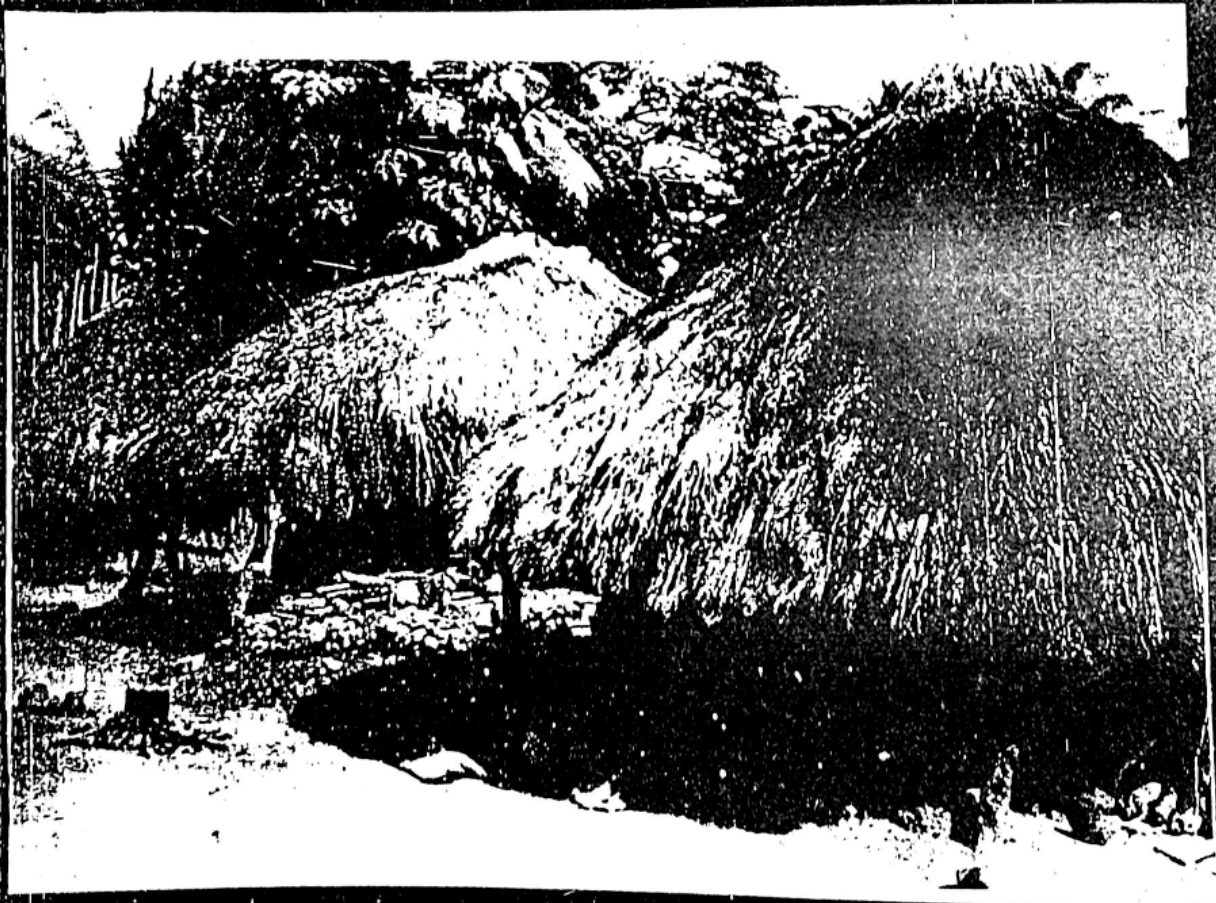


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LANDSCAPE ARCHITECTURE: Profession and Discipline for a Developing Country

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INTRODUCTION

The unplanned, chaotic urban growth, population explosion, pollution, misuse of our natural and man-made resources to date is presently (and or the near future) posing far-reaching challenges to environmental designers in a developing country such as ours. Demographic statistics of the FAO show that 90% of the increase in the world's population presently occurs in the developing countries. Aligned to this are urban drift, neglected rural areas, overcrowding and environmental degradation in the urban areas (IPLA, 1987). The search therefore for quality urban and rural environments or landscapes, balance of carrying capacity, proper use of land, productivity and biomass production are crucial developmental issues deserving maximum attention and concerted efforts of all environmental designers in the developing countries. Landscape architecture is a profession and discipline crucial to solving growth problems while improving both the quality of life and environment.

There is reason to suspect that the development of the environmental design field in this country was led by people whose background, training and professional experience omitted due recognition of or training in landscape architecture. This is because ignorance of landscape architecture both as a profession and discipline coupled with insensitivity to landscape values have pervaded both the university curricula and the practice of

environmental design in the past years.

This essay is an attempt to explain briefly what the profession and discipline entails. In explaining, reliance is made on the experience of the developed nations. However, its relevance to our developmental process is subsequently addressed briefly.

The aim of the essay is multiple. First a frightening level of misunderstanding of landscape architecture exists among many educators and practitioners of allied design professions. Allied to this is that policy makers are also shaded from the relevance of the profession to their existence and national development. Secondly and most importantly, the profession suffers a confused public image. Landscape architects are often thought of as people who plant flowers or beautify houses for the rich.

The essay is therefore to educate allied design educators and professionals alike, policy makers and students. It is geared towards lessening fears rooted in ignorance and establish that the task of building quality environments is a co-operative multi-disciplinary venture.

AS A PROFESSION

Although, the European renaissance landscape gardens, landscape art and parks predated modern landscape architecture, the formal birth of the profession in the western world is accredited to Frederick Law Olmstead, an American. It was he who in 1861 signed, for the first time, his name over the title 'Landscape Architect' on his design for the Central Park, New York (Osmundson, 1965). In addition to city parks, Olmstead planned urban open space systems, city traffic patterns, layouts, university campus, private estates and was actively involved in the conservation movement. All these he called landscape architecture.

