Investigating the architecture of architecture education in Uganda: Student perspectives

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ABSTRACT: For all the discourse on the state of architecture education today, little is written about the student experience in architecture schools. With increasing emphasis on Service Quality, Learning Outcomes, and Completion Rates, understanding student motives, and perspectives of professional education is particularly significant. This paper reports on the findings of a research study that gathered views of key stakeholders in architecture education, and is part of a broader study examining architecture education in the context of East Africa and Uganda in particular. The paper presents the findings of Focus Group Discussions held with students at Part I and Part II levels of the architecture programme in Uganda. Of interest, were the perceptions of students in relation to their chosen careers, as well as their experience in the programmes, stemming from anecdotal evidence indicating that a hidden curriculum in programmes presented a significant challenge for students, at times having a negative impact on their learning. While not conclusive at this stage, the initial findings suggest that a lot can be learned from what students reveal about how they relate to their programme of study, and may be valuable in defining a revised approach to architecture education in East Africa.

Keywords: Architecture Education, Focus Groups, Uganda, Student Perceptions

INTRODUCTION

Architecture education has been under intense scrutiny in recent years, a consequence of: changes to architectural practice and increased legal and professional responsibility placed on architects; changes to the nature of incoming students, who are from more diverse backgrounds and increasingly from cross cultural and across national boundaries; not to mention changing societal demands on architecture and the architect; as well as pressures from the university setting in which the overwhelming majority of architecture schools are based. Further pressures stem from educational requirements of regulatory bodies, largely related to the accreditation requirements of domestic and international validation of programmes. In their review of architecture education in Australasia, Ostwald and Williams (2008) see these requirements as being analogous to the four corners of a square piece of fabric, with architecture education, balancing at the centre of these often competing criteria.

Studies of architecture education have sought to address the diversity of issues that have been raised as part of the development of architecture education pedagogy, including: Shannon (1995), who looked at architecture education in relation to how students learn; Goldschmidt, et al. (2001), who were interested in the intake criteria into architecture school, while Shannon and Radford (2010) were interested in how students incorporate technology into their projects. These and numerous other studies are seeking to contribute to the theory of architecture education, often under-represented in educational discourse. A review of the literature however reveals relatively few studies that look at architecture education from the students' point of view – the recipients of this education. For the most part, the student voice has largely been confined to the reporting of student design projects, rather than as active participants and recipients of architecture education. However, increasingly researchers have been looking at the student perspective in architecture education, be it in relation to the Design Juries (Anthony 1991; and Doidge, et.al. 2000); Student and Instructor interaction (Dutton 1987); or how students actually learn, such as Shannon (1995), Groat and Ahrentzen (1996), Ramsden (2003), and Roberts (2004).

In the context of Africa, increasing interest in architecture as a career choice, particularly over the last two decades, has put architecture education in the spotlight. Regardless, there are still relatively few publications on architecture education or on general education for that matter, with Ngara (2007) lamenting about the lack of research literature on African educational pedagogy, or more specifically African ways of knowing, and the consequential impact this has had on the educational process in Africa. Reflecting on his experience as a student, art educator, Pido (2002) suggests that the historical approach to teaching and learning in East Africa, where schools ignore the experiences of students, assuming they were ignorant: empty vessels to be filled, or more succinctly, a teacher centred approach, still dominant in East Africa today, does not recognise the interrelationship between the teacher and the learner, which according to Cowan (2000), is a two way interaction with one person at one point being 'more of a teacher', and at others 'more of a learner'.

Since the introduction of architecture education in Africa in the 1950s, three major conferences have been held to discuss architecture education issues in Africa: the first in Nairobi, Kenya in 1969, and a further two held in Lagos, Nigeria; the first in 1988 and the second in 1991. These conferences brought together practitioners and educators

from across Africa to discuss the state of architecture on the continent. While the 1969 conference discussed the state of architecture education in relation to the transition to independence, the 1988 and 1991 were more reflective, lamenting about the state of architecture education across the continent three decades after independence. A key concern had to do with the priorities of architecture education, which it appeared, were prioritising the vocational aspects of architecture education, a perpetration a notion that the primary goal of architecture education was to instil in students the drafting skills they would require to work in the established practices, but neglecting the knowledge and research aspects, for growth as professionals. More recent studies on architecture education in Africa by Saidi (2005) and Young-Pugh (2005), present contemporary issues in architecture education in the context of South Africa, which arose as a consequence of structural changes in education brought on by the dismantling of Apartheid. Notably absent in the conferences and publications, has been 'the student', who it appears were peripheral to the discourse. With no known studies of architecture education undertaken in East Africa, a study that delved into this area was certainly long overdue. This paper reports on some of the findings of a wider study on architecture education being undertaken primarily in Uganda, and presents the finding of Focus Group Discussions held with students of architecture. The aim was to investigate student opinions about architecture education; their motivation for doing architecture; and their experiences of architecture education.

