



The
University
Of
Sheffield.

Negotiated Pedagogy

**Instigating the acquisition and development of skills for future
practice in Nigeria.**

By:

Nkemakonam P. Okofu

**A thesis submitted in partial fulfilment of the requirements for the
degree of Doctor of Philosophy**

School of Architecture, University of Sheffield.

Volume 2: Appendices

Table of Contents

Appendix A

The profiles of educator-respondents	3
The profiles of Nigerian educator-respondents	13
Appendix A3: Position paper	16
Appendix A4: Pilot Study	17

Appendix B

B1: Interview Protocol and Questions	26
B2: Interview schedule (Educators' Interviews)	26
B3: Prior to start of the interview (General)	27
B4: Educators interview questions	27
B5: Case Study interview questions for educators	28
B6: Case Study interview questions for students	28
B7: Focus group interview questions for the Nigerian educators	28
B8: Condition for recruiting focus group/workshop educator-participants	28
B9: Questionnaire survey I (Nigerian educators, practitioners, policy makers)	30
B10: Workshop with students and educators	34
B11: Questionnaire survey II (Nigerian architects/educators)	35

APPENDIX C1

Item A: Selected Educators' Interview Transcripts	38
Item B: Selected Students' Interview transcripts	118
Appendix C 2 – Analysis of Workshop Data	142
Appendix C2 – Nvivo data analysis software	147

Appendix D

Appendix D1: Thematic analysis	148
Appendix D2: Table 8.4 Analysis of responses relating to context	149
Appendix D3: Table 8.5 Analysis of responses relating to pedagogic theories	150
Appendix D4: Table 8.6 Analysis of data relating to techniques for future	151
Appendix D5: Table 8.7 Analysis of data relating to Future Skills	152
Appendix D6: Table 8.8 Online Survey relating to future skills	154

Appendix E

Item A: Respondents Information Sheet 1	154
Item A: Respondents Information Sheet 2	155
Item B: Respondents Consent form	156
Item C: Ethics Approval 1	157
Item C: Ethics Approval 2	158

Appendix F

Bibliography	159
--------------	-----

Appendix A

The profiles of educator-respondents

The list below is a detailed description of educators' profile and their distinctive research and teaching interests that further highlights the reasons for their selection.

S/n	Names	Profiles
1.	Ikechukwu Onyegiri (Prof)	Onyegiri (Ph.D.) is a professor of Housing at the Department of Architecture Imo State University Owerri-Nigeria. At the time of this interview, he has taught architectural design and employed the use of the 'Integrated Project Design Model' for over two decades. He argues that this approach enables students to be situated and embedded in the local context to understand what the real issues are. His research interest is on housing, urban, and community design methods.
2.	Ruth Morrow (Prof)	Ruth Morrow is a professor of Architecture at Queens University, Belfast, United Kingdom. Morrow's involvement in research and teaching in architecture spans over two decades with a keen interest in the interconnection between people, place, architectural design pedagogy and practice through the exploration of inclusive design methods. She is an advocate of feminist pedagogy that calls for the recognition and promotion of students' voices in the design studio, through disabling design approaches. Her research centres on the understanding of the creative process, inclusive strategies and design methods.
3.	Doina Petrescu (Prof)	Petrescu (Ph.D.) is a Professor of Architecture and Design Activism at the University of Sheffield. Her research interest is on gender and space in contemporary society with the view that there are other ways of re-

		appropriating and taking control of public spaces as both a citizen and an active agent. Through her studio collective practice -atelier d'architectureautogérée, Petrescu believes that learning could be co-created in a socially-minded kind of way by empowering the inhabitants of big cities and students through the Live Projects to take active control of their learning.
4	Ashraf Salama (Prof)	Salama (Ph.D.) is a Professor of Architecture and head, Department of Architecture, University of Strathclyde, UK. His research focuses on curriculum development, design studio teaching practices, transformative and critical pedagogy, and urban design. He places strong emphasis on the impact of socio-cultural factors in shaping the built environment.
5.	Jhono Bennett	Bennett is a studio teaching staff member at the University of Johannesburg, South Africa. His master degree thesis questioned the existing design studio model that holds the assertion that the consequences of every architectural process end up as a building. Through his thesis, Bennett demonstrated that by developing a design response to vulnerable social and communal local networks, architecture could create a synergy between the architect, local people, context, and their social needs through a social-technical spatial design approach. Using the aforementioned model, Bennett argues that criticality and empathy are two essential capacities that students need to develop in order to address the complexities challenging communities in the Global South.
6.	Jeremy Till (Prof)	Professor Jeremy Till is the head of Central Saint Martins and Pro Vice-Chancellor at University of Arts London. He had been involved in architecture practice before joining

		<p>academia. His research centres on ethics of architecture, social and political dimensions of spatial production, scarcity, and spatial agency. Through his research, Till argues that the contingency of architecture practice demands for a new form of education agenda rather than a new form of knowledge with the view that every new knowledge becomes obsolete within a short period of time.</p>
7.	Maurice Mitchell (Prof)	<p>Maurice Mitchell is a Professor of Architecture at the CASS Faculty of Art, Architecture and Design, London Metropolitan University. He is interested in the narrative interplay between technical and everyday cultural factors in the production and occupation of the built environment, particularly in situations of rapid change and scarce resources where new identities are forged through the process of 'making and fit.' His experience working with students in communities in the Global South, in places such as Ghana, Sierra Leone, and India among others, has exposed him to first-hand design challenges in marginal communities as he experimented with his 'Loose Fit' approach as a form of the LiveProject.</p>
8.	Viviana d' Auria	<p>Viviana d'Auria is an Associate Professor in Human Settlements and Development at the Department of Architecture, Urbanism, and Planning, Katholieke Universiteit Leuven, Belgium. Her research explores critical and spatial analyses of modern dwelling environments and practice of everyday life. D' Auria argues that architectural education should go beyond the stiffened technical approach to learning architectural design by exploring ways of understanding and addressing the dynamism of context-related challenges in the contested communities of the Global South.</p>
9.	Garret Gantner	<p>Gantner (Ph.D.) is a Senior Lecturer at the Department of</p>

		<p>Architecture and Planning, University of Witwatersrand, Johannesburg, South Africa. Through the interconnection between practice and education, Gantner explores how knowledge from a socially-minded form of architecture practice informs a design studio model that places emphasis on situated learning and context-specificity. He was a former Head, Department of Architecture, Kigali Institute of Science and Technology (now University of Rwanda) where he shaped a new curriculum in architecture following the rationale of exploring the meanings and roles for the profession in a local context.</p>
10	Costanza La Mantia	<p>Costanza La Mantia is a registered architect and holds a Ph.D. Urban and Regional Planning from University of Palermo (Italy) with an architecture background. She worked with Garret in shaping the curriculum for the Department of Architecture Kigali Institute of Science and Technology, Uganda. Le Mantia at the time of this interview was a post-doctoral fellow at the University of Witwatersrand, Johannesburg, South Africa, where she engaged in a project 'Resilience Assessment for Sustainable Urban Development.' Her research and teaching approach focuses on bridging the gap between local and cultural identity, preservation and innovation through the application of design principles relating to local and sustainable agenda. Central to her research is participatory slum upgrading with the aim of linking policy framework and spatial issues through community participation and flexible governance processes.</p>
11	Sandra Denicke-Potcher	<p>Denicke is the Acting Deputy Head, School of Architecture, London Metropolitan University. She is engaged in the Undergraduate Live Projects design</p>

		<p>studio. Denicke co-founded Studio 3 –Architecture +urbanism, and public works that focus on exploring new ways of practicing and representing architecture. Denicke, amongst other things, believes the premise that the role of the architect is changing and as such student-architects should be exposed to hands-on learning approach through critical community engagement and participatory democracy leading to knowledge co-creation and multiple authorship.</p>
12	Henry Sanoff (Prof)	<p>Henry Sanoff is a Professor of Architecture at School of Architecture, College of Design, North Carolina State University Raleigh, USA. Since the 1960s Sanoff has been one of the leading proponents of Community Design that advocates for a socially, democratic, and shared approach to learning and doing architecture through a service-learning model. His research and teaching revolve around community participation, social architecture, design research, design methodology, social housing, children’s environments, community arts, ageing populations, and design programming.</p>
13	Hussam Salama	<p>Hussam Salama (Ph.D.) is an Assistant Professor and Head, School of Architecture, German University in Cairo, Egypt. His research and teaching interests revolve around architectural design education, urban design, architecture and urban design theories. Part of his research project focused on exploring cities in the Middle East with a central interest in the aggressive narrative development of the city of Dubai. Salama argues that learning in the context of everyday lived experiences allow the complexity and complicated nature of human, social, political, economic and cultural realities to be understood and addressed appropriately within the same</p>

		context.
14	Alexander Opper	Alex Opper is an architect, designer, artist, educator and a writer. He is the director of the master degree programme in Architecture at the University of Johannesburg, South Africa. His practice-led research employs the physical and mental space of the design-studio that explores the crossing and overlapping conditions of pedagogical possibilities. Opper’s approach to teaching draws on the negotiated relationship and interaction between the design studio and pedagogical projects that directly immerse students within the specific local context of Johannesburg socio-cultural conditions. This “allows for relationships – between the architecture of cities, and cities of architecture – to be questioned, tested and developed.” ¹
15	Eric Charles Wright	Eric Wright is a practicing architect and teaching academic at the University of Johannesburg, South Africa. His philosophy and teaching approach investigates the changing nature of Johannesburg as a city, a landscape, and people. Wright explores the nexus, overlap, and the tangential connection between teaching, practice, and the idea of the city such that teaching, practice and the city become entwined and interdependent.
16.	Bridget Horner	Bridget Horner (Ph.D.) is an Architect and academic at the University of KwaZulu Natal, South Africa. She is also the Director of Space Syntax South Africa; a registered global practice concerned with the enhancement of the social, economic, and environmental performance of buildings and urban spaces. Horner’s research interest lies in evidence-based analysis and strategic design process that explores interdisciplinary engagement between architecture and other allied disciplines with the

¹<https://www.uj.ac.za/contact/Pages/Alex-Opper.aspx>.

		assertion that interdisciplinary learning engenders co-production of knowledge through learning/working with or from others.
17.	Harriet Harriss	Harriet Harriss (Ph.D.) is a senior tutor at The Royal College of Art, London, UK. Her teaching and research interest centres on exploring new and alternative ways of developing pedagogical models within the context of the design education with an emphasis on socially-engaged Live Projects and community-based learning. Her doctoral research thesis examined how architecture 'Live Projects' enable the development of 3 critical skill-sets for future practice with the assertion that teamwork, civic engagement, risk and ambiguity management are quintessential capacities needed in navigating the unstable terrain of architecture practice. Through her research, Harriss, holds the assertion that the campus setting with its siloed nature is neither capable of supporting the testing of materials at scale nor able to encourage students to take risks, hence the need to rethink the right place and approach to educating the next generation of architects.
18	Mark Olweny	Mark Olweny(Ph.D.) is an architect and urban designer, and Associate Dean of the Faculty of the Built Environment, Uganda Martyrs University. His Ph.D research thesis centred on socialisation in architectural education with an emphasis on the values of socially-engaged learning processes. Olweny through his engagement with students in community design projects explored ways of testing how new design approach that connects the locals with the future design to explore ways of responding to social, cultural, political, and climatological conditions of the local context.

19	Carin Cambrinck	<p>CarinCambrink (Ph.D.) is a practising architect and academic staff at the Department of Architecture University of Pretoria, South Africa. The trio of her research, practice, and teaching experiences has exposed her to diverse learning and teaching approach that centred on how practice informs teaching and research within the context of community design learning. Cambrink demonstrated that architecture could be used as a form of intervention, to mediate between the complexities that challenge marginal communities. In her Ph.D. thesis: "A model to address marginality of the architectural profession in the South African discourse on informal settlement upgrade", Cambrink, proposed a Community Action Planning method developed by Goethert&Hamdi (1997) as a transformative matrix in addressing marginality in all its appearances.</p>
20	Beatrice De Carli	<p>De Carli (Ph.D.) is a programme leader in MA in Urban Design, University of Sheffield, UK. Her research interest lies in the exploration of ways of addressing global inequality and uneven development of urban areas by not only examining the cause and effect, but exploring design tools and approaches towards creating planned interventions that are predicated on developing strategies and tactics of re-appropriation, understanding space and social relations with the use of mapping techniques. De Carli explores different Urban design approaches that engage participation, action learning through the live projects that connect teaching, practice and the everyday lived experiences as a citizen and engaged urban practitioner.</p>

21	Leo Care	Leo Care is the director of the MArch course and co-director of Live Works, University of Sheffield, UK. His research interest centres on community-led and participatory design approach with emphasis on how to integrate health and safety design strategies into building projects and construction processes. Care's engagement in the design studio and the Live Projects explore ways of enabling students and local communities they work with learn collaboratively toward co-creating knowledge and life-long learning. Central to his teaching and research engagements is the development of learning and design tool kits that expose students to a diverse range of pedagogical opportunities inherent in the Live Projects such kits include the Feedback handbook.
22	HermieDelpport (Voulgarelis)	HermieDelpport (Ph.D.) is a lecturer at Cape Peninsula University of Technology, Cape Town, South Africa. Her research interest centres on Design-Build pedagogical models that explore ways of enabling students to develop self-build capacities towards addressing housing needs in Johannesburg. Delpport has developed a series of pedagogical design studio models that centre on community design projects; entrepreneur activist architecture practice, 'passport' –an integrated design studio model; collaboration and design-build project approach in local communities.
23	Cristina Cerrulli	Cristina Cerulli(Ph.D.) is a practising architect and a Senior Lecturer at Sheffield Hallam University, at the time of this interview she was an academic at the University of Sheffield, UK. Her work and research centres on social innovation and critical management that explores ways of empowering students not only to be innovative in their creative, entrepreneurial engagement with an alternative approach to architectural design practice but also the need to

		question the normative architectural education and practice. Cerulli runs a social enterprise architecture practice (Studio Polpo) that centres on ways of enabling local business (not for profit) within communities strive for social benefits. She sees her research and practice to revolve around terms such as knowledge transfer, collaborative, and trans-disciplinary approach that engender co-production of knowledge.
24	Tony Ward (Prof)	Tony Ward is a Professor of Architecture at the University of Auckland, New Zealand. His research interest centres on community design, consensus building, socio-cultural and community empowerment, critical pedagogy, critical education theory. Ward believes that education is partly the cause of today's problems. Hence architectural education should be geared towards developing social equality by enabling students to develop criticality and a capacity to question the way they learn. Through his teaching Ward advocates for critical pedagogy, student-centred learning, student-as-producer, cooperative learning, community engagement and learning for social change.
25	Thomas Dutton (Prof).	Thomas Dutton was a Cincinnati Professor of Community Engagement, Department of Architecture and Interior Design, Miami University, USA. Before his death in June 2017, Dutton's research and teaching centred on social justices and equality, critical pedagogy and critical theory. Drawn from his belief that architectural production should go beyond the work of the architect but engenders the participation and collaborative engagement with community members. This led to the establishment of the Centre for Community Engagement in 2002 at Cincinnati to promote collaborative learning within local areas.

PROFILE OF NIGERIAN EDUCATOR-RESPONDENTS

Profile of Nigerian educators engaged in the focus group

1	Alexander Fakere	Alexander Fakere (PhD) is a practising architect and a design studio tutor at the Department of Architecture, Federal University of Technology Akure, Nigeria. His research centres on the design studio pedagogy, housing and urban design methods, sustainable local building materials and ways of addressing and managing communal conflicts in local villages/neighbourhood in South-West Nigeria.
2.	David Oyedemi	David Oyedemi is a lecturer at the Ladoja-Akintola University of Technology Ogbomosho, Nigeria and also a PhD research student at the University of Sheffield. His research and teaching centres on community design methods, the importance of landscape design in health and wellbeing, users' participation in co-housing within local communities in Nigeria. Oyedele explores how students use precedence in their design process in the design studio.
3.	RemygiusNwokocha	RemygiusNwokocha is a licensed architect and an assistant lecturer at Imo State University, Owerri-Nigeria. His research centres on ways of enabling students to develop capacities to design and work with rural communities in Nigeria. Nwokochaargues that the Integrated Project Model enable students develop capacities and skills to self-initiate projects in the midst of challenges facing marginal communities.
4.	Ayodelelkudayishi	Ayodelelkudayishi is a senior lecturer at the Federal University of Technology Akure (FUTA), Nigeria. His research and teaching centres on barrier free architecture of inclusion, thermal comfort design approaches and multiple ways of developing responsive design that are context specific and address

		users' needs through the normative design studio model.
5.	Aliyu Sani	Aliyu Sani is a lecturer at the Ahmedu Bello University, Zaria, Nigeria and also a PhD research student University of Sheffield. His research and teaching interest revolves around contemporary architectural design approaches and ways of addressing housing deficit in Nigeria with an emphasis on developing framework for self-build housing development in Nigeria. Sani teaches architectural design methods, sociology of housing, ways of developing hybridity between traditional building materials/techniques and the contemporary construction techniques.
6.	AminatAjenifujah-Abubakar	AminatAjenifujah-Abubakar is an assistant lecturer at the Department of Architecture, Federal University of Technology Owerri, Nigeria. Her research interest sits at the junction between architecture as a fixed object architecture and architecture as a mobile unit that changes with time, context, people, and place. Ajenifujah-Abubakar explores with her student's ways of evaluating different impressions about peoples' experiences of the mobility of architecture. This is upon the assertion that local mobile architecture does not only transcend between culture and space but possessing the capability of responding to changing needs of users.

APPENDIX A₃

POSITION PAPER

This paper discusses the findings of a PhD (work-in progress) thesis on negotiated pedagogy.

Research Title: Negotiated pedagogy: Instigating the acquisition and development of skills for future practice in Nigeria.

Research Background

This research was prompted by the researcher's own experience as a student and educator whose education only prepared him for a different kind of practice, one that is not only removed from the experience of the everyday practice (where the design studio is isolated from its surrounding) but yet to come to terms with the changes taking place in recent times.

This thesis is also a response to several debates by educators in architectural education in Nigeria through different fora, for instance, a recent conference organised by the Association of Architectural Educators in Nigeria (AARCHES). The debate accentuates the notion that architectural education in 'Nigeria is at cross road', this is drawn upon the argument that architects' education rarely equip them to respond to the social, cultural, political, and environmental complexities challenging the contemporary society (Olotuah, 2006; Chukwuali, 2001). Other educators further argue that the curriculum of architectural education since its inception in 1952 (when the first school of architecture was found) was predicated on the Beaux Art and the Bauhaus orthodoxy which is unfit for use as it only promotes Eurocentric that are in stark contrast with the Nigeria values (Arayela, 2001; Uji, 2001; Olotuah & Adesiji, 2005).

It is not only that the curriculum of architectural education was modelled after the Beaux Art and Bauhaus orthodoxy but also the notion that it does not reflect the core fabric of the Nigerian socio-cultural diversities and mix or being informed by it (Olotuah, 2006). Further to this assertion that the curriculum of architectural education in Nigeria does not reflect the complexity of the context where it is explored (curriculum as lived) , which resonates the argument that over 54 years of its existence from the Zaria experience until recently the curriculum is perceived to have been reviewed once at the end of 1960s, yet it has never taken on board the influence of the socio-cultural and political plurality of the Nigerian rich cultural diversity (Olotuah, 2016:28). Nigerian educators and their counterparts in other parts of the world have continued to advocate for a pedagogy that is not only influenced by the socio-cultural and political exigencies of the context it is explored but also a pedagogy that is capable of responding to the contemporary needs of the ever-changing society.

The research argues that one of such ways of responding to the pedagogic needs of the curriculum of architectural education in Nigeria is not by developing a new curriculum because whatever that is new will definitely be obsolete and irrelevant 'by the time your students face the real world' (Till, 2005). It is by developing a negotiated pedagogy capable of equipping students with capabilities for future practice.

In doing this, the thesis examined alternative pedagogies that call for more social forms of learning, utilised three methodological approaches (Review of existing literature, interviews of educators, and a case study approach), the sample of data cut across three contexts (North America, and Europe, and Africa). The data was analysed to further crystallise the understanding of how educators construct meanings and describe their teaching experiences. It was followed with three case studies that examined students lived experiences in order to evaluate how the claims made by educators played out.

The following key findings emerged from the study, which is further evaluated through focus group, workshop and online survey.

The findings are grouped into five sections:

Section A: Learning techniques

Section B: Context

Section C: Pedagogic theories and approaches

Section D: Future practice and future skills

Section E: Barriers capable of challenging the acquisition of capabilities

Research Findings

Section A: Learning techniques

1. The traditional design studio pedagogy is been criticised for the lack of social responsiveness as it is geared towards developing the 'solitary genius' rather than a social collaborator. This notion of architecture as a solitary practice is being challenged by **encouraging architecture schools to place emphasis on ways of 'learning/working with' others through inclusion, diversity, group work, collaboration, interdisciplinary teamwork, co-production.**
2. The assertion that "architecture is too important to be left to architect"¹ is further resonated in the empirical research as the normative design studio is criticised for not engaging user/clients in the design and decision-making processes. Evidence from data suggests that introducing users/clients and other professionals into the learning and

design context enrich the process while co-creating knowledge and product that is useful to both students and users. The understanding of architecture and authorship further crystallises the assertion that the outcome of co-production creates multiple voices and multiple aesthetics while that of a sole authorship creates one signature, one voice, and one coherent aesthetics.

3. Beyond challenging the orthodoxy of the design studio learning, is the view that developing a pedagogy that exposes students to multiple types of learning experiences, which challenges the notion of 'one size fits all' or seeing every consequence of architecture as a building. Hence, students should be exposed to different types of pedagogies in other to "appreciate knowledge and complexities of issues from different perspectives" (Sanoff & Toker, 2003:3).

Section B: Context

4. Immersing students in their project context is seen as a way to address the notion that the design studio is not responsive to the social, political, economic, and cultural concerns of the context it tends to design for, this is seen in the way students only design from the prescriptive brief of the tutor rather than learning from lived experiences. The assertion accentuates the notion that immersing students in the project context does not only enable them to understand the complexities and realities inherent in the everyday life but equip them with the capacities to engage with the users in the process of co-developing the needed interventions within that context.
5. Another proposition challenges the claim that it is only when students are situated in a context before they could address its inherent challenges with the view that using digital media tools helps in developing a network that links the community of practitioners to the project context and the users without necessarily being immersed in the context. Digital media tools present dynamic opportunities for architects and students to collaborate, share resources, navigate difficult terrains while providing interventions, resources, and shared knowledge to a wider community of users/partners. However, the digital media-networking tool is not without its own challenges as students argue that it denies them the opportunity of engaging directly with the real users of the spaces, they are working in. It further raises the question of whether digital media tools are capable of stimulating the same amount of reality that is present in situated learning approach and also to what extent is the digital media platform enabling the full delivery of the attributes of negotiated pedagogy since it simulates reality from a third-party perspective.

6. Three context related issues have been identified to influence pedagogical frameworks: the student context (relating to issues around student's socio-cultural background), the institutional context (relating to the ethos of the school of architecture), and the project context (relating to issues about project site and its characteristics). When develop pedagogy it is important to evaluate how it relates to these three contextual issues (the student, institutional, or project contexts) in addressing issues of social, political, and cultural concerns within that context. Evidence from this study advocates for a balance between context related issues such that students will have a rounded knowledge of and how to respond to different context related issues.
7. The understanding of context raises a fundamental question of whether context in any way influences the type of pedagogic model or action method to be used in a pedagogic project? Further evidence from the research suggests that a pedagogic model could be transposed into another context without necessarily influencing the meta-framework but influences the nature of action learning method that is site-specific, hence each context/site dictates the action method of engaging with the elements and actors present in that context. More so, project types have been identified to dictate the type of model needed in any context.
8. Students identify public engagement approach as a used technique in relating to users, stakeholders, and partners in a live project to enable all active participants in the project to be connected and situated in the learning process where individual contribution are negotiated towards reaching a consensus design decision within a project.

Section C: Pedagogic theories and approaches

9. Architectural design education is criticised for not originating and developing its own theories but rather lean on other disciplines for theoretical support yet taking a theoretical position is seen as a requirement that legitimates a pedagogical praxis in architectural education (Brown, 2014). Critical, feminist, and transformative pedagogies were seen to legitimate All the educators engaged in the research were keen not only about aligning their pedagogical framework to an existing theoretical body of knowledge as drivers and underpinnings to what they do but also the passion for developing a pedagogy that equips the students towards developing critical thinking capacities. However, another interesting observation evidenced in the study shows that educators placed little or no interest on affixing a label or title to the pedagogy they espoused despite being more reflexive in

exploring, developing, and experimenting with the models. It is further evidence that the title of the pedagogical models was less important to educators than the theories underpinning those models; however, this observation seems to contrast with the normative design studio models reviewed in Chapter 2 where all the models were inherently defined while deriving meaning from their titles.

10. The normative design studio pedagogy is been criticised for promoting Tutor-Centred Learning approach that explores the 'Banking Concept' to learning, which likens the students to empty bank accounts while the teacher deposits knowledge into the students as depositories (Freire, 1970). The above notion of object/subject relationship between the tutor and the student is challenged through the theory of critical pedagogy that does not only enable students to question how the knowledge they receive equip them for future practice but also empower the tutor and the students alike to seek out ways of co-producing knowledge and break down all forms of learning barriers. Through critical pedagogy, the learner and the teacher become partners and collaborators in the learning process while the learning approach moves from Tutor-Centred to Student-Centred learning.
11. Critical pedagogy invites students to take political position and be in charge of their learning. Transformative pedagogy as being demonstrated in the research takes critical pedagogy a step further by not only empowering students to question how they construct knowledge through the way they learn but also able to explore how those knowledge components could be transformed in addressing practical problems. Feminist pedagogy like critical pedagogy encourages diversities in teaching and learning, not only in terms of gender but also calls for students' voices to be recognised in the design studio learning environment. It promotes and advocates for people who are not brought into mainstream thinking and all forms of knowledge that students come with into learning to be recognised. Feminist pedagogy in architectural education encourages all forms of pedagogical approaches, supports all forms of disabilities not only in learning but also in project design processes.
12. The introduction of critical pedagogy in architectural education is important but when it should be introduce is unclear, as some respondents argue that critical pedagogy is politically and socially motivated therefore it should not be introduced at the early stage of a student's academic career as it is capable of promulgating politically oriented architects while some educators believe students should be encouraged to take political positions and be in charge of their learning process.

Section D: Future practice and future skills

13. Negotiated pedagogy possess the capabilities to instigate the acquisition and development of skills for future based on the unique diversities each of the component brings into the negotiation process. The interstitial position of negotiated pedagogy provides opportunity to experiment and evaluate multiple ways skills could be developed with no restrictions. Negotiated pedagogy empowers the acquisition of the following skills and capabilities: interdisciplinary collaboration, teamwork, capability to understand users' needs, presentation, self-initiation of projects, critical thinking, reflective thinking, listening, synthesis, negotiation, empathy, duty of care. While future practices include making and fit, self-initiation of project, incremental building, critical practice, and social technical spatial design practice.
14. Developing future practice goes beyond the acquisition of professional practice skills and certificate of professional competence but being driven by empathy, care, and tenacity towards identifying values that are embedded within a system that one can connect to. It entails moving out of the usual mode of practice of waiting for client's commissioning but instead seek-out ways to self-initiate projects. One of such ways involves but not limited to identifying how to improve public spaces, develop a pedagogy that engages the users/client in the design process, taking risk, providing interventions in marginal communities that requires students and architects to be immersed and situated in a project context in other to identify challenges and prospects inherent in that context.
15. There is an emphasis that future practice should involve a loose-fit rather than a tight-fit approach that sees architecture as a fixed object to be installed in a space and abandoned but instead loose-fit presents architecture as a dynamic process of continuous change. A loose-fit approach encourages hands-on 'making and fits' through 'short live construction, temporary construction, post-occupancy evaluation, changes and adaptation, intuitive constructions, incremental building of the city'. The above assertion challenges the notion of architecture as a fixed object which its process of production does not take on board the complexities and contingent nature of its users, the inherent socio-cultural and political realities of the project context that are capable of impacting on the surrounding environment.
16. There is a call for interdisciplinary collaborative practice that enables disciplines to learn from each other in other to promote hybridity and co-production but the focus is that

each discipline should be able to define its contribution in the process and also understand the contributions of others while exploring the nexus of each disciplinary boundaries.

17. Developing future skills is important but what determines the type of skills that are needed to deliver the expected learning and project outcomes is the type of project not necessarily the type of practice. The argument accentuates the understanding that different projects employed different skill-sets, however evidence from the research suggests that future practice does not influence the type of future skills needed for practice but rather each project dictates the skill-sets needed in order to deliver the proposed learning and project outcomes. Further assertion draws on the notion that each project is conceived from a pedagogical framework; hence pedagogical framework is also capable of influencing the types of skill-sets needed to deliver the proposed outcomes.
18. It is not enough to identify future skills that students and practitioners need to develop in a particular pedagogical model and project but the most important question is how do we ascertain the skills that educator claim students have acquired be assessed? Evidence from the study suggests different assessment mechanisms capable of reconfiguring the power relations between students and educators while also valuing equally the product and processes (in terms of the amount of synthesis) invested in developing product outcome. There are several ways of evaluating students' skills and input, some such ways are public presentation, peer review, student's reflective diary, client and mentor feedbacks².
19. Team and group working techniques were emphasised as critical approaches that are needed to challenge the 'high level of individuality' and the 'solitary' nature of the design studio pedagogy. The ability to work as a team in a group project lies in the understanding of the group dynamics and the capacity to develop the needed skills in order to relate efficiently with the members of the team. This process involves early integration and identification of skills that members come with into the learning process such that those skills could be harnessed and further developed.

Section E: Barriers capable of challenging the acquisition and development of capabilities

20. Working in groups/teams without necessarily developing capacities to understand, negotiate, and communicate with members is challenging and capable of blurring the dynamics in the learning process.

