use Planning: From Global to Local Challenge, (Chapman and Hall, 1985). Perhaps all these efforts collectively raised the visibility of our team and our department globally during the 1970's and beyond. But it should be noted that the 1970's was the decade many referred to as an "environmental decade". It was indeed the most fortunate period to advance landscape planning in the United States. The 1970's "environmental decade", produced such giants in our field as Ian McHarg and Phil Lewis. I was fortunate to befriend these people and to hang on to their coattail as firmly as possible.

What our team did, perhaps in greater detail than others, was the writing of detailed planning methodology, in the form of "how to do" descriptions. We were also greatly helped by being at a major research university at a so called "Land-Grant University", whose tripod organization fostered a combination of research, teaching and outreach. Those 19th century leaders had an incredible foresight to create and also for funding these land grant research universities. We are indebted to them and to our administration that funded our efforts throughout my tenure at my University of Massachusetts.

In summary, we emerged as one of the three major universities in the United States who collectively advanced landscape planning as part of landscape architecture in the United States during this environmental decade. The other two universities were the University of Pennsylvania, whose landscape planning efforts were headed by Ian McHarg and the University of Wisconsin in Madison, Wisconsin, headed by Phil Lewis. But how did I learn the science and the art of Landscape Planning?

I was introduced to landscape planning by Phil Lewis, who was brought to the Harvard University's landscape architecture department by Hideo Sasaki to teach a regional planning studio during 1963. I took his stimulating studio, and embraced the idea of regional scale planning as part of landscape architecture education. At Harvard I also became the disciple of Olmsted, who is credited for planning the first greenway by linking major parks in Boston with a greenway along the Muddy River to the Charles River and to the Boston Common. Olmsted called this greenway a park system or linear parkland (Fábos, Milde and Weinmayr, 1968). But, today several landscape architects refer to Olmsted's park system as the origin of greenway planning in the United States (Fábos, 2004).

But, during the 1970's the name greenways was not yet invented. We simply had seen ourselves as landscape architects, focusing on the planning aspect of landscape architecture. Our years of research gave us credibility because it was supported by our large interdisciplinary team. We were able to distribute our publication internationally. The University of Massachusetts Experiment Station supported our research and printed thousands of copies, which we were able to mail to every major research university around the world. This distribution made us known worldwide.

Equally important was that we could apply our planning procedure to dozens of communities in Massachusetts through our studio instruction. Each application of our studios was published in the form of research bulletins or in planning reports and distributed among the town officials and key decision makers. Since these reports are not available for purchase or in libraries, they are known as unpublished reports. We, the members of the METLAND Team, strongly felt, that we made a difference for our profession here at home and abroad.

Our METLAND team was an outgrowth of my Ph.D. dissertation which I wrote at the University of Michigan. But it continued and expanded into my life long research at my University of Massachusetts. Our highly productive team published over 200 publications from books through research bulletins to planning reports. From the mid 1980's on, we joined the greenway movement.

Finally, our conference in Budapest proves that landscape and greenway planning have become international. I was extremely elated to learn that both the landscape and greenway planning are being practiced around the globe, as we received responses to our "call for papers" from five continents representing 35 countries. This broad based international interest make our conference truly a great learning opportunity. I am also indebted to the organizers of this conference, our joint forces are working together between Corvinus University of Budapest and my own institute at the University of Massachusetts in Amherst, Massachusetts.

Greenway planning in the United States has provided increasingly greater opportunities to landscape architects from the mid 1980's and on. In our case at the University of Massachusetts, we did the first greenway project in the form of a joint landscape architecture and regional planning studio on the Connecticut River in 1984. Our study focused on 19 towns along the river in Massachusetts. A few years later, Charles Little (1990) published the first seminal book on greenways, entitled Greenways for America. During the 1990's I teamed up with Jack Ahern, a colleague of mine at the University of Massachusetts, to study greenways beyond the United States. We invited all greenway planners we knew outside the United States and we were able to receive twenty five papers. Twenty two of them were received from North America and the remaining three from Europe, one from each of the United Kingdom, France and Bulgaria. These papers were published, first in the Landscape and Urban Planning Journal #33 (1995) 1-13 and then reprinted by Elsevier in the form of a book in 1996, entitled Greenways: the Beginning of an International Movement, Editors – Julius Gy. Fábos and Jack Ahern.