From this suspicious beginnings, the profession had diversified in scope to match its goals with the needs and problems in societies and the global environment. For example, Hubbard and Kimball referred to it in 1917 as "primarily a fine art, whose most important function is to create and preserve beauty in the surroundings of human habitations and in the boarder natural scenery of the country; but is also concerned with promoting the comfort, convenience and health of populations, which have scanty access to rural scenery and urgently need to have their hurrying workday lives refreshed and calmed by the beautiful and reposeful sights and sounds which nature aids by landscape art, can abundantly provide" (Laurie, 1978). Similarly, Garret Eckbo in 1950 defined landscape architecture as "that portion of the landscape which is developed or shaped by man beyond buildings, roads or utilities and up to wild nature designed primarily as space for human living". Further, he said, "it is the establishment of relations between buildings, surfacing and other outdoor construction, earth, rock forms, water bodies, plants and open space, and the general form and character of the landscape; but with the primary emphasis on the human content, the relationship between people and landscape, between human beings and three-dimensional outdoor space quantitatively and qualitatively". Today, despite these definition and growth, the profession has not shifted markedly from that offered by Olmstead. To buttress this, the American Society of Landscape Architects, ASLA recently in its handbook defined the profession as a 'science and art' which "embraces those professional activities relating to systematic planning of land areas, the design of outdoor places and spaces of utility and beauty; the conservation of our natural resources and the

creation of a more useful, safe and pleasant living environment, based on the operative physical characteristics, social, philosophic and economic values and man as part of nature not superior". (ASLA 1977). Other professions such as Architecture, Engineering and City planning, ASLA noted, equally deal with man-made relationships to the environment. However, Landscape architecture is the only design profession which concerns itself with understanding, the environment and with the physical problems of designing the outdoors and spaces between buildings to optimize functional and aesthetic effectiveness along with protecting the environment. The fundamental difference with say, Architecture is that the medium of landscape architecture, the landscape, is dynamic. It is capable of growth and change.

Professional Activities and Scope

The profession had since 1968 being recognised as an independent one by the International Labor Office (ILO) in Geneva.

In spite of the diversification on the profession over the years in the developed countries, three categories of professional activities are clearly discernible. These include landscape planning and assessment, site planning, and detailed landscape design (Laurie, 1978).

Landscape assessment involves as the systematic evaluation of large land areas in terms of suitability or capability for likely future use or uses. The land area may coincide with an administrative future use or uses. The land area may coincide with an administrative unit such as local government or state. Usually however, it involves a physiographic/ecological region such as the basin or watershed of a major river or major forest zone such as the rain forest. Sometimes, assessment focusses

instead on the impact of major development proposals (e.g. Mainland Bridge, Steel Complex on the environment, or it may involve the selection of land suitable for a specific use.

Site planning is a process in which the analysis of the site and programme requirements are synthesized with imagination and creativity into a proposal for site development, usually called site plan. In this, programme elements or facilities are located diagrammatically and connected with each other and to the surrounding areas in a manner responsive to the intended aesthetics, opportunities and constraints of the site and its context. One of the primary aims in so doing is the establishment of spatial connections between buildings and the outdoor spaces, between various use areas; the arrangement of elements and allocation of areas to various functions and space needs within the limits of the site. Coupled with this is the resolution of conflicts of functions such as circulation, needs uses or site systems.

Detailed landscape design which is an extension of site planning is a process through which a specific forms and quality are given to the diagrammatic spaces and areas of the site plan (Laurie 1975). It is the selection of forms, components, materials and plants and their combination as concrete solutions to specific problems within the site plan. Specifically, it deals with surfaces, edges, visual relationship technology and indeed, all decisions and details which are necessary for site plan actualization.

It is pertinent to add that an interrelationship exists between these three areas of professional activity. The regional landscape is the context for the site, while the site is the frame work of the detailed design. On the other hand, certain large landscape planning decisions will draw on the

understanding of detailed design and technology for planning. Practitioners therefore need to understand these scales in order to perform any of them with due sensitivity and responsibility.

Emergent areas of activity in the profession within the past two decades include environmental conservation, historic preservation, urban renewal, remote sensing application and computer aided design. In these areas, landscape architects either co-operate with other professionals and experts or work in a multi-disciplinary team.

The Professional Landscape Architect

A landscape architect is not a person who plants flowers. He is a landscape professional.

The role of the professional landscape architect is aptly summed up by Garrett Eckbo when he said that "A landscape architect is a designer, and a supervisor of outdoor development and a consultant on such problems. In common practice, he fills in the gap between the work of the architect, the engineer and nature. He creates outdoor spaces, sequences and continuities of experience and in the process ties up all loose ends and makes all necessary connections. He improves relations between people and environment and is the physical liaison between man and nature" (Eckbo, 1965).

In his professional practice, the landscape architect tries to fit his designs into the context of a given environment, giving due cognizance to the physical problems of adjusting all areas of the environment to obtain a maximum functional and aesthetic effectiveness, while preserving and enhancing the essence of the natural environment. To do this, he possess (or is expected to possess) certain qualities. First, he has or ought to have a sensitive ability to observe and comprehend

the character, potential, constraints and operative environmental processes of any site. Tied to this is his understanding of the needs, desires and responses of people who might use his completed design. A second and very important quality is his capability to communicate graphically and otherwise, his observations, concepts and proposals to others who are unaware.

Landscape architects are basically employed either in private practice or government service. In private practice, he may be a principal or an associate in an inter-disciplinary firm of professionals. Or he may be an employee in a landscape architectural firm, architectural, engineering or development firm.