21. There is a growing concern by students and tutors involved in this research that time and 'timing' play a critical role in learning and developing pedagogical projects. The concern underscores the debate that the time allocated for projects (live or design studio based) within the structure of the curriculum is not sufficient for students to develop the expected learning and project outcomes and also reflect on their learning experiences. The majority of the students believe the allocated time is neither adequate to reflect on their learning nor sufficient to meet up with the proposed outcomes considering the amount of work expected of them.
22. Language barrier is been identified as one of the challenges to architectural education and practice in a multi-cultural learning context, it is capable of inhibiting students' active participation and development in a group project. However, it is been suggested that the tutor should understand students' context related issues and develop an appropriate pedagogy that will equip students with the capacities to respond to those issues within that context.
23. Not being realistic of what students can offer to communities or users they work with is capable of dampening trust amongst the parties in a collaborative live project. There is a call for students who are engaged in the Live Projects that involve the community/users to be realistic of what they can offer and make claims that are authentic and feasible within the project timeline rather than making ambitious and unrealistic promises that are capable of eroding trust while dampening users' expectations.
24. 'Designing from afar' as a pedagogic/practice model expands ways of developing and engaging remotely with digital communities where it is impracticable to be immersed in the context. The digital media tools through the use of social media such as Facebook, twitter, WordPress, Instagram enables knowledge and information sharing. Beyond the promises and opportunities that digital tools offer lies some challenges as students believe that digital tools take away the complexities and realities inherent in the project context, and likewise leads to poor data correspondence between the students and the direct users.
25. There is an assertion that what is gained in a co-produced project (live or studio) is likely to be unbalanced and exploitative if the conditions and terms of participation of the parties involved are not explicitly stated or negotiated in that process. Hence there is a need to explore dynamic but negotiated approaches that engender true democratised users'

participation in the learning and making processes where all learning/project outcomes are critically evaluated before the start of the project.

26. Some educators argue that the legacy of the Live Projects does not live beyond the six weeks of the live project module due to project temporality and the nature of pedagogical frameworks, though it creates something of immediate value to the client/stakeholders and learning experiences to the student. There is a call for this temporality of the Live Projects to be challenged through developing medium-long term pedagogical projects that promote incremental and sustainable building processes while developing a programme to outlive the six weeks duration of the Live Projects within an academic programme of a school of architecture.

Appendix A4

Pilot study

Piloting the empirical research opens up opportunities to critically evaluate the values inherent in the research findings. This aided answering the research questions and also helped to examine how respondents construct their own experiences. This enabled the definition of what constitutes negotiated pedagogy. I conducted a face-to-face pilot interview and one online telephone interview with three educators who were Ph.D. research students. This approach enhanced the evaluation of the interview questions in terms of coherency and clarity that helped reduced ambiguity and obscurity as some questions were reworded. It also exposed several unforeseen challenges that resulted from conducting the interviews. For example, the recording tape used for the first pilot study had poor audio quality while the Skype online telephone interviews were marred by technical problems due to poor internet connection. These challenges were identified and addressed in the main interview protocol.

Using Ph.D. research students with a minimum of three years teaching experience in architectural design enabled the process of experimenting how respondents understand interview questions and enhanced constructive feedback on the questions that generate elements for further exploration. The choice of the interviewees was also based on data accessibility, as Robert Yin argued, "that proximity to the source of data is valuable for qualitative research".² The interview questions were influenced by the findings of the literature review and more importantly the research question. Two questions in the pilot study were harmonised prior to the main interview as they were addressing the same issue, for example, respondents were asked to discuss their innovative experiences in teaching design and also to discuss a typical teaching experience that is socially-minded. The pilot study was only undertaken in the first part of data collection (interviews of educators); however, the case study inquiry was not piloted. The analysis of the pilot study created different narrative accounts of the respondents' experiences of how the design works and their understanding of negotiated pedagogy with an emphasis on the design as the remit of the education of the architect.

² Yin, p. 92.

Appendix B

B1: Interview Protocol and Questions

The following interview protocols were designed to provide a detailed insight towards organising and conducting semi-structured interviews at the 3 different stage of data collection.

The first stage of data collection engages with architectural educators in the 3 regions (Africa, Europe and America). The second stage of interviews followed the themes that emerged from the first as a way to test how the claims made in first interview placed out in 3 different projects which were tailored to follow the information emerging in the interview and according to

B2: Interview schedule (Educators Interviews)

- Recruiting educator-respondents who meet the criteria for selection by understudying their profiles and engagements.
- making initial contact with the respondents to affirm their availability
- Scheduling appropriate time, date, and location for the interview with each respondent
- Structuring the interview question from the protocol as much as possible

B3: Prior to start of interview (General)

- Make available the research information sheet and consent form to the respondents
- Give a brief description of the structure of the research and a preliminary introduction of the researcher to the respondents and vis versa.
- Welcome any question from the information sheet regarding the research while ensuring the information was well understood and in the case of any doubt.
- Discuss a bit on how the interview would be conducted and obtain a permission to record the conversation.
- Check that all equipment and materials for the interviews are good order by running a test.

Inform the respondents that the interview is an open-ended interaction with no fixed pattern to responding to questions but rather an interactive session with freedom to interrupt and explain further details if necessary.

B4: Educators interview questions

1. Please, can you discuss your approach to architectural education (in terms of the innovative design model you have either developed or explore in your teaching)?
2. Does this model replace the normative design studio model or it complement it and how?
3. What underpins your approach to teaching architectural design?
4. How do you frame what you do in terms of teaching and learning?
5. What pedagogy/ethos informs your research and practice?
6. How does your teaching relate to your practice and research?
7. What barriers do you think are challenging this approach to learning and teaching architectural design and how can these challenges be addressed?

Concluding question- Is there anything you would want to add, or ask further, prior to the end of this interview?

Prompts

- a. What motivates you towards adopting this approach to teaching?
- b. How is this model of teaching architectural design assessed?
- c. Discuss the academic structure of this model in terms of content, teaching style, and the design process.
- d. What skills do students and tutors bring into the learning/practice process?
- e. How does this model fit into the curriculum of architectural education?

B5: Case Study interview questions for educators

- 1.0 What is the title of your design model?
- 2.0 What are your expectations both at the start and the end of this programme?
- 3.0 What underpins this approach to design pedagogy and practice?
- 4.0 What skills do you think students develop for future practice using this pedagogical model?
- 5.0 Explain the content, teaching style, and design approach of this model?
- 6.0 How does this model sit within the structure of the University academic calendar and the curriculum?
- 7.0 Who are the stakeholders in the model (the participants); and how are they engagement in the project?
- 8.0 What kind of risk do you think this approach prepares student for in future practice?
- 9.0 What are the possible challenges of this model?

Concluding question: What else do you want to add to all that you have said?

B6: Case study interview questions for students

- 1.0 How did you generate your design brief from your discussion you're your client?
- 2.0 What were your design consideration and priorities in this project?
- 3.0 Can you briefly discuss with examples your reflective experiences engaging in this project?
- 4.0 How did you engage with the users in the design process and design decision?
- 5.0 Can you discuss your role, that of the tutor and the clients in this project?
- 6.0 Can you discuss the learning outcomes and capacities you developed in this project?
- 7.0 How has this new way of learning and working challenged your critical Can you discuss how the use of these new pedagogical tools allowed you to address social challenges in in this project?
- 9.0 What are the challenges of this approach to leaning and practice (both real and simulated environment)?

10.0 What do you want to add to all that you have said thus far?

B7: Focus group interview questions for the Nigerian educators

1. Which of these findings do you think that is capable of promoting the development of negotiated pedagogy in Nigerian and how will the knowledge from the findings be useful within the existing structure of the curriculum?
2. What other features, constraints, opportunities, and factors you think is critical to developing a negotiated pedagogy that was not captured in the research?
3. What pedagogical considerations do you think are essential for the developing models for teaching architectural design in Nigerian context?
4. What opportunities do you think are inherent in the findings that could play out in the Nigerian architectural design education landscape?
5. What constraints do you think could inhibit transposing the key elements of the research findings into the Nigerian design education?
6. What theoretical underpinnings do you think are capable of influencing the development of design pedagogy in the context of the Nigerian architectural education?
7. What else do you want to add to all that you have said?

B8: Condition for recruiting focus group/workshop educator-participants

- a. A Participant must be and educator in Nigerian university with a minimum of 3 years teaching experience.
- b. Participant whose research interest and scholarly writings/projects relates to alternative pedagogy or some form of socially-minded approach to learning.
- c. A participant should have shown desire and interest in alternative practice or ways of knowing.
- d. A participant should be an educator who has taught courses in the design studio and have desire to seek out ways of producing knowledge from the margins.
- e. A participant may include educator who is currently exploring traditional architectural building and construction processes.
- f. Or an educator who has interest in doing postcolonial related research projects.

Appendix B9

Survey questionnaire I- for practitioners, educators, and policy makers in Nigeria

The questionnaire was designed for three specific purposes:

- To understand the challenges facing architectural education and practice in Nigeria.
- To understand what Nigeria needs in terms of pedagogy, architecture, and practice.
- To understand the needs of future practice drawn from pedagogy, practice, and the government organ.

Research Title: Negotiated pedagogy: Instigating the acquisition and development of skills for future practice in Nigeria

Several studies on architectural education in Nigeria have argued differently that architectural education is at crossroad. The arguments accentuate the assertions that the curriculum have failed to reflect the socio-cultural, economic, political, and ecological realities of the everyday life. Further to this is the view that architecture practice in Nigeria have long been modelled after the British and American curriculum, hence the core Nigerian identity and diverse cultural values expressed through architecture are lost in translation.

This study calls for the re-positioning of the education and practice of architecture in Nigeria through the development of pedagogies that advocate for more social forms of learning. The study aims at instigating discussions about ways of developing pedagogy that equip students and future architects with skills for practice.

Researcher: Nkemakonam Okofu - PhD student @ School of Architecture, University of Sheffield, UK.

* Required

Details of respondent

1. Name of Respondent:

2. Sex *

Mark only one oval.

- Female
 Male
 Prefer not to say
 Other:

3. Job title/name of firm:

Age*					
15-20	<input type="checkbox"/>	20- 25	<input type="checkbox"/>	25 - 30	<input type="checkbox"/>
30 - 35	<input type="checkbox"/>	35 - 40	<input type="checkbox"/>	40 - 45	<input type="checkbox"/>
45 - 50	<input type="checkbox"/>	50 - 55	<input type="checkbox"/>	55 - 60	<input type="checkbox"/>
60 - 65	<input type="checkbox"/>	65 - 70	<input type="checkbox"/>	70 - 75	<input type="checkbox"/>

4. Location:

5. Years of post-graduation experience: *

6. Respondent's consent to use data for research purposes * *Check all that apply*

- Yes
- No
- Anonymised consent

Questions

7. 1. What do you think is the role of the architect in Nigeria?

8. 2. How do you define the kind of architecture currently produced in Nigeria?

9. What are the challenges of architecture practice in Nigeria?

10. Who else do you think is performing this role beyond the architect within and outside the built environment?

11. What is your definition of future practice in architecture?

12. What does Nigeria need to realise your envisaged "future practice"?

13. What do you want to see changed in the way we produce architecture?

14. What do you think is the greatest problem to the advancement of architecture practice in Nigeria?

15. What do you think Nigeria needs in terms of architecture, practice, and pedagogy in order to create her own unique identity?

16. What type of skills do you think students need for architecture practice in Nigeria?

17. How do you think these skills can be achieved?

18. What do you think architectural education should do to best prepare student towards addressing the needs of "future practice" through the way we produce architecture?

Appendix B10: WORKSHOP

Workshop - Evaluating research findings in context – Educators and Students.

Discussion with Nigerian educators and students

Items/questions for discussion at the workshop

- What elements of the findings do you think are capable of influencing architectural education in Nigeria?
- What skills within the research findings do you think will students/educators need to develop for future practice in Nigeria?
- What is the implication of these research findings to the future of architectural education and practice in Nigeria?
- What potentials do the findings present towards repositioning the way students will learn and be taught in future?
- What areas or issues do you think this research has not addressed but still remains crucial for future practice in Nigeria?
- What challenges do you think are crucial for transposing the elements of the research findings into Nigerian design education?

Research Title: Negotiated pedagogy: Instigating the acquisition and development of skills for future practice in Nigeria

Evaluating research findings in context

Dear sir/madam,

Following a previous mail consenting to take part in an on-going PhD research relating to architectural education in Nigeria. I have attached below a document highlighting the findings of the research titled above.

Your role in this study is to respond to a short-structured survey questions that aim at understanding your views about the implication of the research findings in Nigeria.

The outcome of this survey will explicate the understanding of how negotiated pedagogy could enable students and future architects to acquire and develop capabilities and skills for future practice in Nigeria.

Please feel free to suggest the reasons for your choice and you can opt out of this study at any given time. Your contribution will help in developing a pedagogy that is suitable for the Nigerian context. Thank you in advance for your cooperation.

Researcher: Nkemakonam Okofu - PhD student @ School of Architecture, University of Sheffield, UK.

* Required

Details of respondent

1. Name of Respondent:

2. Sex *

Mark only one oval.

- Female
 Male
 Prefer not to say
 Others:

3. Job title/name of firm:

Age*

15-20 20- 25 25 - 30

30 - 35 35 - 40 40 - 45

45 - 50 50 - 55 55 - 60

60 - 65 65 - 70 70 - 75

4. Location:

5. Years of post-graduation experience: *

6. Respondent's consent to use data for research purposes *

Check all that apply.

- Yes
- No
- Anonymised consent

Questions

1. Which elements of these research findings do you think are capable of instigating a pedagogy for Nigeria and why?

2. Which of these skill-sets do you think are useful for future practice in Nigeria??

3. What do you think is not captured in the findings but are critical for the Nigerian context?

4. What are the possible barriers capable of challenging the acquisition of skills and transposition of negotiated pedagogy in Nigeria?

5. What else do you want to add?

APPENDIX C

Item A: Selected Educators' Interview Transcripts

Transcript 1: Interview with Ashraf Salama

INTERVIEW TRANSCRIPT AEI002

INTERVIEWEE - (AS): ASHRAF SALAMA (A PROFESSOR OF ARCHITECTURE, UNIVERSITY OF STRATHCLYDE), GLASGOW, UK.

INTERVIEWER - (I): NP OKOFU

INTERVIEW SETTING: Interview was conducted over the telephone at **TIME AND DATE:** 20:00 GMT, Friday May 22nd 2015.

(Start of Interview)

I: Hello, good evening Prof. Ashraf Salama, I am quite delighted to have you on this platform I have read so much about your work and contribution to Architectural Education. Once you are ready we can get started.

AS: Yes, yes I am here.

I: Can you discuss your approach to Architectural Education in general?

AS: Okay, two important things I would want to differentiate between Architectural Education in general and design studio teaching. Heh, probably you are recording Patrick right?

I: Yes I am recording.

AS: Alright, okay my approach in architectural education was materialized through my involvements. First my PhD actually my Masters degree it was master by research and then my PhD

1

with Henry Sanoff in North Carolina. Then I was quite fortunate to have the chance to develop two departments of architecture from scratch. So the approach was evolving basically the main thing is to achieve a balance between the skills and knowledge that professional practice would require in whatever context. So the idea of context is also critical. Being working in different countries US, UK, Qatar, Saudi Arabia, Egypt all these countries have unique aspects, so the idea of context is very important. The approach to architectural education let's say if you want to develop a curriculum or if you wanna address contents related issues. You should relate to the social, environmental, and cultural context of a school of architecture or of a programme of architecture. This is a general approach to architectural education. One important thing also as I said is the balance between forces that shape an architect. Then that's a general approach then we can talk later depending on the questions about the approach to design the approach to content in classes or design studios.

I: Excellent, can you discuss your innovative approach to architectural design?

AS: Approach to architectural design that's an important one. At the personal level, as at the very personal level, it's process-oriented, students oriented, and socially and culturally oriented. So this is two-three important aspects. Process oriented, I don't believe in making the process hidden or un-cleared to the students. So it must be made clear upfront in any teaching activities with the studio procedures or whether thesis within the design studio or a project that is being delivered in the studio. So the process aspect is really critical, yet am still talking about the process. How to handle the process is also critical. Whether you wanna introduce the programme or the briefs or you want students to explore that brief or design statements and project

requirements. In my view, it is really critical to give the students enough chance early in their studies probably from the first year. To be able to develop a brief because sometimes we oversimplify the brief components of design learning. We assume that the brief is basically a task in the hand of the design studio tutor or instructor. Then the students should react to it, no the brief is a critical component of the design studio. Because it really simulates practice, students or architects achieve the pre-brief with the clientele and client organisation. So it's really important to have the brief as part of the design process. Now not personalizing the brief is important so there should be a very generic aspect of the design requirements. Then each student will do a personalisation of the program a personalisation of the brief re-interpretation of the brief as they develop the design solutions. Again relating to the process once we talk about the social and cultural issues. Then how to simulate different architects' role models this is a very important aspect I cannot assume that. Let's say life building projects or life projects as the only good approach to architectural education. So the students should go through multiple types of experiences one of them will be life project another could be process oriented or simulating clients and users in the design process. So these are two important aspects related to the process and then how to introduce client and user. So how to introduce clients and users in the process is not necessarily bound to having an actual or real project. Real project is important no doubt having a specific context or a specific client or a specific program requirement. All these are important aspects; these are not necessarily available in every single design exercise. So it's really important to try to innovate and find ways of bringing also the reality to the classroom or to the studio. Yes we wanna go and investigate reality, we wanna go and investigate social issues, but the challenge is how to bring social issues to the learning setting of

the studio. This is also important so when I said process-oriented. Then socially and culturally oriented related to context and those issues. The next layer should be students oriented when we say students-centred. When we say okay, we have a programme; we have a specific design assignment or a specific design project. How to really structure the studio process in a way that supports students learning. My specific approach is that I developed tools and I developed tools for engagements. Sometimes this engagement takes place between only two students and sometimes it takes place between a group of 4 or 5. I also believe in group work so the idea of group work is very critical. I know the context of the UK a lot of people really refuse the idea of group work because of the difficulty of assessment. Because of the RIBA requirements but I have to say in reality nobody does a project completely on his or her own. So not introducing this in architectural education I will say it's a shortcoming or a defect and I feel it's important to do it. Group work is critical learning skills related to consensus collective decision making, creative decision, and making design decision in groups. All these are important aspects, of course there are tools similar to brainstorming sessions or selective session or whatever kind of techniques we kind of introduce to architects' experiential or inquiry based-learning. So basically this is my approach, process-oriented, student-centred and socially and culturally focused you can say.

I: That is interesting, what title or name do you call this model or approach to teaching architectural design?

AS: Of course live project is one way and another thing is trying to bring social issues to the discussion. How do you bring social issues into the studio if you don't have a real client in a project? There has to be a way of introducing social and cultural issues in the studio even if you don't have a real client you can still have a

4

hypothetical client. But in my view educators to the design studios should go and seek further how to enable students to develop a process by which they can react to. For example specific social or cultural constraints, specific context or user's type-related factors, or aspects. These would take place through tools related to active learning, experiential learning, group discussions, and consensus decision making. So I would say I wouldn't isolate the process from the social component. So once you say there is a social or cultural component you want to introduce in the studio. Then you have to have a structured process with some tools that enable this type of learning about social issues and how they apply towards the design project in hand.

I: So what underpins this approach to teaching and learning architectural design?

AS: Okay very good question. First of all when you go back to what modernity has contributed and have created throughout the past 40-50 years or more 100 years. I will say since the industrial revolution up to maybe 20 years ago or 30 years ago. Modernity and post-modernity were basically relying on the apprentice model and with some variation and that apprentice model contributed to the creation of the egoist architect. The architect who says no- I give the people what I want. So when you look at students attitudes, for example, all of them want to be or aspire to be star-architects. We must overcome and challenge this role of the architect. The way to challenge this role of the architect is basically through this kind of approach. Whether life project or community-based design learning or the approach I am trying to describe in terms of process-oriented, culturally focused, and student centred. So this is one aspect of the theory that underpins this approach. You want to be able to introduce a different architect's role that is responsive to the contemporary

needs and contemporary problems of societies. This is one aspect, the other aspect of cause. The other way is to look at the heh let me just think of; I mentioned about the multiple roles. The types of roles we need to introduce in architecture and design studio and this is one of them the facilitating role or the advocate role. Students have to be able to play the advocacy and the facilitating role. The advocacy and facilitating role can happen, of cause live project, will enable this but there are other approaches also. Through role play, design games and many other tools and techniques that one can introduce in the studio. So what underpins in order to answer your question more clearly is the need for multiple roles that architect can play. That goes beyond the egoist architect, or the pragmatist architect or the star-architect. Basically so this is one you want to be able to create community architect based on the fact that architecture can be seen as a social art and as a social service also. So basically this is how I see it as underpinning that approach.

I: That was quite interesting. So what is the theory underpinning the above approach you just discussed?

AS: Critical pedagogy is important and is critical and I have written and I tried to integrate it in various ways in my work. But I just want to step back further a little bit and start to say okay we need to overcome the negative aspect of contemporary design studio pedagogy. There are many it's because of the too much emphases on one architect's role model which is the egoist or pragmatist. The other is trying to avoid the showing telling mode of communication which doesn't necessarily lead to effective learning. For example, that idea of experience transfer where you tell the student how to respond to a specific design situation or a specific design problem is not the best way. Other ways could happen through interdisciplinary thinking of cause the hidden curriculum and critical pedagogy will be part of it. And

6

also the idea of knowledge construction rather than knowledge consumption. So basically you can look at the studio experience and the studio experiment as a knowledge construction experiment or experience. Because at the end of a studio process or a project process in the studio there is a specific type of knowledge developed and that type of knowledge is always hidden and unclear. My approach is to make it as clear as possible and basically to try to look at design as an exploratory research process in terms of identification of design problems, user types and the users' needs. Then even the design solution as also part of what can be seen as part of an exploratory research. So looking at this is important. Okay, another underpinning aspect is the left-side right-side discourse of learning or human learning. Everybody says that the human brain consists of two halves one half is responsible for analytical or rational thinking. Another half or the second half is responsible for imaginative creative, intuitive thinking. How to bring these two together also underpins my approach to teaching, so that left-left or right-right side of the brain is critical. I don't want to go into too many theories because, that idea of psychological types by Carl Gustav Young.

Because Young introduced 6 psychological types and call them thinking perception extroversion and then feeling intuition and introversion. I tried to map this; this is a theory of psychological types. He was saying that human beings perform mental activities mainly through these psychological types. As I said feeling, intuition and introversion those three basically address the emotional side of the human brain. Which is the right side that is the imaginative intuitive then the other side is based on thinking perception and extroversion. More rational more analytical these two like the theory of psychological types go very well with the left side of the brain right side of the brain. Whereas we call it split brain learning they go very well together basically these are

7

two important theories coming from Young. You can say psychology of learning in addition to critical pedagogy. But I also have to warn a little bit from critical pedagogy though am an advocate of critical pedagogy and transformative pedagogy. There's always a political dimension embedded in critical pedagogy most people who talk too much about critical pedagogy are politically oriented and basically socialist. It is really important to be aware and to be careful about how critical pedagogy is introduced. Because you end up advocating as a specific group of people over all other groups when you adopt a specific type of users. Let say the poor so again going back to a different type of studios that need to be adopted in architectural education. I will say yes critical pedagogy is important but it doesn't have to be addressed in all the design studios. In some of them as students get matured and as students understand the nature of design problems and the nature of user types. It doesn't mean that we cannot address it in early years we can but we have to be really very careful. Because at the end you don't want to produce political architects, politically oriented architects. Yes, political aspects are important but you don't want to overload architecture education with politics. This is my view on this.

I: That was really well detailed. This leads me to the next question, how has your teaching played out in your practice or how is your teaching informing your practice and vice versa?

AS: Okay, I must say that over the past 10 years or even more I was a pure academic. But at the same time Patrick I was doing consulting to different kinds of organisations, or ministries. Government agencies or even aid agency (United States Agency for International Development). But most of my consulting work was basically research-based and was related to post-occupancy

8

evaluation reprogramming of existing facilities and strategic facility planning. With the front as part of the design process and to the end as part of the design process without doing the actual design. So most of my experience is around this over the past you can say 15 years or more. But I will treat the question the other way around. I will say how does your consulting inform your teaching, because this is very important it is very critical to think of the practice, in the terms that practice should be linked to research. The practice also is a research process; the idea that you send to the client and identify the needs is a research process. The idea of identifying problems and design constraints and parameters is a research process or part of a research process. So I rely heavily on the work of John Zeisel inquiry by design I'm not sure if you're familiar with this. But it's really important because the book is old 1981 but it's really very focused on how design and research can be linked together this is one aspect. In terms of informing, I will say definitely I have something in hand that I'm doing as consulting. Typically it is introduced in the studio in a way or another in a structured way. My approach to research in terms of writing, clarity being free of ambiguity all these aspects are informed in various ways in my studios. I have not been teaching for the last couple of years but I have been sitting on reviews and following up what's happening. So answering this question it is very critical they are informed or they inform each other. I don't practice in a traditional sense but I do practice as research work on developing design guideline lines. Developing design parameters for somebody else to take the design task for somebody or the same person working in the design company or in the design office or it could be somebody outside of the same company. I was quite fortunate Patrick to work with a firm in the US, specialised in the programming and post-occupancy evaluation. So we had the chance to do strategic facility planning in the US

they call it advance planning or pre-design as an activity is very important. We must realise that we are focusing too much on architectural education with the notion that everybody should be a good designer but this is not the case in reality. Not everybody should be a good designer but everybody should play a part, a good part of the design process. Some people are very very good at dealing with a client you can involve them and capitalise on their skills and problem definition, problem identification. Interactive and hopefully visually with clients so this is one part another part some people are very good at debating design alternatives but not necessarily developing them. So how to debate design alternatives is an important aspect too; that comes from practice and can be integrated into the studio. So all these aspects are informing my teaching in a way or the other not necessarily every single time in a self-conscious way but it is informing the design teaching. When you even structure the brief or structure the design statement or the project statement and so on.

I: Great stuff; so what skills do you think students and tutors bring into the learning process and what skill do students develop from it as well?

AS: Now we need to realise that there are different types of skills and all of us know them. They are visual skills and there are visually oriented students and there are verbal skills and verbally oriented students. There are some students who are really very good in analysis but not good in generating design alternatives. So the challenge is how to develop a process in the studio by which you can address all types of skills. Because we should not assume that everybody is excellent designers or have exceptional visual and intellectual design skills. Everybody is good at something, so trying to develop processes that address multiple types of skills is important. Okay, what does the process I tried to adopt all the time to bring to the student is basically a

supportive process. That enables them to discover their skills as they go through a project process. How they discover their skills by making an explicit set of phases as part of the process in the studio. So structuring the process that the students know that they are in analytical mode. The student will know that they are in a synthesis mode and the students will know that now we have a different bit and pieces and how to put them together. Whether project statements, client needs, whether site constraint whether of cause we are not saying we want to develop a bad architecture that satisfies the clients. We want to have high architecture but don't forget all other aspects that we mentioned them know about so the skills will be critical thinking skills, verbal presentation skills, negotiation skills group discussion skills. Some students are very good in one to one but if you put them in groups they cannot say anything, they are shy to say or express their ideas and views in the group but how to overcome them is

critical. I think it's critical to look at design skills in a more comprehensive way. Yes, you need to have modern building skills, visualization, but you need to have also verbal presentation skills, self-criticism skills, and negotiation skill. All these aspects are part of the practice that we try to simulate in the design studio so we need to simulate and place emphasis on these skills too.

I: You mentioned context, so what role(s) do contexts play in developing a model for teaching Architectural Design?

AS: Okay, first of all, the nature of the students. Students have different cultural and social economic backgrounds. Which again sometimes we oversimplify and sometimes we deal with the students as if they are coming from the universal background. So students' backgrounds in my view play an important part of learning and of structuring the studio process. I will love to know that I have in my studio if am teaching 15 students. I would like to know whether they are coming from working class, from an

affluent class, from a rich class, from a small big class. All these aspects are important, so that's in terms of context at the level of the students. Some students have never experienced talking in a group or talking in front of a crowd. How to work around this and how to integrate this as part of a studio process. So context is critical, context is critical at the level of the student also the context of the school of architecture itself. Where it is located in a rural area or in a city or a city in the Global South, for example, Africa, Middle East, and South-East Asia. Or whether it is located in a city and a well-developed context let's say London, Edinburgh or something because the type of projects also is mandated by the context sometimes. We have placed too much emphasis on the context and I think it is really important to balance contextual issues. I have seen schools of architecture that has not address a single design project, a single design assignment outside of their local context of the school. This is good in a way but it is really bad in a different way or in another way it is good because students become really aware of the context they are likely to practice. But at the same time, they are not exposed to other context which is a challenge also to try to focus or try to introduce in the studio. So that's at the project level, we have context at the student level the cultural, socio-economic background of the student. Where they are coming from, what type of the image and perceptions they bring to the studio is important and there is a context at the project level which the project context or the project site which another one. So trying to balance contextual issues and look at different types of users. Their cultural and socio-economic background is important. Balancing students' skill, social skills that they bring to the studio as a result of the context in which they grew up or as a result of the socio-economic background in which they live. How to bring this into the studio is important because at the end of the day these people are going to be professional architects.

12

Influenced by initially the socio-economic and socio-cultural backgrounds and secondly by the school of architecture they receive their education. So balancing like to answer the question in an actual balancing the context or contextual issues at the level of the school and at the level of the project is very important. Throughout the years of studies whether we are talking about part one or part two or three years or five years.

I: What are the barriers that are challenging this approach to learning and teaching Architecture Design?

AS: Okay, one challenge is that the perception of a colleague is always when you bring design, the US, for example, they don't wanna see analysis, they don't wanna see documentation of the thought processes, they wanna see the design solution or the majority. I wouldn't say everybody but the challenge is basically the perception of what design is. Is it a process, is it a product or both so, this is one challenge or barrier. The other barrier is that students sometimes are not able to translate to make enough effective links between different parts of the design studio process. Sometimes they get stocked in one phase they cannot move to the next as a result of restructuring the design into clear phases. This is also another challenge, some students as I said are very good in analysing but as they move and progress their ideas; they seem to be incapable of doing this. So this is a challenge also the gap, the potential gap that could happen between different phases within the design studio in the process represent a challenge. The perception of design is a challenge in addition to the requirements of professional accreditation bodies is also a challenge because sometimes you have descriptive measures. Mandated by the accreditation bodies regardless of where you are teaching whether in Nigeria or in Egypt, or in Qatar, or the UK, or in America. So that the criteria and

constraints mandated by the accreditation body sometimes limit the implementation of this kind of model or the expansion of it.