1. BACKGROUND

Architecture education in East Africa began 50 years ago, but was introduced in Uganda in 1989, with a five-year Bachelor of Architecture programme at Makerere University. A second programme was started in a new Faculty of Building Technology and Architecture (now the Faculty of the Built Environment) at the Uganda Martyrs University in 2000. These are two of six professional programmes in East Africa, the other two in Kenya, and one each in Rwanda and Tanzania. The programme at the Uganda Martyrs University followed a different approach from that at Makerere University: a split programme incorporating the undergraduate Bachelor of Science (Building Design and Technology), (now the Bachelor of Environmental Design) and a graduate entry Bachelor of Architecture (now a professional Master of Architecture). The challenges for both schools in their initial years have been documented: even before the programme at Makerere University was started, Mulumba (1988) had advocated that the programme be based in a new Faculty affiliated with the Margaret Trowell School of Industrial and Fine Art at Makerere University. The programme was eventually situated in the engineering faculty, the Faculty of Technology, possibly an attempt to give the new programme scientific legitimacy by placing it in a science rather than arts based faculty. At the Uganda Martyrs University, which at the time was largely a social science university, the implementation of the architecture programme presented significant challenges not only for the educators, but also to the students and administrators. Not only was the programme different from existing programmes at the university, in that it involved five year of study, its 'radically' different teaching pedagogy based on the design studio and problem based learning, as opposed to a primarily lecture based approach, was difficult to comprehend, and therefore not viewed favourably. (Olweny and Nshemereirwe, 2006).

Since 2005, considerable effort has been put into formulating architecture education criteria for Uganda, which culminated in the publication of two landmark documents: the Uganda Society of Architects *Education Criteria* in 2006 and; the *Competency Standards for the Professional Qualification in Architecture* in 2008, by the Uganda National Council for Higher Education. These publications gave, for the first time, criteria by which architecture education in Uganda could be assessed; nevertheless, there was still a gap in understanding of how architecture education was carried out in the context of East Africa, and how students received it. It was generally assumed that passing an examination was evidence that students were acquiring the knowledge they required; however, the process of learning is not only associated with passing examinations, but also to motivation, perceptions and goals. (Gibbs and Simpson 2004) In addition to the pragmatic requirements of architecture education, are what Dutton describes as a *Hidden Curriculum*, "… those unstated values, attitudes, and norms which stem tacitly from social relations of the school and classroom as well as the content of the course." (Dutton 1987:16) Anecdotal evidence suggests that the hidden curriculum in some instances often holds more weight in the review and assessment process in architecture education, than is readily acknowledged. This, if genuinely the case, would have a profound impact on student learning, and subsequently on outcomes; however, with no studies having been undertaken, no tangible evidence exists to support this claim more so in regard to student perspectives on the education process, this study seeks to address this.

2. METHOD

2.1. Study Approach
For this study, that sought to garner perceptions students have of their experiences in architecture school, it was essential that an appropriate approach be employed; Focus Group Discussions were used as they enable the voice of the student to be heard. A key benefit of Focus Group Discussions is that they enable dialogue among participants, which often yields information that would otherwise not come to light, through what have been described as 'resonance' by Conle (1996:298) defined as " ... the process that carries the inquiry along, producing more and more stories, through metaphorical connections rather than through strict logical ones." Focus Group Discussions also allow participants to speak unimpeded, contributing in-depth information that would likely not have been achieved through directed interviews or questionnaire studies. Some of the findings of three Focus Group

Discussions held with architecture students in Uganda are reported in this paper. Two of the Focus Group Discussions were with Part I students (Years 1 to 3), and one with Part II students (Years 4 and 5). A total of 19 students participated in the Discussions, eight from Makerere University, and eleven from Uganda Martyrs University. Further Focus Group Discussions were conducted in Kenya and Tanzania to garner perceptions of students from across East Africa, to ensure the validity of the study. However, the results of these discussions are not presented in this paper, as it was found that students were generally unaware of the education systems in the different countries, and as this paper was only concerned with Uganda, these have not been included.

