

# **Positioning the African School of Architecture: Recent experiences in curriculum reform in the University of Nairobi.**

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## **Abstract**

The School of Architecture at the University of Nairobi Kenya set out a vision statement committing themselves to be an African School of Architecture. As a key vehicle in the fulfilment of this vision, the undergraduate curriculum has been overhauled to focus more intensely on imparting understanding of architecture and cultivation of its enjoyment. Simultaneously, the content of that curriculum uses African architecture as a spring board to the full understanding of the subject.

The challenges facing the School are reflective of its setting in the City of Nairobi a rapid growing metropolis exhibiting the problems of most developing country cities. These are characterised by rapid population growth without commensurate growth in the city economy ultimately leading to the growth of what comes to be known as the informal sector. The nature of city development in this setting poses unique challenges to a school of architecture in terms of the values and attitudes it has to inculcate in its graduates.

Further challenge is provided in the development of a research agenda. Recent restructuring within the University has imparted a heavy research mandate on the school, with the resultant that the research agenda had to be set anew. In this process the question of African architecture and its attendant scholarship had to be addressed.

This paper seeks to set out the efforts the School of Architecture in the University of Nairobi has undertaken to meet the challenge and to give some background thinking on the measures taken.

**Keywords:** African Architecture, Urban development, curriculum development, professional values

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## **Introduction**

The challenges facing the University in Africa today are in a large measure a product of broader dynamics in world affairs and especially the processes relating to the economy. Over the last two decades we have seen a progressive openness in many spheres of life not least is the transformation of the politics of many African countries to multi-party democracies.

The most important of these dynamics has been the advent of information and communication technologies that for example place in a Nairobi household, fifty television channels. The internet now is ubiquitous, accessible even from mobile phones.

The current process of globalisation has been described by many writers in great detail. Deepak Nayyar has described it as both a process of “increasing integration into the world economy”, and a strategy of “development of development based on a rapid integration with the world economy”.<sup>1</sup> Closely connected to globalisation has been the process of liberalisation. It may be useful to reflect briefly on the meaning of liberalisation in order to put into perspective the impact it has had on Universities.

Liberalisation has been defined as “a process of shifting responsibilities to the level they naturally belong”. This view of liberalisation can be demonstrated clearly by taking examples from the political and economic realms. The increased choice and competitiveness in these areas requires that the end consumer now take greater responsibility in the choice they finally make. By presenting a voter for example with a choice of parties, the responsibility of the kind of resultant government is also shifted to the voter. Now there is no one to blame if bad government results but ourselves.

Liberalisation for the Universities has meant more responsibility on the institution in terms of pursuing its vision and in fact over the formulation of the vision itself. Among the implications this has had on the way Universities conduct their affairs, has been the desire to declare their credentials. In an interconnected world modelling an institution on another more successful player, risks the possibility of emerging as either irrelevant or highly insignificant on the arena.

It follows from that argument that one of the challenges facing the African University in today’s dynamics is one of credentials; one of being able to define where the institution belongs. This is critically important given the history of these institutions which in most cases have roots in European institutions, a situation that reflects in the curricula being taught and in the structuring of the research agenda.

The statement of credentials for a school of architecture hinges on the question of who are you, who do you want to be and how are you to become that?

In this paper we look at the thinking of the School of Architecture at the University of Nairobi, Kenya where the author has been involved in the efforts to reposition the School by thinking through those issues.

### **Crafting a Vision Statement**

The School of Architecture works within this overall picture of the University and mirrors the same struggles in developing a position of relevance in the discipline and attracting worthy partners through the possibility that they offer something new. The School, like the University itself, has to declare its credentials even as it seeks to shape its image to fit on the global roundtable.

The vision for a school of architecture must therefore indicate what the school brings to the roundtable of ideas. Almost inevitably the school will have to mine its cultural, geographical and socio-economic context for inspiration in shaping its contribution.

The strength of this is evident. The experiencing and learning of architecture is dependent on the locality it is learned in. Architecture in whatever form, is representative of culture, and is an answer to forces that represent other spheres of life– technology, land, etc -, but always localized in their material manifestation. No where in the world would one experience architecture in the way it is experienced in Rome. This experience cannot be replicated in Sydney and similarly the Sydney experience is unique to that part of the world.