I: Excellent one sir. One more thing, though I asked this question before. Maybe I didn't get the full details of your response, so what name or title do you call this approach/model?

AS: You can see it's a process-based-design teaching model. But sometimes the naming is an issue because the social component is not clear on the name. So I really don't know how to label it. I wrote a paper in 2005 and it's called a processed based design pedagogy, yeah basically this clearly describes my approach although it has been evolving over the past 10 years but I will say a process based design model. If you wanna add society or community in it but I can send you the details, okay wait. I will tell you here it is A User-Centred Process Based Design Teaching Model.

I: Is there anything you feel you would like to add or ask before we come to the end this interview?

AS: I just wanna add one thing, when you were asking me about the theoretical underpinnings. I forgot to mention also that idea of positivism and anti-positivism is two different philosophies that can be simply explained. Though by saying anti-positivism adopts the premise that architecture can be seen or design solution can be seen in too many ways different ways. Not by one or through one way that idea of pluralism. So it adopts positivism is like a mathematical formula. There is one solution and good thing, anti-positivism adopts the premise that there wide varieties of interpretation. The reality can be interpreted in too many different ways depending on people's socio-cultural backgrounds. So try also as generic philosophies that underpin design studio teaching in addition to split brain theory and the

14

Carl Gustav Young psychological types. I would say positivism and anti-positivism and how they are juxtaposed in the design studio teaching. I wanna draw your attention Patrick, I have a new book I don't know if you've seen it; it's called 'Spatial Design Education' I will send you the link.

I: Yes I have seen the book now. The idea the book presents quite agree with all you have been saying so far and your position in your other publications as well.

AS: Thank you Patrick, so can I ask you who else you are interviewing?

I: I have a list of interviewees drawn from different geographical context ranging from Africa, UK, US, and a bit of other outside this list but are simulating some form of social agenda in design teaching that is innovative in their own right.

Transcript 2: Interview with Bridget Horner

INTERVIEW TRANSCRIPT AEI0011

INTERVIEWEE (BH): DR. BRIDGET HORNER (SENIOR LECTURER,
UNIVERSITY OF KWAZULU-NATA DURBAN),
SOUTH AFRICA.

INTERVIEWER (I): NP OKOFU

INTERVIEW SETTING: Interview was conducted over the
telephone.

TIME AND DATE: 07:00 hour GMT, Thursday June 4th
2015.

(Start of Interview)

**I: Please can you discuss your approach to architectural
education in general?**

BH: I need to give you a little of background. First, about myself, and a bit of the context we are working in. I started lecturing full time only about 2-3 years ago, I had only worked a part-time at the University. When I started I was kind of keeping in, you know the focus is never a full-time sort of thinking about education. I started full time role in 2012 but 2013 was the first time I took over a studio. So I was responsible for the year and I started to notice that the students were disconnected from the people they designed for and disconnected from the context they were designing in. But they

seem to just want to design from best architecture and things that look like star-architects' work. But they were real; had no depth and so I think that was where my interest for this sort of socially-minded architecture sprang from. It's a kind of response to what I was seeing and trying to find a way around it. How do you conscientize students to be more sensitive to the people that they design for and for the context that they are designing in? I think that's probably the main set of thinking in terms of an approach.

I: Okay, so what's your view about architectural education in terms of your own experience first as a student and as a tutor?

BH: Hmmm, it was a long time ago. I think when we first started it was also very much eh... I don't know what's like where you came from but I always thought that we started on a silo. We were very disconnected from first, architecture in the faculties just where they are located and are completely from any other department at the university and also our universities are not even in the city. They are on the periphery, completely isolated from any happenings in the city. So, we felt that we were trying to solve the world problems from a distance and actually not knowing what the real issues are. I think I felt the same way about Durban as well, also I started in Port Elisabeth and when I came to Durban I also felt the same thing. It's a university that sits up high on a hill. Very isolated and very much silo teaching way. It's just architects teaching architecture students there's no input from any other sort of related disciplines. So yea I thought I have both instances (my education and teaching) in Durban that are very much isolated and disconnected. Both from other disciplines and the general society not knowing what kind of issues that we will be dealing with when we actually leave education facility. This is also seen, in the way students choose projects and how they interact with each other in the studio as well.

I: Excellent, that was brief and concise. Can you also discuss your innovative approaches to design teaching possibly from the one you have developed or adopted for teaching architectural design?

BH: Okay, when I took over the year's coordinator in 2013 to this year (2015) I noticed all those sort of things that I told you about students being disconnected. I had a very strong relationship with a colleague in Drama. There is a section of the drama they call the planned theatre. They are very much on the ground, working with communities. So they presented an idea to the community and they get feedback that gives them a sense of what the real issues in the communities are. It is not a polish production; the intention is to get community engaged in discussing what goes on in where they live. So myself and my colleague thought this will be an interesting sort of technique to get students on the ground and engage with society and also for them to really find out what the real problems are. Not to just assume that they know what all the issues are and this methodology is sort of provides a solution to architecture. We understand the problems, and we've got to provide the solution. The intention is like to get the community to develop their own solutions. We have never been able to take them to that far that the community develop their own solution. But we sort of frame it that the community is essentially the students and if we can get the students to understand a little bit more through this method. What we did in 2013 was that we paired up a set of students from drama with a group of say 10-15 architecture students. They put up a street performance in the city and after the street performance they will then ask the audience. What they felt about the issues they were highlighting. If they felt it's a true reflection of their experience of the city. For example, one of the performances they put up was a story about a woman who got mad and no one had actually helped her. There's a whole lot of series

3

sort of dodgy characters and some of them were drunks after which they kind of spoke to people. Part of the question was how are you experiencing the city? And they got some really interesting reactions from people. So I think it was very enlightening for them. They've never understood that the people in the city are paying 10 rands/per night. Sleep on the floor on a mattress or that kind of hardship that real people experience and this was a way for them to give a little bit of themselves away. Not making themselves vulnerable that people could talk to them on one on one base but not sort of a clipboard asking sort of questions. They could have a rare meaningful conversation with people on the city. So that was the starting point, we were trying to bring participatory theatre methodology into architecture.

I: I think that was really innovative in its own right, unique and interesting to explore further. So what is the name or title of this model/approach?

BH: [Laugh] I think what we did is sort of participatory theatre methodology. It's really about learning from drama [...]. What's interesting about participatory theatre it is similar to architecture because they've got this kind of sleek side to it as expensive performance. Where you pay and you have this kind of part theatre that comes as a response from the community. They think it's community issues and the same way kind of parallel to architecture. You can either be very removed or (...) sort of sleek thing or you can actually be well connected into the community. So there are some interesting parallels in the approaches to the drama discipline and architecture discipline. So that's where we found the synergy between us. There are a few things that we still want to develop further. For example, the community that we are dealing with is the community of students, not the community beyond what we think we found; because we found that this approach is different. So unique from how the students have studied in their

4

undergrad but they find it quite challenging to do. And it's that their first reaction is oh no I'm not doing performance what do you think? It's not what I'm trained to do. So it puts them off their comfort zones completely, to begin with. So in that way, it is quite hard so, I think in the next phase once we've got students more comfortable with a set of different methodology. We can take it further to actually see how the community can respond. But I think the interesting part that has come out of it especially last year. This year is still in the early days, last year in some of the architectural response as one of the students designed an emergency shelter to address the issue of xenophobia which I'm sure you've heard about. In Durban, people would have come into this building and the buildings will just short down and all of these people literary thousands of people get accommodated in the building and are safe. So the kind of projects that students were taking on wasn't like libraries, museum, and galleries anymore. Because they had to come up with the kind of responsive projects, to what they learnt on the streets. One of the projects was an emergency shelter. Some will be innovative accommodations that took into consideration traders or immigrants that just came in and needed a temporary place to stay for a short while. So there were some very innovative set of ideas of how architecture could respond to a set of issues that were happening on the ground.

I: Great, so what can you say underpins this approach or model for delivering architectural design education compared to your perception about architects trying to solve a problem while sitting from a distance not understanding what the situations were?

BH: Okay, the idea is that students can learn from each other. It's not about an architect or educators having the right answers. We don't have all the answers and it's about being able to realise that people on the ground know what they want and the architect can

learn from. We don't have anyone having the answers, basically, it's about learning from others.

I: What is the theoretical underpinning to this approach or how do you situate this model within a body of knowledge?

BH: Miranda Young-Jahangeer who is a drama tutor and I wrote a paper which is about to be published in the journal of architectural education. Potentially the two key thinking behind the paper were. The idea is that you are learning from others, from the understanding of being live, learning in real context. Then the other thing was learning from Paulo Freire's work. The idea is that in education we are not just filling students with contents; they are actually coming up with their own content, their own ideas. They can contribute to the whole education process, so that's also it. We're not just it; we are not there to fill them. Then the third sort of stream is that what happens in the studio is also a reflection of what happens in life and a reflection of what happens outside the studio. And it is being conscious of how you can address issues of power, agency, and structure in the studio. What we did this year and also last year was to see how we can reduce the power hierarchy especially between myself as the educator and the students. Obviously, it's quite difficult because students see you as the person that gives them marks at the end of the day.

That's one of the key things we would like to do but it's quite challenging to try and break those hierarchies and also make students to be aware of how the issue of race, power, and social class come into the classroom as well. Even though we want to see everyone as homogeneous and equals and all those play out in the studio as well.

I: Interesting, how has your teaching influenced your practice or the other way round does your practice play any role in influencing your teaching and also your research?

6

BH: Hmm-mm [laugh] I am not so sure if you are familiar with my practice: 'space syntax'. A lot of the work I do is essentially assisting architects to create better building better urban design proposals. Have you heard about space syntax at all Patrick?

I: yes I do, can you talk more about this form of practice?

BH: I mean I have never really thought about space syntax methodology into the classroom. I think it's more than just the thinking that there's a strong connection between space and society. How our design influences the society and how society also influences how we make spaces as well. So that's my kind of thinking in a way, I have always thought about how the society influence the way social and human spaces are created. But that was only two years ago when I radically want to rethink how we teach architecture. One was the responsibility of taking a year as a coordinator. The other thinking behind my practice relates to how students outputs were completely insensitive to the context they were working in. The third thing was that I went on a writing course that completely made me to think quite a lot about what I was really doing in the studio. You know, sometimes you keep changing like doing things and some point you put your head down and say how? This is not right. You sometimes need to change. So it was a bit of a change in my thinking that started happening through my research and the realisation of what was happening in the studio environment. Not feeling comfortable with students' output. I haven't done a huge amount of research and a bit frank it's something called the 'critical friend' so myself and John a lecturer had a frank conversation about how he thinks about architecture and the connection with society. For me, having this conversation kind of pushed the idea of what architecture is, what it could be.

I: Oh lovely, how do your students feel about the education they were receiving and how is it preparing them for future practice?

BH: yeah, I think I agree with you, I think the key thing for me is that no one has really challenged the way we teach. Whether teaching in the sort of studio culture is the right approach. We kind of accept this for many years as the way to teach architecture. And I haven't found anywhere that it's challenged and I think some people have tried to make some changes. But I think you really need to be radical in sort of thinking about how we teach architecture. I do agree with the view that there is a disconnect between the studio teaching and how it feeds into practice. But I think my take on this is that students don't know how to interact with clients. They don't really understand what peoples' needs are or even how to ask or what's the right question to ask. I think that for me is quite challenging because students don't question what they were given. So the lecturer will create the brief fulfil the requirements of the brief which essentially just creating an accommodation schedule. Building envelopes and they think they have responded maybe to the context. But they haven't really challenged the content of the brief, they haven't really challenged the accommodation schedule if it really fit in with what's being required for. I think those things for me are missing a bit in terms of the education system it's almost just about now you know how to design library. Okay figure out how to design a community centre but you haven't considered all issues that must be involved. So agree with the fact that it really doesn't prepare you in a way for practice.

I: How is this model situated in the general curriculum courses structure? Can you talk about the course content, structure, and the delivery style?

BH: What I do is that the students have a module called Architectural Design and Urbanism that they do this semester, I think I did sent you the brief?

I: Yes I received a brief from you through my email?

BH: So what the brief essentially speaks about is that they are given a brief showing the site and certain components of the projects. One of the components is the urban scale and the other one is a medium scale and the third one is catalytic component. And this year the street performance was a catalytic component into what we call the large scale and the medium component. So we're trying to put up in this catalytic project within the street performance in the studio thinking. This year we did a little bit different thing to what we did last year. Last year we did street performance early into the year but this year we wanted to introduce 'making', before the street performance. So it will carry on a little bit further into the second semester. Either way, it becomes integral to the actual architecture output that includes the large scale project, we have chosen as an urban design proposal and the medium scale to be a sort of mixed-used building, they can decide what components of it. Then we also have history and theory courses which they do in this semester as well and this year I have combined history and theory because the intention is that in 2016 we will have history and theory as one module. So what I've done is that I have thematically taught history and theory together. There are specific set of themes such as: culture, consumption, community and ah... [Laugh]. I have forgotten the fourth one. Because we draw from an African perspective and from the understanding of social networks and ideas about community. I also used that sort of module as a way of conscientizing them about the issues in South Africa. About designing within our cities about the issues, about apartheid, we used all the information to understand what happens in the design course. So there's more of an

9

integrated approach between historical and theoretical side as well as the practical side to the design studio.

I: Lovely! what skills do you think students bring into this learning environment in terms of using this approach and subsequently what skills do they acquire from it as well?

BH: Okay I think the students come with the thinking that they do not know particularly too much. I think what's interesting for me is how the fact that the outputs have varied in the last years. So when we first did this in 2014 the class was very nice and congenial to change. So they were a little hasty in the street performance but actually enjoyed it in the end and it made them so excited about the opportunities that could come from it. It made them realise how we do not need to be afraid of the context with the people because they were right at the peak of the Durban city which a lot of people do not go into. A lot of our students live in the suburbs and they've never actually gone into the city centre, to them, they were quite comfortable there. So the process did make them confident about the city, about the space in which they were working in. However, the class was very quiet. So it's very difficult to tell that they do not contribute much to the class dynamics. I think when we went there they were very good at helping one another and assisting one another. So they developed their own kind of network to support one another and this year's class was a bit different. This was where we started to realise that this programme is so dependent on the kind of the class dynamics. This class was very vocal a lot of internal antagonism between them very competitive class, very individualistic. They really struggled to work together as a team. So, we designed it in such a way that it wasn't just the studio masters and the students discussing about their design but everyone was part of the crit session. So we found out that the student were antagonistic to each other. They were almost like wanting to have a confrontation with the students that were been critiqued. But I think after this kind of process they've been much more amenable to each other. There was much more a sense of comradery afterwards and that was essentially what this project was all about, trying to inculcate a sense of community and teamwork in the class. In this year it was quite difficult

because of the nature of the class. But last year, it really the approach integrated the class together. So it's peculiar to the types of students. This year's class brought so much anxiety in the project maybe because they were all unstable and were used to just designing buildings. Now that they've been asked to engage with the community that they didn't understand. On the site they didn't understand how to engage in the urban design project, they didn't know anything about the process. So that anxiety sort of heightened the confrontations they had in the class. But what's interesting is that the class was vocal and they were prepared to say how they felt about everything and not to let things go. I think that was great, so they stood after themselves. I think it's important that the students also don't get bullied by what the studio instructors wanted them to do. They were prepared to discuss things and say what they felt, you know uncomfortable about things. We did this one exercise with them, they were asked to take a model apart and put it together. Each student pulled the model apart and re-assembles them completely differently and non-of them actually did like put what the previous student did. They were very offended when I said to them your class has no sense of community. You all are eventually individuals and I think from that point on they started to realise how important it was to work together you know to start working as a team. Instead of them always pulling each other apart and that was how they started the year like that. They slowly started to realise the idea of working together instead of the solitary way of work.

I: Lovely, what barriers or obstacles do you think are challenging this approach to teaching and learning architectural design?

BH: I think there were two barriers. One is the class dynamics and the other issue was that we tried to include a broader group of people. We tried including dance and more people from the drama department. We found that the more we tried to grow this beyond myself and Miranda it became really difficult. Because in the university environment people have their own sort of projects that they are working on. Their own sort of drivers, so to get this beyond

11

just two people that really have a similar view was quite difficult. So I think that was one of the barriers - how to grow with the idea? It's not just in one year and the idea of working together. The other barrier I think was a personal one where you keep questioning and wondering the nature of outcome as not tangible, it is clear that this sort of performances is completely ephemeral. They are time-based; therefore, the very short amount of time, the product may seem inconsequential if you look at them as an architect. For example, this year they worked on a footpath which basically connects an informal statement to the city. There were two public spaces that were just green triangles. Students occupied these spaces and designed furniture, swing and sort of public amenities for these places. But if you look at it you may say oh that's not sort of amazing, maybe that's not considered architecture. So I think the perception of people from outside that might say oh this is a waste of time. Because what you see at the end of the day as product is what people are after. It may not seem like amazing but it's not about the product the whole thing was really about the process and how it changes the student's thinking about what their role as an architect is. I think that's key but how you get that message across to the bigger audience is quite difficult and I'm finding that quite challenging.

I: What valuable key features do you want to inculcate into your students using this model?

BH: We want students to begin with the understanding that architecture is not only about building. As one of them said oh now I realised that people are actually important, I couldn't stop laughing when she told me that. I also heard some students say 'I wanna just work on social projects'. I have realised that social housing is so important and I never really considered how important it is to work in communities. A few of my students within the time of module said we have realised it is not just about designing houses and

offices, and parks. It's actually about creating meaningful spaces for people. I think that's really it for me, I think architecture is more than just designing things it's really about thinking, it is about communities, It's about creating a great environment for people, it doesn't matter what race or colour, grade, economic group whatever. The first group of students that we taught last year, a lot of them that have gone into the 5th - MArch doing their thesis. They are really doing some exciting projects that are very much community-based projects. For me students are now thinking what their roles can be as architects and how they can contribute to the society. So I think that for me will be the key thing and not to wait for projects to come to you. I think as an architect people can actually afford to look up to you as elite, it is an elite profession. If we can start thinking a little bit different about how we practice and how we get clients. I think that will also open up a whole new world for the profession.

I: Excellent, How is your model structured into the general curriculum of Architectural Education at your University?

BH: I think that's another challenge that you can call a barrier. We have obviously a three-year undergrad and students are taught exactly like that they are taught through briefs. A sort of studio method where a brief is given to students and are expected to design a building. When they get into the 4th year they are faced with a completely new set of approach and I think that makes it a bit difficult for them, there is no continuity. Because it's something that just happens in the 4th year it's not carried into undergraduate level and I think this is a barrier. It is something that myself and Moranda put in place in architecture and I'm not so sure how easily it can be sorted into the undergrad. I think that's one of the barriers which need to be integrated into other studio levels in order to make impact in the students' lives.

I: Is there anything you feel you would like to add or ask, before the end of this interview?

BH: Yeah, I mean it's quite difficult to do things differently and it's very easy to do things how it's always been done. I think that's the challenge that I'm finding how to really integrate this approach into the entire curriculum such that it becomes very much an approach that students can develop further on. The kind of experiences you have is so meaningful. I mean when we were doing the debate with students this year after the street performance one of the students said a guy who recognised them at the site came to them when they were pulling the street installation down. Then he said are you guys taking all these away, are you not gonna leave it, we really like having you here. I think that was touching and those sort of little experiences that students have by connecting to people in the area drive us. Because the students left those meaningful experiences. Another is there's a school just up the road from where we were working and then with the students, we were going to design the front of the mixed-used building right next to the school and I went to visit the school principal. When we did the street performance we all dressed in the same outfit, we all had black T-shirts called 'street performance'. When the principal saw our students she quickly asked oh were you part of that street performance group? Obviously, we didn't know she was among the people that have walked passed where we had the performance. The fact that she recognised the students means that they can have a conversation with you without those normal barriers that you have when you just meet someone for the first time which is awkward. It kind of broke down all those sorts of barriers but because there's a familiarity between you and this person. Because they recognised you were trying to positively communicate. I think for me that was really meaningful and a driver to what we do.

I: Thank you very much for your time and interest I will really keep you posted as the research progresses and hope also in future will be able to grant me audience when next I call on you possibly to clarify any of the things we've discussed thus far.

HB: No problems I'm just curious how you are finding people, how did you come across Jhono for example?

I: Yeah, Jhono Bennett I think he's been publishing a lot of socially-engaged stuff online and more importantly, my supervisor (Tatjana Schneider) knows Jhono and they planning to do a collaborative project together.

HB: It's amazing you are going to have a large body of network I will try and feed into that network [laugh].

Transcript 3: Interview with Garret Gantner

INTERVIEW TRANSCRIPT AEI007

INTERVIEWEE - (GG): GARRET GANTNER (ARCHITECTURE AND PLANNING DEPARTMENT, UNIVERSITY OF WITSWATERSRAND), SOUTH AFRICA.

INTERVIEWER - (I): NP OKOFU

INTERVIEW SETTING: Interview was conducted over the telephone at

TIME AND DATE: 09:00 AM Tuesday June 2nd 2015.

(Start of Interview)

I: Please can you discuss your approach to architectural education in general?

GG: Well that's a complicated question; in general I would say the role of educational institutions is not so much to provide training but to provide education in terms of critical thinking. I think there's a great distinction to be made between the two and there's often a conflict between that approaches. The accreditation bodies who want to see a certain level of technical precision and the ability for architects to become registered within the kind of legal system upon graduation or thereafter. Well that I believe has good intentions and I think sometimes it's problematic because it places a lot of emphases on a kind of professional and technical training. As if you are preparing people only to plug into offices and do the kind of work that was needed 5 years ago, 10 years ago when this sometimes even 20, 40 and

50 years ago when the systems were set up. The problem with that is that you are perpetuating the system which has a lot of limitations rather than trying to prepare people to shape the profession. To create work for themselves that may not currently exist and I do think a lot of that as the world wakes up to the fact that design is a way to potentially solve a lot of issues. That we been trying to solve through technology over many many years. But there's a huge social impact where architecture and urbanism are not one or the other explicitly and exclusively but some combination of the two. To play in this because in the end it deals with human habitation and of course there are lots of different ways one could approach. But I think starting with the foundation that questions what the limitations and the boundaries of the disciplines are beneficial. One that gets people to think that there's not a correct or incorrect ways to do things is beneficial. One that tries to get people to cross disciplinary boundaries and at least explores if not become exploit. At least explore the relationship between architecture and other disciplines urbanism, ecology, sociology and at least be able to understand what it is that that they are dealing with. I will say that's kind of a general statement and that plays out in different ways. I could talk a little bit about how we did that in Kigali if you are interested but that's a general statement I guess that's where i would go. I think as background it's important to note the context in which these things are working a lot of the schools of architecture in a number of sub-Saharan African countries were developed, the more established ones were developed during the colonial period and they were formed by Europeans whether it was the British or the French or the Portuguese. They were formed by Europeans and they started teaching a model that was en-vogue in the European universities in the 1950s and early 1960s and the way that model was adapted in Sub-Saharan Africa was basically to train people as bureaucrats because the

colonial models of how territory was administered was very centrally controlled and was very much administered by the state. That model persisted after a lot of these countries gained independence because of the role of the state to try to play the same role with or without the same level of resources. Perhaps in the last 10 years or so in which they have realized that the model doesn't work particularly well because the way that architect practice today is not that you get a degree you out work for some sort of public administration and you design buildings. It's a very different kind of practice; it's much more entrepreneurial kind of practice today. It's a much more interdisciplinary kind of practice today and the educational models by and large have not adapted very well to make that adjustment. So there's still in a lot of schools a history that comes with a lot of baggage and institutions are always slow to adapt that's the nature of big institutions. I think a lot of schools are very much behind the game, it's actually the students who are much farther ahead than the instructors [laugh] in some case. When I was in Kigali of course we didn't have all of that baggage because the school didn't exist when we started. It was the first degree programme in the country, we were not yet accredited by any professional bodies because the school didn't exist. We can get accreditation until we start graduating students, so there was an ability to adjust. If something was identified as was not we could adjust it immediately rather than wait for 5 years to go through the accreditation process and re-accreditation. It was a very international young and dynamic group of faculty who were interested in this project of how you shape a school about this relevant to the context. I can summarize these things very neatly but I shouldn't forget to say that the process of doing this was actually quite messy. It wasn't as organised as I am about to make it sound. But the first and primary role that we tried to play was to get students coming out of the rather poor secondary

education system in which they basically taught how to copy notes from the chalk board into their notes and copy that onto a quiz and copy that onto an exam. To get them out of these modes of thinking that the knowledge is going to be delivered to them by their instructors but that they actually have to seek it out. Which I guess is a way of saying that critical thinking skills were the number one priority and of course that's one thing that architecture is quite good at. Because you have to do your own project, you have to do your own work, you can't just have a studio critic draw drawings for you. So there's a certain advantage to architecture as a whole in that regard, but we tried to get that into as many classes as possible. The important aspect of that was building up writing skills of the students. You can, am not sure if you are familiar with Rwanda in general but about 10-15 years ago they tried to change from a Francophone education to Anglophone African education. Which means that at the time that this programme was starting it was basically Rwandans who 90% of them speak Rwanda; there was no need for a European language as a unifying language. At that time there was a bit of a joke that Rwanda has the worst French and Francophone African and the worst English and Anglophone Africa because they were on the half way in between. The level of the English which is language of the university that the students had coming in was quite poor and the ability to write was really abysmal I would say. Because it is not something that had ever being taught before. So we looked at how we built those writing skills and critical thinking skills throughout the entire five year curriculum. Starting with history of architecture classes and they be required to do again specifically short responds. Through quizzes about the content and that got rapped up to a kind of one page memo which was sort of a reflection on what they were learning and not so much about regurgitating information. But about trying to understand why they are learning at all. What

they might be able to apply from it. That will get rapped up into short essays which eventually get rapped up into a long and longer essay until you get to a thesis where actually they are producing a book that is theoretical treaty that it's also an architectural design project. Similar things in the studios of the studio projects had very specific topics that had specific goals and the goals by and large came out of looking at the context within Rwanda and East Africa in general. Trying to understand what I will call initiatives and inevitable. Initiatives being what are the policy drivers behind the way the country is developing at least the ones that we agree with. What within architecture will be those and some of those are urbanisation policies and initiatives some of them are the transition from subsistence agriculture based economy to the desire to have a green economy. There's a lot of forward thinking in the Rwanda government about what they should be doing. But then these policies tend to be pieces of paper that are on the shelf because nobody had to implement them. So we looked at things like the strategy for green growth and climate change and asked how we produce an architect who can actually contribute to growth ambition. Out of that some of the kind of ecological and material based sustainability and the driving on the local material. As a way of developing a building industry which really didn't exist in Rwanda was one of the things that kind of prevailed the curriculum. Then there were certain things that are inevitable. The urbanization of the country is inevitable that's in East Africa and most of Africa as a whole and we kind of saw that as something that is going to happen and the choice desire that they do it badly or do it well. In other to do it well you need professionals who have the ability to do that. Although we were training architects not even urban planners and there was a very heavy urban emphasis on the programme so they did have an introductory urban planning class. They had urban design course,

they had two studios that had a very heavy urban focus. Basically the sequence of studio was in the first year it's really just about space making and trying to understand the bases of architecture. Then in the second year it continued a little bit with that then goes into some of the social aspects and they give very public projects and then asked to find a way that users make engaged. They went out of the classrooms and were asking people how they might interact with something that they were designing. In the third year the projects were stepping up in scale. One was some sort of institutional project was usually a housing project which has varying level of scales at the master plan scale, the building scale, and the unit scale and the second semester in the third year was much of a travelling studio which the point was to get them as far away from Kigali to place as different from Kigali as we could possibly pay for a few thousand dollar on a bus. That took them to Nairobi and Mombasa one year and to Darel-Salam and Zanzibar the following two years. The travelling studios is really about engaging with cultures and what it is to design in a culture and a climate that is different from what they are used to and so as to open their eyes that nothing is necessarily standard. That you have to actually seek these things out so it's about getting them out of their comfort zone. The fourth year was really very urban in character; there was one that was kind of ecological urbanism studio which based on the water management systems in Kigali. Which was a hilly city and there is a huge potentials for the valleys which are basically what we want them to be purifiers of water and preserve the water supply for the city. So the studio often looked at development, what an appropriate development is around the edges of those wet lands and how you can create an infrastructure and building intervention that is ecologically appropriate in that context. Then second semester fourth year was a participatory design studio and they will go out into a community in an informal settlement. They

go through a process of engaging with the community to identify needs and to then propose solutions to those needs. Again on a large scale, and master planning scale but then specific building interventions. It's a five year programme and the fifth year was the theses year that kind of combined everything into one. A lot of these studios were developed with this specific purpose because those were the things we found very relevant to the context. The method of doing them to this time possible we were trying to get them off campus. So that they are not isolated in those kind of theoretical academic space but they are actually engaging directly with the issues around them. That was also a way of producing a body of research by the institution that doesn't have the resources for research that's much more established in Universities in Europe, US and more developed countries have. The library is just pretty useless at Kigali if you can't do an academic kind of research through the kind of book research and desk top research in literature. The only way you can do any viable research is to do field research because it doesn't cost any thin, it doesn't require a lot of resources. It just requires individuals to have kind of open eyes and open ears. Okay I mean that's a pretty long summary already maybe I will stop and then see if you have more questions.

I: Excellent. Do you have a name or title for this innovative model you have employed in the different stages in architectural education in Rwanda?