No attempts were made to select or pre-select participants based on any control parameters. Participation was on a voluntary basis, with students responded to advertisements placed on notice boards in their respective schools of architecture, as well as through follow-up calls through their respective Architecture Students' Associations. Both Architecture faculties were informed of the Focus Group Discussions, but did not participate in selecting the students, neither were they aware which students participated. This was important to ensure students were attending on their own behalf, and not on that of their respective schools of architecture. Of the 19 participants, five were female, representative of the percentage of females in architecture education in Uganda (about 25%). Apart from the initial Discussion with Part I students of Uganda Martyrs University, the Focus Groups Discussions were conducted in Kampala, and held on Saturdays, so as not to overly inconvenience the participants. Each Session took approximately 90 minutes, and was conducted by myself as the key researcher, and a research assistant, who acted as observer. All discussions were recorded using Sound Studio™ and later transcribed to facilitate analysis. As part of the editing process, only the initial of the students are used to ensure their anonymity. It was essential that the students be informed of this as part of the introductory comments, as it gave them the confidence to speak their minds without the fear of possible repercussions. A technical glitch with the recording software affected one of the Focus Groups, making it necessary to have a follow-up Discussion with a different set of students. Similar guiding questions were used for each Focus Group; however, apart from the initial 'ice-breaker' questions, the sequence and direction the discussion took was largely determined by the nature of the discussions.

It was essential that participants felt comfortable with devolving information, thus the need to take account of seniority, in the formulation of the Focus Groups. There was also a specific contextual issue that needed to be addressed: the propensity for respondents to give answers that they believe the interviewee or the moderator would want to hear. Grouping discussants within peer groups, it would appear is an appropriate means of enabling discourse, as well as reducing the need to give 'correct' answers, as discussants are more comfortable discussing issues amongst their peers. A major challenge however, was the possibility of a few people to dominate the discussions, as was the challenge of not providing leading questions, or validating what students were discussing, particularly when they sought verification for what they at times felt were 'correct' answers. In this regard, it was at times necessary to allow students to complete long narratives without interruption to ensure that the process was indeed driven by them, and not by me as the researcher, and in so doing give the group confidence to speak their minds. Further, it was also important to resist the urge to correct student recollections or understanding of issues, as this would potentially have altered the direction of the discussions. It was therefore important to have questions phrased as conversation, rather than as direct questions, thus the importance in the flexibility in not having a set sequence of questions. It was also found necessary at the end of each session to give students feedback on the findings of the study, and to expound on developments in contemporary architecture education and practice. Respondents were keen to understand the global context of architecture education, and how it impacted on them.

3. FINDINGS

Initial assessment of the Focus Group transcripts indicate that the respondents talked about a variety of issues, roughly classified into the following categories: Perception of architecture education; Choice of architecture school; Faculty-student relations; Experiences in architecture school; Programme structure; Assessment criteria; Definition of architecture; Group-work/Team-work; Computing in architecture; and, Reflections on architecture practice. This paper will present some of the findings from three areas: Perception of architecture education: Faculty-student relations; and, Computers in Architecture. These stood out as being of particular interest, and relevant in relation to the *hidden curriculum*.

3.1. Perceptions of Architecture Education
There is a long-standing belief in Uganda that architecture is all about *drawing plans*! This widely held misconception of what architects do has major implications for architecture education, as was brought to my attention during a recently held interview with an applicant for the Bachelor of Environmental Design at the Uganda Martyrs University. One applicant who had completed *Technical Drawing* as a subject for his High School leaving examination, attaining an 'A', could not fathom why he had to endure a five year architecture programme as he already knew how to 'draw plans'. Such sentiments appeared to be the norm rather than the exception, prompting an interest in the link between perceptions of architecture, and student attitudes to learning in architecture school. The high dropout rates from architecture programmes could in a way be linked to these attitudes, impacting on the student's ability to undertake and complete the programme of study successfully. The magnitude of the situation was made even more apparent as part of the Focus Group Discussions, where it was revealed that a number of students at different stages of their architecture education were not clear of on the difference between a two-year Architectural Drafting programme and a five-year professional Architecture programme.