This therefore becomes a challenge and an obligation. The unique experience of architecture available to the school must be developed for the benefit of all mankind. Conversely if the school of architecture neglects to develop this experience, then it is lost on the world. It means that the world misses out on the lessons that may rack there. It may even justify intervention by other parties to bring forth the knowledge and understanding locked there.

It is therefore necessary for the African School of architecture to declare its orientation and acceptance of this responsibility. The Nairobi school definitely felt there was the need to declare openly that we are an *African* school of architecture. Thus the School of Architecture at the University of Nairobi declares that:

*Our vision is to be a world class School of Architecture, built on a deep appreciation of African values, engaged in qualitative and meaningful pursuit of knowledge in order to fulfil the aspirations of the community in the continuing search for humane living and working environments<sup>ii</sup>*

This declaration is important as a vision statement in order that we can distinguish fully what kind of inspiration is driving us. In the roundtable of global ideas it is then clear that we bring an African perspective and are inspired by this heritage.

More than that it declares for the school what kind of obligation and responsibility we accept.

## **Curriculum Content**

Student who enter the architecture course at the University have hardly any preparation before hand. Nothing in the school system prepares students for the nature of the course in architecture. How students are introduced into the course is critically important for the outlook these students then form.

It is necessary that students are able to appreciate from an early point the value of African architecture as a valid response to the needs of the people. It is necessary that African traditional architecture is read as an answer to;

- Forces of social organization
- Forces of land and climate
- Forces of materials and technological levels.

This emphasis on an African introduction is not meant to exclude an understanding of the rest of the world, and certainly there is no intention of underrating the value of classical architecture. It is necessary however that students be able to approach these understandings with an appreciation developed through a conscious respect for the architecture they are familiar with.

The University of Nairobi has traditionally considered the study of the History of Architecture as a critical part of the way we deliver on the curriculum. In the recent past, we have expanded this to include theory of architecture sometimes taught quite separately from History.

### **Shaping the Content**

The content of the curriculum is greatly influenced by the context in which we expect majority of the graduates to practice their architecture. Recent trends seem to indicate a diversification of services offered by architectural graduates, but the tendency to seek work and commission in the urban centers remains. The overall directions in these urban centers is a powerful incentive in shaping curriculum content and structure.

The state of the urban centres of Africa have now become a matter of concern. The rate of the urban population growth largely fuelled by migration, is too high relative to the economic growth rate leading to a situation of population completely outstripping the capacity to accommodate economic activity of every individual.

This situation has led to the phenomenon that has come to be labeled the informal sector. The informal sector basically represents economic activity that cannot be accommodated by the formal sector. In most cases it is unstructured and in competition with the formal sector.

These developments challenge the formal planning and control of the city. Weak regulatory environments result from this leading to what is a virtual spiral with the problem growing bigger and bigger. A total collapse of the controlled environment is often the case. Major cities in Africa have found themselves in this situation where the possibility of putting things right becomes then very remote.

The history of our continent and the attachment we still have to traditional methods and customs, just serve to complicate the situation in our urban environments. The loose, informal and complex order of African architecture tends to conflict with the regimented nature of city planning.

### **The Educational content**

The nature of our education system leaves any mention of the environment especially the built environment completely out of the picture. What this means is that little if any structure to help people understand their environment exists. Thus the city is driven by a system of thought that is highly deviant of the formal planning of the urban centres. Solutions that are proffered even by the community are sometimes quite alarming themselves. A great part of the population that lives in the informal settlements do not

have even the most rudimentary tools to help them order their environment. Despite a rich heritage in the organization of settlements throughout Africa, the city with its rapid growth and complex demands has become for many an insurmountable challenge.

We are thus able to see from this picture the kind of challenges that the city brings up:

1. The poor regulatory structure. This is an especially profound factor in that it requires a high degree of responsibility from all players in the creation of the built environment.
2. The accommodation of the informal sector. In most cities, this phenomenon will manifest itself as a second city that has its own rules and sense of aesthetics.
3. A lack of a structured thinking about the built environment.

It is in this environment that an African School of Architecture is required to draw lessons and seek inspiration.