GG: No I don't have a title for it, perhaps I should develop one. Yea I could give that a thought and get back to you. I think another thing that's important to know about this is that over time we made a number of adjustments since we had the ability to do it. This is something that better established institutions have problems doing because once you've been accredited by the common wealth association of architects or whoever your

7

accrediting bodies are. They expect you to run that programme for 5 years until you have an opportunity to really reform it on a massive scale. Again we didn't have those limitations yet because they haven't accredited school and haven't graduated anyone. So we were able to make pretty big changes along the way and some of the changes that we did we took the kind of sustainability lecture course which was not a technical course. But a framing of how one might approach the thinking behind sustainability that can then be acquired in the studios. We took that and moved it forward in the curriculum to the earlier years so that it could be tested in a longer sequence of studios. We also changed the way that the history classes were delivered because we noticed rather poor performance by the students in some of the history courses. Even though that we were teaching at global history, obviously there's a limited documentation of history of architecture that is specific to Africa and especially specific to East and Central Africa. We did something that very few schools do but it's actually quite obvious. We asked the students what's going on here why is it that people are not engaged in this course and the students gave us a very intelligent answer. They said we don't just understand why it is relevant we're studying history but it's also history from somewhere else from some other time and we don't see how it applies to us today. So we took that, which I suspected something that occurs in a lot of schools all over the world and of course nobody has ever taken their time to actually ask students what they thought about it. We took that feedback and we changed the way that we delivered the history courses so rather than being a timeline of history. There were 3 semesters of history, so rather than starting from something all and then move to something someone else taught modern and another course and modern architecture history. We structured each course around a theme that has led to architecture movement over time, for the first one was

advancement in technology. We were looking at how advancement in technology has spurred architecture movement and shift in architectural thinking from Ancient time all the way up to the present. We will ask them how this might apply to them today because there is still advancement in technology. There are still new forms of architecture coming out because of the technological advances and it was a way of directly linking something that may have happened 4000 years ago to something that's happening today in any society. Because it's still the same sets of issues, it's just that the responses are different. Similarly the second course was structured around social and political movements in architecture as a responds to certain conditions or a kind of Utopian vision or something that's a product of a very specific political and social context. Again this is something that students can engage with today even if there are no examples from the history of architecture in Rwanda that shows how Rwandan architecture has responded to a particular social context. It's easier for students to understand that when they look at these examples from Europe or North Africa or India or China or the US or where ever it's from. That when there's a response created for certain social conditions or certain political conditions, that there are also particular social and political conditions within Rwanda. So what might that response be in Rwanda, so the history course that we've is like setting a question rather than delivering a survey of information. The 3rd one which was a little bit more abstract which was about this kind of philosophy of beauty and the way that has changed over time and whether beauty is something that can distilled in a certain principles or whether is something that's developed locally because of some kind of cultural conditions and we looked at movement of architecture that were really just about creating beauty over time and then again questioning what does that mean in Rwanda. What is Rwandan's perception of beauty and

despite making that change and how they content was delivered. It maybe all the same buildings and the same slides that were shown previously but the way it was organised is different. As just making that change within one year we saw more responds from the next group of students. They wrote much better essays, they were much more engaged the attendance was higher and they gave much better feedback on the course. So I think sometime it's just about trying to understand what the issues are rather than trying to fix things at high level. As faculty members will say this doesn't work let's try something else. They then punish the students if they don't do it right. There's a real lack of engagements with students themselves and actually getting the feedback that's really quite simple but quite valuable as well.

I: What underpins this approach to architectural education in Rwanda beyond the fact that it was the first of its kind and the consciousness of the context as you said earlier?

GG: I think it's just the belief that there's a lot more to the discipline of architecture than the glossy magazines would suggest. That this is not just an aesthetic discipline but it is a transcending discipline that is really difficult to define that one day you might be an anthropologist, the next day you might be a historian and the next day you might be an ecologist, and next day you might be an artist. The whole of architecture is all of those things and in order to really encompass all of it, you have to approach an education that speaks to all of it. That is not just about the product but it's also about the process and about the level of critical engagement with particular issues that makes the discipline more relevant to the society as a whole. I mean if you ask ordinary person of the street whether or not they think architects are necessary for the society to function well. I'm not sure how many people will say yes maybe 30%, 20%, or 40% I

10

doubt that's the majority. If you ask the same questions about say about teachers or doctors of course everyone will say yes the society needs doctors, teachers. So what's the difference between architecture and those other professions? I think the difference is the self-inflicted wound and that we have created architecture or the image of architecture as something that's ostentatious luxury. That it's relevance is through very high budget projects kind of very glamorous kind of noticeable iconic building. If that's the only value that we can assign to architecture then we actually limit its value in society as a whole. In the context of developing countries where the resources to do those kind of iconic projects are scarce. When they do exist they usually exist because someone with him the public realm, close to the public realm has actually embezzled money from the tax payers. In that kind of context what's the point in developing a discipline that only values that kind of iconic ostentatious luxurious glamorous status. It limits the work that we do to something very simplistic when the work that we do could actually be complex and very relevant. Even the society that at present might believe that architecture is beyond reach because it's not just affordable. But if we can demonstrate the value that architecture has follows ecological values, economic value, developmental or educational value. In addition to the fact that we produce building then it doesn't seem like such an extraordinary expense and by doing so you can expand the clientele for architecture on quite a massive scale.

I: How has your teaching influenced your practice or vice versa?

GG: I think both influence each other. One of the things that was so much unique about my experience in Rwanda was that I was also practicing. I worked for an organisation called Mass Design Group I'm not sure if you've heard of them they've been doing a

lot of practice recently and they have a very similar approach. The question is what is the social impact of architecture? So i was able to be teaching of some things that I'm currently practicing and that's not unusual in architecture but I do think it's unusable in this particular kind of architecture. So that was an enormous benefit and it would have been difficult to teach without also having one's foot in practice because the kind of issues that we deal with informs the way that you approach a project informs your teaching. I think the amount gained from practice was probably more applicable to teaching and what was gained in teaching is slightly less applicable to practice. But I do think that there are some overlaps there because the kind of knowledge that one gains from engaging in a particular context. Getting a studio that is highly specific to a place gives a body of research about that place which can then be applied to practice.

I: You spoke so much about context and how it influenced the kind of model you developed for Rwanda. What is the major consideration adopting this model in a different context?

GG: I think the model is applicable in many different contexts. The specific content within the model is probably somewhat unique to every place so, in Nigeria for example the set of issues that you are dealing with is different. Therefore the responds will be different but the underlying idea that you create an educational system that respond to the needs of the society rather than responding to the needs of the individual designer's ego is a core principle. I think core principle is applicable anywhere in the world but the difficult thing is defining what your context is. In Rwanda it was easier because it was the only school in the country and it was the first and only degree programme in the country. There is a very small group of architects and very big need for people in this profession. So we

12

could note very quickly of the context within Rwanda. When you get to a school that is very much globally focus or even more regionally focused. The context expands you know it's' easy to define the Rwandan context because it's a small country with a well organised authoritarian political structure. It has a set of issues that is fairly common throughout the country that is not common outside of the country. So it's easy to identify something very specific, I will expect a place like Nigeria will be much more difficult to identify exactly what the context is. I'm sure you could form an entire education just around the context of Lagos because it's so big and so complex and has so many issues around the built environment that people might engage with. But then that's one city, so to make it relevant for the country as a whole you have to expand that context. To make it relevant for let's say West Africa you have to expand that context. Again to make it relevant for the entire continent or the entire developing world you have to expand the context again. I think the most difficult part is not how to figure out how to apply a model like this to a context. It's actually specifying what the context is and is what every institution answer before they even begin to develop something like this.

I: What barrier(s) do you think are challenging this approach to teaching architectural design?

GG: The potential barriers are many and the extents to which each one exist vary from institution to institution. The first potential barriers are the staff themselves especially at very well established universities and particularly people who has been teaching for quite a long time. Because it takes a lot of efforts to reshape the way that you teach and do it continually to reshape from year to year. To always improve and you know staff helps workload of teaching and research and often in architecture staff also run professional practices as well. There's no lot of time to

do this, but it takes a real motivation and sometimes you get people who have well established positions at the university who have very senior positions that they earned through research that did 20 years ago. The question of what they did 20 years ago is still relevant today never enter into the conversation. So there's sometimes we require much staff to go through this process because it's a cumbersome process. It takes a lot of effort and sometimes you get egos involved and people can say look you know I'm a senior professor I've done all these body of research I've published this that and that. I have been in professional practice for 30 years who are you to tell me that I need to change the way that I'm doing things that is one barrier. Another is administrative and this is the one that's most difficult to control by people looking to shape this kind of education. Because in schools of architecture usually exist within a university and university have administrative structures. They have procedures the larger the institution gets the harder it is to change things. I'm not sure if you are familiar with how these things work in the universities but anytime you change a curriculum. It usually has to go through the academic senate which is not just the people who are in the discipline but it's made up of people from all the disciplines of the university. Whether it's a faculty or school depending how it's structured and you know those things take enormous amount of time and you are not guaranteed to get result. Sometimes the approvals are subject to consultation or approval with the national or international accreditation bodies. The accreditations bodies are stereotyping here are usually run by old privileged men. In my personal experience all these old privileged men are the least to engage in some kind of adaptation. If you just look internationally like in the UK and Nigeria even in Rwanda and here in South Africa people are trying to get accreditation from common wealth of architects but if you look at their requirements they are quite

good and quite flexible. I think the international accreditation body will be happy to see some of these types of changes. If you look at the national bodies Rwanda didn't have one so that's why we have freedom to do this but here in South Africa there's one and again it's run by old privileged men. Then in South Africa is run by old privileged white men who have for most of their lives because of the political history of South Africa then completely separated from the issues of 80-90% of the society. The idea that you can to shape an education that starts to engage with this it's a very difficult process, its difficult explanation that they go through and difficult to buy into it. So I think the accreditation bodies at the national level are often a great impediment because schools are afraid of losing their accreditation. They afraid of being too experimental, because they are afraid of the responds from the accreditation bodies. The accreditation bodies are often just looking for students who come from another school that they can plug into their office and do or do Photoshop or do revits or draw technical details. I think there's always this fundamental conflict between academia and the professional ones people that they can plug into their offices just ready to go. Academia want to produce people who can think through a degree but still have lots to learn in 20 years from now will take leadership in the profession and those two goals are not always aligned. The accreditation bodies can't really stop complaining about the fact that you are teaching them all these theoretical ideas. You are teaching them all these nice things but they don't know how to do a window details and therefore I'm not going to hire any of your graduates. You know you get this kind of very mundane conversation but my philosophy around that is that educational institution has a role to providing education and not technical training. If the profession needs an additional level of technical training then the profession will be responsible to providing that additional technical training. That's my stand but

that stand you can imagine doesn't always go well if presented to well established design firms and accrediting bodies.

I: How do you assess the performances of the students using this approach that has different layers of input from the students?

GG: It's difficult to speak about assessment as a whole because you know it's kind of specific to the project and courses that students take but I can try to summarize. There are a number of principles around the assessment; the first thing that I think is important is to be transparent about where the student's marks are coming from. I went to school in the US in America I remember that when I was in school I never get anything other than A letter grade at the end of the project. There's no explanation, there's no breakdown as much as well the marks are coming from and we just accepted because it seems normal. Now that I am on the educational side I think that's really unfair to students because when you design a curriculum around this kind of holistic approach to architecture it has multiple facets. Somebody might produce a really beautiful building but that is totally inappropriate for that context and then the more transparent you are about how that gets assessed the students can see that my mark was very high. For the conceptual design component of the project or my mark was very low for its specificity to the context. That's a kind of simplistic example but that transparency of how the assessment takes place allows the students to know what's expected of them. Secondly it allows any discussion around the assessment to be much focused where the successes and where the failures were rather than just pick on a general conversation. Well this was really not as good as that and that project wasn't A grade and ended on B class it all seems that arbitrary as to where these things came from. The assessment needs to be structured vertically throughout the

16

curriculum over time and say if you take the example that I gave about building up a writing skills. As the students do series of courses over time, the first time you do that the assessment should more about the kind of big ideas, conceptual ideas and this i suppose the studios as well and not so much about the resolution or the precision of that because you need to encourage experimentation and not punish students in the early years taking the initiatives to try something to experiment something and getting the result that wasn't quite resolved or didn't quite work. As soon as you start to punish students for not resolving things completely in their early years. You encourage them to just do what the instructors tells them to do or to just copy the work of someone they think is doing well and that's not very good incentives. Every time that you need to transition more to very specific resolution precision technical ability. So I will say in the first year of architectural education most of your marks should be coming from the exploration on the process, a kind of experimentation and the expression of ideas and a smaller proportion comes from how well these ideas were implemented. They maybe half way through in education those sort of balance out towards the end of the education. Your marks are coming much more from a resolution, precision, and the technical ability if it's a writing assignment the quality of the writing. The way the argument is structured and less so from the underline conceptual ideas. It's a way of encouraging some level of investigation in the beginning by making it understood overtime that doing investigation is not enough you have to produce a result that actually works. I'm not sure really if that's what your question was about that's how I can frame it generally without bringing the specifics of one course or the other course.

I: What skills do you think students bring into this learning environment using this approach and what kind of skills do they acquire for practice?

GG: In terms of skills that students bring. I think it depends on the breakdown of the students body to some extent it will be just having a specific kind of knowledge about a specific kind of context. Because everyone grew up somewhere and they have a kind of bases they assume is normal. Perhaps some have more exposure and understanding that there's a difference between a different kinds of context. But that actually is a very valuable skill as long as you are able to get them to realize that what they are familiar with may or may not be normal. But it's certainly not something that is standard everywhere that it is something very specific to a place. That allows them to think what is it about this place that is specific kind of you know they can bring some of those issues to the table. What they gain out of it maybe it will be better to talk a few weeks from now because I'm going to Kigali next week and one of the things I'm doing there is interviewing some of my former students who have been out in the profession for one or two years now after graduating. Trying to find out what they are up to and how they see this shaping of the profession all the time. So I don't know, but there haven't being a lot of time that the school has been graduating people so I don't think yes there's a critical mass of people trending this way to have a huge visible impact at least not on the surface. Perhaps under the surface there's something going on am not sure but I'm hoping to find out. I think something they take out of it is that there's a greater understanding of how they might be able to contribute to something that's uniquely in their place Rwandan but uniquely of their context because talking to a lot of the students when they first entered architecture. First of all most people don't really know what's architecture is when they begin,

they think it's some form of building engineering. They have that and they have the imagery that comes along with that. But I remembered talking some of the students saying that when they first started in architecture they thought okay we're going to learn how to make buildings and make a city and have to turn Kigali into something like New York or Singapore and when they came out they will say. We don't want it that way to be New York or Singapore; we want it to be Kigali we just have to figure out what that means and what that is. So I do think that there's a take way that Kigali is just standard for whatever you are or wherever you are practicing. That can be applied to where someone works the point is that it's not just to take something that may have worked elsewhere and implement it in exactly the same way.

The point is to understand what the core issues were and core issues are in this context and develop a responds that's appropriate for that.

I: Is there anything you feel you would like to add, or ask, before the end of this interview?

GG: I don't think so, as I have said you may want to follow-up in two weeks' time maybe three weeks' time after I get back from Kigali because I might have a better I mean more specific knowledge of exactly what's going on within the younger generation in the profession after I speak with some of them there. To see how impactful this really was, maybe I'm deluding myself, maybe they don't go into normal architecture offices and that will be that. But I don't know yet so I will suggest you me up in a few weeks and I might be able to add more.

Transcript 4: Interview with Henry Sanoff

INTERVIEW TRANSCRIPT AEI008

INTERVIEWEE (HS): HENRY SANOFF (PROFESSOR OF COMMUNITY DESIGN, SCHOOL OF ARCHITECTURE, NORTH CAROLINA STATE UNIVERSITY, RALEIGH), USA.

INTERVIEWER - (I): NP OKOFU

INTERVIEW SETTING: Skype Interview

TIME AND DATE: 15:00 GMT; Thursday June 4th 2015.

(Start of Interview)

I: can you please discuss your approach to architectural education in general and architectural design in particular??

HS: Well you know after 60 years architectural education has changed from the time that I was a student till now. Now my interest and focus is basically that kind of user approach to architecture. Those people who are affected by design decisions should be involved in the process of making those decisions. When I was teaching, everything that I was teaching about related to that concept as well as some principles of education. Very few teachers understand anything about education, they know about architecture but not about education and as a result, say around 50 or 60 years, teachers teach the way they were taught and the way they were taught was wrong. So everything that I did really started with the bases of what constitutes

1

education and how do students learn that and frame a kind of design studio around education principles as well as community action principles.

I: Drawing from your long-standing experience in teaching, can you discuss the innovative design studio model(s) that you have explored in teaching architectural design?

HS: Okay I think the innovative models have to do with education. First of all, the concept of design management - engaging students to learn how to organise their own projects. Consequently, management can only occur in projects outside of the university where students actually work with people on projects. The other important factor is the concept of programming. Learning how to programme, not computer programme, I guess in the UK it's referred to the briefing. How to understand the needs of the user group and how to kind of detail those requirements. The only way that you can do that effectively is if you are actually involved in a real project when you are talking to real people. So, the idea of programming and of management. The other important factor is teamwork, most of our lives are involved in working in teams whether you are married, whether you are working in an office, whatever it is you are doing, it's about interacting with other people. To learn how to work in a team is important, not just trusting students into group projects but really dealing with basic principles of teamwork the concept of sharing, the concept of minimising authority. A lot of concepts related to teamwork that is important for students to learn so that they can be effective no matter what practice they are involved in. So we have management, we have teamwork, we programming, and we have evaluation sometimes referred to post-occupancy evaluation. Many times we have to look at what has been done in

2

a systematic way before we proceed, so evaluation is really looking at users' behaviour in a variety of different settings that are now related to the projects that students are involved with. So I will simplify it as PEP (**Programming, Evaluation, and Participation**) that was the 3 key ingredients that really distinguishes the way that I teach.

I: That's really interesting, so what influenced the development and adoption of this model for teaching architectural design?

HS: Yea, when I was a student people kept; in fact teachers kept talking about the 'design process' and they never really explained what the design process was. It was basically a series of a desk crit and juries. When I went to work with some architects, working with some of the famous professionals in New York city. I found that nothing has changed, in the way that many professionals function, which is similar to the way the design studio operate. So I rejected everything that I learnt in terms of how the design studios are organised. The first thing I did was that I went back to school and did a thesis and afterwards I went to Jamaica. I was staying in the British West Indies and I wanted to go to a place where I knew nothing about the people, or about the country. It's like re-inventing myself as an architect and this was in 1961 it was the beginning of urbanization and people in rural areas were moving to urban areas. So I decided I wanted to live in a small village for a time and then moved to the urban area in Kingston, Jamaica. So I can understand why people left, what the conditions were. Drawing from my experience living in a small village, I worked around and knocked on peoples' doors to talk to them about their living and housing conditions. Whether they would like to stay or move to the big cities and I did the same thing in Kingston. In the process I found that what has been built by local government was wrong, it was actually lowering the

3

standard of living. I looked at squalor communities. The squalor communities were really ingenious because people were creating their own shelters using tar materials and giving the fact that there was a very hard climate. The squalor developments were more comfortable than the housing provided by government. Housing provided by government were conventional bungalows that people coming from the rural areas didn't have to use the kitchen didn't have to use bathroom. The buildings were terrible and there was no maintenance and the standard of living was very much lower. So it became very clear first that architects are not designing for people like themselves. Architects are designing for a wide range of people of different cultures, different incomes and it's important to understand the cultural differences. The kinds of settings that people live in, in terms of climatic, cultural, and political settings. Learning from that is critical. Creating hypothetical solutions is really not a legitimate approach to learning how to be a professional. A professional is always dealing with real situations. I think students need to deal with real situations to develop necessary strategies when they become professionals. So in summary it's really a reaction against the kind of traditional design studio education that is very backward.

I: Excellent! How has your practice played out in your teaching or how does your teaching influence your practice?

HS: Sure, well I think to a great extent; I don't have a real professional practice but I have done school buildings. I have done a few projects that maybe one project or something like that. Basically, the work that I have done as a teacher and a researcher has influenced the way that I practised. So there's no difference in the way that I organised the studio and the way I organised the design of the school. So my teaching and research

4

inform my practice now this is really quite different because it is practice that informs teaching. Because students around the world learn about architecture from magazines, they learn about what the famous architects have done and that has a great influence on the design studio but I think is wrong. In most fields, professionals come to the universities because of the research that is done in the university and how that research changes the profession. Architecture is the only field where the students look to professionals for guidance; it's just a reverse of what happens in other fields.

I: Interesting! What theory underpins this approach to teaching architectural design?

HS: The way a discipline grows is its ability to integrate with other disciplines. If you look at the sciences the greatest development in science is when different disciplines interact whether it's Neo-psychology or bio-science it's always multiple disciplines that interact. Now in architecture, you don't have traditionally...; we have structural engineers, mechanical engineers and the architects, but architecture is really for people. So the missing ingredient is understanding the human behaviour. Understanding of the environment, psychology, and sociology and what I described as the participatory geography. So the underpinning is really the integration of many disciplines and how the knowledge from those disciplines can help to inform better design decisions.

I: Okay, what barriers do you think are challenging this approach to teaching architectural design?

HS: The basic barrier is the fact that architectural education is like a cafeteria you walk in you choose from the samples of different foods. Architectural education is where you sample different studios. Now the problem is if you are talking about

changing the nature of the profession, changing the nature of education. The cafeteria approach doesn't work; the approach has to be like fine (...) which is where all the pieces all the parts of the meal fit together. From where one makes the other taste better so in education what it means is that you can't just do community design studio in the context of all the traditional studios. Because what they will see the traditional teachers say is 'well community design is not architecture' that don't get the real reinforcement that is necessary. So what it means is that either the students focus on community design and the traditional studio projects maybe a year or two. Not only that the coursework is necessary to support the theory courses, but also programming is important. They need a course in programming, a course in research, and in community architecture. So the students need to have a sufficient body of knowledge in order to be effective in the community design studio. So in my work, I developed a coursework and the students will be working with me from anywhere for a period of one to three years. Consequently, they really need much more power and be much more knowledgeable on how to work effectively in communities. Now if a student, for example, does a community studio for a semester in a community studio. Again it's not going to have a major impact because working on a community project for a couple of months is not gonna change a behaviour, it's not gonna change a life. They should be able to have a good experience for over a minimum of 12 months in order to make a real impact. So consequently when you are talking about change the change has to be of cause the entire educational system. It's not just enough to introduce a new course or a new approach but needs a support mechanism to sustain that idea. Basically, in changing a new curriculum there is a need a deliberate focus for example, students can focus on building. Students can focus on urban design, students can focus on community design and for each

focus, and there are support courses. Students may stay on that track for at least a year or a year and a half otherwise the idea of community engagement and community involvement won't have the power that's necessary to make the changes. Just taking one studio which is typical in many universities throughout the world, it doesn't make the necessary changes. It's not going to change the profession; it's not going to change education.

I: Excellent, one more question what do you think should be the focus of future architectural education in contemporary times?

HS: Well, you know the Bauhaus turned it back from everything that was done before and it embraced a new form of architecture, new building forms, new materials, and new ideology. But there were people to support the idea of Bauhaus. So architects rejected the kind of classical style and embraced the modern style. I think the change in education has to turn it back on what has been done before it, by looking at something totally different. The problem is that it's not a formal education, it's a process it's not a form. You can't copy a picture of a building with a flat roof or glass from the magazine, it's really the way students learn and that's really much more difficult to change.

Over the years I found people in different parts of the world that support this idea of change and more socially-engaged forms of learning. But they never come from the same location but are scattered in different schools of architecture in different parts of the world. For example, in the University of Strathclyde, Glasgow, a former student of mine in the School of Architecture (Ashraf Salama), under this umbrella of 'community design'. His presence is capable of bringing changes to architectural education within the university as there are up to two people with similar interest. We need to have at least two or three

people in every school of architecture to be able to make the changes. The difficulties are that you don't get the support from other traditional faculties, traditional faculties are afraid of change they want to keep the system going as it is. But the world is changed but the teaching faculty has not changed. So I have been doing this work for decades, yes increasingly there are more people around the world, more faculties more students but not enough to bring a very dramatic change not only that changes don't happen that quickly it takes a long time.

I: So what else do you want to add before we come to the end of this interview?

HS: Well are you doing this work to have some changes in your country?

I: Yes, actually I am doing a PhD here at the University of Sheffield and this research aims at instigating the development of a socially-minded pedagogical model for teaching architectural design in Nigeria.

HS: Well, this issue has come up 30-40 years ago in Africa and many people have been struggling with this because not only on the influence of colonisation, but leaders in African countries would like to show the rest of the world that they are progressives. So they reinforced the idea of skyscrapers and buildings that are incongruent with the local culture and don't work. It's one thing to buildings in the Middle East or the United States where there is lots of money and utilities but when you start building high rise building in African countries where you don't have air-conditioning, or the air conditioning is not consistent, the buildings are bound to be grounded. These practices have been going on for decades; however, the best ways to change is to run for political office. That's the way to make a change because politicians certainly in Africa have a lot

of power. Architects don't have any power; well you can work on your thesis and develop a model. But to bring a long term change you have to run for political office, because that's the only way that you gonna have the power to make changes.

I: well I am also a lecturer in architecture in one of the Universities in Nigeria. I believe that developing and employing pedagogy that is socially-minded will not only change the way architects practice but allow empower users to be part of the design process.

HS: When students come to architecture school what they are looking at is building that architects have developed all around the world and that's what they want to do, to become famous architects. Well, your suggestion is totally different so what you have to do is to brainwash students, seriously brainwash them. You can't do it in one semester and you can't do it in one course, it has to be reinforced. It has to be over and over and over again. Then you may have an impact, it's a critical issue one person cannot bring this change. It has to be more than one person and reinforced by other people around you. So you have to have some impact on the other teachers as well as the students or teachers have to be hired with a similar viewpoint to reinforce each other. I have been working by myself for 50 years. I have been raising money, have a lot of power I have been effective. So in the university people come and go, some members of staff stay for 4-5 years they will leave to some other places. So in this country, we don't have continuity. UK is a little bit different because people don't move around this much, but I think the problem is that you need a support mechanism that reinforces what you want to do. So it's okay to teach the way you want but to really have an impact after the students leave they have to go with somebody else who reinforces your ideas otherwise they're gonna forget about all that you told them at school.

Transcript 5: Interview with Doina Petrescu

INTERVIEW TRANSCRIPT AEI003

INTERVIEWEE - (AS): DOINA PETRESCU (PROFESSOR OF ARCHITECTURE, SCHOOL OF ARCHITECTURE, UNIVERSITY OF SHEFFIELD), UK.

INTERVIEWER - (I): NP OKOFU

INTERVIEW SETTING: A face to face interview

DATE AND TIME: 15:00 GMT; Friday May 20TH 2015.

(Start of Interview)

I: Please discuss your approach to architectural education in terms of innovative design model that you have practiced or developed?

DP: So to answer the first question the way that I am connecting the practice and the research that I'm doing as well as the teaching is approached in two formats. One is the Live Projects and the other is the studio. I was very much interested in design based research work - research by design. Design that has social dimension as I've mentioned before, this is also what my practice is concerned about - invariably pioneering participatory architecture. So one of the first live project that I have conducted using my practice as a framework was the ECO BOX garden project. When the students from Sheffield University came to set up a prototype for a community garden. We decided that the users, no the inhabitants - the future users of the garden will

continue to build the garden. Following the rules that the prototype had, it was a pilot kind of garden okay I think you can see it here in this book 'Architecture and Participation', I think it is interesting to look at. I think I am speaking here about 'Design Action' from the Live Project as a form of design action. The Sheffield University students came they designed just a bit of this. They were be able to put up together users' guide that will indicate where people can find materials for the garden and how to do it in such a way that people can build the garden afterwards by themselves. I think this was subject for research - I mean the prototype. We did a bit of research in the area to identify what materials are available, where from we can get them and the students have been useful in doing this. They came again a few years after and they did one of the mobile devices and this was one of the architecture mobile devices. The garden was one of the devices; they did this one of the mobile device that will serve the garden with others. It was very useful again to have the students because they have time, imagination, and motivation to do something together with the inhabitants. So after a few years the project was a little bit advanced so we were in another stage where we noticed that in the beginning when we didn't have many people around. It was the first prototype of the garden at the very beginning of the project but this was in the middle and there were a number of people coming into the garden and the garden was almost finished. It was a mobile kitchen and it was conceived by the students and the inhabitants together. So it was a sort of co-design approach and we knew that they will need a kitchen. Yeah so sort for a type of intervention, students' intervention at another stage of the evolution of the project. So this was one way of working with the students, the students were the triggers and drivers of a design activities that continued after they left. They learnt several things; the students learnt how to work with community, how to

communicate their design, and how to co-design somehow. So there were quite a number of skills of how to work in a foreign context because they were in France but do not necessarily speak French. How to negotiate and communicate in a different language and deliver this in record time. They were facing a number of unexpected context challenges and my practice worked as a mediator. You know we set up also part of the brief, we were there to help, we were there also to tutor them, and it was an interesting experience. So the other thing was developing the studio, if you look at my personal pages you will see the archive of the studio work I conducted with students and again the studio was an extension of the practice-based research that I do with my practice. I think I see this in other schools - using the studio as a sounding and testing board for the research that they are doing. The practice is a support tool - as a way of supporting what you are doing. I think it is important to think about these relations and how to empower knowledgeably your students and give a wider circulation and impact to the world as you are moving on.

I: Okay moving unto the next question, what underpins this approach to your teaching and practice probably?

DP: Because I think it's important when you are teaching other things like in my case say participatory architecture or socially or politically engaged architecture. It's very important to offer examples and offer real world experience. If you train students to do architecture in a different way or if you ask them to imagine other forms of architecture that are more socially engaged. What example do you give them; so I use my practice as a way of offering living examples of how to practice architecture differently and of course I have mediated this to projects that students were involved in. So because you are learning much

better when you are in a real live context, when you are testing you are experiencing it yourself.

I: How does your practice influence your teaching or vice versa?

DP: First, The Live Project was existing in the format that we could use. This was a chance and I think this was normal to how the Live Projects were structured to enable students have certain experiences in practice. Yea in my practice or to use my practice as a vehicle for learning and teaching. So it was no contradiction, no necessary negotiation with the studio work. I have proposed strategically a topic that was connected to what I was doing in practice. I included again purposely in the studio programme activities that will connect to my practice. Another vehicle was research; we have conducted a number of research projects that involved both my practice and the Live Project students that were doing research. So the research project and the way it was conceived and organised is occasioned for this encounter.