> *SK* - The choice of School A for me was more of an afterthought, cause I did a Diploma first from School C. But that was more of I think, a misguided choice in my opinion, cause I didn't get a chance of getting good career guidance along the way. … [*Truncated*] Usually schools, secondary schools have things for career guidance, which in my experience Uganda is a little lacking in that area. As in people are assigned to do career guidance, but in most cases they hardly have an idea of what they even guiding students about. So in this case someone told be 'no, you know School A offers architecture, but there's also School C, and School C it's two years, a shorter period, it's very technical, so you get hands on experience, and people of that sort are preferred in this world'. So that was the general idea. Now that did not expose me to things like the professional bodies, registration, requirements for professional registration and practice, and things of that sort. Now that is why I call it a little misguiding as a choice. So if I had known of some of these things earlier, I definitely would have gone straight for a Bachelors degree without wasting time with a Diploma first.

While this particular student did complete the Diploma in Architectural Drafting, and then enrolled in the professional programme, the monologue suggests that it is still not clear what the difference between the programmes is, apart from the lack of the professional practice courses. In part, the misrepresentation of the *Diploma in Architectural Drafting* at one of the Universities as a *Diploma in Architecture*, has enabled the perpetuation of this fallacy, as is evident in the ensuing dialogue.

> *MO* - Were you aware of other programmes offered? Just that you mentioned School C, but School C has never offered an Architecture programme.
>
> *TN* - They have a Diploma.
>
> *MO* - It's a Diploma in Architectural Drafting
>
> *TN* - But, I think in our year, the intake of 2009, they actually have architecture now, I don't know if it is a five year course or ...

While a lack of available information for the programmes could be partly to blame, the prevalence of these sentiments suggests that *drawing* as the principal output of an architect, does impact on the nature of architecture programmes as well, translating to dominance of *Skills* as the key focus of architecture education, which in many cases, is the drawing plans, part of a feed back loop that involves student perceptions and Instructor attitudes. The implications of this may be evident in attitudes and the approach to what are often called *support courses*, which are often separated from the 'main' focus of architecture programmes, the Design Studio. With students coming into architecture school with a perception that architecture is about drawing and drafting, it is likely that these students may pay more attention to the Design Studio, neglecting Support Courses which are regarded as not being essential to the practice and execution of architecture. These fears were affirmed, with some students reporting that there was indeed a dislocation between support courses, and the design studio, in some instances, as was evident in the following two comments:

> *SK* - … despite CAD being taught as a course unit for the first three years, using it for an assignment or anything is taboo. [*Truncated*]
>
> *TM* - … and a little frustrating, because, like I'd said, I was anxious, I wanted to start doing what I knew or thought was architecture, but here I was calculating pipes, calculating beams, columns, nothing really that would get you to getting the drawings out. … [*Truncated*]

More overt, is the pertinacious notion of the architect as *The Master Builder*, or in the words of one student, the architect as a "semi-god" (sic). While the professional role of the architect today has shifted considerably since this notion were true, the myth persists, nurtured through an education system that presents architecture as an elitist profession for select individuals who aspire to design genius (Mills and Lipman 1994); in other words, undervaluing a number of key areas of architecture in favour of one key area, originality in design (Duffy and Hutton 1998), or succinctly, the creation of *stararchitects*. Certainly the aspiration to be a great architect cannot be frowned upon, and one could conceivably argue that it is the aim of most students of architecture to achieve greatness, but what is evident is the notion that architects for the most part work in isolation and are always the lead consultants on design projects:

> *AR* - I don't know in what way students' confidence can be built, because professionally, I feel we should be very confident. You are going to be a team leader, you are going to be among these other professionals, but you should put your foot down, say what you need to say …
>
> *TN* - … in architecture it's all about changing people's way of life … .
>
> *SK* - But also, the other things that come with architecture is that it helps you create things, which is something I think I have a passion about, being able to create things out of ideas, and that sort of thing, so it makes me a semi-god or something like that.

Such notions are often reinforced by the education system that emphasises individual excellence above all else, this it appears is the impression of some students, as expressed by a third year student "… that is the perception that is always created in school. You want to, when we do these individual projects you want to be the one, you know, you want to have that project, that they say, OK ..." (CK)

While the stereotype of the uncompromising architect, epitomised by Architect Howard Roark in the Ayn Rand novel, the Fountainhead continues to persist, there is certainly evidence that students are aware of the structural changes in the profession, and are seeking a more holistic approach to architecture education:

> *HT* - … it also opens your mind to for example the landscape, which in Uganda does not get a lot of attention, and at the end of the day you are able to integrate all of these different aspects into one whole as a was of a deeper understanding of what architecture is.