In this country, while a few indigenous landscape architects are in private practice, a handful more are in government service. Involved in private practice are such professionals as O.I. Fasusi, E. N. Akah and B.C. Uwasomba. The state and Federal government agencies which currently employ at least one qualified landscape architect include NIPOST, FCDA, Benue State Housing Agency, Imo State Open Space Development Commission and Planning Unit, Ogun State University.

Another area of professional practice is in education. Here, the landscape architect performs the role of a teacher, design critic and consultant. He talks and writes about landscape design with occasional demonstration or researches.

As no degree programme in landscape architecture currently exists in any Nigerian University, the very few LA's in academics teach either in the departments of urban planning or architecture. These include J.B. Falade of the Department of Urban and Regional Planning, OAU, Ile-Ife, U.A. Awuzie of Department of Architecture, Imo State University

and the author of the Department of Architecture, University of Lagos.

Range of Professional Services

The range of services which the landscape architect may provide a client includes any or all of the following: consulting, feasibility studies, regional studies, project planning, master planning, site planning, urban design, detailed design and construction supervision.

The process which he employs in working with the client is generally as follows:

- a. Brief, preliminary visit to client and/or site.
- b. Preliminary drawings and estimates.
- c. Master/site plan.
- d. Working drawings, specifications, bids and contracts documents (working drawings will include, grading/drainage plan, layout plan, planting plan, construction details of roads walks, steps benches, drains etc.)
- e. Construction supervision.

Projects in which the landscape architect is involved vary in size and scope. On a smallest scale, he designs pocket parks, residential/office grounds and gardens to obtain desirable unity between indoor and outdoor living/working spaces. On a large scale, he plans recreational area at municipal, state and national levels. He collaborates in the design and development of neighborhoods and residential layouts, towns, housing projects, shopping centers, schools, hospitals, highways and parkways, resorts, sports centers, airports, civic and community centres, industrial establishments and industrial parks, beach-front recreation, botanical gardens, historic sites and monuments. Mineland reclamation, reclamation of erosional sites, environmental conservation, urban

renewal/historic preservation, visual resource analysis and management and environmental impact statements are some of the emergent areas of professional services in the past two decades in the developed countries.

The extent to which landscape architects both foreign and indigenous have in the past performed these professional roles in this country is rather limited. As observed by Falade, trained landscape designers are too few and too recent to have made significant impact on landscape design in Nigeria. Instead, their contributions have been in recent large scale developments such as University campuses, housing estates, contemporary urban parks, and estates for private individuals and government agencies. Notable among these was the work of M. Lancaster between 1958 and 1961 in the development of the former college of Arts and Science and University - College Hospital, Ibadan. Lancaster, who was said to have pioneered the modern landscape design in Nigeria was a landscape consultant to Maxwell Fry, Drew, Drake and Ladsun, the consultant architects for University campus (Falade, 1988).⁴ Another major work is to be found in the Obafemi Awolowo University, Ile-Ife whose comprehensive master plan and landscape development plan were prepared in 1969 by the Department of Landscape Architecture, ~~University of~~ Landscape Architecture, University of Wisconsin, Madison, USA. The successful implementation of this plan has earned the campus the accolade of one of the most beautiful campus in Africa.

Perhaps, the most recent outstanding, but hardly known contribution is in the planning of Abuja, the new Federal capital territory. Part of the consultants IPA, which planned the territory, was the firm of Wallace, Moharg, Roberts and Todd, Inc. a firm of

landscape architects, architects and planners. One of their directors, T.A. Todd, was in charge of site evaluation and city site selection, concept planning, urban design, master planning and community services planning. Faithful implementation of the plan will eventually expose the commanding landscape input. Lamentably, all these projects were performed by foreign landscape architects.

There are no doubt scattered and less-well known works of landscape architects like the early parks of Enugu designed by B.C. Uwasomba and Owerri Beautification projects by F. Okite of Open Spaces Commission. But for the most part, indigenous LA's are grossly under-utilized and are hardly given opportunity to make meaningful impact on the urban, regional and national landscape. Their practice of the profession is largely haunted by:

- limited awareness on the part of decision-makers and the public on the role of landscape architecture in urban and material development.
- the edipsing dominance of environmental design endeavour by architects and engineers.

AS A DISCIPLINE

What prepares the potential landscape architect for these professional roles discussed? Education of course. Undergraduate first professional degree programmes prepare graduate to apply the appreciation, knowledge of interrelationships between land water, plants and humans to the skillful development of land for efficient use and pleasant spaces.

In the United States and Canada for example, specialized programmes operate both at the

bachelor's and master's level. The bachelor's level, options exist for either a Bachelor of Science (BSLA), usually earned after 4 years of a study, or a Bachelor of Landscape Architecture, earned usually after 5 years of study. At the post-graduate level, Master of Landscape Architecture (MLA) may be earned. The duration however varies from two, three or more years. This is dependent on whether the candidate had a requisite background such as BSLA, BLS or B.Arch. or must develop basic competence equivalent to these before undertaking study at the higher level.

In these circumstances, programmes may vary because of interest, specialties of the faculty coupled with the resources of the school. In spite of the variations, these programmes include as their core components which develop competence and expertise in design communication, construction, plant materials, ecological principles and horticulture. In addition, they emphasize the influence of physical, social and behavioural sciences.

Generally accepted elements of these first professional degrees programmes cater for these areas, namely (ASLA, 1975):

- a. History of landscape architecture
- b. Theory and philosophy of landscape architecture]
- c. Basic design
- d. Delineation or Rendering
- e. Surveying and/or civil engineering
- f. Landscape architectural design
- g. Professional practice
- h. Landscape architectural construction
- i. Plant materials and/or Ecology
- j. Planting design
- k. Regional analysis and design

l. Comprehensive landscape architectural exercises.

m. Remote sensing/aerial photo interpretation and computer applications.

Components of the MLA programme elaborate on these areas at higher levels of inquiry. However, some postgraduate programmes offer studies leading to specialization in site design, landscape planning and conservation, research aspects of landscape architecture, historic preservation and computer applications. This specialization culminates into a design thesis.

