

Architectural Education in Sub-Saharan Africa: An Investigation into Pedagogical Positions and Knowledge Frameworks

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Abstract

Formal architectural education in sub-Saharan Africa has been taught since the 1920s: initially in South Africa, and later in Kenya and Nigeria during the 1950s. The first postcolonial schools were opened in Ghana and Sudan also during the 1950s, and initiated discourse on the nature of architectural education for a postcolonial Africa. Notwithstanding, the origins of architectural education as an imposed reality across the region have had an unwavering impact on the current state of education. With increased focus on the state of architectural education globally, the need to tell the story of sub-Saharan Africa has never been more urgent, often obscured by discourse from other parts of the world, but significant in relation to growing discourse on decolonise and transform of education.

This paper engages with the discourse on architectural education within the context of sub-Saharan Africa. Derived from a wider study of architectural education undertaken across the region, the paper provides an insight into pedagogical positions and knowledge frameworks that have defined (and to an extent continue to define) how architectural education is perceived, and how it is undertaken. The paper investigates historic and contemporary discourse on architectural education that transcends the ages; a source of heated debate today, growing out of the recognition that architecture is a socio-cultural phenomenon. The few cases presented may yet destabilise the status quo and the traditional hierarchies within architectural education, they however are testament to a growing penchant for change, acknowledging alternative knowledge's and breaking from the hegemony of in historicised educational approaches.

Keywords: African-ness; architectural education; decolonisation; hegemony; pedagogy; sub-Saharan Africa

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1. Introduction

A century after the first architecture schools in the region were established in South Africa,¹ and seventy years after the founding of the first postcolonial architecture schools in Ghana and Sudan,² there has never been a more important time to tell the story of architectural education in sub-Saharan Africa. Regardless of this long history of architectural education, interrogation of the subject internationally has been fairly limited, highlighted in the October 2014 special edition of the *Journal of Architectural Education (JAE)*—Building Modern Africa—which had only one short article on architectural education in sub-Saharan Africa.³ This deficiency had been noted a decade earlier in the September/October 2004 edition of *AD Profile* on architectural education,⁴ as well as in the Spring 2018 edition of the *Journal Charette* with the theme, *From the Global South: Pedagogical Encounters in Architecture*, in which Mota and van Gameren⁵ acknowledge that perspectives of sub-Saharan Africa, which come largely from the global north, may be problematic and could misrepresent the state of architecture (and architectural education) across the region. This is not helped by the immense size of sub-Saharan Africa, which encompasses diverse nations, cultures and histories, acknowledged in the introduction to the special edition, *Building Modern Africa*, as noted by Brown:

JAE's foray into "Modern Africa" was fraught with danger from the start. Our proposition to survey a territory so large, geographically diverse, and culturally distant, was bound to be a mix of discovery and conflict—similar to so many other western incursions into Africa. The intellectual stakes for JAE rise at least partially from the unfortunate fact that Africa continues to be a "dark continent" for western architects.⁶

It is this reality, as well as my experiences as an architectural educator working in the region for close to two decades; experiences that have been the subject of publications interrogating the state of contemporary education,⁷ and provided a starting point for this exploration of architectural education. There is no doubt that many ideas, opportunities and challenges of architectural education across the region are tied into global concerns and themes, thus highlighting the similarities that exist in architectural education in many parts of the world. There are, however, specificities that are peculiar to the region,

which make such a study intriguing, as it investigates two key themes that emerged as part of a wider literature review of architectural education across sub-Saharan Africa, begun as an interest in contemporary architectural pedagogy in eastern and southern Africa. The first theme engages with pedagogical positions within architectural education, and how these influence the nature of educational engagement. From this, the second theme addresses the knowledge frameworks within architectural education, which is a dominant theme in postcolonial educational literature (architectural education being no exception).

Through a literature review of publications on and from architectural education across sub-Saharan Africa, this paper investigates these two identified themes as an initial exploration of architectural educational discourse across the region. In seeking to address the topic, the initial approach was to make use of academic citation databases, such as *Art and Architecture*, *Avery Index to Architectural Periodicals* and *Scopus*, the go-to index for architectural publications. However, this strategy proved to be inadequate, with only a few publications on or from sub-Saharan Africa available in these databases, revealing a challenge for anyone carrying out research on Africa. *Google Scholar*, as an academic citation search engine, proved a much more valuable source, allowing access to both academic and grey literature⁸ and, therefore, a considerably wider array of publications, which included a number of relatively obscure documents that greatly enriched the study. Sourcing citations, it turned out, was not the only challenge, with the sourcing of references presenting another obstacle. In some cases, this required the use of personal contacts to obtain non-digitised documents, or even visits to specific sites, particularly the library of the Royal Institute of British Architects (RIBA), which maintains a significant collection of documents on architectural education from across the world.