> *SK* - School A for example has a School of Architecture that's located within a Faculty of Technology. That exposes it to different departments: civil engineers, electrical engineers, land surveyors, mention all of them in the building industry. Now, the field, in the field these are people we interact with, but it is very absurd that the programme in School A doesn't introduce you to these people

With further analysis of the data still to be carried out, there is certainly a lot more that can be garnered about student perceptions of architecture and any impact it has on the architecture education learning experience, and more importantly, pedagogy and assessment. In this light, the relationship between faculty and students takes on increased significance, and was raised in the discussions as a significant point for debate.

3.2. Student-Faculty Relations

University education over the last century, particularly in the social science fields, has largely been based on a traditional lecture based model, a method suitable for delivering theoretical knowledge to a group of learners, but not necessarily aiding their learning, nor facilitating their ability to translate that learning into solutions. (Webster 2004) This essentially teacher-led, and institutionally-driven approach, has never been suited for architecture education, with its diverse goals and interests, presents a challenge for educational pedagogy. Requirements for a greater interaction with faculty, giving architecture programmes have traditionally had low faculty-student ratios in order to achieve the architecture education requirements is a major difference. With increased pressures on programme costs, the ratio between faculty and students has become critical. However, a salient point is how this could impact on student learning, given that the relationships between faculty and students is a significant factor in architecture educational.

In architecture schools, the relationship between faculty and students is privileged, with anecdotal evidence suggesting that architecture students have greater access to their lecturers and tutors than in any other programme, primarily as a consequence of the design studio, the quintessential method of teaching in architecture education. The interaction between faculty and students was keenly discussed by students in the Focus Groups, an indication that not only were they aware of its importance, but also how it could potentially impact on the nature of their design work, and their growth and progress. As part of the dialogue, it became clear that students rarely got an opportunity to reveal their thoughts on this particular issue. This could in part be related to what one student succinctly described as a "Master-Slave" relationship:

> *SK* - My experience in School B gave the impression that you guys have a more cordial relationship, where you guys interact really, whereas in School A it's still the same old traditional kind of institution like arrangement, where there are gods and servants, subjects and slaves, you know, masters and slaves. You guys interact on a more, you are kind of in one plane. … (Truncated)

> *MK* - What Sidney is saying, is actually true, to an extent, cause like, during presentations, you, … you find that, … there's an air of, ... the atmosphere is very thick, it's, … people are very tense, especially the person presenting. It takes of course a lot of time to get used to, after some time you get used to that kind of environment, and maybe find ways to counter it. But the mood is, is, is a very tense one, it is not relaxed, as such it limits the creativity. … (Truncated)

The description of the relationship between faculty and students as being a "master-slave" relationship, presents an unnerving situation to us, as it has implications to the way students learn, and work, as expressed by the following dialogue:

> *LO* - It has been trying for us, students trying to defend their ideas (*reinforced by PK*). But at the end of it all, you want the marks, (*Laughter*) and it's the tutor who has the marks.

> *PK* - The only thing I would want to add on to that, is that the rigidity of the tutors in the end may come, at times shuts our innovative, how can I call it, qualities in a way, at times you get to fear them so much, that you fear that they can mess up your marks, so you end up having to take their suggestions.

> *CK* - As architectural tutors, I don't know if I can call you tutors or lecturers. When does it stop being, 'hey you're supposed to do this', or 'this is how it's supposed to be done', or 'do this or don't pass'. Cause that is the major conflict.

Suggestions of the origins of this state of affairs were not immediately clear, although there was some indication that this was directly related to the way architecture education was introduced to East Africa, as a Certificate programme to produce Drafts people capable of assisting RIBA qualified graduates, coupled with the traditional seniority issues, as well as the ingrained teacher-led, teacher knows best approach to education. It was not all negative though, with some students acknowledging that their interaction with faculty was positive, and indeed assisted in their learning:

> *PA* - The best part about this is exposure, we have so many lecturers all with different experiences, from different fields, and you soon get a wider scope of what architecture involves, and at the end of the day, the fact that these guys explain in different ways …

Overall, the attitudes of the students towards academic staff were more negative than positive, a reflection of a system that was overly biased towered a teacher-centred approach, often an indication of more significant issues underlying the approach to teaching.