The International Federation of Landscape Architects (IFLA) in its policy on education set the following educational criteria (IFLA 1987):

- a. For entry to undergraduate professional education, the candidate should have attained educational standard necessary for entry to a university.
- b. For Postgraduate education, the student should have a recognized first degree or diploma from a University (or equivalent Institution) or have met the final qualifying examination of a national association of landscape architects.
- c. Undergraduate professional education should be the equivalent of at least four years of full time study.
- d. Postgraduate education should be two years full time study after receipt of baccalaureate, or first university degree.
- e. Required courses should be offered in

- Landscape Analysis/Planning/Design;
- Design Implementation, professional practice and History/Theory.

f. Elective courses should be offered in Social and Economic Studies, Biological Sciences, Horticulture, Geology and Agronomy.

g. Optimal courses should address such subjects as landscape management, urban administration or recreation planning.

h. Period of practical experience should complement academic studies.

i. Academic programmes must include courses offered by faculty with landscape architectural practice experience, and in appropriate cases, these individuals be encouraged to continue practice while teaching (1).

j. The graduate should spend at least two years under supervision while gaining varied professional experience, before being eligible for election as a professional.

LICENSURE OR PROFESSIONAL REGISTRATION

Education alone does not confer a professional status to the graduate landscape architect. Licensure or registration along with requisite education confers the graduate the statutory recognition to practice as a professional.

All professionals operate under a code of ethics. These ethics seek to safeguard and protect the public health, safety and welfare in accordance with the national laws guiding professional conduct and practice. It is these laws that dictate that those occupations which affect public health, safety and welfare be licensed. Moreover, licensure all over the world has become a yardstick for competence in the design profession in particular. Landscape architecture as a design profession therefore falls within the ambit of registration for professional practice.

Criteria for registration differ slightly in various countries. The IFLA policy mentioned above stipulate two years of pupillage after four years of first professional degree before eligibility for registration. In Britain, recognized education, pupillage and experience from the requirements. In the US, though slight variations occur between states, recognised education, experience and a professional qualifying examination (UNE) are required. While most states require 2 years, a few require up to 4 years of experience after a recognized four-year degree to qualify for the examination. Considerable number of states require only one year experience for 5-years programme or for a master's degree (MLA) for qualification for the examination. The examination itself covers history, professional practice, design (theory and performance), design implementation, plant materials and planting design. (AFLA 1975).⁶

A PROFESSION AND DISCIPLINE RELEVANT TO NIGERIA

Is landscape architecture a profession and discipline relevant to the needs of a developing nation such as Nigeria? Certainly. Literature, activities of IFLA and a few examples of specific development notes will underscore this.

In explaining the interest of landscape architects in developing countries, Struckmeyer, the supervising Landscape Architect for the OAU, Master Plan said, "these countries are engaging in massive construction of innumerable educational institutions, industrial projects, expansion of urban areas and development of new agricultural programmes. In most cases, development will be accomplished without regard to the critical existing natural and cultural resource systems which will be essential for future human

existence" (Struckmeyer 1971). It was this same concern that prompted IFLA to set up a task force on 'Landscape Architecture and the Developing countries in 1985. The same year, its president undertook a UNESCO sponsored trip to Lagos and Abuja, and then to Malawi, to seek ways of establishing Landscape architecture. This was widely reported on television and the daily newspapers (Vanguard, Tues, Feb. 26, 1985).

Landscape architecture is relevant to Nigeria in all areas of professional activities discussed earlier. However, few specific examples of pressing areas of importance include landscape planning and assessment, site planning and detailed design, urban design and environmental conservation.

Landscape Planning and Assessment: Nation-wide, there is not really a shortage of land and its resources. Instead, growth pressures have created scarcity of land and sprawl in specific areas. Rather than creating buildable land by filling the wetlands or leveling the hills, we should locate growth in areas where resource can match it.

Analysis and assessment of urban landscape, potential urban and rural as well regional landscape, will enable us identify land capabilities and constraints. Consequently, these will provide a guide to areas of urban growth. Conversely, these will lend to the preservation of those critical resources of our natural environment (e.g. wetlands, aquifers, urban greenbelt, agricultural and forest lands) which are critical to our continued survival. The net effect of landscape planning for our cities would be development of standards and policies that promote improved quality of environment desirable in those cities.

Site Planning and Detailed Design: With the crowded conditions, expanding urban concrete jungles with their heat, limited open space for recreation, socialization and community identity, the greening of the urban centers, the provision of public parks and recreation areas are of urgent necessity. Landscape architects can be made use of in planning and design of appropriate parks, open spaces and recreational areas for recreation and ventilation. Similarly, they could collaborate in the design of shopping centers, residential layouts, medical centres, neighbourhood centers etc. to create spatially more functional and pleasing environments.

Urban Design/Renewal: The visual quality and physical hazards attendant to our city streets are symptomatic of our uncontrolled urban development. Through strict application and adherence to urban design practices, urban streets are meant to offer dually pleasing but safe environments to their users. Landscape architects can collaborate in designing parkways, pedestrian zones, restructuring and creating attractive landscapes on suitable city streets.

Environmental Conservation: Desert encroachment, gully erosion and loss of top soil are issues which have consumed considerable attention and money in the last few years. Largely, they are issues requiring multi-disciplinary solutions. Landscape architecture is relevant to those solutions not just in terms of physical conservation measures, but in identifying these landuse and development practices which engender these catastrophes with increasing surface mining activities, mine land reclamation will be of grave concern in the coming years. Landscape design practices are crucial to this concern, especially in terms of adaptive re-use of mine sites.