### **The place of the curriculum**

But the real test is in the curriculum that the school decides to teach. It must be remembered that the challenge of training architects is made greater by the total lack of exposure in earlier years. There is also little discussion of architectural issue in the media that would allow students to form some opinions on the discipline.

The raw material that is the student at intake is thus truly a clean slate. Disciplines like Engineering and Medicine do not quite have this challenge. Basic science subjects like physics and biology do indeed give a measure of preparation to their students. This is not so with Architecture.

### **Challenges in the curriculum making process**

We are challenged to transform within the length of the course, an individual who has hardly any exposure to structured thinking about their environment into a professional who is not only going to carry responsibility over the structuring of this environment, but is actually expected to offer both operation and moral leadership to the shaping of the built environment. This individual must also come out of this experience with a degree of commitment and dedication to further the discipline itself. It is this perspective and in recognition of the enormous challenge it poses that our curriculum has been shaped.

But beyond the task of transforming individuals and creating professionals, the School is also expected to play the role of a leader in the generation of knowledge, in the dissemination of that knowledge and to serve as a repository of the same. This presents a different kind of challenge in a way more intractable than the training aspect.

In fulfilling this broader mandate, the school must clarify its position in a number of areas and lay out clear strategies to meet stated goals. The capacity to generate new knowledge is of course pegged on the research function. Research requires a certain capacity in the school in terms of the scholarship. The school will require to have a critical mass of

holders of high degrees in order to give impetus to research activities. Of course this alone is not enough and the resources to work on research activities must also be made available.

But the development of scholarship in this sense faces a more insurmountable challenge. Academic research finds itself in persistent competition with professional practice. This situation has often been misunderstood and the notion that teaching staff are out to make money at the expense of academic work is bandied around. It must however be appreciated that the preparation that degrees in architecture give to their holders is not geared toward academic research but rather toward professional practice. Academic activity at the senior level tends to demand a major transformation from a professional outlook to an academic approach developed largely from the liberal arts approach.

It is therefore not surprising that this paradox seems to confront the School. Most of the staff would rather be involved in professional practice rather than academic research. As it happens those who are deeply involved in practice tend to make the best teachers leading to a truly frustrating situation given the University administration's attitude toward promotional criteria.

How then does the school deal with this?

In attempting to formulate answers to the challenges that the school faces, the curriculum, important as it may be, cannot be sufficient to answer all the issues. Other strategies must be brought along and in the final analysis, the school must develop a strategic plan in order to place all the issues in proper perspective.

### **The experience of the University of Nairobi, School of Architecture**

Two processes have been instituted at the Department of Architecture in the University of Nairobi. The process of curriculum reform preceded and in deed gave birth to the process of strategic planning.

The process of curriculum reform was triggered initially by internal dynamics within the Department and it soon became clear that the changes we were looking for were rather deep necessitating a more thorough re-examination of the curriculum that a regular review could deliver. We needed to rethink the entire structure of the course.

But even that created another problem. In taking a comprehensive look at how we train architects for our environment, it became necessary that we clarify how we see our overall role in the shaping of our built environment and in carrying out our other mandates of research, community service and repository of knowledge. In other words we found that curriculum review could not happen in a comprehensive manner unless it has been placed in the context of a strategic plan.

### **Formulating our strategic plan**

The scenario drawn out at the beginning of this presentation was key to the formulation of the plan. In the first instance we recognised that our school has to be guided by its

African credentials. In an era of globalisation where through the internet and other forums, we shall be operating on a global scene, we felt that we need to declare our credentials. What we expect to bring to the table of international discourse is our superior understanding of the African environment in all its complexities.

The recognition that we shall be at the centre of the great problems emanating from urbanisation, led us to look into the challenging environment of the City of Nairobi, a fast growing third world city where all the problems of the African city were made manifest.

Why not use this as our grand laboratory to comprehend these issues?

Other strategies were evolved but the whole aim was to turn the school into an effective player in the shaping of the built environment and to contribute in a significant way in the global pool of ideas about the built environment.

Whereas all these strategies were important in order to create for us the correct mood and environment we required, it was the curriculum that was going to be the prime vehicle for achieving a new vision for the school and to deal with the weaknesses we had identified in the course. It is in fact the process of curriculum reform that went on to consume the greater energy in the school as we went for a search for the answers to our deepest concerns.