3.3. Computers in Architecture Education

The final discussion topic presented is that of Computers in Architecture, which along with the faculty-student relationships also generated significant debate. This section of the discussions dwelt on a variety of issues, however, it became clear that students were discussing two things in particular: i. *Computer Enhanced Presentation*; and, ii. *Computer Aided Drafting*. The discussions did reveal an inherent misunderstanding of what was *Computer Aided Design*, or at a more general level, what could be achieved with the use of a computer. For the most part, the students interviewed were not aware of the difference between Computer Aided Design, Computer Aided Drafting, and Computer Enhanced Presentation: the acronym CAD used in reference to all the three. Further, and more fascinating, is a continued misconception that computers are mysterious machines that are incapable of making mistakes and actually do things on their own, as was evident in the following dialogue:

> *LO* - The thing is with the computer, you cannot say you did something unconsciously, or without thinking ...

> *TN* - There would be no mistake … (*prolonged silence*)

> *LO* - Ok mistakes! …and mistakes add to something. You cannot just whisk a mouse and come up with something...

> *PK* - OK, you may think Computer Aided Design is all about mice, have you heard of the Apple iPad that has come up. … in a way, you can just sketch on the iPad itself and then like transform it ...

> *TN* - You are still using your hand ...

> *CK* - You are still sketching ...

> *PK* - Ok, it is your hand, and the CAD software ...

These misconceptions are evidently related to the historic origins of computing, when users had to programme the computer to perform a task. Computers and computer applications are also regarded as being separate from the design, conceptualisation and analysis process, and as the discussions went deeper, it became evident that few students had made use of computers as *Design Tools* for conceptual modelling, building performance simulation or analysis. For the most part, discussions were related to computing as a presentation tool, using CAD programmes to develop 3D models, and to enhance 3D models using photo editing and presentation software. Design was perceived to occur outside the computer and the computer, when used, was only to draw up a previously completed design. There was evidence of mixed feelings towards Computer Aided Design, with some students subscribing to the notion that it is taboo (as presented earlier) - no doubt fuelled by a resistance to its use in architecture programmes by faculty. There is however a growing body of students who view Computer Aided Design as an essential part of the architecture profession in the twenty-first century:

> *PK* - I mean, is attitude of CAD making someone have fake designs? I think it's like, compared to the way, ok the pencil can also ruin somebody's designs. CAD is today's, I may call it, twenty-first century designing tool, and the pencil was top of the other century. …

> *LO* - OK, it might be an old tool, the pencil, but it still preserves your originality. … compared to the mouse, I still feel the pencil does it well. And if it's about it being an old fashioned way, if it still does the job, it's still the way to go.

The resistance to the use of computers in architecture, it appears, is a consequence of the students being dissuaded from using computers by faculty, as one student stated " … it's sad to see that first years are not, you know, there was a person who did use CAD and they were disqualified as well." The resistance to the use of computers as an integral part of the design and development process appears to stem from the fact that relatively few faculty have been exposed to computers as a design tools, with most only experiencing computers as drafting tools. This is a conundrum, set to continue, and a problem not lost on students:

> *PA* - … however back to what EM was saying, you got this lecturer who is telling you what was done in the 1960s. I mean, get updated, books are written all the time, it actually helps when someone knows what is happening elsewhere, … .

> *EM* - … Whereas I was born in a generation where everyone is carrying an iPod, my lecturer was born in the 1960s, and all they could do is hand draw. …

The negative perception of computers in design education certainly has consequences to not only to students, but also the profession as a whole, particularly when considering contemporary uses such as Building Integrated Modelling (BIM), which are still largely unheard of in both practice and academic setting in the context of East Africa. This state of computers in architecture education does invite questions about the relationship between academia and the architecture profession, as well as to query the purpose of architecture education itself. Is architecture education

only about providing graduates with the skills to enable them to work within an existing practice structure, or is it also to enable, and equip graduates to push the envelope of architecture?