The recent promulgation of environmental protection decree and the setting up of an Environmental Protection Agency may signify the dawn of environmental conservation in this country. Landscape architects with other professionals and experts are relevant in drawing up relevant conservation guidelines. More importantly, they will become increasingly involved through the agency in impact assessment on natural/man-made landscapes as well as on critical environmental resources.

Education: As reported both by IFLA news and Vanguard Feb 26, 1985, the sole aim of IFLA presidents visit in 1985 was to seek avenues for the establishment of a degree programme in a Nigerian university. Sadly, four years after Lagos State University, Obafemi Awolowo University confirmed their intention and University of Lagos expressed its strong intention, not a single programme has been established.

If our environmental design schools share the view that in today's complex environment, the training of environmental designers should be geared towards the design of a total environment, then, this training should of necessity include the development of professionals versed in a wide range of disciplines which culminate in the built environment. Landscape architecture is one of such discipline. A programme of study in at least one Nigerian University should form part of that total training. Such a programme is of urgent necessity.

Apart from propagating understanding of theory, practice and role of landscape architecture in our national development, the programme will save the need for potential students to seek training overseas, especially for the first professional degree. With dwindling funding, it is doubtful if

existing plans in that respect by any university such as University of Lagos will materialize soon. It is hoped however, that well placed and sympathetic individuals or organizations may initiate the move through endowment.

As educators, our small contribution will be to strive for the inclusion of landscape architectural courses where they are lacking in existing environmental design programmes.

CONCLUSION

Man depends on the land and on the balance of nature for his survival and enrichment. He is dependent on land resources for food, oxygen, water, even for shade and screen. The proper use of land resources to house, feed and support our teeming population is a onerous task hardly acclaimed but confronting this country for now and in the coming decades. Haphazard urban development, piecemeal and uncharted rural development will only compound the task.

Landscape architecture as a profession and discipline whose theory and practice are rooted in man's interdependence with nature, in crucial towards our reshaping positively our living environments and landscape for today and the future. The necessary first step is the establishment of a professional degree programme in a Nigerian University. This will be coupled with the teaching of basic courses in Landscape architecture in all environmental design and planning curricula in higher institutions.

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Landscape Architecture: A Profession and Discipline for a Developing Country

By Jerry N. Obietuna
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(Manuscript), 1995

Introduction

The unplanned, chaotic urban growth, population explosion, pollution, misuse of our natural and man made resources are presently (and for the near future) posing far reaching challenges to environmental designers in a developing country such as ours. Demographic statistics of the FAO show that 90% of the increase in world's population presently occurs in developing countries. Allied to this are urban drift, neglected rural areas, overcrowding and environmental degradation in the urban areas (IFA, 1987). The search therefore for quality urban and rural environments or landscapes, balance of carrying capacity, proper use of land, productivity and biomass production are crucial development issues deserving maximum attention and concerted efforts of all environmental designers in developing countries. Landscape architecture is a profession and discipline crucial to solving such growth problems while improving the quality of life and environment.

There is reason to suspect that the development of the environmental design field in this country was led by people whose background, training and professional experience omitted due recognition of or training in landscape architecture. This is because ignorance of landscape architecture both as a profession and discipline coupled with insensitivity to landscape values have pervaded both the university curricula and the practice of environmental design in the past years. This essay is an attempt to explain briefly what the profession and the discipline entail. In explaining, reliance is made on the experience of developed nations. However, its relevance to our developmental process is subsequently addressed briefly. The aim of the essay is multiple. First, a frightening level of misunderstanding of landscape architecture exists among many educators and practitioners of allied design professions. Allied to this is that policy makers are also shaded from the relevance of the profession to their existence and national development. Secondly and most importantly, the profession suffers a confused public image. Landscape architects are often thought of as people who 'plant flowers' in houses for the rich. The essay is therefore to educate allied design professionals alike, policy makers and students. It is geared towards lessening fears rooted in ignorance and establish that the task of building quality environments is a cooperative, multi-disciplinary venture.

As a Profession

Although the European renaissance gardens, landscape art and public parks predated modern landscape architecture, the formal birth of the profession in the western world is credited to Frederick Law Olmsted, an American. It was he who in 1861 signed, for the first time, his name over the title 'Landscape Architect' on his design for the Central Park, New York (Osmundson, 1965). In addition to city parks, Olmsted planned urban open space systems, city traffic patterns, layouts, university campus, and private estates while he was actively involved in the conservation movement. All these he called landscape architecture.

From this auspicious beginning, the profession had diversified in scope to match its goals with the needs and problems in societies and the global environment. For example, Hubbard and Kimball referred to it in 1917 as "primarily a fine art, whose most important function is to create and preserve beauty in the surroundings of human habitations and in the broader natural scenery of the country; but it is also concerned with promoting the comfort, convenience and health of populations, which have scanty access to rural scenery and urgently need to have their hurrying workday lives refreshed and calmed by the beautiful and reposeful sights and sounds which nature aided by landscape art can abundantly provide" (Laurie, 1978). Similarly, Garrett Eckbo in 1960 defined landscape architecture as "that portion of the landscape which is developed or shaped by man, beyond buildings, roads or utilities and up to wild nature, designed primarily as space for human living". Further, he said "it is the establishment of relations between buildings, surfacing and other outdoor construction, earth, rock forms, water bodies, plants and open space including the general form and character of the landscape but with the primary emphasis on the human content, the relationship between people and landscape, between human beings and the three dimensional outdoor space quantitatively and qualitatively" (Laurie, 1978 p. 9).

Today, despite these definitions and growth, the profession has not shifted markedly from that offered by Olmsted. To buttress this, the American Society of Landscape Architects, ASLA recently in its handbook defined the profession as a 'science and art' which 'embraces those professional activities relating to the systematic planning of land areas, the design of outdoor places and spaces of utility and beauty, the conservation of our natural resources and the creation of a more useful, safe and pleasant living environment, based on the operative physical characteristics, social, philosophic and economic values and man as part of nature not superior' (ASLA, 1977). Other professions such as Architecture, Engineering and city planning ASLA noted, equally deal with man-made relationships to the environment. However, landscape architecture is the only design profession which concerns itself with understanding the environment and with the physical problems of designing the outdoors and spaces between buildings to optimize functional and aesthetic effectiveness along with protecting the environment. The fundamental difference with say, Architecture is that the medium of landscape architecture, the landscape is dynamic. It is capable of growth and change.