I: What theory underpins this approach to teaching design?

DP: You mean what's the ethos ... what's my belief? I think I am politically motivated so it's not to challenge for the sake of challenging. I really want to get access to ordinary people to take control of the city and my means as an architect is to do this through designing projects. Several projects that I have done in the last 10 -15 years were all about this, about ways of enabling ordinary citizens, inhabitants of big cities to have access to space that they will self-manage. I have use pedagogy and I have taught also in the studio about the same thing so I have a sort of

political position I will say here both as practitioner and as an educator.

I: How do you structure your model in terms of the content, design process, and the delivery style? Though you said earlier that your model employs live project tools and principles can you throw more light on this?

DP: You are asking specifically about the Live Project, yea, which is different from the studio. A live project is only a 6 weeks project. I don't know if you have attended the Live Projects review. Okay, so you know what they are, the Live Projects are in fact short term projects, theme-based and they involve working in real context which is not the case with the studio. The studio is almost a one year structured module and its framework sometimes engages students to work only on one project during this year. Yeah, it's a very different setting to the Live Projects. Your question is it specifically about the Live Projects?

I: Yes why I asked the question was to understand the relationship between this approach you have highlighted and the Live Projects that you discussed earlier on?

DP: Now my practice centres on temporality and I have used the occasion of the Live Projects. I also used this project that I have developed with Atelier d' Architecture Autogérée (AAA). So I have used the Live Project for 6 weeks in the beginning and again at the 3rd year for another 6 weeks. So it doesn't correspond particularly or it doesn't map against the structure of the Live Projects. I used it at a very specific opportunity to get something pushed further within the project in this case at the very beginning of the project and also at the middle to add another layer which was this layer of mobile devices.

I: Okay, so let's talk about your teaching. How does your model relate with the structure of the Live Project?

DP: Do you mean the type of model that I'm using? Because I think there's an aspect of radical pedagogy in the sense of the fact that you are encouraging and pushing students to question their roles as architects and their roles as students. To take initiatives, to get engaged, to believe and to have I will say a political statement within that project and on one side. On the other side I think I am trying to be innovative to mix quality and teamwork that I'm promoting. I'm promoting collaboration within teaching and learning but at the same time to allow any student to have sort of individual contribution. To identify himself or herself with the project and with his own project at the end and to have the feeling that he's learning he's flourishing he's contributing essentially. So it is a sort of balance between collective work and individual work I'm trying to ask students to formulate the questions themselves. I have never had a programme in the studio I had just topics or sites and programmes. The briefs for the project were always conceived by the students themselves. I think this is also a way to put the students in a power position, yea you kind of allow students to formulate his or her own questions. I am also promoting feminist approaches you know we have this kind of critical dimension. This idea of encouraging diversity not only in terms of gender you know all kind of cultural approaches that I will identify with students. So I'm always encouraging this kind of minor knowledge or approaches to learning .So I consider myself as a big listener as someone who is really paying attention to the students. I'm really trying to address what is important and I mean the important questions, you know not only what is fashionable or what is easy but what is important. What I think is important to address as a question today I mean for a long time,

was this issue of engagement. You will see also my studio programme everything is about transition to think about change and future and you know how one will face the challenges of the future in very particular context. I have chosen, I have selected, and I have exposed the students to heh... So the studio is about post-communist transition, post gentrification, post-industrial transition, and post-colonial transition. So you know important questions for our transition and I'm pushing the students to ask the questions that are not too usually asked to take risk in that approach this is what I think. Taking risk also in terms of what you know how they are perceived by their colleague. My other colleagues sometimes I had very difficult years where students of mine were questioned a lot in their review by my colleagues that won't necessarily understand or accept. I was of cause leading with some approaches, for examples the work with diagrams in this school (University of Sheffield), I was the one that brought this approach in the beginning in 2001 when I arrived here. I was representing processes rather buildings or spaces and of cause when you represent processes the way you are representing it is different. I had a lot of counter reactions from my colleagues questioning this way of presenting architecture or doing architecture. But it's not only doing architecture, but the question of what is architecture? Architecture is also about processes and it's also about networks, this is what I am pushing in my approach to architecture and the way I teach students.

I: What are the barriers or obstacles that challenge this approach to architecture education and practice?

DP: What are the challenges? I think some of the challenges are the fact that you are challenging the students with the new way of doing and understanding architecture and the students are not necessarily prepared to this. You know we tried to construct the curriculum in the school that will gradually inform the students

about a different approach to architecture. But we still have a lot of external pressures from the RIBA accrediting body and the fact that we have to respect the RIBA criteria which are quite conservative. Yea according to RIBA both our undergraduate and Masters Students will have to design buildings even complex buildings. This is a limitation; again it is towing this direction to identify architecture as a building. So to change this mind-set for students and to convince them that in fact architecture is not only building. The fact that they might have to work in their practice or produce a type of architecture in their practice or produce this kind of architecture in their practice. So they can live up and they can have a life they can pay themselves by doing this is a challenge. To demonstrate that you do not necessarily have to build buildings in order to have a wage or to get paid but you can also network. You can design strategies; you can do participatory work and still live out of this. And again my practice was an example always for me to demonstrate this to show students, you see it's possible to live out of a different type of practice that defines architecture in a different way.

I: How do you source for funding for most design-build projects?

DP: Yea yeah I think this is very important. It's important to demonstrate and to teach the students. How they can get funding for such practices and through my own practice by representing this you know that I have a series of diagrams again in which I am showing the funding scape of the project. How I started the project in the beginning with very little money. How I got funding from mostly public funding from different sources and how these managed to pay a part of the work. Another part was maybe voluntary and these were appropriated within the same time. I think it's very important to think about not having, to go out of the box, to think out of the box; out of the usual way

of funding a practice which is usually by commission. Private commission or through competition but to think about the business plan or the economic plan for a project that you are self-initiating. You know to embed somehow the funding as part of architecture for the project. This is what we are trying to teach and to show. That is why I said, I have mapped this carefully using my practice as an example. Because this is how I can convince students say look my practice is a model there might be other models I think it's interesting to look at the economic scape of the practice.

I: Can you discuss any funding model(s) that you adopted in funding this intervention projects?

DP: Yeah yea they are always in business even if they don't think of it; in any practice you have a business model. Really it's just that the models could be different I mean you can fund the practice in different ways. There's this other model I think it's important you understand them and to teach them. So we have here in the school with the management course we were teaching for a long time. I don't know if we continued to do this a sort of more socially oriented more than others I mean. Cristina Cerulli you can have interview with her as well, she has developed this so we have social enterprise model of architectural practice. Maybe this is how the practice is defined in which the social value of the work you are doing as a practice is recognised. Yea I think there are models that have come from social innovation also in which architecture is a driver for social innovation.

I: What else do you want to add to what you have said thus far?

DP: I think there is a social recommendation or message to you because I think working in another (Western, European or

Northern context) comes with challenges. I think you might not have the same sources of funding, the same demand or social demand in the Europe for example; there are many ways of getting public funding you can be in an organisation. With my practice, we are not a liberal professional practice, we are professional organisation and this entitles us to ask for public funding if we want our activities to be recognised for the public interest. You might not have these opportunities in Nigeria for examples I don't know what type of organisations exist there. If you can really play this model there but there might be other models that are more embedded in the local culture that you have to explore and map. You might have your own ways of collective funding or something but I know in Senegal they have this tontines. This kind of collective way of sharing collective funds that people will put together. Maybe groups collect their contributions at the end of a period as forms of self-help that are developed in different countries. Sometime you do not need to pass through the money economy but maybe you can exchange some services or maybe you can be paid through services because you need to live. You need to do certain services and maybe you can be provided with this by your client. I think it is important to explore these different models of sustaining and supporting these types of social practices that are very adapted and specific around your own context. More so knowledge economy there might be other ways of circulating knowledge which is different from here. You might use other support, when we went to Sierra Leone it was very interesting to see the role of street theatre in passing on educational messages. You know, specifically health education messages about aids, people will enact this on the street or people will sing a song that was also another vehicle. So again this one worked here but it did work very well there because it was locally, culturally adapted and I think with my students it will be interesting for you to look at the

Senegal project. We looked into also corner street schools you know the type of projects that were much more appropriated and specifically located.

Transcript 6: Interview with Viviana D' Auria

INTERVIEW TRANSCRIPT AEI0010

INTERVIEWEE - (VA): VIVIANA D' AURIA (ASSISTANT PROFESSOR,

DEPARTMENT OF ARCHITECTURE,
URBANISM AND PLANNING, UNIVERSITY
OF LEUVEN), BELGIUM.

INTERVIEWER - (I): NP OKOFU

INTERVIEW SETTING: Interview was conducted over the telephone

DATE AND TIME: 20th May 2015; 13:00 GMT.

(Start of Interview)

I: can you please discuss your approach to architectural education in general and architectural design in particular?

VA: If I can understand, you are inquiring about the kind of more general views on architectural education and if I could position myself. Though I have started answering I don't know how much of that you got of my answers before the line went off maybe I should just begin again.

I: yes, please!

VA: One important thing that happened when I was a student of architecture. Which was basically the recognition that I was not very satisfied with the kind of architectural education that I was receiving? That had to do with the fact that I was been trained in a school that was object-oriented. So let say that the process of how you got to achieve buildings and the broader context they were feeding into was not really considered very much. At the same time, it was very theoretical and historical kind of curriculum. I guess that's a general thing about Italian schools and that also mean that I was missing the kind of applied side of things. So we didn't have any kind of practical, let say component within our training. We had very few design studios and the design studios were seen as tools to investigate particular issues. They were more well objective than situations and that was immediate kind of problematic for me. So I started also working, well I started looking for exchange programmes that I could also experience different forms of education. For example, in Finland they had a tradition (...), Netherland is talking about the interplay of cultures and how architecture was not this kind of giving that it was very responsive to a particular way of inhabiting the world. So that was a kind of important starting point to my dissatisfaction. If I have to relate it to today, I think that this is still a problem for a lot of schools. They are kind of building smart professionals rather than critical designers. So there is a lot of work to kind of move towards that approach that is more responsive. Let say basically majority of people in need [laugh]. Instead of few clients that can afford private architecture commission. That is the basic kind of outline, then of cause, I can go into details if you feel that I have to give other information at some points just let me know.

I: Excellent! Can you discuss your teaching experience with your students outside the conventional design studio model?

VA: yea, I think there are two things here. The first is the programme, the postgraduate programmes that I am involved in Leuven which is where I have done most of my teachings until now. More also my student experience before becoming an educator. It was always based on the idea that the kind of leading principles that you should base all your teaching on, learning from the existing kind of context. So very situated understanding of the context and of cause putting you also as a listener toward the most vulnerable kind of communities. So recognising that the majority of heh, that your client should be constituted by the majority of those who are right now striving for better lives and better quality of life in different cities even in Belgium. But not making the difference between the North and the South but always kind of recognising that there are, let say development issues in every single context. The only way that you will begin to be socially minded is to first recognise these needs of vulnerable communities. But at the same time also start to open up your mind to what is existing, as a practice of occupying space. By first asking for a particular kind of element and not already coming in with any pre-planned ideas that are for postgraduate programmes. Then a lot of importance is given to design studios as not an object-oriented [laugh]. A kind of teaching and learning experience but very much on the other hand as a way of answering a particular question about difficulties and they are usually socially oriented questions. That also implies that as teachers we are not the kind of educators looking from above. But we are part of the theme that is trying to answer their questions. So something about hierarchy is a very important thing. In one of the design development project that I

was involved in, as a regular design project. We have to advise a University in Sri Lanka on how to make their curriculum more adapted to let say urban design. We tried to advocate for something similar to what I just mentioned. Because what we found happening in Sri Lanka, they had of cause British colonialism there. The kind of the curriculum there is recognised by the RIBA charters. But of cause this had to do with a way of doing architecture that has no understanding of what was actually happening in Sri Lanka but based on other criteria and so forth. What we tried to advocate there was to start learning from the existing, to start constructing from the history of architecture which was based on the way of life of the people of Sri Lanka rather than the European mode of practice.

I: What is the name/title of this model?

VA: I don't think we've found a name for it [laugh], in the sense that heh we have this specificity of living and working in urban scale. So very often we interact with large part of the city and we are not building, it's very hard for us to go towards the live project kind of situation. Because it is not a circumscribed intervention that we are aiming for but for example rethinking the master plan. We are trying to provide an alternative really normative way of defining context, building regulations, setbacks (...) which was a completely different situation on the ground. So we don't consider a live project as a design-build experience. Only but we kinda extend that definition of the live project in and move a little bit with the idea that can be the only way. That kind of difficulties of initiating particular processes because of the scales we are working on, ya we don't have a name for it [laugh]. I guess it's because we haven't really considered the approach enough as something that needs to be named. That for me was very interesting about Sheffield because some names did come

up. I realised we don't have that in Leuven we don't have that awareness in terms of naming programmes.

I: Ok, how is the model structured such that students understand the process, content, and the design approach? More so is this model part of an academic module structure in the university system?

VA: It began forty years ago as a postgraduate programme which was a short-term programme not a two-year programme like today. It started actually with the patronage of **UN-Habitat** as training for mid-career professionals. So it had a specific framework which was one related to UN-Habitat adjustment instituted. So there were a number of schools in Europe which were studying the programme not just in Europe actually but in a number of other places. Which were starting up centres of learning and research that had to do with the idea of human settlements? So a kind of holistic approach to urban development where you take into consideration issues of: culture, technology, and many things. From that moment it evolved a lot in part because; it was extended in time and became a full-fledged postgraduate programme. Then it opened up not just to make careers professionals but to also students that were into a different kind of career-path. Students that just graduated or they had fewer experiences than the mid-career professionals. Then yeah, we were able to secure for example certain agreements for scholarships to be able to have a substantial amount of students from the South to come. That helped the programme to evolve and became a fully-fledged recognised programme for two years. But it is a postgraduate programme it is not on the regular undergraduate programme of say 5 years Architecture. That's why it's a master degree, it's a specialisation and there we had a lot of recognition. Now the framework is changing again because postgraduate programmes in Belgium are expected to be self-

5

supporting completely. So it's very much driven by the motivation. A kind of critical wills of a number of teachers and researcher that believe the programme should kind of remain and reinforce itself. But in terms of recognition, it's fully-fledged post-graduate programme right now.

I: what are the graduates from this programme called and how do they practice in the real world?

VA: The certificate they receive is one of our postgraduate master in Architecture and Human Settlements. Human settlement remains the name for the profession and students who graduate from this programme are considered as reflective practitioners - people who can design and have comparative experience. They are able to question urban development both in India and Latin America and Europe itself. It's kind of building a critical capacity but also considering them as kind of, we call design mediators. We found that discussing design alternative is a way to set-up stakeholders' coalition. That's sometimes they are truly not happening because there is a lot of a direct confrontation between stakeholders and (...). So there are a number of students that continue to do that work either within NGOs. Some of them work for United Nations agencies and some go back to local authorities. But they also kind of have a small innovative approach to let's say urban development in their own context. There are 3 sectors that students can work in: the United Nations, local agencies and public administrative planning unit. So a minority goes back to private practice.

I: So under what theoretical framework can you situate this approach of learning and teaching?

VA: well I don't think it's different in the sense that it is definitely pushing practitioners to challenge anything that is kind of

established the uneven distribution of resources and capacities. So that the idea of challenging the status-quo is very present but I think it is perhaps different because we don't exalt that aspect very explicitly. Because we feel that the discussion around that might actually replace the particular capacities of negotiation of mediation that are then used to actually really allow for change and innovations. So rather than discussing around that we try to present a lot of examples of critical practitioners let say the and then the design studios that are kind of real situations. Where we usually have, you know a problematic context where there is direct confrontation perhaps between a local community and something else we try then to use that as the arena from which to test this capacity of negotiation. I think rather than stressing the unbalance we try to, we take as a starting point but move towards a kind of mediating approach. So it's softly challenging the status-quo than explicitly challenging the status-quo. It's more change from within than from without in a sense. Then guess that might be a difference with the more outspokenly inquisitive pedagogical models. That might have to do with Flemish culture because Belgians are very shy people. I don't think they go for direct confrontation [laugh] and so that might be one of the reasons.

I: What kind of skills do you think students bring into this learning environment with this model and what skills do they develop from it?

VA: One of the skills that we try to develop is critical thinking [laugh]. There are definitely a lot of students that hmm no there is also a very big difference because we have students from Belgium and students from a lot of context across the world. There're lots of students from Sub-Saharan Africa, Latin America, and Asia. So they all come in with different backgrounds that are usually the ones that come in from so-called the Global South

7

have had direct experience of what a slum might be in practice. For example where someone might have difficulties of living in a very socially, spatially, segregated context. Might be which is very different from what European students have experience for example e heh that means we try to mix and mingle experiences. As much as possible in order to develop the idea of world citizenship. We think it is important for students to develop as a frame so the idea that they feel that they are part of a community of practice. That then goes to challenge a kind of inequality everywhere and what is happening in a particular context has profound impact on the other contexts. We are all in a kind of interconnected situation, the idea of global citizen and critical thinking are two basic kinds of capabilities that are important. The third one is simply to be able to design in a trans-scaler and interdisciplinary kind of way. So we have a majority of architects and urban planners and we also liaise with social scientist. Some of them attend our courses as well because when you start tackling such a context. For example the social housing estate in Belgium, there is no way that you can really operate in such a context without using ethnographic tools. There are also tools to kind of communicate with communities and try to understand their needs and thoughts. What skills that the students bring are usually a lot of insight into their context of origin. Because there is so many of these contexts related issues that are spoken in a generic way. The slum in the Global South is kind of a general category. But of cause, a lot of experiences like hands-on learning experiences as basically surveying some of these communities. So they usually come in with a lot of how to share from that perspective and that particular context they come from. In many cases they also come from schools that they've been dissatisfied with, and so they also bring in more points to the discussion on issues relating to pedagogy.

I: lovely! Drawing from your experience what barriers do you think challenges this approach to teaching and learning architectural design?

VA: I think there are two large barriers that we are facing at Eastern Leuven. More specifically as I say, first it has to do with fact that we are within the faculty of Engineering. It's a context where inputs are measured quantitatively. The ideas that we need to develop professionals with a kind of solution driven approach to things and the idea is to be able to bring immediate solution in a very kind of scientifically sound way. So it's a kind of elaborate thinking that's very detached from the field and to be able to justify our approach within the postgraduate programme. We've had a lot of questions and we've been basically considered as strange people and we just have to live with that kind of distance. No labour, this does mean that in terms of conversation at the faculty level. We are just seen as people who are doing strange alternative kind of things. So I think one major barrier is communication between disciplinary approaches and the recognition that these approaches are valued one. Even it is not built around solution driven approaches also the whole ideas of kind of being in a lab and doing experiments. Using formulas as applying those formulas and then finding an answer [laugh]. The second barrier has to do with the studio that we developed around communities that live in the Global South and Based in the Global South. So when I mentioned that it is important for us to learn from the existing. In contact with the existing to have a kind of action learning experience. This also means we consider it as a basic kind of points that is not negotiable to travel with students to the area that is the site of the studio. We go there for a minimum of two weeks and sometimes a longer period. However to secure funding and able to do this we are not able to engage in proper conversation with any kind of development cooperation sector because they are kind of old-school hard-core

development thinkers. So the idea is that people from the North go to the South to help the poor and this means that there is unequal relationship built within the development framework which we are trying to escape whenever we have to secure funding. We can hardly escape this, of course in practice we find everything we have to mitigate the consequences of such uneven kind of relationship that is already laid out in the funding scheme. So I will say that those are two large barriers.

I: How do you address ethical issues while working with this approach, most importantly communication issues?

AV: Well there are challenges of communication some of them are explicit because we don't speak their local language. For example, for in other places, it's much more like implicit kind of communication barriers in the sense that I think the basic question from the community was why are you coming from so far [laugh] to do certain things and so forth. I must say that we are working in tandem with the local universities so there is no way this will begin without being based on relationship. A long-standing relationship with a local partner, but the question is why isn't local universities able and strong enough to do it without us coming in? That is one point but I also think that at the same time there is a lot to gain from the exchange of groups that are working on similar project. You can create a particular momentum which benefits from the fact that there is both an insider's perspective and the critical outsider's perspectives. The two together can increase the possibilities for change in a particular situation and I see these happening for example in the summer school that I mentioned. When I was in Sheffield last week because the University of Guayaquil in Ecuador was already busy. Advocating for avoiding force relocation of a lot of people because of the large-scale mega project that is been implemented. But for the fact that they have students coming in

10

from international Universities from South Africa, India, Belgium and farther actually gives the university higher standing and higher consideration. Within their own context and this, I think can be beneficial but indeed there is kind of I will say basic world device. We inherit this course from colonialism and so forth. Built into a lot of these kinds of a situation because then you will also wonder why does the University of Guayaquil to supplement their own work. In the eyes of Ecuadorian local government this is the only thing that will happen to allow a university to be reconsidered on different grounds than what they were used to. So we need to separate I guess the fact that we can learn by also combining critical outsider and critical insider perspectives. From the general uneven distribution of potentials and resources across the North and the South if you want to call it that way.

I: Excellent, How did you engage the communities in the 'process of making' while developing intervention projects in the Global South for instance?

VA: No, I think one way in which we involved people (...) was by not considering the community, vulnerable community which ultimately the principle let's say partner in collaboration. Not concentrating only on them but adding to the table of conversation also stakeholders which are difficult to reach because there's not a lot of communication. So local authorities even private, you know actors and trying efforts to set up a conversation with them without perhaps let's say alternative design scenarios. We used that as a ground for the conversation, otherwise it wouldn't have happened and that's how I see that it was also unconventional. I'm not sure if it's unique but it also about generating a conversation which usually doesn't happen. So it's not only going for example in a slum and trying to help the upgrade process it is actually trying to connect these needs to a larger urban development plan. That local authority and private

actors might actually take that into consideration as well. We've done this a lot in Leuven when the programme 'was established in the 1990's. Again with a partnership with UN-Habitat and we worked in secondary cities. There we had a lot of actors around the table not just, for example, vulnerable communities but with perhaps the world large farms, the park authority the mobility people. Because the idea is also because we are working on the urban scale we are touching upon so many different interests. That's how we also think that a kind of solution that goes beyond small-scale transformation can actually happen. This has to do with parks that were fenced, you know pieces of cities that are back to back each other. They are considering each other with simple conversation around alternative design scenarios. You can actually get very fine that how I see our involvements with people and in that sense I think it's different definitely from any kind of conventional architecture teaching but it's also different from the participatory approach where your main focus on the community within the community itself but it's trying to generate conversations across different stakeholders which usually are not in conversation.

I: How do you assess your students work in the projects, considering their different roles in the learning process?

VA: This is a point that we think we need to improve because we have a traditional formal assessment. Well, that's something we should definitely improve. The only thing I can't say is that the assessment doesn't have only on the bases of the final exam. But also on the kind of skills that students have shown that relating to the process itself and also their partner which are usually coming from a different context. Not only in terms of geographic origin but also in terms of disciplinary background or if they are all architects. Anyway, architecture is done differently in a group with somebody with a different background. The large majority of

12

students adapts and kind of use this as the main point of entry. But there are also cases, unfortunately, students have shown they don't have the capability at that time. That does become an important aspect we take into consideration that's part of the assessment. We don't have a way to include an assessment by users but it will be interesting to do that. Mainly because we send students off to many destinations as I said earlier because we have different stakeholders. I'm not sure we will, we could generate that assessment from so many different outputs. We do try to do it by including some people from the local community in the final thesis. So it's definitely a point we will need to improve.

I: Okay, what do you have to add to all you have said so far?

VA: I don't know if I would but, I really like to know where this will go in the sense that it is not additional information. But I do think that your project is a crucial one I will be interested to see the kind of final outcome. Say this screening that you are doing and also how you plan to really transform it into an approach that will be useful for Nigeria. I haven't been to Nigeria but I have been to Ghana for quite many years. But perhaps there are some similarities in the curriculum that I felt. I found it very strange that Ghanaian students were not going out into their own cities to learn from them and they were chasing an idea of designers far from what the context needed.

Transcript 7: Interview with Cristina Cerulli

INTERVIEW TRANSCRIPT AEI0024

INTERVIEWEE - (CC): CRISTINA CERULLI (MAUD STUDIO INSTRUCTOR AT SCHOOL OF ARCHITECTURE, UNIVERSITY OF SHEFFIELD), UK.

INTERVIEWER - (I): NP OKOFU

INTERVIEW SETTING: A face to face interview was conducted at the Arts Tower, University of Sheffield, UK.

TIME AND DATE: 14:00 GMT, Wednesday June 27th 2016.

(Start of Interview)

I: How do you frame your approach to architectural education?

CC: I feel I came to architectural education by chance, not very long after I've started my job as a lecturer. I was asked to do something that I had not done before not something that I had researched into or something that's in line with my work. That for me was the starting point to actually developing a pedagogical position. So when I first started teaching shortly after I finished my PhD, I had gone through architectural education. I had worked in practice I worked as a researcher after I finished my PhD then I got a lectureship position. So I had to teach apart from occasional appearances I couldn't claim that I had any teaching experience as at that time. So I tried to learn as fast as possible from colleagues, I was very lucky in the first year I had to teach with a group of some interesting colleagues. I had to teach the Live Project with Rosie Parnell and Jeremy Till, and I also taught management with Pru Chile. So quite a good set of very pedagogical-minded colleagues. In a way for me, working with them was a kind of imprinting. I assumed that it was the norm of having a sort of pedagogical drive. I thought that was noble in itself and later on, I discovered that wasn't much okay having a sort of honest purpose for pedagogy. Again I was asked to teach something I knew nothing about

which had to do with management in practice for the MArch and I saw it as learning through teaching and teaching to learn. Obviously, I knew I had some issues but I hadn't really taken a position on a lot of things related to pedagogy and management. So basically it became a project for me to develop this position and to teach something that was perceived as the boring bit of the course something that the external examiners and the RIBA that had picked upon as the weakest part of the course and that was the kind of drive. So I felt like making it better than the way it was perceived and also to the students that were beginning to get to know what kind of thing that is motivating. They are very bright students wanting to change the world but really driven by money. So I was trying to teach them business skills and enterprise skills, and communication skills in a way that was well articulated that can link to traditional entrepreneurship kind of module. So that was the starting point of engaging in the socially-minded project. Almost entirely coincident that my next door neighbour was social enterprise coach and development expert. We by chance ended up going to London on the same train and we had a long chat about socially motivated projects. So I decided to do an experiment with him and we basically started a strand within the management curriculum on social innovation and I played with the format every year, at a point, we did a one day workshop with students to identify a problem and then we proposed social innovation project that would address those issues. Some years ago we got funding. For me, that was really a kind of eye-opening process into how rewarding and transformative teaching can be and it was really nice to observe how to create the process of running these workshops on the principles of social innovation or socially motivated projects that were rooted in the actual process of how to implement projects of that nature. It kind of sits into the design proposals while at the beginning, this was like a separate assignment in the 6th year the main design proposal started to incorporate this concept and this was really rewarding that it wasn't just the management assignment add-on.

I: What underpins this approach to your teaching and pedagogy on social innovation?

CC: The underpinning to this is the desire to developing pedagogical steps that are informative and transformative. So the idea of giving the opportunities to students to test tangible practical skills in a way that might push them in the direction that they might not go otherwise. The underpinning to that is the desire to create a shift to a just environment and particularly with design profession. Rhetorically, I have been serving the wrong master I was kind of operating in a market that was problematic for me, I was been opportune to form the future in the bottom line of a profession that has got a list of critical awareness of what they do. They kind of changed the system and at least created a shift towards a more just system.

I: What is the title for this model of social enterprise?

C: The management and practice module runs in the 5th and 6th. Within this module, the curriculum was partly prescribed by the RIBA. It's one of the modules that is critical to the validation. The module looks at the RIBA criteria for validation, they are often criticised that the RIBA criteria are quite opened. They are opened to interpretation; however, there was nothing in the validation criteria that goes against what I was doing. I thought there would be a little bit of resistance from the RIBA to that kind of work but I was quite surprised to get glamorous feedback from the RIBA visiting board. What they said was that this is what the profession should be doing - framing architecture as agent of change. So in a way I thought that I was doing something a little bit alternative, a little bit outside of what the professional framework prescribes. The professional validating framework actually recognised it as what they actually wanted. This is an implied model that I haven't written much about it. I have talked about it in conferences but it's one of those things that I haven't really thought

about it. More so because there's really no recognition of the pedagogical work of our job; it's not really valued and will not be encouraged unless an individual effort as a teacher who does research to support your teaching.

I: How did you reconcile your interest in social innovation model with your engagement in the MAUD project 3 (Re-appropriating the post-industrial landscape) with Beatrice De Carli?

CC: I see this project as the first part of a journey. I see all the students' projects that I set up as shared journey of learning. In this particular project, we designed the briefs and the framework of the project. They always have open questions so I entered the project with research and attitude and opened to what you might learn about the project. It is aligned to my work, research within the university, and also practice outside the university. I see the project as the journey that I do with the students and there's one bit of shared understanding in the past six weeks. The motivation is to expose them to the complexities of a real project that is trying to be developed and also the complexities of the interfacing where the local authorities and other policy landscapes. For me even if they don't come up with the proposal actually they have experience of how to relate with complexities and conflicts and able to understand issues in live project. To see that there are discrepancies and that all the agenda are negotiated. To hear from someone from the council say - why it should be like that but in reality it works like this and to understand the contingent nature of the urban design processes that they might be engaged with. We've been trying to setup more Live Projects though school Live Projects are been canonised to mean that particular model, it's been branded. It is something that is very much rooted in the pedagogical approach developed by old colleagues with the element of liveliness and interaction with the outside world. So we are just trying to experiment with effective format of the urban design course. personally I think it will be good to bye-pass this 6 weeks constraints because in the Live Project in the MArch module the great intensity if you want to analyse the majority of the work I think retrospectively you will also see that

outside the six weeks of the project very few have got any legacy. It's something that's great for the student and great for the client for something but then it gets also forgotten very often. So I am interested in looking at a sort of medium-long term approach and establish something that is ongoing as well, though it's not happening with this year because the format and the change in the format of studio for the year.