This paper deliberately took an inclusive approach, engaging equally with grey literature and documents often not included in scholarly research, but a necessary part of undertaking a study in sub-Saharan Africa. In this case, it was found that a considerable number of publications had been published in *predatory journals*, revealing a challenge for many scholars based in Africa, who publish in these journals out of necessity on the one hand, inexperienced naivety on the other, and everything else in between. While this did raise questions about the validity and quality of these studies, they have been included in this article as they do contribute in their own way to the emerging discourse on architectural education in sub-Saharan Africa, albeit from a

specific point of reference, one that cannot be ignored due to the sheer volume of papers that exist, but that should be critiqued for what it is and for its impact (positive or negative) on the broader discourse on architectural education. While this paper refers to sub-Saharan Africa, the research mainly draws information from studies published in English, and largely from the many former British colonies spread across the region.

2. Pedagogical Positions

Debates about suitable pedagogical approaches in architectural education emerged as a primary area of interest in this research, tied to inherent educational approaches. The importance of pedagogical approaches takes on added significance, as it is through these processes that students develop and acquire architectural values, which are transmitted consciously or unconsciously as part of the educational process.⁹ Across sub-Saharan Africa, there is no denying the fact that formal educational pedagogy is intrinsically linked to its colonial origins, which was introduced to enable individuals to participate in the army, to engage with trade, as religious missionaries, or in specific roles within the colonial governance structure.¹⁰ The control of access to education ensured hegemony across the region, which also served to concretise ideas about the purpose of education as a means to access particular roles in government. Within the educational realm there is evidence that it (education) was often synonymous with the mere transmission (and acquisition) of preconceived and pre-digested knowledge.¹¹ Oftentimes students come into higher education to be provided with all the knowledge, skills and experiences to enable them to engage in professional practice immediately on graduation, akin to the filling of empty vessels,¹² or what Crysler described as a *transmission model*,¹³ or Freire as *banking education*.¹⁴ This approach suggested an *entrenched pedagogy*,¹⁵ or even notions of *cultural cloning*, described by Essed and Goldberg as the ‘... systematic reproduction of sameness’,¹⁶ which created a degree of dependence and alienation to enable conformity.¹⁷ Within the context of professional education, it is at times suggested that sameness links back to the historic origins of a profession, which for architecture builds a ‘... sense of kinship with centuries of traditions, thoughts, and personalities ... the true tie that binds those who practice architecture with those who teach it and study it’.¹⁸ As regards sub-Saharan Africa, this has often meant casting students as blank slates, as noted by art educator Odoch Pido, whose early years as an art student saw his life experiences disregarded,¹⁹ a move that served to dislocate him (and his peers) from their societal context, a phenomenon

described as ‘the spectacle of separation and quartering’,²⁰ a ‘separation from oneself’²¹ as a prerequisite to participating in modern (read western) education.

Voulgarelis²² is particularly critical of such historicised approaches to architectural education, more so as the architecture student of sub-Saharan Africa may be regarded as “non-traditional”²³ within the context of “traditional” architectural education. This has not been helped by the use of pedagogical approaches that have changed little over the years, a result of what Noero²⁴ argues is a failure of architecture to embed itself into sub-Saharan Africa, seeking instead to emulate approaches from Europe or North America, perceived as the epitome of architectural education.²⁵ Coetzer²⁶ suggests this is part of the ‘absurdity of architectural design education’ in sub-Saharan Africa, whose approaches instil in students an “alien” set of references and values that do not reflect the realities of students’ lived experiences.²⁷ For Manià et al.,²⁸ this approach, based on the notion of conformity with established norms and rules that bolster the status quo, has contributed to architecture becoming even more detached from the society it purports to serve, heightened by the dearth of discourse on alternative and transformational educational approaches in architectural education.²⁹ This is compounded by an accreditation system largely concerned with the ‘adequacy and quality of physical infrastructure’ in the schools,³⁰ rather than the curriculum content or pedagogical approaches.³¹