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The profession had since 1968 being recognized as an independent one by the International Labour Office (ILO) in Geneva. In spite of the diversification of the profession over the years in the developed countries, three categories of professional activities are clearly discernible. These include landscape planning and assessment, site planning and detailed landscape design (Laurie, 1978).

Landscape assessment involves the systematic evaluation of large land areas in terms of suitability or capability for likely future use or uses. The land area may coincide with an administrative unit such as local government or state. Usually however, it involves a physiographic/ecological region such as the basin or watershed of a major river or a major forest zone such as the rain forest. Sometimes, assessment focuses instead on the impact of major development proposals (such as 3rd Mainland Bridge, Steel Complex) on the environment. Or it may involve the selection of land suitable for a specific use such as regional shopping center, conference center or recreation areas.

Site planning is a process in which the analyses of the site and programme requirement are synthesized with imagination and creativity into a proposal for site development called site plan. In this, the programme elements or facilities are located diagrammatically and connected with each other and to the surrounding areas in a manner responsive to the intended aesthetics, opportunities and constraints of the site and its context. One of the primary aims in so doing is the establishment of spatial connections between buildings and the outdoor, between various use areas; the arrangement of elements and allocation of areas to various functions and spaces needs within the limits of the site. Coupled with this is the resolution of conflicts of functions such as circulation with needs and site systems.

Detailed landscape design which is an extension of site planning is a process through which specific forms and quality are given to the diagrammatic spaces and areas of the site plan. Specifically, it deals with surfaces, edges, visual relationships, technology and indeed, all decisions and details which are necessary for site plan actualization.

It is pertinent to add that an interrelationship exists between these three areas of professional activity. The regional landscape is the context for the site, while the site is the framework for detailed design. On the other hand, certain large landscape planning decision will draw on the understanding of detailed design and technology for siting facilities. Practitioners therefore need to understand these scales in order to perform any of them with due sensitivity and responsibility. Emergent areas of activity in the profession within the past two decades include environmental conservation, historic preservation, urban renewal, remote sensing application and computer aided design. In these areas, landscape architects either cooperate with other professional and experts or work in a multi-disciplinary team.

The Professional Landscape Architect

A landscape architect is not a person who plants flowers. He is a landscape professional. The role of the professional landscape architect is aptly summed up by Garrett Eckbo when he said that 'A landscape architect is a designer and supervisor of outdoor development and a consultant on such problems. In common practice, he fills the gap between the work of the architect, the engineer and nature. He creates outdoor spaces, sequences and continuities of experience and in the process ties up all the loose ends and make all necessary connections. He improves relations between people and environment and is the physical liaison between man and nature' (Eckbo, 1965).

In his professional practice, the landscape architect tries to fit his designs into the context of a given environment giving due cognizance to the physical problems of adjusting all areas of the environment to obtain maximum functional and aesthetic effectiveness, while preserving and enhancing the essence of the natural environment. To do this, he possess (or is expected to possess) certain qualities. First, he has or ought to have a sensitive ability to observe and comprehend the character, potential, constraints and operative environmental processes of any site. Tied to this is his understanding of the needs, desires and responses of the people who might use his completed design. A second and very important quality is his capability to communicate graphically and otherwise, his observations, concepts and proposal to others who are unaware. Landscape architects are basically employed either in private or government service. In private practice, he may be a principal or an associate in an inter-disciplinary firm of professionals. Or he may be an employee in a landscape architectural firm, architectural, engineering or development firm.

In this country, while a few indigenous landscape architects are in private practice, a handful more is in government service. Involved in private practice are such professionals as O.I. Fasusi, E.N. Akah and B.C. Uwasomba. The state and Federal Government agencies which currently employ at least one qualified landscape architect include NIPOST, FCDA, Benue State Housing Agency, Imo State Open space Development Commission and planning unit, Ogun State University. Another area of professional practice is in education. Here, the landscape architect performs the role of a teacher, designer with occasional demonstration or researches. As no degree programme in landscape architecture currently exists in any Nigerian University, the very few LAs in academics teach either in the departments of the urban planning or architecture. These include J. B. Falade of the Department of Urban Regional planning, OAU, Ile-Ife, W.A. Awuzie of the Department of Architecture, Imo State University and the author of the Department of architecture, University of Lagos.

Range of Professional Services

The range of services which the landscape architect may provide a client includes any or all of the following: consulting, feasibility studies, regional studies, project planning, master planning, site planning, urban design, detailed design and construction supervision. The process which he employs in working with the client is generally as follows:

- a. Brief, preliminary visit to client and/a site
- b. Preliminary sketches and estimates
- c. Master/site plan and sketches
- d. Working drawings, specification, bids and contract documents (working drawings will include, grading/drainage plan, layout or staking plan, planting plan, construction details of roads, walks, steps, benches, drains, mounds, picnic huts, fountains, etc.
- e. Construction supervision

Projects in which the landscape architect is involved vary in size and scope. On a smallest scale, he designs pocket parks, residential/office grounds and gardens to obtain desirable unity between indoor and outdoor living/working spaces. On a large scale, he plans recreational areas at municipal, state and national levels. He collaborates in the design and development of neighborhoods and residential layouts, towns, housing projects, shopping centers, schools, hospitals, highways and parkways, resorts, sports centers, airports, civic and community centers, industrial establishments and industrial parks, beach-front recreation, botanical gardens, historic sites and monuments. Mine land reclamation, reclamation of erosional sites, environmental conservation, urban renewal/histories preservation, visual resources analysis and management and environmental impact assessments are some of the emergent areas of professional services in the past two decades in the developed countries.