4. DISCUSSION

The findings of the Focus Group Discussions appear to indicate significant hidden curriculum undertones in architecture education in Uganda as perceived by students. These are particularly evident in student descriptions of faculty, and attitudes towards the use of computers in architecture. The sentiments expressed by students, that computers have no place in architecture design, are reminiscent of pre 1990's attitudes to computers in schools of architecture around the world, and an indication that students are indeed echoing faculty positions on the use of computers in architecture education. While the need to introduce students to computers in architecture was recognised back in the 1960s (Pohl 1975), there is still resistance to its integration in architecture education in East Africa in 2010. This is certainly not unique to Uganda; Çil and Pakdil (2007) reveal similar attitudes in their investigation of the use of computers from the perspective of the educators in Turkey. Their findings reveal that there is a fear, by some instructors, that computers will result in the loss of the human touch and consequently authenticity in students' representation. More crucially was the fear that computers would supersede practitioners with traditional skills, rendering many of them jobless. As such, although Computer courses are actually taught, the restriction to the use of computers in the design studio reveals overtly the hidden curriculum. This is also seen in the student attitudes towards the design juries and their relationship with instructors, who are at times taken to be the custodians of knowledge, which the students come to university to acquire.

The findings also raise important questions related to the nature of the architecture curricula and attendant pedagogy. With its historic origins as a patriarchal profession, skewed towards preparing students for a traditional role that has the architect as the 'Master Builder', a path for all intents and purposes, is no longer regarded as the mainstay of the twenty-first century architect. (Hindle, and Rwelamila, 1998; Awad, 2002) The teacher-centred approach is not useful in preparing architects for the unknown and unfamiliar challenges that they will be faced with in practice. (Henderson, 2001) The study of student perceptions of architecture education also reveals that architecture education is, in an all too familiar situation for much of Africa, " … as the presentation, the transmission of packaged, of predigested, information – education as instruction administered to the 'ignorant' by experts." (Mills and Lipman, 1994:215) This approach pays credence to teacher centred practices, or in other words, the empty vessel approach, in which students come to university to learn all they can to become experts in their field. (Olweny and Nshemereirwe, 2006; Roberts 2010) In reality, architecture education is more than that, and should be in part, " … the understanding that arises in a community of scholars". (Mills and Lipman, 1994:214). Webster suggests that tutors should be open to student-centred learning to be able to educate and graduate 'critically' reflective architects, as opposed to clones of themselves. (Webster, 2004)

CONCLUSION

The purpose of this study was to build an understanding of the 'lived' experiences of the architecture student in East Africa, with particular reference to Uganda. This paper has presented an overview of the findings of the study of architecture education in East Africa, with specific reference to the perceptions of architecture students. An initial assessment of the findings indicates that the experiences of students cannot be discounted as part of the evaluation of architecture education. The study is not conclusive at this stage, and further evaluation is being carried out to fully analyse the collected data; however, by bringing to light the complex issues encompassed by the hidden curriculum, it is hoped that architecture education discourse, particularly in East Africa will shift to discussions of competencies and away from the current debate - related to fitness for practice - which inevitably comes back to the ability to draft. Certainly the acknowledgement of the existence of a hidden curriculum in architecture education is a major step in addressing key contextual issues implicit in the education of architects.

The use of Focus Group Discussions as a research tool has proven to be an invaluable approach to research in the context of Uganda, enabling relatively spontaneous responses from participants, and allowing respondents to discuss issues that would likely not have come up in any questionnaire or a one-on-one interview. Even more important is that Focus Groups draw on the deep-rooted propensity within African society to narrate stories, but are nevertheless an underutilised method in contemporary research. This method of research does lend itself to the context of Uganda, where questionnaires are often incorrectly completed with what the respondents feel the interviewer wants to hear. In the case of the Focus Groups Discussions, this generally cannot happen as respondents are reacting to the gist of the overall discussion.

The findings of the Focus Group Discussions are suggest that further evaluations are necessary not only of student perceptions of architecture education, but more so on how architecture education is influenced by the 'tutor-factor'. A better understanding of students and their motivation for undertaking architecture may prove a valuable step in enabling architecture educators be better appreciate how architecture education in the context of East Africa, can be enhanced, for the betterment of the profession. While the study thus far has only taken in students in Uganda, a wider investigation including students and faculty of architecture schools in Kenya and Tanzania is currently underway. The findings certainly present challenges for architecture educators, professionals, students and

universities alike. How they are resolved can only come from an understanding and appreciating of the matters in question in their particular context.

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