Calls to rethink architectural education notwithstanding, it should be clear that rethinking pedagogical approaches, within the context of ‘... decolonising the curriculum is far more nuanced than simply replacing theorists and authors’.³² This was apparent in the early years of the school of architecture at the Kigali Institute of Science and Technology (now the University of Rwanda), where Gantner³³ challenged the view that limited access to resources placed the school at a competitive disadvantage.³⁴ Gantner argued that this presented an opportunity to redefine what architecture education in sub-Saharan Africa could be, suggesting that primary research should be integral to architectural education across the region. This acknowledged that libraries in many universities across sub-Saharan Africa are woefully underfunded and under stocked, with many architecture schools not even having functional libraries.³⁵ In this regard, contemporary architectural education in sub-Saharan Africa becomes a blank canvas on to which a new educational paradigm could emerge—an opportunity to develop research techniques suitable for the regional context.³⁶ The projects undertaken were similar to the design build projects often embarked upon by European and

American schools of architecture across sub-Saharan Africa, but with a key difference: students and instructors have a close affinity with the projects, with many students having first-hand experiences of the conditions for which they are designing. Other alternatives to address the inherent shortcomings of the prevailing pedagogical approach have been put forward, with Fisher et al.³⁷ proposing storytelling or personal narrative as a means of empowering students. They argue that this would blur the division between learners and instructors, invaluable in a context where the prioritising of a dominant narrative has prevented the emergence of alternative or emerging voices, which at the institutional level ‘... tend to be marginalised and ostracised by professional and accreditation bodies’.³⁸ For Lühl,³⁹ this was an opportunity for the development of research prowess and specialisation, a means of overcoming the lack of research within architecture education across the continent,⁴⁰ and an opportunity to level the playing field between schools in Europe and North America, and those in sub-Saharan Africa.⁴¹ This would ensure students were not adversely disadvantaged because of the lack of resources, giving the example of using found materials in design and presentation endeavours, showcasing the realities of resource constraints as a core element in architecture.⁴² In a similar vein, Low suggests that ‘... an African approach to studio demands that we “work the site” in all its multiple manifestations ...’.⁴³ Low sought to take the studio out of “the studio” as a means of humanising and defragmenting the stratifications in architectural education,⁴⁴ appreciating that learning is ‘... not an isolated activity but linked to context and social interaction’.⁴⁵ Noero goes further, suggesting that collaborative teaching approaches could also be a means to promote ethical practice.⁴⁶ This, however, could only happen through true collaboration, which goes beyond what Berlanda describes as *educational tourism*,⁴⁷ where European and American architecture schools have taken on design build projects that provide facilities for marginal communities.⁴⁸ However, these projects do not acknowledge involvement of (or do not involve) local architectural schools, thus raising serious ethical questions while also gaining a reputation as being little more than a new wave of *educational colonialism* by European and North American schools.⁴⁹ While it is acknowledged that they may provide accommodation for marginal communities, these often cannot be replicated as the designs and construction methods are simply too complex for local craft workers.⁵⁰ On a different note, such projects highlight a key challenge of architecture education across the region: its lack of engagement with rural and marginal communities (with a few exceptions), a consequence of an urban bias that has persisted in architectural education from the beginning.⁵¹

The challenges highlighted above have been a key driver for the most ambitious effort at reshaping architectural education in sub-Saharan Africa, as proposed by the Graduate School of Architecture (GSA) at the University of Johannesburg, as described by then programme leader, Lesley Lokko:

In the context of a racist and heavily-policed educational paradigm, opening up the pedagogical dogma to different views, positions and paradigms has had far-reaching implications, both radical and benign. As previously mentioned, the legacy of apartheid spatial ideology and planning has left architecture as a discipline in a particularly precarious position.⁵²

While the programme attempted to interrogate taken-for-granted, culturally loaded, educational endeavours and spatial patterns, the school remains one of only a few that have taken this radically different approach to architectural education. This approach is geared to ensure students appreciate the role architecture can play in transforming society.⁵³ Lokko goes on to propose that:

... a new set of pedagogies must be conceived of, a set of creative practices that make it impossible for official structures to ignore or marginalise: we call these *transformative pedagogies* and it is our intention to develop these as the basic building blocks of a new curriculum. Diversity—of medium, perspective, approach and context—is key. The question of what constitutes an authentic African architectural culture is still premature and evolving, but we believe that protecting the space in which such a culture may develop and mature is the school's fundamental priority.⁵⁴

Within this pedagogical approach, research formed the foundation of the programme, a means to bridge divides across histories, societies and ideals. This radically different approach to the prevailing and somewhat pervasive approach to architectural education was showcased as part of the 2017 African Architecture Awards, where two of the five shortlisted projects in the *Emerging Voices* category of the awards were by students of the GSA.⁵⁵ What becomes of these pedagogical changes in the long run is unclear, as there is still considerable resistance to alternative approaches regardless of these successes. This may relate to the nature of knowledge within architectural education, as is explored in the following section.