The extent to which landscape architects both foreign and indigenous have in the past performed these professional roles in this country is rather limited. As observed by Falade, trained landscape designers are too few and too recent to have made significant impact on landscape design in Nigeria. Instead, their contributions have been in recent large scale developments such as university campuses, housing estates, contemporary urban parks and estates for private individuals and government agencies. Notable among these was the work of M. Lancaster between 1958 and 1961 in the development of the former College of Arts and Science and University-College Hospital, Ibadan. Lancaster, who was said to have pioneered the modern

landscape design in Nigeria, was a landscape consultant to Maxwell Fry, Drew Drake and Ladsun, the consultant architects for Ibadan University campus (Falade, 1988). Another major work is to be found in the Obafemi Awolowo University, Ile-Ife whose comprehensive master plan and landscape development plan were prepared in 1969 by the Department of Landscape Architecture, University of Wisconsin, Madison, USA. The successful implementation of this plan has earned the campus the accolade of one of the most beautiful campus in Africa. Perhaps, the most recent outstanding, but hardly known contribution is the planning of Abuja, the new Federal Capital territory. Part of the consultants IPA, which planned the territory, was the firm of Wallace, McHarg, Roberts and Todd, Inc. a firm of landscape architects, architects and planners. One of their directors, T.A Todd, was in charge of site evaluation and city site selection, concept planning, urban design, master planning and community services planning. Faithful implementation of the plan will eventually expose the commanding landscape input. Unfortunately in implementation, the faith which befell the open spaces in Festac Town, Lagos is set to be repeated on a grander scale in Abuja. Lamentably, all these projects were performed by foreign landscape architects.

There are no doubt scattered and less-well known works of landscape architects like the early parks of Enugu designed by B. C. Uwasomba and Owerri beautification projects by F. Okite of the Open Spaces Commission. But for the most part, indigenous LAs' are grossly under-utilized and are hardly given opportunity to make meaningful impact on the urban, regional and national landscape. Their practice of the profession is largely haunted by:

- Limited awareness on the part of decision-makers and the public on the role of landscape architecture in urban and material development.
- The eclipsing dominance of environmental design endeavor by architects and engineers.

As a Discipline

What prepares the potential landscape architect for these professional roles discussed is education, of course. Undergraduate first professional degree programmes prepare graduates to apply the appreciation, knowledge of interrelationships between land, water, plant and humans to the skilled development of land for efficient use and pleasant spaces. In the United States and Canada for example, specialized programmes operate both at the bachelor's and master's level. At the bachelor's level, options exist for either a Bachelor of Science (BSLA), usually after 4 years of study, or a Bachelor of Landscape Architecture (BLA), earned usually after 5 years of study. At the post-graduate level, Master of landscape Architecture (MLA) may be earned. The duration however varies from two, three or more years. This is dependent on whether the candidates had a requisite background such as BSLA, BLA or B. Arch. or must develop basic competence equivalent to these before undertaking study at the higher level.

In these circumstances, the programme may vary because of interests, specialties of the faculty coupled with the resources of the school. In spite of the variation, these programmes include as their core, components which develop competence and expertise in design communication, construction, plant materials, ecological principles and horticulture. In addition, they emphasize the influence of physical, social and behavioral sciences.

Generally accepted elements of these first professional degree programmes cater for these area, namely (ASLA, 1975);

- a. History of landscape architecture
- b. Theory and philosophy of landscape architecture

- c. Basic design
- d. Delineation or rendering
- e. Survey and/or civil engineering
- f. Landscape architectural design
- g. Professional practice
- h. Landscape architectural construction
- i. Plant material and/or Ecology
- j. Planting design
- k. Regional analysis and design
- l. Comprehensive landscape architectural exercises
- m. Remote sensing/aerial photo interpretation and computer applications.

Components of the MLA programme elaborate on these areas at higher levels of inquiry. However, some postgraduate programmes offer studies leading to specialization in site design, landscape planning and conservation aspects of landscape architecture, historic preservation and computer application. This specialization culminates into a design thesis. The International Federal of Landscape Architect (IFLA) in its policy on education set the following educational criteria (IFLA, 1987):

- a. For entry into undergraduate professional education, the candidate should have attained educational standard necessary for entry into a university.
- b. For postgraduate education, the student should have a recognized first degree or diploma from a university (or equivalent institution) or have met the final qualifying examination of a national association of landscape architects.
- c. Undergraduate professional education should be the equivalent of at least four years full time study.
- d. Postgraduate education should be two years full time study after receipt of baccalaureate or first university degree.
- e. Required courses should be offered in: Landscape analysis/Planning/Design; Design implementation, professional practice and History/Theory.
- f. Elective courses should be offered in social and economic studies, biological sciences, horticulture, geology and agronomy.
- g. Optional courses should address such subjects as landscape management, urban administration or recreation planning.
- h. Period of practical experience should complement academic studies.
- i. Academic programmes must include courses offered by faculty with landscape architectural practice experience, and in appropriate cases, these individuals be encouraged to continue practice while teaching.
- j. The graduate should spend at least two years under supervision while gaining varied professional experience, before being eligible for election as a professional.

Licensure or Professional Registration

Education alone does not confer a professional status to the graduate landscape architect. Licensure or registration along with requisite education confers the graduate the statutory recognition to practice as a professional. All professional operate under a code of ethics. These ethics seek to safeguard and protect the public health, safety and welfare in accordance with the national laws guiding professional conduct and practice. It is these laws that dictate that those occupations which affect public health, safety and welfare be licensed. Moreover, licensure all

over the world has become a yardstick for competence in the design profession in particular. Landscape architecture as a design profession therefore falls within the ambit of registration for professional practice.