I: What are the values, techniques, and ways of working and learning that are associated with this approach to Urban Design?

CC: I am very conscious about the ethics of what we do, and I do know that a lot of participatory works including many of the live projects are almost somewhat exploitative in nature. The primary outcome is something that will look good on the school website and something that will look very good on people's portfolios, and that is the actual driver for many of the students. Co-production is a relationship where both parties have something to gain and its fine if that is discussed clearly and the terms of exchange are explicitly stated. Often-times students' projects are framed as co-production but they are not really genuine co-production because what is gained by different parties is unbalanced and in some cases they can be exploitative sort of relationships.

One thing that I am really keen to pass on to the students is that it's great to engage with the project, but they should be honest about what it is that they are doing rather than making claims that are bigger than what they will offer. We are doing a six weeks project, and we are not changing the world through that. That is a useful step, and for them, there's great learning outcomes and exposure to ways of doing things. The complexities of interfacing with the cities and the local authority even if there's collaboration with the council I will not bring that as co-production. So it is a buzzword and it's used very often as a buzzword. I am in favour of co-production but it's an abused term particularly in this university.

I: What can you say about your approach to this project?

CC: In this project the briefs are entirely tutor led, in the same way the Live Projects -the briefs are developed by tutors and the client. But in this one the briefs are much more detailed and you could say it is much more prescriptive in terms of outputs than the traditional Live Project and this is down to the requirements of the Masters degree programme that the students benefit from several short projects. Within what appears to be quite tight almost prescriptive brief. It is prescriptive in terms of the tools that students have to use and the approach actual within that we give them a lot of freedom to interpret it. We encourage them to challenge it if they have got a lot reason to do something different if they feel it's more appropriate and come forward and make an argument for it.

I: How do you encourage students to develop critical thinking skills?

C: I tried to encourage them by forcing them to articulate their position by every step. About the brief it is relatively prescriptive compared with other types of briefs that we also kind of looked at. We are not just only encouraging them to challenge the brief but within the brief there's room to do things differently and we regularly do get students that do things slightly different from what we expect them to do. So we asked them to present to us in a particular format but most times they tend to do it a different way. They ignore a lot of details in the brief and they do present what they want. We prompt their every step to articulate their positions as a group and as individuals. This is a group work that should also be looked at through an individual lens through their portfolios. So each of them will present the same work in their own individual portfolio and that is also where they are encouraged to make explicit their critical thinking. So maybe there are things that are not in the group work because they are in their portfolios brief.

I: What skills do you think students develop using this approach to doing design?

CC: Because of the complexities and complication in urban design rather architecture in the design decision making processes. There isn't one part that has complete control on anything and things are often in a fluid situation. This is a great stage to be able to influence things and be able to understand the contingent nature of urban development. It's hopefully a starting point for them to find a way in the processes and doing it in a small project than the defined projects which might not allow them enough depth to actually form a position they feel they can sustain. They don't feel too much out of their depth because they have to develop some knowledge.

I: What other things do you want to add to what you have said so far before the end of this discussion?

CC: One thing I think we haven't talked about is the collective processes. I feel it underpins all my research and practice works and for me it's a philosophical position where I believe that collective processes are the alternative ways of doing things or the way of resisting the sort of status quo of neo-liberal production of city. I do things that can be underscored to that. I have been looking at collective processes largely about housing and for this project we tried to get them to work in group as much as possible and expose them to the challenges and the tricks of the benefits of working collectively. That is a pedagogical device not only as a sort of teaching in a more practical terms to let us see more groups with the amount of time that we have to be able to see more students at the same time. I think it's important for them to learn how to negotiate their work in the context of the group and also in the context of the larger group it's a key skill to develop to be able to influence the process.

Item B: Students' Interview transcripts

Transcript 1: Interview with Paul Bailey

INTERVIEW TRANSCRIPT AEI026

INTERVIEWEE - (PB): PAUL BAILEY (MArch ARCHITECTURE STUDENT) UNIVERSITY OF SHEFFIELD, UK.

PROJECT: BROOMHILL COMMUNITY LIBRARY, SHEFFIELD, UK. (THROUGH THE LIVE PROJECTS PEDAGOGY).

INTERVIEWER - (I): NP OKOFU

INTERVIEW SETTING: A face to face interview

TIME AND DATE: 15:00 GMT Friday December 2nd 2015.

(Start of Interview)

I: What feedback did your group obtain from the client/stakeholders' review of the Broomhill Community Library live project?

PB: One of the things that came out of the feedback at the end of the project was that BBest gave us feedback as opposed to the library management that represented the client actually was because we were working with the library management at the same time we tried to please BBest and that created a tension that made the live project maybe sometimes more difficult than it had to be. Another thing that we reflected on from the Oriel

House Live Project review was working with the international students as well I could say we didn't make the most use of that opportunity. I think we should have made the most of that opportunity we should have had a meeting at the start of the project to learn about each member's backgrounds and more clearly identified people's skills. For example we had Salma from Sudan she was really experienced and we all of us valued her experience but though it came midway into the project. It's one of those learning experiences that are in the Live Projects unlike any others project because you have to manage the relationships not only with clients but also the students themselves working as a group and also Leo as the mentor because he provided mentorship and direction but wasn't in control of what we did, he never chaired meetings. Some other feedbacks that we had at the end of the live project from client/ stakeholders were really nice and really charming but maybe not as clean and crisp as previous project. So I don't know whether that was the students' interpretation on the way the client spoke across themselves. The university felt that it could have been crisper but the client felt they wanted something more tactile, something that reflected their aspiration.

I: Can you discuss your experience of working with the client in this live project?

PB: when we met with the clients and discussed about the brief they were quite clear. They wanted an idea for the building, they want a lot of skills to be add into that and we came back with that and we made a booklet from the research that we did, that was useful and served as precedence to open up discussions with the client. The initial research that we did wasn't just a precedence in architecture production - having one of the buildings to talk about, but it also sparked up their ideas and that helped them think outside what their original brief was. That was

the first way to push the design but at the same time you have that consultations though at the end they mentioned other things that they would like to be done. So it was more like ways to present the library so we had meetings every week organised by me as the main contact and if they had a little thing that they wanted in between we just sort that out without them (the client) going to the group as a whole but then it's was a kind of a process we tried to come out with feasibility study all the way through. In those little meetings and discussions the client were bringing out new kind of mini briefs that would then supplement the initial brief this helped us in developing the projects but at the same time you have to remind the client and the students as well that you've only got six weeks to produce something. I think maybe we tried to take on too much; maybe that was why the document at the end of our feasibility study wasn't as strong as it could have been but we actually had given a lot in other areas as well. So we attended events organised by the library and we subsequently organised a public engagement as a way of developing the brief we saw that as a process of engaging with the users and client at the same time. We held this event in the form of public engagement with the client, stakeholders, volunteers, the general public and users of the library including the children group and we used the discussion as another way to push the idea of what they really wanted in the library. We did it in a way that was beneficial to the client in way that it engaged people to tick the boxes and sketch their ideal future library in the community.

I: What were the basic skills that you developed in the project using this approach to learning?

PB: I think coming from practice we've actually worked a lot in practice and I was involved in this client's project but not in the same way in a formative process. Firstly, organising the group

and the work that we produce to be relevant for each meeting. That really means understanding the complexities of a real context because the idea people have about architecture school is that you learn how to make the nicest design but architecture is not always the design that is mostly spoken at client's meetings. At the same time when you are there you have to resolve issues and take them on board and it definitely gives you skills that normal project can't do and also skills that in practice it allows you to be more critical of your work in practice and the way you work in practice because you can see a different way of forming your relationship. You could imagine that from that work of the library that if we were a real collector of people that relationship could continue though it must have been a small thing we could have produced data when the funding and feasibility start you could actually work as an architect. So it was a way of understanding different working relationships.

I: Can you discuss the challenges you experienced with this live project?

PB: I think that relates to practising architecture in general as well. There are a lot of people who go and practice and they focus on all of those issues and lose the quality of the work. We raised this question of if you were working as an individual in a scenario where it's just only you working in the live project just as the way the live project works would I have produced a better outcome compared to working as a team, does that limit your productivity. But I think maybe next time we have to work we may need more time to work on the team dynamics that may be the first we would work on. Because when people talk about live projects they talk about horizontal and parallel relationships, maybe we could have had more defined team roles so that we will be more productive as an individual in the project. You shouldn't be afraid to maybe have a smaller group to go and

have client contact but at the same time, you want everybody to be there because it's a learning experience. I think that's the way if we structured it as a practice to produce the best outcome that will be different a structure to the academic activities where everybody gets the relevant experiences because the sensible thing to do is taking 10 of the students may be at the first meeting yes but then afterwards you have to shrink down the groups so that people can still work on different task. I think the challenges with the group work were quite complex and difficult to manage at the early stage of the project. This criticism came from our mentor Leo saying if I had given you all these separately would you have produced more work than what you are seeing now. I think it's an acknowledgement that it takes a long time for us to balance as a team to then start producing good work. But that's part of the learning experiences as well and that's one of the biggest take away for me. I think the most valuable thing for me was understanding my strength as an individual and using the live project as a way to test yourself because we had to do public engagement presentation as well that was a new experience for me because you present to a completely different audience. So once you present to the library staff, the general public, and the users it is completely different to presenting my work to architecture students and academic viewers. If I have to engage in more community projects in the future I will adopt the live project approach because the knowledge acquired from this project has shaped my learning experience and also encouraged me to do more work like that and advocate more to it.

I: what do you think you would have done differently if asked to do this project again?

PB: The first thing is the team background, understanding the capabilities of the team and balancing that with the new skills

5

that people want to develop. So they get the opportunities to learn new skills and also maximise their talents to get the best outcome. Maybe be more confident about our relationship with the client and what we can produce because I think we tried to produce too much and that affected the quality. So if I have to do it again we will say we can only do this, we can recommend people we can ask people to take on some other things but for us to have a better scope of work and say we can only do this feasibility document because we want to make that as good as possible. That would mean we have more resolve finished outcome. Maybe I don't know because they did have a model which may not be useful. Maybe delegating people to take up certain obligation say meeting up with the client because we had limited time for the module. There were lots of discussions when we were doing the project especially with peers and friends with this idea of that doing this project in practice it would be so much more productive because of the structure that is in place but in live project people can't challenge that because they want to work as equals. Because you have to delegate task doesn't mean you are not operating at the same levels or equals it does make it more productive if you can have a structure in place because someone needs to step in and make sure that everyone is producing as good as they can and make sure you don't lose time.

I: How do you assess the role of the mentor?

PB: They made it clear in the university that the mentor is not the same as the tutor in the role of the live project. The mentor didn't really offer so much advice more than ask questions, like have you done this, why did you do it this way. More so there was a time he talked about team relationship and getting us to address issues that we were ignoring maybe because we were worried about confrontations but once the mentor comes in and

say how is the group working and that will kind of create a force straight away which might have been uncomfortable conversation for some members to raise some concerns but he made it better down the line. So it's about the work you produce as the way the team works as a group. I think we had a good team in terms of critical evaluation of the live project. I think the importance of this Live Project helped us to develop the brief with the client because when we had the other studio design module all the brief building processes were generated but not with the clients. A few of the projects will be based on real-life situations it's all fiction and narrative. I think it will be effective when I go back into practice it will also make me understand power relations between the client and the architect. If you imagine going into a community may be a community with severe social issues. If you make promises of building a structure for that community and you say we can offer you this and you show them this amazing vision of what the village could look like and you can't deliver. It doesn't end with you moving out of the community but you have ruined those peoples' hopes and aspirations so before you make promise; be very realistic of what you can achieve and also be realistic of the kind of clients and community that you are working with. So that you don't get people to a certain level and leave them. More so when we talk about participation in our individual projects, there's always a point where the architect always has to move away and it has to be where you leave the community in the project so that they don't get lost in the project as well.

I: What is your motivation for doing this live project?

PB: Actually a lot of students chose this project because it involves a real building at the end of it. It involves architecture and they've to see a building at the end of it but the same time I think a lot of us chose this project because it was a community

that we have come in contact with before the start of the project. My motivation of choosing this live project was something that I can relate to emotionally and my skills are best suited towards relating to this kind of project as well.

I: Based on your experience of the Live Projects and the normative studio pedagogy which do you think will better equip you for practice?

PB: As soon as people are exposed to the realities of the everyday practice they become more aware of the complexities of real-life context. I think the live project presents greater opportunities to understand the realities of human needs and how to respond to those needs in the same context but this time with the real users with co-designing. I also think the most successful architects are people that can manage expectations, collaborations and complexities of the social world by developing adequate capacities to do so.

Transcript 2: Interview with Ateeb Hussain

INTERVIEW TRANSCRIPT AEI027

INTERVIEWEE - (AH): ATEEB HUSSAIN (MA IN URBAN DESIGN STUDENT) UNIVERSITY OF SHEFFIELD, UK.

PROJECT: RE-APPROPRIATING THE POST INDUSTRIAL LANDSCAPE OF SHEFFIELD CITY CENTRE, UK (THROUGH COMMUNITY LED-DEVELOPMENT APPROACH).

INTERVIEWER - (I): NP OKOFU

INTERVIEW SETTING: A face to face interview

TIME AND DATE: 15:00 GMT Monday June 6th 2015.

(Start of Interview)

I: Can you discuss how this project and the brief was conceived?

AH: I think the project was conceived by the tutors (Cristina and Beatrice). The project was led by Cristina who was a co-founder of Studio Polpo based here in Sheffield. We were divided into 5 groups to study 5 different areas in Sheffield. Our role was to develop strategies to re-appropriate these spaces with the zone selected through a community led development approach. The project was done in different phases (1 & 2) marked as long term

and short term development strategies. We had to develop different strategies for the community to re-appropriate these places by the communities themselves without any external help except in the construction phase but the design phase was to be done by the community.

I: How did you make sense of the brief that was conceived by the tutors?

AH: Coming from the brief I don't think we have got any ideas, we only had the general overview of developing strategies. At first we had to come up with strategies on how to re-appropriate spaces by developing intervention projects in the assigned zone for our group and we did further studies relating to the nature of land ownership, policies and planning applications, and identify potential local development partners as agents of change within the study area. For instance the NGOs, Sheffield CLT, and government agencies within the study context. So at some point some ideas were given within the brief by our tutors and we had to develop phase programmes. The action areas were delineated by the tutors. The spaces that we were to create interventions and the nature of interventions were carefully designed by the tutors but we developed the principles like sustainable principles social, physical, economic, and ecological principles. All these principles and processes were designed by my group and it was a time consuming process and we had to work continuously to develop the drawings and partnerships.

I: How did you engage the users or community in the process of develop the strategies?

AH: Because this was a 6 weeks project. I don't think we had time to bring in users or the community into the project but different people coming up at different stages of the project like in the 2nd

week we had someone from the city council and in the 3rd week we had a Professor coming from New Zealand, Wellington North State University to discuss about gender related issues and urban design not about community led development. This is supposed to be user development process. The public was only involved at the last stage during the installation and public presentation at the different sites in Sheffield City Centre. A lot of people were happy to see that students were working on these projects instead of external agencies. They were happy that people were still talking about developing those areas. I felt that the users could have been more involved in the project but given that the MAUD programme was a one year course and we had limited time to engage the users more directly in developing the strategies. I think time was a major problem that we couldn't involve the users in the process.

I: In developing the strategies how did you understand context?

AH: Context is definitely one of the factors that influence strategies especially in urban design because all these strategies are design with the users in mind. So when you come to the issue of context different countries have different kinds of people and different strategies. For instance we proposed setting up a community kitchen in Sheffield but I don't think such proposal can easily be acceptable in any city in India because people will not come very freely to cook food in the public like how it's understood here in Sheffield.

I: How did you consider the issue of context in your project?

AH: If you take two instances about two contexts (UK and India). I think it's more easier to implement a strategy like the community centre as a short term project in the UK than in India because it takes a lot of time to bring people together, get the necessary permissions. Context is influenced by religion, social, cultural, political and economic diversities that exist in different locations of the world and affect the way and approach you employ in engaging different projects.

I: How did your group address the issues of participation, co-production, and collaboration?

AH: The strategies that we developed were tied to the project: community-led development, hence, participation was one of the most important tools in the project. In the first phase we proposed a community kitchen and we needed people to come and setup a community kitchen while in the second phase we had a community school. In every stage of the project we proposed a form of participatory action process. I think we needed more marketing strategies to be able to present the project to the people and make people understand the project by mounting installation for more than 2 days to create the awareness. We discovered that it took a longer time for some members of the public to understand what the project was all about. I think one of the reasons why we initiated the strategies but not involving the community at the start was for us to set the framework and stages of engagements as urban designers determining when to engage the users and other partners in the process. We decided to give preliminary ideas to the public saying these are the things that you can do on your site and wanted to know what they feel about it. It was left for the public

to alter the proposals that we had developed based on what they think. I think the live project was more of real live situation than simulated situation that responds to a theoretical framework. I think the Sheffield project exposed us to techniques and skills on how to work with partners, stakeholders and the public towards developing networks of interest.

I: What skills do you think this approach has helped you to develop?

AH: Actually working in this way has helped us as a group to develop skills on mapping techniques - how to map ideas, strategies, and concepts in a way that can allow you to test some of them on the ground with the public during the installation stage. Through the mapping techniques of walking, situating enabled us to understand the real issues in the city. I can also say that my design skills have improved greatly when compared to the first two projects. The experience and insight gained through reflection from the first two projects played a critical role in developing more ideas and strategies even individually. Another skill that we developed was how to communicate directly with the public, so the street presentation helped us to test how well people understand the strategies and our overall design proposals. Though it took us some time for people to get to understand what the project was all about because we had to use common terms in communicating the design ideas rather than urban designer's terminologies.

I: What is your understanding of community led development in this project?

AH: Instead of us developing for the whole design for the community, we wanted the people to come to us with ideas of what they wanted in that area such that the final outcomes are

influenced and piloted by the community rather than a market led development. That's my own understanding of community led development. Within the discourse of community led development you get lots of ideas. Part of the strategies for community led development is the idea of participation, then the question of how do we bring people together? What strategies can we devise to get people together? That also changes from place to place. The only time we had something to gain from studio Polpo was when someone from the studio came to give us a few ideas on community led development otherwise the network wasn't a serious partnership engagement because they were not really involved in that process.

I: What challenges did you encounter in the process?

AH: Part of the challenge we had was that one of our tutors was a coordinator of the studio Polpo and also the tutor of the module, hence her dual roles were a bit confusing. So we couldn't separate the ideas that were coming from the Studio Polpo and those from the tutor as an instructor of the module. Another issue was time and timing which was a serious challenge as it couldn't allow us to engage the users in the process and develop the CLT as part of the tools for community led development agenda. We had issue with working as a team in the group work, one of the groups had to split into two because someone from the group wasn't engaging with the rest of the members which led to a conflict in the group, he wasn't ready to compromise and that also affected the overall grade of the group in the assessment. There was also this issue of language barrier which hindered fluent communication process both in the understanding and spoken English as some members of the group were challenged by this. It was also difficult to comprehend and discuss their ideas openly. It took us about 2weeks to understand what the tutors wanted us to do because

the framework was not that explicit on what they expected us to do and how. I believe there was so much to do at the different layers of the project within a short time frame.

I: What else do you want to add to what you have said thus far?

A: Nothing much to say.

Appendix C2

Appendix C 2 – ANALYSIS WORKSHOP DATA

The data involves 2 groups of 5 participants each (2 educators and 8 students)

<p>Question</p> <p>1.</p>	<ul style="list-style-type: none"> • What elements of the findings do you think are capable of influencing architectural education in Nigeria?
<p>Group</p>	<p>Group Response:</p>
<p>Group A</p> <p>5</p>	<p>The three pedagogical theories (critical, transformative, and feminist) mentioned in the findings were identified by students and educator as crucial transposable theories that are capable of influencing architectural education in Nigeria. The reasons for their selection, as mentioned by the student-respondents in the discussion are predicated on the notion that critical pedagogy empowers students to question what and how they learn, creating a medium for dialogue and negotiation between students and teacher. It is capable of enabling students to make important decisions about developing appropriate skills for future practice. Transformative pedagogy was also mentioned several times on the sticky notes, all of which noted its capability to transform theoretical knowledge into practical use in the Nigerian context.</p> <p>Critical thinking was also highlighted as an essential skill that enables a new set of ideas to emerge through the critical appraisal of existing ideas.</p> <p>There is a further emphasis placed on exposing students to different models and pedagogical strategies that will enable them to respond to context specificities using different techniques such as experiential learning and group discussions. This is placed with the assertion that Nigeria has different cultural, social, ecological and political diversities that must be understood and incorporated in the design process.</p> <p>Student-centre learning was selected over tutor-centred learning with the view that it places students at the centre of their learning, political position taken, independent learning, and enable them to make decisions on what and how they learn.</p> <p>Importance was given to engaging clients/users in the design and decision-making process through working/learning with them rather than designing for them. The respondents state that incorporating the users into the building team enriches the product outcome and also encourages multiple voices.</p>

	Teamwork, collaboration, co-designing and interdisciplinary practice was mentioned on the sticky notes as elements of future practice whereby disciplines work in a team towards responding to complex societal challenges, thus defiling a single approach.
Group B 5 participants	<p>Group B, similar to group A, sees the ability to understand context and its specificities quite useful in the Nigerian context. This is informed by the assertion that understanding context specificities is not only a panacea towards developing designs that respond to the social, cultural, political, and ecological needs of Nigeria, but will also help educators to develop models that are responsive to students' learning needs.</p> <p>The group believes that hands-on situated learning, introduced through by immersing students in their project context has far more benefit than learning from afar. However, the values inherent in designing from afar (the use of digital media tools) were welcomed, as one of the students indicated on the sticky note that hands-on learning widens student's learning experience while developing the capacity to respond to live situations. They agree with the assertion that the role of validating bodies in defining the curriculum of architectural education in Nigeria constitutes a barrier as they challenge any other form of education that does not speculate building as an end product.</p>
Question 2.	<ul style="list-style-type: none"> • What skills within the research findings do you think will enable students/educators to address contemporary practice challenges in Nigeria?
Group A	Teamwork, co-designing, negotiation, collaborative learning, interdisciplinary learning/practice, critical thinking, group decision making, how to address contemporary challenges, and capacity to self-initiate projects were the more prominent skills highlighted by each of the respondents as critical for architectural education and practice in Nigeria. Other skills were also noted such as: how to use digital media tools, communication, use of software, empathy, and care.
Group B	Group B also identified skills, which were already, mentioned by group A (teamwork, self-initiating, negotiation, interdisciplinary, and communication skills among others). However, they differ slightly from group A as they assert that how to use digital media tools has far reaching positive implications towards transforming both architectural education and practice in Nigeria, something group A holds a different opinion on. One of the important skills mentioned in this group is how to transform theoretical knowledge into practice, with the assertion that it does not only allow theories to be tested but harnesses their usefulness in addressing practical problems. Other skills include presentation, project and time management. Another important skill mentioned in both groups is developing a sense of care and empathy for the job they do and for the

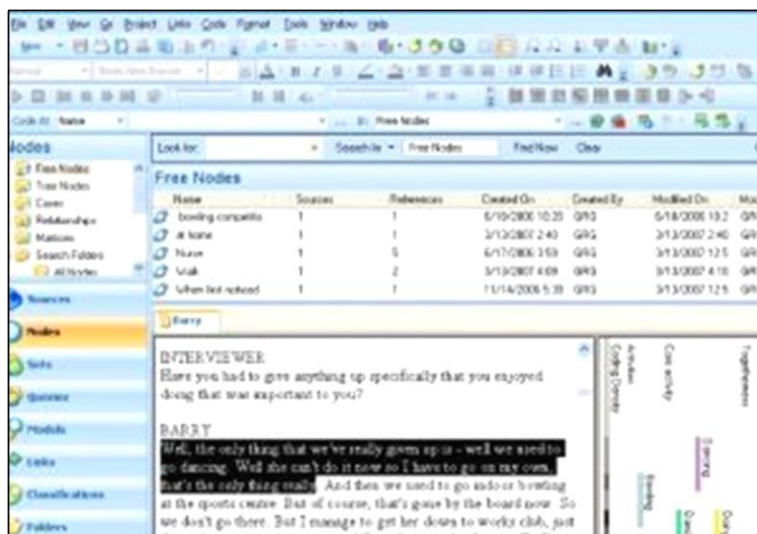
	community they work with. Beyond professional practice requirements in Nigeria, the group opines that having a sense of care contributes meaningfully to peoples' wellbeing.
Question 3-	<ul style="list-style-type: none"> • What is the implication of these research findings for the future of architectural education and practice in Nigeria?
Group A	<p>The group agrees with the importance of teamwork, both in learning and in practice, but raises the concern that identifying an effective team/group working method that is appropriate for the Nigerian context is as important as identifying the principles that are capable of driving effective teamwork. This is due to the understanding that context plays a critical role in defining the method of engagement. The group also mentioned interdisciplinary teamwork as crucial in working towards advancement of architectural practice in Nigeria, with the assertion that working with professionals in different disciplines does not only enable architects to understand the values inherent in other disciplines, but also allow complex problems to be addressed through interdisciplinary inputs.</p> <p>Another implication of the finding of this research, as discussed by respondents, is the ability to self-initiate projects. This is centred upon the view that developing the capacity to self-initiate projects will contribute towards the expansion of the scope of architecture practice in Nigeria, as architects will be self-empowered to the extent that they will develop project proposals for the government by being situated in a particular local context. This can address the frequent loss of jobs by architects, as jobs can be created rather than waiting for commissions. The notion that students are empowered to take critical positions about their learning is significant. They do this by developing their criticality through student-centred learning, rather than through teacher dictating what and how to learn. This will have positive implications for architectural education in Nigeria.</p>
Group B	<p>Group B highlights the importance of those research findings that are capable of repositioning architectural education and practice in Nigeria. The first element mentioned is the role of digital media tools (Facebook, WhatsApp, Twitter, and WordPress) which can be mobilised to reconfigure ways of relating to project contexts when it is difficult to be immersed in the project sites. Digital media as discussed by the group has the potentials to allow a wider audience to connect to an enlarged network of users, designers, and stakeholders without being physically present in the project context.</p> <p>As one of the respondents writes on a sticky note – “the implications are: that students are awakened to the consciousness of how to self-initiate projects; how to work with real</p>

	<p>budgets and understand users' requirements/needs" (see Appendix C). Group A previously discussed the importance of self-initiate projects for architectural education and practice in Nigeria. They opine that the application of critical pedagogy in architectural education has the potentials to improve student-teacher-relation while placing students at the centre of their learning.</p> <p>The group further highlighted how experiential and hands-on learning which encourages learning by doing, will generate a better understanding of what the architect deals with in reality. Further, it will enable students to develop a capacity to address real life problems in their natural state, something which has the capacity to influence architectural education in Nigeria.</p>
<p>Question 4.</p>	<ul style="list-style-type: none"> • What potentials do the findings present towards repositioning the way students will learn and be taught in the future?
<p>Group A and Group B</p>	<p>The following points were mentioned as potential learning strategies to be adopted when developing pedagogy for architectural education in Nigeria:</p> <ul style="list-style-type: none"> • Capacity to understand what the real issues are. • Ability to work in teams • Ways to co-design and learning with/from others • Ways of engaging in interdisciplinary learning and practice • Critical and reflective thinking • An incremental building process through "making and fit" • The need to understand and adopt appropriate learning/pedagogic theories • The role of empathy, care, and tenacity in relating with others • Using digital tools in relating to the project context and networking • The need to challenge the banking concept through the introduction of critical and feminist pedagogies • Ways of developing the following skills: negotiation, communication, self-initiation, teamwork, criticality, reflection, time and resource management. • The findings possess the potentials to encourage the interaction and healthy relationship between teacher and students in the classroom, hence establishing an opportunity to learn from each other. The groups believe that these elements can redefine architectural education and to some extent practice when integrated into the current design studio models. However, they also raised the concern of how this might work, since some of the theories underpinning negotiated pedagogy challenge the validation criteria set by ARCON and NUC.