3. Knowledge Frameworks

The framing of knowledge has had a significant bearing on educational processes in architectural education in sub-Saharan Africa, which has, for the most part, been scaffolded by European knowledge frameworks. This has influenced the way

architectural knowledge has been structured and presented, appreciating that the origins of architectural education within the context of much of sub-Saharan Africa has largely been adopted wholesale from Europe; that is, arriving as part of the colonial project, and imposed with little regard for local realities. In many cases these approaches and knowledge systems have changed little over the years, evident in the limited trajectories evident across architectural programmes, and the scant discourse around this issue. It is not the purpose of this article to interrogate historical developments across the region, merely to acknowledge key points in architectural education over the years.

Outside South Africa, where the first architecture programmes in sub-Saharan Africa were established in the 1920s, it was not until the 1950s that two more schools were opened (see Table 1 and Figure 1): at the Nigerian College of Arts, Science and Technology, Ibadan, in what is now Nigeria (1952),⁵⁶ and at the Royal Technical College, Nairobi, in what is now Kenya (1956).⁵⁷ Unlike the South African programmes, these were not professional ones but geared to train technicians, who would support architects educated in RIBA accredited schools in the UK.⁵⁸ The transition to fully fledged architecture programmes came after a change in colonial education policies in the late 1950s, emerging as a response to the need for local professionals, due to a shortage of expatriates, to engage in the large volume of work as part of a post-war construction boom.⁵⁹ The transition saw the newly revised programmes take on key elements from the metropolis, initially mirroring those in their parent institutions,⁶⁰ with both programmes also benefiting from the outcomes of the 1953 Conference on Tropical Architecture, hosted by University College London (UCL).⁶¹ The conference was set up after protests by Nigerian architecture students studying at UCL, who were disgruntled with the education they were receiving in the UK, which they regarded as inappropriate considering the conditions they would encounter on returning to West Africa. The Oxford Conference of April 1958,⁶² among other things, brought architecture science to the forefront of architectural educational endeavours. Nowhere was this more apparent than in developments surrounding tropical modernism,⁶³ simultaneously synonymous with the application of technology, as well as the epitome of the modernisation of countries across sub-Saharan African. These were significant in defining the direction of early postcolonial architecture and architectural education, the “universal appeal” of modernism ensuring the sidelining of socio-cultural issues within the curriculum.

It was not until the first post-independence architecture schools in Ghana and Sudan that socio-cultural issues came under keen scrutiny, a consequence of a desire to establish an architectural education appropriate for an independent Africa. This would have to address a desire to urbanise due to a rapidly growing population, a small construction industry, limited technological resources, and few qualified locals.⁶⁴ The new programmes also had to respond to the emerging discourse related to *African-ness*,⁶⁵ questioning approaches that had been adopted almost wholesale from Europe that were not considered appropriate for an independent Africa. Responding to the aspirations of a newly independent Africa, John Lloyd, inaugural Dean of the School of Architecture, Town Planning and Building in Kumasi, Ghana, noted that ‘a Faculty of Architecture ..., if it is to truly contribute to the future of the [African] continent, must drastically redefine anew the task of an “architect”’.⁶⁶ This was in stark contrast to sentiments expressed by Robert Gardner-Medwin, then Head of the Liverpool School of Architecture, who oversaw the transition of the programme at Nairobi to a professional degree level. Gardner-Medwin was eager to uphold the status quo, compelling the programme to pursue a science and technology focus, as presented by Magaziner:

... (architecture) “is first of all deeply and fundamentally concerned with bringing the applications of science and technology to bear upon the total problem of human settlement,” Gardner-Medwin instructed his Nairobi colleagues. Architecture was about delivering solutions to pressing material problems. It was a practical science and African architecture programs like Nairobi’s were where practitioners would learn to apply rigorous technique to practical problems.⁶⁷