### **The curriculum review**

Several goals were set in the process of the review.

- (i) We needed a curriculum that would deliver the fundamental understanding of architecture in an efficient and effective manner.
- (ii) The curriculum had to help cultivate enthusiasm and enjoyment of the course.
- (iii) It had to impart the values of architecture and produce conscientious individuals.

It is possible to see from this the response to the issues raised earlier about the challenge that confronts us as we seek to shape professionals. In these tenets guiding our review is our response to a large measure to the challenge of our environment.<sup>iii</sup>

#### **(i) Focus on basic knowledge**

It is common in the discussion about professional courses to question the kind of foundation that should be laid within the course. One approach favours some kind of general education focusing on broad understandings and using later parts of the course to come down on the real subject of the course. This approach in fact has been used in certain areas of design education. An example can be made of the University of New South Wales in Australia. Their curriculum in fact gets students to study general design issues before interested parties get into architecture in their fourth year of study.

In the University of Nairobi, a loose version of that approach has been in place for some time. Some common undergraduate course take most of the classroom time in the first year. Within the department of Architecture we took the rest of the time teaching issues of basic design.

In the restructured curriculum this approach was dropped in favour of an intense focus on the fundamentals of architecture in the first and second year. The thinking here is that by the end of the second year, a certain degree of transformation has been achieved and the layman student is on their way to becoming an architect. At this point in their education, they are talking like architects having a fair command of the language of architecture, well exposed in both historical and contemporary architecture and relating to the values of the profession.

The net result is that we have more time to explore widely on the other areas of learning and to intensify our studios through meaningful explorations built on a fairly solid foundation.

## **(ii) Cultivation of Enthusiasm and Enjoyment**

Enjoyment of the course underpins lifelong interest. It is only when the course material and learning experience elicits within the student a level of excitement and enthusiasm, that self drive and commitment can arise. By focusing on this aspect of the undergraduate experience, we are hoping to plant a seed that will see committed professionals and scholars emerge.

Architecture in our experience is a stressful course, demanding of the students a high degree of sacrifice. The young adults who make up a typical University class are torn asunder by the pressures from their peers, their social circles and their academic work. The fact that in Kenya the Architecture course is six years has not helped matters much. We get a disproportionate number of students who report stress related ailments at the senior level of the course. This has been a cause for concern for some time and there has been a worry that this is generally affecting grades.

One other negative effect of the length of the course is the very low appeal it has among women students. The course at the University of Nairobi attracts only about 10% women.

The most conspicuous feature of the new curriculum proposal is a two-tier structure that allows for a non-professional degree to be awarded after 4 years and the professional B.Arch degree after 6 years. Our expectation is that this will lead to a less stressful course since students will be able to look forward to a degree within the regular length of degree courses in Kenya.

We fully expect that we shall be able to attract more women students. The target is about 30% and we are optimistic that with the two-tier structure, we shall reach it.

A key plank in the achievement of this particular objective is the assimilation of technology. Computer technology allows major improvement in the quality of presentation of drawn work through the application of Computer Aided Design (CAD). By further incorporating this technology in the teaching of theory courses, we are able to get

- (a) a higher level of interactivity within the lecture session
- (b) more student centred sessions largely reliant on student generated material
- (c) an overall superior degree of assimilation of course material.

**(iii) Inculcation of the values of the profession.**

Put in another way, this is meant to rescue the students from mediocrity, to have them matured. The transformation that we seek to create within the students who come to us is also partly about their values, their sense of what is right and wrong. It is about sound judgement and responsible action.

In a way this is the most challenging task a curriculum has to fulfil and there is clearly a limit to what can be achieved by the write up itself. This question begins to look further into the manner of delivery and the whole environment for learning that is created in the school.

The particular feature that address this issue directly is the creation of a senior cadre of students within the school. The situation where a cadre of senior students exists has a stabilising factor for the entire school and their seniority itself becomes a challenge. The expectation is that this would lead to an accelerated process of maturation and that the students would then come out of it a more rounded individual.

This is reinforced by the traditional studio format which places an above average level of responsibility on the student. We see in the format the opportunity to mould the student to be an opinion shaper and a leader in responsible action.