Criteria for registration differ slightly in various countries. The IFLA policy mentioned above stipulates two years of pupillage after four years of first professional degree before eligibility for registration. In Britain, recognized education, pupillage and experience form the requirements. In the US, though slight variations occur between states, recognized education, experience and a professional qualifying examination (UNL) are required. While most states require 2 years, a few require up to 4 years of experience after a recognized degree to qualify for the examination. Considerable number of states requires only one year experience for a 5-year programme or for a master's degree (MLA) for qualification for the examination. The examination itself covers history, professional practice, design (theory and performance), design implementation, plant materials and planting design (ASLA, 1975).

A Profession and Discipline Relevant to Nigeria

Is landscape architecture a profession and discipline relevant to the needs of a developing nation such as Nigeria? Certainly! Literature, activities of IFLA and a few examples of specific developmental issues will underscore this.

In explaining the interest of interest of landscape architects in developing countries, Struckmeyer, the supervision Landscape Architect for the OAU He-He Master Plan said, 'these countries are engaging in massive...construction of innumerable educational institutions, industrial projects, expansion of urban areas and development will be accomplished without regard to the critical existing natural and cultural resource systems which will be essential for future human existence' (Struckmeyer, 1971). It was this same concern that prompted IFLA to set up a task force on 'Landscape Architecture and the Developing Countries' in 1985. The same year, its president undertook a UNESCO sponsored trip to Lagos and Abuja, and then to Malawi, to seek ways of establishing Landscape architecture. This was widely reported on television and the daily newspapers (Vanguard, Tues, Feb. 26, 1985).

Landscape architecture is relevant to Nigeria in all areas of professional activities discussed earlier. However, few specific examples of pressing areas of importance include landscape planning and assessment, site planning and detailed design, urban design and environmental conservation.

a. Landscape Planning and Assessment: Nation-wide there is not really a shortage of land and its resources. Instead, growth pressures have created scarcity of land and sprawl in specific areas. Rather than creating buildable land by filling the wetlands or leveling the hills, we should locate growth in areas where resources can match it. Analysis and assessment of urban landscape, potential urban and rural as well regional landscapes, will enable us identify land capabilities and constraints which will provide a guide to area of urban growth. Conversely, these will lend to the preservation of those critical resources or our natural environment (e.g wetland, aquifers, urban greenbelts, agricultural and forest lands) which are critical to our continued survival. The net effect of landscape planning for our cities would be development of standards and policies that promote improved quality of environment desirable in those cities.

b. Site Planning and Detailed Design: With the crowded conditions, expanding urban concrete jungles with their heat, limited open space for recreation, socialization and community identity, the greening of the urban centers, the provision of public parks and recreation areas are of urgent

necessity. Landscape architects can be made use of in planning and design of appropriate parks, open spaces and recreational areas for recreation and ventilation. Similarly, they could collaborate in the design of shopping centers, residential layouts, medical centers, neighborhood centers among others to create spatially more functional and pleasing environments.

c. Urban Design/Renewal: The visual quality and physical hazards attendant to our city streets are symptomatic of our uncontrolled urban development. Through strict application and adherence to urban design practices, urban streets are meant to offer dually pleasing but safe environments to their users. Landscape architects can collaborate in designing parkways, pedestrian zones, restructuring and creating attractive landscapes on suitable city streets.

d. Environmental Conservation: Desert encroachment, gully erosion and loss of top soil are issues which have consumed considerable attention and money in the last few years. Largely, they are issues requiring multi-disciplinary solutions. Landscape architecture is relevant to those solutions not just in terms of physical conservation measures, but in identifying those land use and development practices which engender these catastrophes. With increasing surface mining activities, mine land reclamation will be grave concern, especially in terms of adaptive re-use of mine sites. The recent promulgation of environmental protection decree and the setting up of an environmental protection agency may signify the dawn of environmental conservation in this country. Landscape architects with other professionals and experts are relevant in drawing up relevant conservation guidelines. More importantly, they will become increasingly involved through the agency in impact assessment on natural/man-made landscapes as well as on critical environmental resources.

e. Education: As reported both by IFLA news and Vanguard, Feb 26, 1985, the sole aim of IFLA president's visit in 1985 was to seek avenue for the establishment of a degree programme in a Nigerian university. Sadly, four years after Lagos State University, Obafemi Awolowo University confirmed their intention and University of Lagos expressed its strong intention, not a single programme has been established. If our environmental design schools share the view that in today's complex environment, the training of environmental designers should be geared towards design of a total environment, then their training should of necessity include the development of professionals versed in a wide range of disciplines, which culminate in the built environment. Landscape architecture is one of such disciplines. A programme of study in at least one Nigerian University should form part of that total training. Such programme is of urgent necessity. Apart from propagating understanding of the theory, practice and role of landscape architecture in our national development, the programme will save the need for potential students to seek training overseas, especially for the first professional degree. With dwindling funding it is doubtful if existing plans in that respect by any university such as University of Lagos will materialize soon. It is hoped however that well placed and sympathetic individuals or organizations may initiate the move through endowment. As educators, our small contribution will be to strive for the inclusion of landscape architectural courses where they lacking in existing environmental design programmes.

Conclusion

Man depends on the land and on the balance of nature for his survival and enrichment. He is dependent on land resources for food, oxygen, water, even for shade and screen. The proper use of land resources to house, feed and support our teeming population is an onerous task hardly acclaimed but confronting this country for now and in the coming decades. Haphazard urban development, piecemeal and uncharted rural development will only compound the task.

Landscape architecture as a profession and discipline, whose theory and practice are rooted in man's interdependence with nature, is crucial towards reshaping positively our living environments and landscapes for today and the future. The necessary first step is the establishment of a professional degree programme in a Nigerian University. This will be coupled with the teaching of basic courses in landscape architecture in all environmental design and planning curricula in higher institutions.

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