This decision served to define how architectural education would continue to be perceived in East Africa, well into the 1990s; but it was not without its challengers, with calls to articulate what constituted architectural education for sub-Saharan Africa. This was particularly the case for South African-educated Selby Mvusi, who emerged as a key instigator for change in the prevailing architectural curriculum and, what in hindsight, could be viewed as the beginnings of the decolonisation movement in architectural education in East Africa. Mvusi called for a new approach that did away with the view of universal applicability and scientific rationality that rationalised away the notion of cultural difference. Significantly, the scientific paradigms embedded within the approach at the time were regarded as universally applicable, a means of addressing developmental needs, which would ensure a strong link between architectural education and the future of the fledgling post-colonial states of sub-Saharan Africa. Indeed, it is noted that building:

... is part of nationhood. When a new nation comes into being, its historians are apt to refer to its creators and 'builders', and its leaders as 'architects'. Once independence is achieved, to be able to build is—as any postage stamp collector will vouch—one of the insignia of freedom, no less less vital an element in national self-esteem than the possession of armed forces or one's own international airline. And the justifiable pride in building is all the more intense if a nation happens to have a local vernacular—and, best of all, local materials—that can be used and developed.⁶⁸

Architectural education was thus built upon strong technological and scientific processes that afforded the budding profession valuable academic currency.⁶⁹ This approach placed culture and tradition firmly in the past; Futurism in this paradigm constituted a "war on the past", built on the assertion that nothing meaningful could be derived from the past.⁷⁰ This idea was at the heart of conflicts in the architecture programme at the University of Nairobi, where Selby Mvusi and his colleague Derek Morgan were adamant that the course be as much concerned with sociology and urban ethnography as it was with technical logic. They believed students should have an appreciation of the place of architecture beyond technical logic, with the aim being '... to disable student's expectations that they were going to be trained to become expert in ways preordained by professions'.⁷¹ According to Magaziner:

Mvusi theorized what would happen if Africans' contemporary "thought-processes" were taken seriously instead of being dismissed as either inauthentic or archaic. Contrary to those who saw only binaries such as developed/underdeveloped, rural/urban, African/Western, or traditional/modern, Mvusi insisted "underdevelopment is not monolithic. Neither is it exclusive nor static. It is itself active and dynamic, and is forever pacing development." To be poor and rural and African was not to be behind, but rather to be. The chronology of progress was a fiction.⁷²

Mvusi's sentiments expressed frustration towards the educational approach at the University of Nairobi, which in promoting the idea that modernity was incompatible with local norms, in effect ignored the role of society in creating architecture.⁷³ The desire of countries to match former colonial powers in all areas, including architecture, was a key driver in the direction taken within architectural education, given that architecture was perceived as an overt indication of the state of development, which filtered into architecture programmes, as noted by Danby:

The students were eager to learn the skills of the image-making foreigners so that they, in their turn, would be able to produce

modern buildings worthy of the progressive aspirations of their countries.⁷⁴

Although Mvusi and Morgan were unsuccessful in their attempts at influencing the curriculum at Nairobi, their ideas are re-emerging as key themes in architectural discourse, more so in post-apartheid South Africa. Here Luckan⁷⁵ suggested that architectural education should challenge the perception of the architect as the all-knowing expert, a notion that is still perpetrated in a few architecture schools,⁷⁶ and one which fails to appreciate, as pointed out by Voulgarelis, that such an education is more about a cultural phenomenon than about educational uniformity.⁷⁷ The post-apartheid era has been key in driving these explorations as architectural education seeks to address the needs of a multiracial South Africa,⁷⁸ as it must address the disparities of societies across sub-Saharan Africa. This suggests that any historicised approach that presents the curriculum and associated pedagogical perspectives as fixed and unchanging,⁷⁹ where change is often viewed with suspicion and trepidation, contributes to the view that architectural education is out of touch, existing in a paradigm of “unchanging permanence”.⁸⁰ This echoes sentiments expressed by Magaji and Ilyasu,⁸¹ and Odeleye,⁸² who suggest that the problems faced by the architecture profession have only emerged because architects themselves have failed to change with the times, which for architectural education reflects a failure to appreciate the:

... increasing diversification of the student cohort, worsening staff to student ratios [*sic*], under-preparedness of students for studies in architecture, the introduction of computer technologies and changes in architectural practice ...⁸³