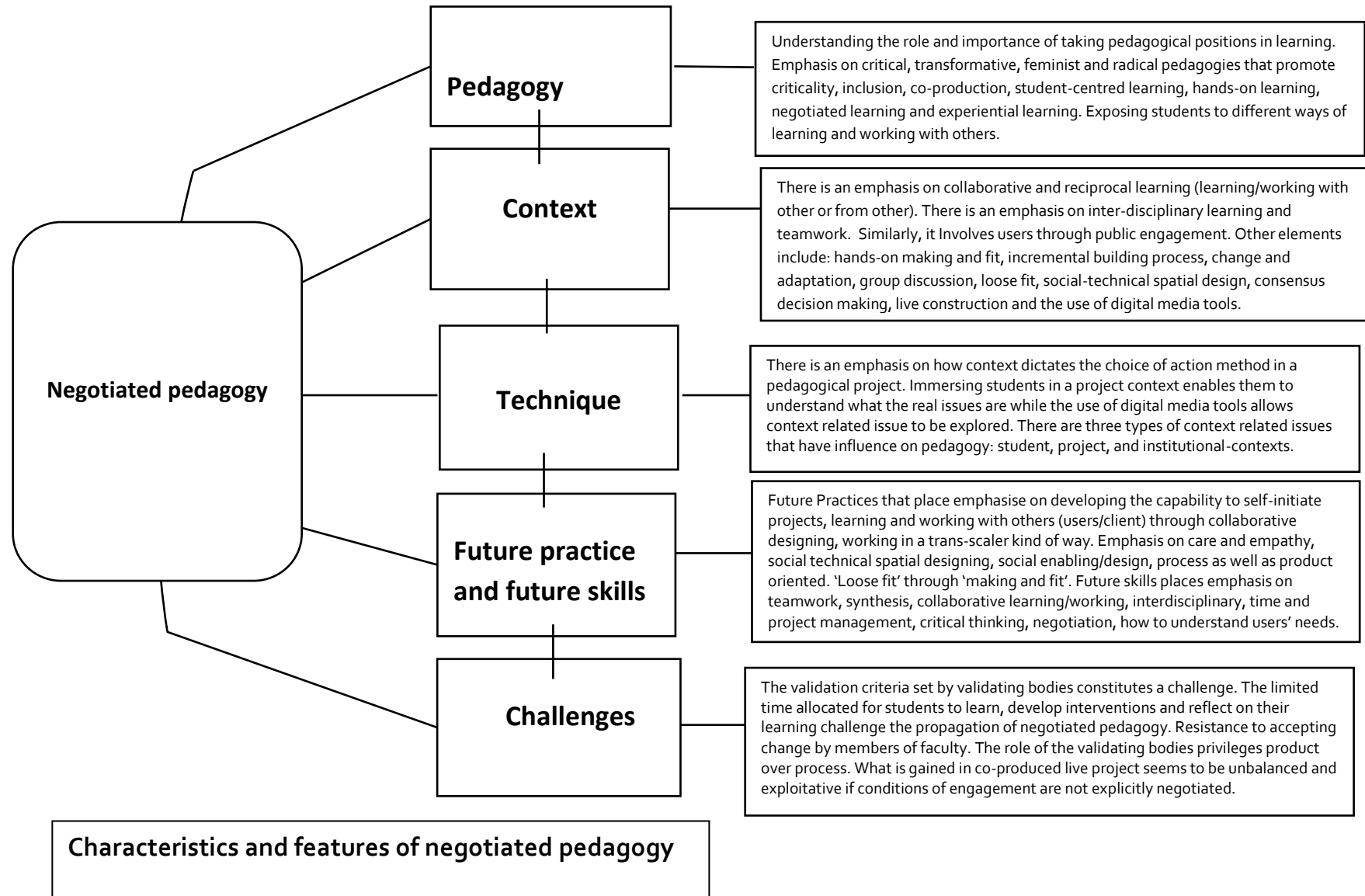
<p>Question 5.</p>	<ul style="list-style-type: none"> • What areas or issues do you think this research has not addressed, but still remain crucial for future practice in Nigeria?
<p>Group A and Group B</p>	<p>The following points which were not mentioned in the research findings, were highlighted by respondents as critical concerns capable of informing the nature of future practice in Nigeria.</p> <ul style="list-style-type: none"> • Leadership and administrative challenges in professional practice – lack of continuity in terms of sustaining projects and visions within the leadership of the professional practice body. Conflict of interest and fight for relevance amongst different regulatory bodies within architectural practice. • Corruption – an endemic practice that exists in education, practice, circular society, private, cooperate, and government institutions capable of inhibiting any meaningful development in Nigeria. • The research findings are silent on possible ways they could be implemented in architectural education, in such a way that they align with the core Nigerian values and diversities present among people, places, practices and government policy. • The findings do not address the high level of poverty in Nigeria in terms of affordable housing provision, and - ways of harnessing available local building materials with modern technology that will benefit the poor. • The research findings are silent on when these elements should be introduced (at what academic level) they do not offer any way that could be into the existing curriculum of architectural education in Nigeria, particularly when considering the role of the NIA/ARCON and NUC in regulating how and what students learn.
<p>Question 6.</p>	<p>What challenges/barriers do you think could hinder the acquisition of skills and also the transposition of the components in Nigeria?</p>

<p>Group A and Group B</p>	<ul style="list-style-type: none"> • Due to the resistance to change and the slow nature of the Nigerian system (people, educational, and government structures) towards accepting change, implementation is slow and often times unattainable. • Lack of cohesion and conflict of interest on the part of the regulating bodies – (ARCON and NUC) who operate by using different conditions for validating programmes. This is capable of affecting the introduction of new ways of learning. • Many schools of architecture do not believe that there is a problem with the current system of architectural education in Nigeria. Therefore, hence introducing a new pedagogy will to some extent struggle to be accepted or recognised. • Due to the bureaucratic red tapes surrounding curriculum or programme change in the University administrative process, there is every possibility that at the senate level, such noble pedagogic ideas may be thrown out as faculty members are not ready to accept change once it threatens the accreditation requirements.
---	---

Appendix C₄ – Nvivo data analysis software



Appendix D1: Thematic analysis



Appendix D2:

Table 8.4: Analysis of responses relating to context

(survey questionnaires, focus group, and workshop)

Research instrument	Responses (%)	Reasons
Focus group	71	<p>They need to understand the Nigerian context in terms of the socio-cultural aspects.</p> <p>When designs are produced through a locally developed methodology, it promotes a sense of identity and cultural authenticity.</p> <p>Putting students in project context will help the students to understand the context in terms of the culture, economic landscapes, available local materials, and identify opportunities in the communities as they work with the users to produce the architecture together³.</p>
Survey	62	<p>It equips the designer with the skills to identify context specific challenges and opportunities but also enables a responsive design outcome.</p>
Workshop	71	<p>Understanding context specificities is not only a panacea towards developing designs that respond to the social, cultural, political, and ecological needs of Nigeria; it helps to promote local content also.</p> <p>Nigeria has different cultural, social, ecological and political diversities that must be understood and incorporated in the design process.</p> <p>...We need a curriculum that addresses Nigerian problems and makes us relevant in the world.</p>

³Aliyu Sani, focused group interview discussion with Nkemakonam Okofu, 2017.

Appendix D3

Table 8.5: Analysis of responses relating to pedagogic theories

(survey questionnaires, focus group, and workshop)

Research instrument	Responses (%)	Reasons
Focus group	67	<p>I think experiential learning theory should be capable of supporting a pedagogic model that is socially-minded.</p> <p>The importance of linking proposed pedagogy to existing learning theory</p> <p>Critical skills and theory should be encouraged. The idea of critical pedagogy and student-centred learning will encourage criticality.</p> <p>Educational culture in Nigeria does not support an approach where students question the knowledge of the teacher,</p> <p>When students are trained with a model that is culturally focused on the community needs, they develop skills to relate and negotiate with them, which is useful for practice</p>
Survey	39.5	<p>Critical pedagogy and transformative pedagogy will help to close the gap between theory and practice.</p> <p>Critical pedagogy is good but I think feminist pedagogy is more important because it will give women a voice in architecture, which they don't have now (female respondent).</p>
Workshop	65	<p>Critical pedagogy encourages student centred learning.</p> <p>Critical pedagogy, feminist pedagogy, transformative pedagogy is important in Nigeria.</p> <p>Critical pedagogy and feminist pedagogy.</p>

Appendix D4

**Table 8.6: Analysis of data relating to techniques
(Workshop, focus group, survey questionnaires)**

Research instrument	Responses (%)	Reasons
Focus group	96	<p>The need to de-emphasise the isolationist mode of learning by including others in learning.</p> <p>Architectural education in Nigeria needs a responsive pedagogy that reflects our social, cultural and political values</p> <p>Nigerian project design and construction climate promotes individualism rather than partnership in project delivery”.</p> <p>Interdisciplinary learning is important but exposing students to the plurality of different pedagogic experience is the most important thing for Nigeria.</p>
Survey	30	<p>More collaborative ways of working and learning with others (users, clients, stakeholders).</p> <p>Working with users develop teamwork, communication, and material management.</p> <p>Interdisciplinary practice</p> <p>Collaboration practice.</p>
Workshop	73	<p>Collaborative learning is good.</p> <p>Co-designing with different professionals should be encouraged</p> <p>Participatory design in needed for community architecture.</p> <p>Exposing students to different model is important in because it helps them to respond to different contextual issues with different approaches.</p> <p>Group discussions and experiential learning is good for Nigeria because Nigeria his multi-cultural, social, and political diverse people.</p>

Table 8.3 illustrates the relevance of developing learning techniques that place emphasis on 'learning/working with' and 'learning from' other in the Nigerian context. It is important to state that the evidence from the data may be argued by critics that the findings cannot be generalised as it does not represent a large sample size. However, it certainly constitutes a case to learn from and adapted within the context in question drawing from Flyvbjerg's notion of "typicality of judgement" (see section 4.4, Chapter 4).

Appendix D5

Table 8.7: Analysis of data relating to Future Skills

(Focus group, Workshop, survey questionnaire)

Research instrument	Response (%)	Reasons and comments
Focus group 7 skills identified	65	<p>Capability to understand users' needs, Self-initiation of projects, Critical thinking, Synthesis, negotiation,</p> <p>Empathy and care, use of digital media tools.</p> <p>Interdisciplinary teamwork.</p> <p>Critical thinking is important, because you if you don't think outside the box you cannot be creative and bring out innovative ideas.</p>
Survey 13 skills identified	84	<p>Teamwork, Reflection and critical thinking, Time and resource management,</p> <p>Working with users develop teamwork,</p> <p>Communication, synthesis, and material management.</p> <p>Presentation, Group design/group discussion</p> <p>Empathy and care, digital media tools, listening, innovation and entrepreneurial,</p> <p>Critical thinking is indispensable in all professional practice without which you can't advance development or innovation.</p>
Workshop 8 skills identified	67	<p>Self-initiation of projects</p> <p>Capacity to understand what the real issues are.</p> <p>Ability to work in teams</p> <p>Capability to identify users' needs</p> <p>Interdisciplinary teamwork</p> <p>Critical and reflective thinking</p> <p>Care, and empathy and communication skills</p> <p>Negotiation and synthesis skill</p> <p>Digital media tools</p>

Appendix D6

Table 8.8: Online Survey relating to future skills

Analysis of future skills relating to Online Survey Questionnaires

Rating	Future Skills	Code	Response	%
1.	Self-initiation of projects	SP	47	94
2.	Understanding users' needs	UN	41	92
3.	Innovation/entrepreneurial	IE	37	74
4.	Teamwork/interdisciplinary teamwork	TW	31	62
7.	Synthesis	SY	31	62
5.	Critical thinking/reflective thinking	CT	30	60
6.	Presentation	PP	30	60
8.	Digital media tools/networking	DM	25	50
9.	Communication	CM	24	48
10.	Listening/negotiation	LS	18	36
11.	Time and resource management	TM	15	30
12.	Group design/group discussion	GD	13	26
13.	Empathy and care	EC	11	22
	Total		353	714

Appendix E: Respondents Information Sheet 1



Participant Information Sheet

Research Project Title: Socially-minded architecture education: a pedagogical approach for social architecture in Nigeria.

Invitation: You are being invited to take part in this research project. Before you decide to do so, it is important you understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the project's purpose? This research aims to develop an appropriate pedagogical model for teaching architectural design in Nigerian universities with the target of developing students that are socially-minded while possessing the capacity to self-initiate projects. This project also aims to investigate the obstacles and precedents for social architecture practice in a wider African context.

Why have I been chosen? You have been chosen because your research and/or practice focus on alternative architectural design pedagogy that is centered on socially-minded architecture practice.

Do I have to take part? The decision whether or not to take part lies with you. If you do decide to take part, you will be able to keep a copy of this information sheet, and you should indicate your agreement to the online consent form. You can still withdraw at any time. You do not have to give a reason.

What will happen to me if I take part? You will be interviewed for approximately 20 minutes to find out more about your approach to design pedagogy and its relationship to social architectural practice.

What are the possible disadvantages and risk of taking part? Participating in the research is not anticipated to cause you any disadvantages or discomfort.

What are the possible benefits of taking part? It is hoped that this work will have a beneficial impact on understanding other relevant forms of teaching architectural design that seeks to address socially-minded practice. Results will be shared with participants and will be used to inform curriculum development in Nigeria.

Will my taking part in this project be taken confidential? All the information collected about you during the course of the research will be treated based on your choice of anonymity as stated in the consent form.

Will I be recorded, and how will the recorded media be used? You will be recorded on audio media that will be transferred to an encrypted laptop which can

Respondents Information Sheet 2

only be accessed by the researcher and the researcher's supervisors. The backup copies of these data will be securely locked in a filing cabinet.

What will happen to the result of the research project? The result of the research will be published, for example in the PhD thesis submitted to the University of Sheffield, in peer reviewed journals, and conference presentations.

Who is organizing and funding the research project? This is a Ph.D. research project that is sponsored by Imo State University, Owerri-Nigeria.

Who has ethically reviewed the project? This project has been ethically approved by the School of Architecture University of Sheffield ethics review procedure committee.

What if something goes wrong? If you have complaints about the project in the first instance you can contact any member of the research team (the principal investigator or supervisors- see details below). However, if you feel your complaint has not been handled to your satisfaction you can contact Sheffield School of Architecture ethics review committee or the registrar and secretary at registrar@sheffield.ac.uk to take your complaint further.

Contact for further information: Please contact Nkemakonam Patrick Okofu, the lead researcher, Sheffield School of Architecture, The Arts Tower, Western Bank, University of Sheffield, S10 2TN, UK. Tel: +44(0)7404159178. Email: npokofu1@sheffield.ac.uk.


The research supervisors: Tatjana Schneider, Sheffield School of Architecture, The Arts Tower, Western Bank, University of Sheffield, S10 2TN, UK. Tel: +44(0) 1142220320. Email: t.schneider@sheffield.ac.uk.

Rosie Parnell, Sheffield School of Architecture, The Arts Tower, Western Bank, University of Sheffield, S10 2TN, UK. Tel: +44(0) 1142220327. Email: r.parnell@sheffield.ac.uk.

The University Registrar: Dr Philip Harvey, The Registrar and Secretary's Office, University of Sheffield, Firth Court, Western Bank, Sheffield S10 2TN, UK. Tel: +44(0)114 222 1100. Email: registrar@sheffield.ac.uk

Thank you for reading this. We hope that you would like to take part in the research project. To do so, please contact Nkemakonam Patrick Okofu @ npokofu1@sheffield.ac.uk.

Item B: Respondents Consent form

 <p>The University Of Sheffield.</p>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">FOR OFFICIAL USE ONLY</div> <p>Participant Number/Initials</p> <div style="display: flex; justify-content: center; gap: 10px;"> <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> / <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> </div>	
<p>Title: Socially-minded architecture education: a pedagogical approach for social architecture in Nigeria.</p> <p>Consent Form for Interviews: A Qualitative Sub-study</p> <p>Thank you for reading the information sheet about the interview sub-study. If you are happy to participate then please complete and sign the form below. Please initial the boxes below to confirm that you agree with each statement:</p>		
<p>I confirm that I have read and understood the information sheet dated [.....] and have had the opportunity to ask questions.</p> <p>I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline.</p> <p>or</p> <p>I understand that my responses will be kept strictly confidential. I understand that my name will not be linked with the research materials, and will not be identified or identifiable in the report or reports that result from the research.</p> <p>I agree for this interview to be tape-recorded. I understand that the audio recording made of this interview will be used only for analysis and that extracts from the interview, from which I would not be personally identified, may be used in any conference presentation, report or journal article developed as a result of the research. I understand that no other use will be made of the recording without my written permission, and that no one outside the research team will be allowed access to the original recording.</p> <p>I agree that my anonymised data will be kept for future research purposes such as publications related to this study after the completion of the study.</p> <p>I agree to take part in this interview.</p>	<p>Initial box:</p> <div style="display: flex; flex-direction: column; gap: 10px;"> <div style="border: 1px solid black; width: 40px; height: 30px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 40px; height: 30px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 40px; height: 30px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 40px; height: 30px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 40px; height: 30px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 40px; height: 30px; margin: 0 auto;"></div> </div>	
<p>_____ Name of participant</p>	<p>_____ Date</p>	<p>_____ Signature</p>
<p>_____ Principal Investigator</p>	<p>_____ Date</p>	<p>_____ Signature</p>
<p><i>To be counter-signed and dated electronically for telephone interviews or in the presence of the participant for face to face interviews</i></p>		
<p>Copies: <i>Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, and the information sheet. A copy of the signed and dated consent form should be placed in the main project file which must be kept in a secure location.</i></p>		
<p>1</p>		

Item C: Ethics Approval 1



Downloaded: 08/11/2017
Approved: 19/02/2015

Nkemakonam Okofu
Registration number: 130110228
School of Architecture
Programme: Architecture (PhD/Architecture FT) - ARCR131

Dear Nkemakonam

PROJECT TITLE: Socially-minded architecture education: a pedagogical approach for social architecture in Nigeria.

APPLICATION: Reference Number 002730

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 19/02/2015 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 002730 (dated 27/01/2015).
- Participant information sheet 004858 version 1 (27/01/2015).
- Participant consent form 004859 version 1 (27/01/2015).

The following optional amendments were suggested:

See the comments above.

If during the course of the project you need to [deviate significantly from the above-approved documentation](#) please inform me since written approval will be required.

Yours sincerely

Email Arc Ethics
Ethics Administrator
School of Architecture

Ethics Approval 2



Downloaded: 08/11/2017
Approved: 24/02/2016

Nkemakonam Okofu
Registration number: 130110228
School of Architecture
Programme: Architecture (PhD/Architecture FT) - ARCR131

Dear Nkemakonam

PROJECT TITLE: Socially-minded architecture education: a pedagogical approach for social architecture in Nigeria

APPLICATION: Reference Number 007004

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 24/02/2016 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 007004 (dated 18/02/2016).
- Participant information sheet 1013779 version 1 (26/11/2015).
- Participant consent form 1013780 version 1 (26/11/2015).

If during the course of the project you need to [deviate significantly from the above-approved documentation](#) please inform me since written approval will be required.

Yours sincerely

Chengzhi Peng
Ethics Administrator
School of Architecture

Appendix F

Bibliography

- oo:/ (Architectural practice), National Endowment for Science, Technology and the Arts (Great Britain), Design Council, and CABE, *Compendium for the Civic Economy*. (London: oo:/, 2011).
- Abdulkarim, Mas'ud, 'Architecture Curriculum: Are Six (6) Years Enough Any Longer?', *Journal of Association of Architectural Educators in Nigeria*, 6.3 (2007), 41–48
- Abt-Perkins, Dawn, Ruth Balf, Matthew Brown, Jacqueline Deal, Elizabeth Dutro, Kimberly Adilia Helmer, and others, *Culturally Relevant Pedagogy: Clashes and Confrontations* (R&L Education, 2010)
- Abu-Shomar, Ayman, 'The Politics of Education and Critical Pedagogy: Considerations from the English Literary Tradition in 'Post-Colonial' Academic Contexts', *Postcolonial Directions in Education*, 2.2 (2013), 263–313
- Adedeji, Yomi MD, Abraham A. Taiwo, Olukayode A. Olotuah, and Gabriel Fadairo, 'Architectural Education and Sustainable Human Habitat in Nigeria', *Sustainability Today*, 167 (2012), 89–100
- Adewale, Aregbeshola R., 'The Political, Economic and Social Dynamics of Nigeria: A Synopsis', 2011
- Adeyemi, A. Ekundayo, 'Structure of Part II Education', *Nigerian Institute of Architects (NIA)*, 4.2 (1988), 34–36
- Aegerter, Lindsay Pentolfe, 'A Pedagogy of Postcolonial Literature', *College Literature*, 24.2 (1997), 142–50
- Ahrensbach, Timothy, Joost Beunderman, Alice Fung, Indy Johar, and Joni Steiner, 'Compendium for the Civic Economy', *London: oo*, 2011
- Albrecht, Johann, 'Towards a Theory of Participation in Architecture—An Examination of Humanistic Planning Theories', *Journal of Architectural Education*, 42.1 (1988), 24–31
- Alverson, Audrey, 'Contextual [Mis]Understanding', *Defy Rules*, 2010 <<https://defy-rules.com/tag/architectural-context/>> [accessed 24 February 2017]
- Amakom, Uzochukwu, 'Post Independence Nigeria and Industrialisation Strategies: Four and Half Erratic Decades', 2008
- Anderson, Geoff, David Boud, and Jane Sampson, *Learning Contracts: A Practical Guide* (Routledge, 2013)
- Anderson, Jane, and Colin Priest, 'Developing an Inclusive Definition, Typological Analysis and Online Resource for Live Projects', in *Architecture Live Project Pedagogy into Practice* (London and New York: Routledge, Taylor and Francis Group, 2014)

- Anderson, John R., Lynne M. Reder, and Herbert A. Simon, 'Situated Learning and Education', *Educational Researcher*, 25.4 (1996), 5–11
- Andrew Onyeukwu, Online Survey, 2019
- Anstey, Tim, Katja Grillner, and Rolf Hughes, *Architecture and Authorship* (Black Dog Publishing, 2007)
- Aoki, Ted, 'Interview: Rethinking Curriculum and Pedagogy', *Kappa Delta Pi Record*, 35.4 (1999), 180–81
- Aoki, Ted T., 'Legitimizing Lived Curriculum: Towards a Curricular Landscape of Multiplicity.', *Journal of Curriculum and Supervision*, 8.3 (1993), 255–68
- Apostel, Leo, 'Interdisciplinarity Problems of Teaching and Research in Universities.', 1972
- Arayela, Olatunde, 'An Introspection into Forty Years of Architectural Practice in Nigeria (1960-2000) The Way Forward', *Architects and Architecture in Nigeria: A Tribute to Prof. EA Adeyemi. Ed. Prof. UO Nkwogwu, Pub. AARCHES*, 2001, 91–107
- Arbelaez Garces, Giovanni, Auguste Rakotondranaivo, and Eric Bonjour, 'Improving Users' Product Acceptability: An Approach Based on Bayesian Networks and a Simulated Annealing Algorithm', *International Journal of Production Research*, 54.17 (2016), 5151–68
- Architects Registration Council of Nigeria, and Nigerian Institute of Architects, 'Condition of Engagement and Remuneration for Professional Architects' Services', 2011
- 'Architecture: Collaborative Practice', *University of Sheffield Postgraduate Study* <<https://www.sheffield.ac.uk/postgraduate/taught/courses/2019/architecture-collaborative-practice-march>> [accessed 26 June 2019]
- 'Architecture Connects, an International Peer Reviewed Conference of Association of Architectural Educators', 2017 <aaconference2017.wordpress.com> [accessed 18 September 2017]
- Argyris, Chris, and Donald A. Schön, 'Organisational Learning II: Theory, Method and Practice', *Reading: Addison-Wesley*, 1996
- Ashcroft, Bill, Gareth Griffiths, and Helen Tiffin, *Post-Colonial Studies: The Key Concepts* (Routledge, 2013)
- Austin, Zubin, and Jane Sutton, 'Qualitative Research: Getting Started', *The Canadian Journal of Hospital Pharmacy*, 67.6 (2014), 436
- Averill, Jennifer B., 'Qualitative Data Analysis', in *Nursing Research Using Phenomenology: Qualitative Designs and Methods in Nursing*, ed. by Mary De Chesnay (New York: Springer Publishing Company, 2015)
- Awan, Nishat, Tatjana Schneider, and Jeremy Till, *Spatial Agency: Other Ways of Doing Architecture* (Abingdon, Oxon [England]; New York, NY: Routledge, 2011)

- Awuzie, Aloyious, 'The Role of Architectural Education in the National Development Agenda in Nigeria, Keynote Address at the Biennial AARCHES National Conference/General Meeting, 6-9 September 2007.' (presented at the Association of Architectural Education in Nigeria (AARCHES), Imo State University, Owerri-Nigeria, 2007)
- Bader, G. E., and C. A. Rossi, 'Focus Groups: A Step-by-Step Guide. [SI]: Bader Group', 2002
- Banduras, Albert, *Social Foundations of Thought and Action*. (New Jersey: Prentice-Hall, 1986)
- Barnes, Jeffrey, Kerri Conrad, Christ of Demont-Heinrich, Mary Graziano, Dawn Kowalski, Jamie Neufeld, and others, 'Generalizability and Transferability', *Writing@ CSU. Colorado State University Department of English*. Retrieved from [WWW Document] [Http://Writing.Colostate.Edu/Guides/Research/Gentrans/Pop2c.Cfm](http://Writing.Colostate.Edu/Guides/Research/Gentrans/Pop2c.Cfm) (Accessed 1 March 2011), 2005
- Barnett, Ronald, 'Framing Education for Practice', in *Education for Future Practice* (Brill Sense, 2010), pp. 15–25
- Bell, Bryan, and Katie Wakeford, *Expanding Architecture: Design as Activism* (Metropolis Books New York, 2008)
- Bernstein, Sharon, 'Feminist Intentions: Race, Gender and Power in a High School Classroom', *NWSA Journal*, 7.2 (1995), 18–34
- Bhabha, Homi, 'Of Mimicry and Man: The Ambivalence of Colonial Discourse', *October*, 28 (1984), 125–33
- , 'The Location of Culture', *London and New York: Routledge*, 1994
- Bhabha, Homi K., 'Culture's In-Between', *Questions of Cultural Identity*, 1 (1996), 53–60
- Biggs, John, *Teaching for Quality Learning at University*, Secon edition (Buckingham: Buckingham: Open University Press/Society for Research into Higher Education, 2003)
- Black, T., & Harriss, H, 'The Culture of Rowing & Swimming: Spaces of Sport. Paper. The Culture of Rowing & Swimming Symposium', 2010
- Blundell-Jones, Peter, Doina Petrescu, and Jeremy Till, *Architecture and Participation* (New York: Spon Press, 2005)
<<http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=122696>> [accessed 21 June 2014]
- Bobadoye, Sunday A., Adewale J. Afolami, Ogunmakinde Olabode, and Emmanuel Aribisala, 'The Nigerian Institute of Architects' Professional Practice Examination: Conceptions, Misconceptions and the Way Forward.', *African Higher Education Review*, 7.2 (2013), 15–24
- Boix-Mansilla, Veronica, 'Teaching for Interdisciplinary Understanding: What Counts as Quality Work?', 2004
<http://webshare.northseattle.edu/IS/readings/what_is_interdisciplinary_learni.htm> [accessed 10 January 2017]
- Boshyk, Yury, and Robert L. Dilworth, *Action Learning History and Evolution* (London: Palgrave Macmillan, 2010)

- Bostow, Raquelle, Sherry Brewer, Nancy Chick, Ben Galina, Allison McGrath, Kirsten Mendoza, and others, 'A Guide to Feminist Pedagogy', *A Guide to Feminist Pedagogy*, 2015
 <<https://my.vanderbilt.edu/femped/>> [accessed 3 February 2017]
- Boud, David, Ruth Cohen, and Jane Sampson, 'Peer Learning and Assessment', *Assessment & Evaluation in Higher Education*, 24.4 (1999), 413–26
- Boyer, Ernest L., *Scholarship Reconsidered: Priorities of the Professoriate*. (ERIC, 1990)
- Bozdogan, Sibel, 'Architectural History in Professional Education: Reflections on Postcolonial Challenges to the Modern Survey 1', *Journal of Architectural Education*, 52.4 (1999), 207–15
- Brace, I., *Questionnaire Design: How to Plan, Structure, and Write Survey Material for Effective Market Research/Ian Brace* (London, 2004)
- Braun, V., and V. Clarke, 'Thematic Analysis in H. Cooper, PM Camic, DL Long, AT Panter, D. Rindskopf & KJ Sher', *APA Handbook of Research Methods in Psychology II: Research Designs*, 2012, 57–71
- Braun, Virginia, and Victoria Clarke, 'Using Thematic Analysis in Psychology', *Qualitative Research in Psychology*, 3.2 (2006), 77–101
- Breunig, Mary, 'Turning Experiential Education and Critical Pedagogy Theory into Praxis', *Journal of Experiential Education*, 28.2 (2005), 106–22
- Brinberg, David, and Joseph E. McGrath, 'Validity and the Research Process', in *Validity and the Research Process* (Sage Publications, 1985)
- Brookfield, S. D., 'The Power of Critical Theory for Adult Learning and Teaching', *The Adult Learner*, 85 (2005)
- Broomhill Community Library, '60 Years a Library', *Heritage Open Day*, 2017
 <<http://www.heritageopendays.org.uk/visiting/event/percy-cane-garden-oriel-house>>
 [accessed 4 July 2017]
- Brown, James, 'In Dialogue with Myself, In Dialogue with Paulo Freire', in *Radical Pedagogies: Architectural Education and the British Tradition*, ed. by Harriet Harriss and Froud Daisy (Newcastle, UK: RIBA Publications, 2015)
- Brown, James Benedict, 'A Critique of the Live Project' (Queen's University Belfast, 2012)
- Brown, James Benedict, 'Learning Theories of Live Projects', in *Architecture Live Projects Pedagogy into Practice* (London; New York: Routledge, Taylor and Francis Group, 2014), pp. 18–23
- Bruce, Ann, Catherine Lyall, Joyce Tait, and Robin Williams, 'Interdisciplinary Integration in Europe: The Case of the Fifth Framework Programme', *Futures*, 36.4 (2004), 457–70
- Bruner, Jerome S., *The Culture of Education* (Harvard University Press, 1996)
- Bruner, Jerome Seymour, *Toward a Theory of Instruction* (Harvard University Press, 1966), LIX
- Bryson, B. J., and Victoria A. Bennet-Anyikwa, 'The Teaching and Learning Experience: Deconstructing and Creating Space Using a Feminist Pedagogy', *Race, Gender & Class*,