**The resultant shape**

The connection can now be made between the structure and content of the curriculum to the urban challenge that we face. Given the factors explained earlier, it is important that the professional developed to confront the challenges of our urban centres must have at least three qualities:

- (i) They must have a mastery of the discipline. Especially they must be able to formulate answers to new situations they may not have faced before. Their immersion into the fundamentals of the discipline must be total and solidly established.
- (ii) They must have enthusiasm for the subject of architecture. They must believe in the inherent good of their work and seek to drive themselves, committing their full life to the betterment of the built environment. They must be able to demonstrate passion for their work and project that to others.
- (iii) They must be responsible and conscientious people, able to project a moral position and give leadership. They must be people who can take a principled stand in the face of enormous pressure from vested interests or from a misinformed population. They must be a beacon of hope.

The hope is that we these qualities in our graduates, the school is contributing to the proper development of our urban areas. The limitation exists however on all sides: The written curriculum alone cannot deliver everything and will require support in the environment of the school, and architects alone will not fully reform the city. They too will require a supportive environment.

**Setting the Research Agenda**

Recent restructuring within the University of Nairobi has created a large Department of Architecture and Building Science by merging the previous Department of Architecture and the Housing and Building Research Institute. Whereas the Department of

Architecture was primarily focussed on producing graduates to join the profession of architecture, the HABRI was pursuing a broad Research mandate within the Building industry. The new unit was required to adopt and advance this mandate.

The Department adopts five broad research themes, designed to cover the full spectrum of our concerns and to involve the entire faculty in what is basically a team effort. Our focus is primarily the fuller understanding of our region as explained above. (The groups and current ongoing projects are published on the internet at <http://www.uonbi.ac.ke/departments/arch-build-sci/research.htm> )

Universities tend to place great emphasis on research that basically addresses other scholars. Promotional criteria tend to lay great emphasis on papers published in refereed journals and other scholarly forums. Coupled with a general lack of resources to conduct serious research, this approach has had the effect of actually stagnating research efforts in schools of architecture.

Critical constituencies remain un-served in this way. At the School of architecture at University of Nairobi it became necessary to examine again who should be the beneficiaries of research. This led to a restatement of the expected outcomes and the audiences they must address. Four audiences were identified:

- (d) Scholars and Researchers. This is advanced research work that is meant to build on knowledge in the discipline generated by the international network of scholars. This kind of research will normally find its outlets in scholarly journals and learned conferences.
- (e) Practitioners and Policy makers.
- (f) The Student community. One of the peculiar contradictions that is manifest in the University is the lack of a credible connection between research and what is taught in the lecture room. One could point to the overall lack of student texts covering African architecture despite ongoing research in this area as an illustration of this point.
- (g) The General Public. Focusing knowledge on the general public helps raise the overall level of awareness in the population. This is important especially in the protection of the heritage.

## **Conclusion**

The school of architecture needs to position itself in three critical areas:

- (i) It needs to take a proper and responsible place in the network of international scholarship. In this way it must accept the responsibility to develop for the benefit of the entire global fraternity, an understanding of the architecture of the region the school operates from.
- (ii) It must position itself as an advocate of lifelong and deep interest in the discipline of architecture and to mould such individuals as will be able to willingly offer leadership and sacrifice in order to advance understanding of the discipline.
- (iii) The school must champion the dissemination of knowledge about architecture and seek to create a bond with the users of the built environment.

The African School of Architecture must be an active source of knowledge and understanding in active exchange with schools in the rest of the world – including the rest of the continent. It must be an inspiring place attractive to young creative minds who can then engage in the study of architecture with confidence and pride rooted in the deep appreciation of the heritage brought down to us from earlier generations. It must be a source of understanding for the whole population about the nature and values in the built environment and an inspiration to responsible action in the shaping of both our urban and rural environments.

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<sup>i</sup> Nayyar, Deepak; *Globalisation and Development: A Historical Perspective in Building a World Community Globalisation and the Common Good*, Royal Danish Ministry of Foreign Affairs, June 2000

<sup>ii</sup> University of Nairobi, Department of Architecture *Strategic Plan 1999-2005*

<sup>iii</sup> The full undergraduate curriculum is published on the internet at <http://www.uonbi.ac.ke/departments/arch-build-sci/courses.html>