Recent musings on the state of architectural education, while suggesting that challenges today are no different from those experienced over the years, do highlight a permanence of the status quo. Willingness to change and to innovate, as noted by Barac,⁸⁴ is seen in newer or independent schools of architecture, as in the Graduate School of Architecture (GSA) at the University of Johannesburg, and in the initial intentions of the architecture programme at the University of Rwanda.⁸⁵ For the latter, the challenge of setting up an architecture programme primarily with expatriate staff was not lost on the faculty, who needed to tread the fine line between architectural hegemony or cultural imperialism, on the one hand, and the need to build a local identity for the budding architects, on the other.⁸⁶ The programme directors acknowledged that within the context of sub-Saharan Africa, possibly more so than anywhere else, architectural interventions go well beyond simply the design of buildings,⁸⁷ leading to a programme that prioritised primary research. In the GSA, the socio-political ideals of post-apartheid South Africa were key

to the formulation of the programme, with *decolonisation* and *transformation* firmly embedded in the new graduate course. The programme sought to address, in its own way, the challenges that could only be addressed in a new school of architecture, unimpeded by historical baggage. This allowed for the rapid implementation of new ideas, which had become apparent as a consequence of the *#RhodesMustFall*⁸⁸ and *#FeesMustFall*⁸⁹ movements that swept through South Africa in 2015, forcing a rethink of higher education across the country.⁹⁰ Within architectural education, these movements highlighted the divide between students and the wider society, a ‘disengagement ... among many architecture students ... and ... the lived experiences of the community for which they hypothetically make decisions’.⁹¹ A third divergent approach was seen at Uganda Martyrs University, which sought to position its programme, to address the key challenges of environmental design and sustainability, through what was described as a ‘... radically ambitious agenda [that] included changes to the ethos, educational approach and the way instructors interacted with students’.⁹² The ability to enact change and to transform the programme was viewed by many as an impossible mission, but it was made possible as educational approaches and canons had not become entrenched.⁹³ What these examples showcase are inclinations toward change reminiscent of that, which briefly blossomed during the 1950s and 1960s. What it shows is the possible reawakening of this discourse half a century after it first emerged; however, as this discourse is still emerging, it is yet to be seen how this will unfold over the coming decades.

4. Reflections and Conclusions

Reflecting on the origins of architectural education in sub-Saharan Africa and its situation today, two almost polarised views persists. On the one hand, it is suggested that the system needs a radical transformation, achieved by abandoning the ineffective frameworks that continue to scaffold architectural education across the region. On the other hand, this is juxtaposed against a view that maintains that the status quo has served the profession well, and therefore does not need to be changed. As noted by Berlanda,⁹⁴ the latter view is underpinned by validation requirements, where attempts to break from this view could potentially leave students unable to claim the title “architect”, as the title is legally protected in most countries in Africa.⁹⁵ It also raises a pertinent question regarding the role of architecture in the postcolonial period, where architectural education still retains its largely western value systems.⁹⁶ While anti-colonial movements that emerged immediately after independence had initially hinted at

possible changes within education, contemporary discourse across the region suggests that this did not have a major influence on architectural education, and even the limited engagements evident are still little more than novelties within a sea of sameness. This reinforces the view that ‘... the discipline of architecture is inherently conservative and any changes to its teaching [are] constrained by its international traditions, conservative attitudes and inertia in bureaucratic systems’.⁹⁷

Although core to architectural education, how knowledge systems, pedagogical approaches and the embedded cultural values influence educational engagement in sub-Saharan Africa have only occasionally been interrogated and challenged. This in itself is bewildering, given the strong anti-colonial sentiments that emerged across the region during the 1950s and 1960s, and discussed in conferences that called for changes to architectural education over the years.⁹⁸ The emergence of critical discourse on architectural education out of post-apartheid South Africa could be viewed as a continuation of postcolonial trends seen earlier in East and West Africa. What is different is the impetus for change, driven by a willingness (at least in some spheres) to challenge the status quo, to ‘destabilize ... traditional hierarchies within education that perpetuate class, race, and gender hegemonies and, at the very least, destabilize the illusion that societal structures are static’.⁹⁹ This has forced a rethinking of educational approaches, with architectural education having to acknowledge not only the contribution of pedagogy and knowledge systems to this transformation, but also how this is instrumental in addressing injustices built into physical landscapes as an outcome of architectural endeavours. The transformation and decolonisation of architectural education across sub-Saharan Africa necessarily has to engage with global discourse, given the globalisation of education and practice, increasing international validation of programmes and growing calls for diversity in the profession. It would therefore be important that further research takes stock of global developments in architectural education, which for historical reasons still present as a backdrop to developments across the region.