A decade later during 2000-2006 I worked with Robert Ryan, another colleague who was hired by my University to fill my position after my retirement in 1997. We joined to find out how the greenway movement had progressed since our first publication in 1995. Once more we invited greenway planners we knew around the world to submit papers for our review and editing. These papers were then published in two special issues in the Landscape and Urban Planning Journal. This time we found that the interest in greenways had grown significantly within a decade. These two special issues of the 24 papers or chapters took up 639 pages

(Fábos & Ryan, 2004 & 2005). While the authors of our 1995 greenway publication came primarily from North America by 2004 and 2006 we achieved a more international authorship. The majority of the 24 papers, or 14 of them, still came from North America, but the remaining ten were received from the four other continents. Four of the authors of the ten papers were from Europe, including Germany, Italy, The Netherland and Portugal. Four papers were received from Asia, including one from each of China, Japan, South Korea and Singapore. Finally one of the authors came from Egypt, an African continent and one from Brazil, representing South America. Greenway planning had, indeed spread to all major continents.

During the 2009-2010 period we once more are organizing another event to find out the status of greenway planning. This time our faculty at the University of Massachusetts has joined with key members of the Corvinus University to organize an international conference in Budapest, Hungary. We invited professionals we knew worldwide to send abstracts of relevant landscape and greenway planning topics. Please note we have expanded the focus of this conference from greenway planning to landscape and greenway planning. We also further expanded to include design topics as a means to appeal to a broader segment of European professionals.

The response to this conference have proved that the worldwide interest to our call for papers for this joint conference to be held in Budapest has grown significantly. We received one hundred and twenty one abstracts from thirty three countries. Each of the six continents is represented. The majority of abstracts were received from Europe and the United States. We received thirty three abstracts from the United States and thirty one from Hungary, the host of the conference, and another 38 abstracts were received from 18 other European countries. The rest of the continents are represented by one to five people. Since we advertised the conference with a general title, namely, landscape and greenway planning and design, the respondents were free to define the title of their presentations. As a result, we received a very rich variety of topics. I am confident that these great variety of papers will make this conference a memorable and a very rich experience for all participants.

Equally important is that the papers will be published prior to the conference. All papers and their list of references will provide the participants with a huge resource and valuable set of global contacts. We have seen during our professional lives that conferences do serve professionals with continuing educational needs, and an ability to increase their professional networking capabilities. National conferences such as the American Society of Landscape Architects even give academic credits to its members, especially those members who attend the majority of the lectures and panel sessions.

Our conference, having presenters from countries around the world, is providing a great learning opportunity. In reviewing the list of the speakers, the great majority are academics, mostly faculty members or Ph.D. students. This situation is expected to result in well written papers, published in our proceedings.

I appreciate the most valuable contributions of my co-organizers of this conference, namely, Dr. Robert Ryan and Professor Mark Lindhult at the University of Massachusetts. And on the European side I thank László Kollányi of Corvinus University. Finally, I have the greatest appreciation to Sándor Jombach, who as a Ph.D. candidate at Corvinus spent the fall semester with us in Amherst. He did the great majority of the correspondence via our computer networking. While in Amherst he was working very closely with our University of Massachusetts team, Ryan, Lindhult and myself. We are indebted for his intelligent and hard work.

I dedicate this paper to the memory of the many thousands of families, who were labeled as “KULÁKS” by the feared dictator Stalin, who was the ruler of the Soviet Union from the death of Lenin to his death in March 5 1953. He died just three days after I was drafted into Hungary’s labor camp for 2 years of hard labor.

This ordeal which led to my immigration to the United States has been the starting point of my academic journey from agronomy to landscape planning.

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