It is refreshing to see the growth in publications on architectural education across sub-Saharan Africa, albeit largely out of South Africa and, to a lesser extent, Nigeria. Discourse beyond these countries is less visible, and difficult to access, but where available provides a fascinating insight into the state of architectural education across this vast region. Although the study reviewed a wide array of publications, it is acknowledged that language was a defining factor, limiting access to publications in

languages other than English, in particular, Afrikaans, French and Portuguese, ironically a colonial legacy that is still intrinsically tied to education across the region. The findings are indicative of the state of discourse on architectural education across sub-Saharan Africa, something increasingly cited as a challenge to the future of not only architectural education across the region, but to the architecture profession itself. Reflecting on the few examples presented in this paper, these highlight a number of endeavours that attempted to rethink architectural education for sub-Saharan Africa, explorations that may become more significant in the years to come. There are, no doubt, significantly more yet to emerge, presenting significant scope for further exploration of this topic as part of this and other research projects.

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20 Achille Mbembe, *Critique of Black Reason*, trans. Laurent Dubois (Durham: Duke University Press, 2017), 78.

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22 Hermie E. Voulgarelis, 'Non-traditional architectural studies: What might influence the development of a successful model? A review of literature' (Design, Development & Research, Cape Town, South Africa, 26–27 September 2011).

23 "Non-traditional" students have typically referred to students with disabilities, as well as from minority ethnic and racial backgrounds, and have different learning styles or whose learning approaches are atypical. For sub-Saharan Africa, this is somewhat flipped given that the approach to architectural education is still largely linked to European origins. While overtly apparent in South Africa, it is not much different across the region.

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25 Tomà Berlanda, 'De-Colonising Architectural Education: Thoughts from Cape Town,' *Built Heritage* 3, no. 1 (2017).

26 Nicholas Coetzer, 'Towards a dialogical design studio: Mediating absurdities in undergraduate architectural education in South Africa,' *South African Journal of Art History* 25, no. 1 (2010).

27 F. Jegede et al., 'Designing to meet indigenous needs: Place of traditional studies in architectural education' (11th International Technology, Education and Development (INTED) Conference, Valencia, Spain, 6–8 March 2017).

28 Kirby Mania, Ariane Janse van Rensburg and R. Bird, 'Writing into design: An embedded writing course for architectural studies,' *South African Journal of Higher Education* 31, no. 5 (2017), <https://doi.org/10.28535/31-5-1497>.

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30 M. Magaji and M. S. Ilyasu, 'The architectural education curriculum in the Nigerian schools of architecture,' *IOSR Journal of Research & Method in Education (IOSR-JRME)* 6, no. 6 (2016), <https://doi.org/10.9790/7388-0606081317>.

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al., 'Designing to meet indigenous needs'; Olu Ola Ogunsote and Bogda Prucnal-Ogunsote, 'Infrastructural and interconnectivity considerations in the design of modern architecture studios in Nigeria: Lessons from leading schools of architecture,' *Journal of the Association of Architectural Educators in Nigeria (AARCHES-J)*, no. 1 (2013).

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33 Garret Gantner, 'Hands, eyes and feet: Approaches to an architectural education' (Sustainable Futures: Architecture and Urbanism in the Global South, Kampala, Uganda, Uganda Martyrs University, 2012).

34 The lack of resources is a major point of discussion across sub-Saharan Africa, as noted by Ogunsote and Prucnal-Ogunsote, 'Infrastructural and interconnectivity considerations.'

35 S. I. Nwankwo, J. O. Diogu and S. C. E. Obasi, 'Evaluation of students design studio performance in schools of architecture towards ensuring qualitative architectural education in Nigeria' (ICERI 2014 Conference, Seville, Spain, 17–19 November 2014).

36 This was evident in projects including Laboratory for an Integrated African Network for the Built Environment (LIANE) and Joint development of courses for energy efficient and sustainable housing in Africa (JENGA).

37 Roger C. Fisher, Mary E. Lange and Emmanuel N. Nkambule, 'Cultural hybridity in the teaching of architecture within a decolonised society,' *Paranoá* 18 (2017), <https://doi.org/10.18830/issn.1679-0944.n18.2017.01>.

38 Berlanda, 'De-Colonising Architectural Education,' 71. This was a challenge for the architecture programme at Uganda Martyrs University, the second school in Uganda, which was ostracised for developing a programme markedly different from that in the existing school at the time.

39 Phillip Lühl, 'Towards a new architecture school: Positioning Namibia's first school of architecture theoretically within its post-colonial context' (paper presented at the Architectural Education Forum Symposium: Architectural Education @ Different Scales, Johannesburg, 3–4 September 2016).

40 Y. M. D. Adedeji et al., 'Architectural education and sustainable human habitat in Nigeria,' *WIT Transactions on Ecology and the Environment* 167 (2011), <https://doi.org/10.2495/ST110091>.

41 Sandra Felix, 'Architecture for all' (paper presented at the Architectural Education Forum Symposium: Architectural Education @ Different Scales, Johannesburg, 3–4 September 2016).

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43 Low, 'Educating architects in Africa,' 163.

44 Mark Olweny, 'Introducing sustainability into an architectural curriculum in East Africa,' *International Journal of Sustainability in Higher Education* 19, no. 6 (2018), <https://doi.org/10.1108/IJSHE-02-2018-0039>; Mudashir Gafar and Abdulazeez U. Raji, 'An assessment of architecture students' perception on the soft and practical skills integration into the curriculum structure for sustainable development in Nigeria,' *Journal of Technology Management and Business* 5, no. 2 (2018).

45 Hermie E. Delpont-Voulgarelis and Rudolf Perold, 'Exploring collaboration in architectural education: Towards design-build projects – Part 1,' *Journal of the South African Institute of Architects* 77, January/February (2016): 43. See also Olweny, 'Socialisation in architectural education.'

46 Noero, 'Invited presentation.'

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- 52 Lokko, 'A minor majority,' 390.
- 53 Bridget Horner, Miranda Young-Jahangeer and Rubby Dhunpath, 'Performing problems on the pavement: An innovative approach to architectural education in post-apartheid South Africa,' *Journal of Architectural Education* 70, no. 2 (2016), <https://doi.org/10.1080/10464883.2016.1197667>.
- 54 Lesley Lokko, 'uKuhumusha: From 'Here' to 'There' – Transplanting the Unit System from Europe to Africa (and back again),' *Charrette* 4, no. 2 (2017): 21–22.
- 55 Out of close to 500 applicants from more than thirty countries across Africa.
- 56 The College was moved to Zaria in 1955, and has since changed its name to the Ahmadu Bello University.
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- 58 See Clive Whitehead, 'The Concept of British Education Policy in the Colonies 1850–1960,' *Journal of Educational Administration and History* 39, no. 2 (2007), <https://doi.org/10.1080/00220620701342296>.
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- 63 See Hannah le Roux, 'Building on the boundary – Modern architecture in the tropics,' *Social Identities* 10, no. 4 (2004): 439.
- 64 Łukasz Stanek and Ola Uduku, 'Post-independence modernization,' in *Radical Pedagogies: Reconstructing Architectural Education at the 7th Warsaw Under Construction Festival*, ed. Beatriz Colomina and Evangelos Kotsioris (Warsaw: Warsaw Faculty of Architecture, 2015), 16.
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- 67 Magaziner, 'The foundation: Design, time, and possibility in 1960s Nairobi'. *Comparative Studies in Society and History*, 60 (2018), pp., 609.
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90 Lokko, 'uKuhumusha.'

91 Horner, Young-Jahangeer and Dhunpath, 'Performing problems on the pavement,' 203.

92 Olweny, 'Introducing sustainability,' 1142.

93 Olweny, 'Introducing sustainability.'

94 Berlanda, 'De-Colonising Architectural Education.'

95 Felix, 'Architecture for all'; Coetzer, 'Towards a dialogical design studio.'

96 Lühl, 'Towards a new architecture school.'

97 Fisher, Lange and Nkambule, 'Cultural hybridity,' 4.

98 The first was held in 1984, hosted by the African Union of Architects (AUA) in Nairobi, Kenya, under the theme "The Appropriate Direction of Architectural Education in the African Region of the British Commonwealth". Two follow-up conferences partly sponsored by the Commonwealth Association of Architects (CAA) were held in 1988 and 1991, both seeking to respond to the perceived dilemma of architectural education.

99 Horner, Young-Jahangeer and Dhunpath, 'Performing problems on the pavement,' 204.