2003, 131–46

- Buchanan, Peter, 'The Big Rethink: Architectural Education', *Architectural Review*, 232.1388 (2012), 91–101
- , 'What Is Wrong with Architectural Education', *Architectural Review*, 185.1109 (1989), 24–26
- Buckingham, David, 'Introduction: Fantasies of Empowerment', *Radical Pedagogy and Popular Culture*. In D. Buckingham (Ed.), *Teaching Popular Culture: Beyond Radical Pedagogy*, 1998, 1–17
- Building Futures, 'The Future for Architects', *Royal Institution of British Architects*. URL: http://www.buildingfutures.org.uk/assets/downloads/The_Future_for_Architects_Full_Report_2.Pdf (Accessed 6 June 2015), 2011
- Bulbeck, Chilla, *Re-Orienting Western Feminisms: Women's Diversity in a Postcolonial World* (Cambridge University Press, 1998)
- Burbules, Nicholas C., and Rupert Berk, 'Critical Thinking and Critical Pedagogy: Relations, Differences, and Limits', *Critical Theories in Education: Changing Terrains of Knowledge and Politics*, 1999, 45–65
- Burgess, Peter G., 'Architectural Education and Values', in *Proceedings of the 12th Annual Conference of the Environmental Design Research Association: Design Research Interaction*. Ames, Iowa, 1981
- Burney, Shehla, *Pedagogy of the Other: Edward Said, Postcolonial Theory, and Strategies for Critique*. *Counterpoints: Studies in the Postmodern Theory of Education*. Volume 417. (ERIC, 2012)
- Butin, Dan, *Service-Learning in Theory and Practice: The Future of Community Engagement in Higher Education* (Springer, 2010)
- Butterworth, Carolyn, and Leo Care, 'A Live Currency: Introducing The SSoA Live Projects Handbook.', *Charrette*, 1.1 (2014), 72–81
- Castleberry, Ashley, and Amanda Nolen, 'Thematic Analysis of Qualitative Research Data: Is It as Easy as It Sounds?', *Currents in Pharmacy Teaching and Learning*, 10.6 (2018), 807–15
- Charalambous, Nadia, and Natasa Christou, 'Re-Adjusting the Objectives of Architectural Education', *Procedia-Social and Behavioral Sciences*, 228 (2016), 375–82
- Charmaz, Kathy, 'Constructing Grounded Theory: A Practical Guide through Qualitative Research', *Sage Publications Ltd, London*, 2006
- CHE, 'Decolonising the Curriculum: Stimulating Debate', *Pretoria*, 3, 2017
<<http://www.che.ac.za/sites/default/files/publications/BrieflySpeaking%20%283%29%20Curriculum%20decolonisation.pdf>>
- Chiles, Prue, and Ana Holder, *The Live Project. The Oxford Conference: A Re-Evaluation of Education in Architecture*, ed. by Susan Roaf and Andrew Bairstow (Oxford Brookes University, UK: WIT Press, 2008)

- Chiles, Prue, and Jeremy Till, 'Live Projects: An Inspirational Model the Student Perspective', *CEBE Case Study*, 2004 <<https://www.heacademy.ac.uk/system/files/pruechiles.pdf>>
- Chilisa, Bagele, *Indigenous Research Methodologies* (Sage Publications, 2011)
- Chinue Achebe, *Things Fall Apart* (New York: Knopf Double Day Publishing Group, 1995)
- Choi, Esther, and Marrikka Trotter, *Architecture at the Edge of Everything Else* (MIT Press, 2010)
- Chreim, Samia, BE Bernie Williams, and CR Bob Hinings, 'Interlevel Influences on the Reconstruction of Professional Role Identity', *Academy of Management Journal*, 50.6 (2007), 1515–39
- Christodoulou, Daisy, *Seven Myths about Education* (Routledge, 2014)
- Chukwuali, Chukwuemeka, 'The Basic Problem of Architectural Education: A Nigerian Perspective In U. O. Nkwogu (Ed.) *Architects and Architecture in Nigeria – A Tribute to Prof. E.A Adeyemi.*', *Akure: AARCHES, Shalom Publishers*, 2001, 145–54
- Clandinin, D. Jean, and F. Michael Connelly, 'Narrative Inquiry: Experience and Story in Qualitative Research', 2000
- Cohen, L., *Research Methods in Education/Louis Cohen, Lawrence Manion and Keith Morrison* (London, 2007)
- Collins, Patricia Hill, *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment* (Routledge, 2002)
- Colomina, Beatriz, Esther Choi, Ignacio Gonzalez Galan, and Anna-Maria Meister, 'Radical Pedagogies', *Architectural Review*, 232.1388 (2012), 78–82
- Connaway, Lynn Silipigni, and Ronald R. Powell, *Basic Research Methods for Librarians* (ABC-CLIO, 2010)
- Cooner, Tarsem Singh, 'Learning to Create Enquiry-Based Blended Learning Designs: Resources to Develop Interdisciplinary Education', *Social Work Education*, 30.03 (2011), 312–30
- Costanzo, Luigi Michele, *Twenty Years After (Deconstruction), An Interview with Bernard Tschumi. Theoretical Meltdown* (Hoboken, N.J.; Chichester: Wiley ; John Wiley [distributor], 2009)
- Cramer, Phebe, *Storytelling, Narrative, and the Thematic Apperception Test* (Guilford Press, 2004)
- Crawford, Margaret, 'Can Architects Be Socially Responsible?', *Out of Site: A Social Criticism of Architecture*, 1991, 27–45
- Crenshaw, Kimberle, 'Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics [1989]', in *Feminist Legal Theory* (Routledge, 2018), pp. 57–80
- Creswell, J., 'Philosophical Assumptions and Interpretive Frameworks', *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Los Angeles: Sage Publications, 2013, 15–41

- Creswell, John, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches.*, Third Edition (London: Sage publication, 2008)
- , *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (SAGE Publications, 2014) <<https://books.google.co.uk/books?id=nSVxmN2KWeYC>>
- Creswell, John W., and Vicki L. Plano Clark, *Designing and Conducting Mixed Methods Research* (Sage publications, 2018)
- Creswell, John W., and Dana L. Miller, 'Determining Validity in Qualitative Inquiry', *Theory into Practice*, 39.3 (2000), 124–30
- Crispin, Jessa, 'The Failures of Mainstream Feminism', *New Republic*, 13 (2017)
- Crotty, Michael, *The Foundations of Social Research: Meaning and Perspective in the Research Process* (Sage, 1998)
- Crysler, C. Greig, 'Critical Pedagogy and Architectural Education', *Journal of Architectural Education*, 48.4 (1995), 208–17
- Cuff, Dana, *Architecture: The Story of Practice* (Mit Press, 1992)
- Daniel Elam, 'Postcolonial Theory', *Oxford Bibliographies*
<<https://www.oxfordbibliographies.com/view/document/obo-9780190221911/obo-9780190221911-0069.xml>> [accessed 15 September 2019]
- Darel-Abel, O.A, O.A Alagbe, P.A Aderonmu, O.N Ekhaese, and B.A Adewale, 'Pathways to Architectural Education and Practice Success in Nigeria', *Journal of Education and Practice*, 6.4 (2015), 169–75
- Darke, Peta, Graeme Shanks, and Marianne Broadbent, 'Successfully Completing Case Study Research: Combining Rigour, Relevance and Pragmatism', *Information Systems Journal*, 8.4 (1998), 273–89
- Darsø, Lotte, *Innovation in the Making* (Samfundslitteratur, 2001)
- David Stein, 'Situated Learning in Adult Education. ERIC Digest.', *Situated Learning in Adult Education. ERIC Digest.*, n.d <<https://www.ericdigests.org/1998-3/adult-education.html>> [accessed 26 March 2017]
- Davies, Ian, Li-Ching Ho, Dina Kiwan, Carla L. Peck, Andrew Peterson, Edda Sant, and others, *The Palgrave Handbook of Global Citizenship and Education* (Springer, 2018)
- De Botton, Lena, Lidia Puigvert, and Montse Sánchez-Aroca, *The Inclusion of Other Women: Breaking the Silence through Dialogic Learning* (Springer Science & Business Media, 2005), IV
- De Carlo, Giancarlo, 'Architecture's Public', *Architecture and Participation*, 2005, 3–22
- De Chesnay, Mary, *Nursing Research Using Phenomenology: Qualitative Designs and Methods in Nursing* (Springer Publishing Company, 2014)
- DeCarvalho, Jose J., and Juliana Flórez-Flórez, 'The Meeting of Knowledges: A Project for the

- Decolonisation of the University in Latin America', *Postcolonial Studies*, 17.2 (2014), 122–39
- Decolonising the Curriculum, 'Keele Manifesto for Decolonising the Curriculum' <<https://www.keele.ac.uk/raceequalitycharter/raceequalitycharter/keeledecolonisingthecurriculumnetwork/keelemanifestofordecolonisingthecurriculum/>> [accessed 13 December 2018]
- Dei, George J. Sefa, 'Rethinking the Role of Indigenous Knowledges in the Academy', *International Journal of Inclusive Education*, 4.2 (2000), 111–32
- Deleuze, Gilles, and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (London: Bloomsbury Publishing, 1988)
- Deleuze, Gilles, and Felix Guattari, 'Anti-Œdipus,(Trans. Robert Hurley, Mark Seem and Helen R. Lane), London, New York', *Continuum*, 2004
- Denicke-Polcher, Sandra, and Torange Khonsari, 'Architecture of Multiple Authorship', *Association of Architectural Educators*, 2014, 46–50
- Department of Architecture, FUTA, 'Arc. 401/501 Architectural Design IV Programme Handbook', 2013
- Department of Architecture, Imo State University Owerri-Nigeria, 'Students' Handbook', 2013
- Department of Architecture, Nnamdi Azikiwe University, Awka, 'Arc.311/411 Architectural Design Programme Handbook', 2012
- 'Describing Architecture School as a Hot-House - Google Search' <<https://www.google.com/search?ei=NEoCXeGpA8i5ggejuJzACg&q=describing+architecture>>
- Desmond-Harris, Jenée, *Doubts About Inclusive Feminism Have Little to Do with The Women's March. They're Rooted in History*. *Vox*, 2018
- Dewey, John, *Education and Democracy* (New York: Macmillan, 1916)
- Dey, Ian, *Qualitative Data Analysis: A User-Friendly Guide for Social Scientists* (Routledge, 2005)
- Doidge, Charles, Rachel Sara, and Rosie Parnell, *The Crit: An Architecture Student's Handbook* (Routledge, 2007)
- , *The Crit: An Architecture Student's Handbook* (Routledge, 2007)
- Dollard, John, and Neal E. Miller, *Social Learn & Imitation IIs 254* (Routledge, 2013), XIV
- Doucet, Isabelle, and Nel Janssens, eds., 'Transdisciplinarity, the Hybridisation of Knowledge Production and Space-Related Research', in *Transdisciplinary Knowledge Production in Architecture and Urbanism: Towards Hybrid Modes of Inquiry* (Springer Science & Business Media, 2011), XI
- Dutton, Thomas A., 'Cities, Cultures, and Resistance: Beyond Leon Krier and the Postmodern Condition', *Journal of Architectural Education*, 42.2 (1989), 3–9

- , 'Design and Studio Pedagogy', *Journal of Architectural Education*, 41.1 (1987), 16–25
- , 'Introduction: Architectural Education, Postmodernism, and Critical Pedagogy', *Voices in Architectural Education: Cultural Politics and Pedagogy (Critical Studies in Education & Culture)*, by Thomas A. Dutton, Xv–Xxix. New York: Bergin & Garvey, 1991
- , ed., *Voices in Architectural Education: Cultural Politics and Pedagogy*, Critical Studies in Education and Culture Series (New York: Bergin & Garvey, 1991)
- Dutton, Thomas A., and Lian Hurst Mann, *Reconstructing Architecture: Critical Discourses and Social Practices* (University of Minnesota Press, 1996), v
- Dyson, Anne Haas, and Celia Genishi, *The Need for Story: Cultural Diversity in Classroom and Community*. (ERIC, 1994)
- Echols, Alice, *Daring to Be Bad: Radical Feminism in America, 1967-1975* (U of Minnesota Press, 1989), III
- Ehrenreich, Barbara, *What Is Socialist Feminism?* (Nationwide Women's Program, 1976)
- Elliot and Associates, 'How to Conduct a Focus Group', *Guideline for Conducting a Focus Group*, 2005
<http://assessment.aas.duke.edu/documents/How_to_Conduct_a_Focus_Group.pdf> [accessed 6 October 2017]
- Ellsworth, Elizabeth, 'Why Doesn't This Feel Empowering? Working through the Repressive Myths of Critical Pedagogy', *Harvard Educational Review*, 59.3 (1989), 297–325
- 'English Oxford Dictionaries', 2017 <en.oxforddictionaries.com/definition/technique> [accessed 14 March 2017]
- Etherington, Kim, and Nell Bridges, 'Narrative Case Study Research: On Endings and Six Session Reviews', *Counselling and Psychotherapy Research*, 11.1 (2011), 11–22
- Evans, Johnathon, Sagit Yakuitel, and David Dunster, *101 Things I Learned in Architecture School* (Taylor & Francis, 2010)
- , *101 Things I Learned in Architecture School* (Taylor & Francis, 2010)
- Ezeanya, Chika A., *Education and Indigenous Knowledge in Africa: Traditional Bonesetting and Orthopaedic Medicine in West Africa*, 2011
- Fay, Brian, *Critical Social Science: Liberation and Its Limits* (Cornell University Press Ithaca, NY, 1987)
- 'Feminist Movements and Ideologies', *Wikipedia*, 2019
<https://en.wikipedia.org/w/index.php?title=Feminist_movements_and_ideologies&oldid=887084403> [accessed 27 May 2019]
- 'Feminist Pedagogy', *Wikipedia*, 2019
<https://en.wikipedia.org/w/index.php?title=Feminist_pedagogy&oldid=890045908> [accessed 24 May 2019]

- Fisher, Roger, Mary E. Lange, and M. Emmanuel N. Nkambule, 'Cultural Hybridity and Vigor in the Decolonised Architectural Curriculum.', *Paranoá: Cadernos de Arquitetura e Urbanismo*, 18
- , 'Cultural Hybridity and Vigor in the Decolonised Architectural Curriculum.', *Paranoá: Cadernos de Arquitetura e Urbanismo*, 18
- Fisher, Thomas, 'Public-Interest Architecture: A Needed and Inevitable Change', *Expanding Architecture: Design as Activism*, 2008, 8–13
- Flanagan, J., S. Baldwin, and D. Clarke, 'Work-based Learning as a Means of Developing and Assessing Nursing Competence', *Journal of Clinical Nursing*, 9.3 (2000), 360–68
- Flyvbjerg, Bent, 'Five Misunderstandings about Case-Study Research', *Qualitative Inquiry*, 12.2 (2006), 219–45
- Foley, Jean Ann, Doug Morris, Panayota Gounari, and Faith Agostinone-Wilson, 'Critical Education, Critical Pedagogies, Marxist Education in the United States.', *Journal for Critical Education Policy Studies (JCEPS)*, 13.3 (2015)
- Foster, Elizabeth, *Comparable but Different: Work-Based Learning for a Learning Society* (DfEE, 1996)
- Foucault, Michael, *Discipline and Punish: The Birth of the Prison* (Harmondsworth, England: Penguin, 1991)
- Frampton, K, 'Forms of Resistance: Politics, Culture, and Architecture.', in *Voices in Architectural Education: Cultural Politics and Pedagogy* (New York: Bergin & Gavey., 1991), pp. 1–27
- Frampton, K., *Towards a Critical Regionalism: Six Points for an Architecture of Resistance. Labour, Work and Architecture: Collected Essays on Architecture and Design (77-89)* (London: Phaidon Press, 2002)
- Franz, Nancy, 'A Holistic Model of Engaged Scholarship: Telling the Story across Higher Education's Missions', *Journal of Higher Education Outreach and Engagement*, 13.4 (2010), 31–50
- Freeman, David E., and Yvonne S. Freeman, 'Between Worlds: Access to Second Language Acquisition.', 1994
- Freire, Paulo, *Pedagogy of Freedom: Ethics, Democracy, and Civic Courage* (Rowman & Littlefield, 1998)
- , *Pedagogy of the Oppressed* (Bloomsbury Publishing, 2000)
- Garrison, D. Randy, and Heather Kanuka, 'Blended Learning: Uncovering Its Transformative Potential in Higher Education', *The Internet and Higher Education*, 7.2 (2004), 95–105
- Geuss, Raymond, *The Idea of a Critical Theory: Habermas and the Frankfurt School* (Cambridge University Press, 1981)
- Gillham, Bill, *Case Study Research Methods* (Bloomsbury Publishing, 2000)
- Giroux, Henry, *Pedagogy and the Politics of Hope: Theory, Culture and Schooling*. Boulder (Boulder:

Westview Press., 1997)

- Giroux, Henry A., 'Border Pedagogy and Die Politics of Modernism/Postmodernism', *Journal of Architectural Education*, 44.2 (1991), 69–79
- , 'Democracy and the Discourse of Cultural Difference: Towards a Politics of Border Pedagogy', *British Journal of Sociology of Education*, 12.4 (1991), 501–19
- , *On Critical Pedagogy* (Bloomsbury Publishing USA, 2011)
- , 'Paulo Freire and the Crisis of the Political', *Power and Education*, 2.3 (2010), 335–40
- , 'Pedagogy of the Depressed: Beyond the New Politics of Cynicism', *College Literature*, 28.3 (2001), 1–32
- , 'Public Pedagogy and the Politics of Resistance: Notes on a Critical Theory of Educational Struggle', *Educational Philosophy and Theory*, 35.1 (2003), 5–16
- , 'Rethinking Education as the Practice of Freedom: Paulo Freire and the Promise of Critical Pedagogy', *Policy Futures in Education*, 8.6 (2010), 715–21
- Giroux, Henry A., and Christopher G. Robbins, *Giroux Reader* (Routledge, 2016)
- Gloster, David, 'Education and the RIBA', in *RIBA Procedures for Validation and Validation Criteria for UK and International Courses and Examinations in Architecture* (RIBA Education Department, 2011) <<https://www.architecture.com/knowledge-and-resources/resources-landing-page/validation-procedures-and-criteria>> [accessed 14 June 2014]
- Goodson, Ivor, and Patricia J. Sikes, *Life History Research in Educational Settings: Learning from Lives* (Open University Press Buckingham, 2001)
- Grant, Brad, 'Cultural Invisibility: The African American Experience in Architectural Education', *TA Dutton, Voices in Architectural Education Cultural Politics and Pedagogy*, 1991, 149–64
- Greenwood, Davydd J., 'Organizational Learning II: Theory, Method, and Practice', *Industrial & Labor Relations Review*, 50.4 (1997), 701
- Gruenewald, David A., 'The Best of Both Worlds: A Critical Pedagogy of Place', *Educational Researcher*, 32.4 (2003), 3–12
- Guattari, Félix, *The Three Ecologies* (London; New York: Continuum, 2005)
- Guest, Greg, Arwen Bunce, and Laura Johnson, 'How Many Interviews Are Enough? An Experiment with Data Saturation and Variability', *Field Methods*, 18.1 (2006), 59–82
- Gutman, Robert, *Architecture from the Outside in: Selected Essays*, ed. by Dana Cuff, John Wriedt, and Bryan Bell, 1st ed (New York: Princeton Architectural Press, 2010)
- Halmos, Paul R., Edwin E. Moise, and George Piranian, 'The Problem of Learning to Teach', *American Mathematical Monthly*, 1975, 466–76
- Hamadi, Lutfi, 'Edward Said: The Postcolonial Theory and the Literature of Decolonization', *European Scientific Journal, ESJ*, 10.10 (2014)

- Hancock, Dawson R., and Bob Algozzine, *Doing Case Study Research: A Practical Guide for Beginning Researchers* (Teachers College Press, 2006)
- Hanisch, Carol, 'Women's Liberation Consciousness-Raising: Then and Now', *On the Issues Magazine*, 2010
- 'Hansard's Parliamentary Debates', 1943, vol. 393, cols 403–73
- Haraway, Donna, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', *Feminist Studies*, 14.3 (1988), 575–99
- Harding, Sandra, *Whose Science? Whose Knowledge? Thinking from Women's Lives* (Cornell University Press, 2016)
- Harriss, Harriet, 'Architecture Live Projects Acquiring and Applying Missing Practice-Ready Skills', 2014
- , 'Architecture Live Projects-Managing Emergent Ambiguities in Risk Management and Ambiguity Tolerance', *Charrette*, 2.1 (2015), 19–31
- Haruna, Ibrahim, 'Architecture Practice: The NIA Point of View' (presented at the Colloquium organised by the Architects Registration Council of Nigeria, 1st to 3rd of April, Musa Yar' Adua Centre, Abuja, 2008)
- , 'Marketing Architecture: A Fundamental to Successful Practice', *Marketing Architecture* <<http://www.ibrahimharuna.com/jmcp/index.php/articles/78-marketing-architecture/index.html>> [accessed 31 July 2018]
- Harvey, David, 'The Right to the City', *The City Reader*, 6, 23–40
- Harvey, Lee, *Critical Social Research* (Unwin Hyman, 1990), XXI
- Hassanpour, B., A. I. Che-Ani, Ismar Minang Satotoy Usman, Suhana Johar, and Norngainy Mohd Tawil, 'Lifelong Learning in Architectural Design Studio: The Learning Contract Approach.', *International Education Studies*, 8.1 (2015), 1–8
- Head, Brian W., and John Alford, 'Wicked Problems: Implications for Public Policy and Management', *Administration & Society*, 47.6 (2015), 711–39
- Heidegger, Martin, *Zollikon Seminars: Protocols, Conversations, Letters* (Northwestern University Press, 2001)
- Henderson, George, 'Forward', in *The Crit: An Architecture Student's Handbook*, (Eds) Charles, D., Sara, R., and Parnell, R. (London: Reed Educational and Professional Publishing Ltd, 2000)
- Hendricks, Cheryl, and Brenda Leibowitz, 'Decolonising Universities Isn't an Easy Process – but It Has to Happen', *The Conversation*, 2016 <<https://theconversation.com/decolonising-universities-isnt-an-easy-process-but-it-has-to-happen-59604>> [accessed 14 July 2018]
- Hill, Jonathan, *Architecture: The Subject Is Matter* (Psychology Press, 2001)
- Hoegl, Martin, Hans Georg, and H. G. Gemuenden, 'Teamwork Quality and the Success of Innovative Projects: A Theoretical Concept and Empirical Evidence.', 12 (2001), 435–49

- Hokstad, L. M., G. Rødne, B. O. Braaten, S. Wellinger, and F. Shetelig, 'Transformative Learning in Architectural Education: Re-Thinking Architecture and the Education of Architecture', *Threshold Concepts in Practice*, 2016, 231–333
- Holder, Anna, 'Initiating Architecture: Agency, Knowledge and Values in Instigating Spatial Change' (University of Sheffield, 2014)
- Hollander, Elizabeth, *Forward. Service-Learning in Theory and Practice: The Future of Community Engagement in Higher Education* (Springer, 2010)
- Hollway, Wendy, and Tony Jefferson, *Doing Qualitative Research Differently: Free Association, Narrative and the Interview Method* (Sage, 2000)
- hooks, bell, *Feminist Theory: From Center to Margin* (Cambridge, MA: South End Press, 1984)
- hooks, bell, *Talking Back: Thinking Feminist, Thinking Black* (South End Press, 1989)
- hooks, bell, 'Teaching to Transgress: Education as the Practice of Freedom', *Journal of Engineering Education*, 1 (1994), 126–38
- Hosagrahar, Jyoti, 'Interrogating Difference: Postcolonial Perspectives in Architecture and Urbanism', *CG Cryslar, S. Cairns, & H. Heynen, H.(Eds.). The SAGE Handbook of Architectural Theory*, 2012, 70–84
- Hunter, Will, 'Alternative Routes for Architecture', *Architectural Review*, 232.1388 (2012), 88–89
- Hyde, Rory, *Future Practice: Conversations from the Edge of Architecture* (Routledge, 2012)
- Imam, Hauwa, 'Educational Policy in Nigeria from the Colonial Era to the Post-Independence Period', *Italian Journal of Sociology of Education*, 4.1 (2012)
- Ira Shor, *Mpowering Education: Critical Teaching for Social Change*. (Chicago: The University of Chicago, 1992)
- Ivanitskaya, Lana, Deborah Clark, George Montgomery, and Ronald Primeau, 'Interdisciplinary Learning: Process and Outcomes', *Innovative Higher Education*, 27.2 (2002), 95–111
- Iwuagwu, Ben U., and Iwuagwu, Chioma, 'Mandatory Six Months Industrial Training for Architecture Students in Universities: A Need for Extension', *SCSR Journal of Development*, 1.1 (2014)
- Jacob, Sam, 'Opening the Black Box/AA Night School', in *Radical Pedagogies: Architectural Education and the British Tradition*, ed. by Harriet Harriss and Froud Daisy (Newcastle, UK: RIBA Publications, 2015)
- Jantsch, Erich, 'Towards Interdisciplinarity and Transdisciplinarity in Education and Innovation', *Interdisciplinarity: Problems of Teaching and Research in Universities*, 1972, 97–121
- Jarvis, Peter, *The Practitioner-Researcher: Developing Theory from Practice*, The Jossey-Bass Higher and Adult Education Series, 1st ed (San Francisco, Calif: Jossey-Bass, 1999)
- Johnson, Barbara, *The Feminist Difference: Literature, Psychoanalysis, Race and Gender* (London: Harvard University Press, 2002)

- Jones, Anna, 'A Disciplined Approach to Critical Thinking', in *The Palgrave Handbook of Critical Thinking in Higher Education* (Springer, 2015), pp. 169–82
- Jones, Peter Blundell, Doina Petrescu, and Jeremy Till, *Architecture and Participation* (Routledge, 2013)
- Kamanzi, Brian, 'Decolonising the Curriculum – A Student Call in Context', *University World News*, 2016 <<http://www.universityworldnews.com/article.php?story=20160527145138375>> [accessed 17 July 2018]
- Keengwe, Jared, and Grace Onchwari, *Handbook of Research on Learner-Centered Pedagogy in Teacher Education and Professional Development* (IGI Global, 2016)
- Kere, F., A. Beygo, and A. Lepik, *Francis Kéré: Radically Simple* (Hatje Cantz, 2016)
- Kerr, Paulette, 'Espoused Theories and Theories-in-use of Information Literacy: A Model for Reflection and Evaluation', *Proceedings of the American Society for Information Science and Technology*, 46.1 (2009), 1–7
- Kincheloe, Joe L., *Critical Pedagogy Primer* (Peter Lang, 2008), I
- Klein, Julie Thompson, 'Forward', in *Transdisciplinary Knowledge Production in Architecture and Urbanism: Towards Hybrid Modes of Inquiry*, ed. by Isabelle Doucet and Nel Janssens (Springer Science & Business Media, 2011), XI
- Knowles, Malcolm S., *Using Learning Contracts: Practical Approaches to Individualizing and Structuring Learning* (Jossey-Bass, 1986)
- Knowles, Malcolm Shepherd, 'Self-Directed Learning', 1975
- Kolb, David, *Experiential Learning: Experience as the Source of Learning and Development*. . (New Jersey: Prentice-Hall, 1984)
- Krippendorff, Klaus, *The Semantic Turn: A New Foundation for Design* (crc Press, 2005)
- Krueger, Richard A., *Focus Groups: A Practical Guide for Applied Research* (Sage publications, 2014)
- Krueger, Richard A., and Mary Anne Casey, *Focus Groups: A Practical Guide for Applied Research* (Sage publications, 2014)
- Kumar, Ranjit, *Research Methodology: A Step-by-Step Guide for Beginners* (Sage Publications Limited, 2011)
- Kvale, Steinar, *Doing Interviews* (Sage, 2008)
- , *Interviews: An Introduction to Qualitative Research Interviewing* (Sage, 1996)
- Lake, Robert L., 'Radical Love in Teacher Education Praxis: Imagining the Real through Listening to Diverse Student Voices', *The International Journal of Critical Pedagogy*, 7.3 (2016)
- Lance Josal, 'The Future of the Architecture Practice', *Design Intelligence*, 2018 <<https://www.di.net/articles/future-architecture-practice-2/>> [accessed 13 November 2019]

- Lange, T., E. E. Scott, R. Sara, L. Athanasiadou, H. Harriss, A. J. Merrett, and others, 'Making Trouble to Stay with: Architecture and Feminist Pedagogies', *Field Journal*, 7 (2017), 89–100
- LaPiere, Richard T., 'Attitudes vs. Actions', *Social Forces*, 13.2 (1934), 230–37
- Latham, Sir Michael, *Constructing the Team* (HM Stationery Office London, 1994)
- Lave, Jean, and Etienne Wenger, *Situated Learning: Legitimate Peripheral Participation*, Ed (Cambridge: Cambridge University Press, 1990)
- Lawrence, Emilie, 'Feminist Pedagogy', *GEA - Gender and Education Association (Changing the Future | Educating about Gender)*, 2016
<<http://www.genderandeducation.com/issues/feminist-pedagogy/>>
- Lawrence, Roderick J., 'Deciphering Interdisciplinary and Transdisciplinary Contributions', *Transdisciplinary Journal of Engineering & Science*, 1.1 (2010), 125–30
- Lawson, Bryan, 'Design Education: The Issues', in *Conference on Design Education Proceedings Edinburgh: RIAS*, 1999
- , *How Designers Think: The Design Process Demystified* (Routledge, 2006)
- Le Grange, Lesley, 'Decolonising the University Curriculum: Leading Article', *South African Journal of Higher Education*, 30.2 (2016), 1–12
- 'Learning Theories', 2017 <[https://en.wikipedia.org/wiki/Learning_theory_\(education\)](https://en.wikipedia.org/wiki/Learning_theory_(education))> [accessed 25 April 2017]
- Lee, Ming-yeh, and Juanita Johnson-Bailey, 'Challenges to the Classroom Authority of Women of Color.', *New Directions for Adult and Continuing Education*, 102 (2004), 55–64
- Lepik, Andres, *Small Scale, Big Change: New Architectures of Social Engagement* (The Museum of Modern Art, 2010)
- Liam Hurst Mann, 'Crossover Dream: A Parti(r), Structures for Knowledge of Difference', in *Voices in Architectural Education: Cultural Politics and Pedagogy*, ed. by Thomas Dutton (New York, NY: Bergin & Garvey, 1991)
- Lincoln, Yvonna S., Susan A. Lynham, and Egon G. Guba, 'Paradigmatic Controversies, Contradictions, and Emerging Confluences, Revisited', *The Sage Handbook of Qualitative Research*, 4 (2011), 97–128
- Littman, Elliott, James Mayo, and Peter Burgess, 'Political Knowledge and the Architectural Studio', *Journal of Architectural Education*, 34.3 (1981), 24–28
- Lokko, Lesley, 'Hit Me Baby One More Time', in *A Gendered Profession*, ed. by James Benedict Brown, Harriet Harriss, Ruth Morrow, and James Soane (RIBA Publishing, 2016)
- London, Manuel, *The Oxford Handbook of Lifelong Learning* (Oxford University Press, 2011)
- Lorber, J., *The Variety of Feminisms and Their Contributions to Gender Equality* (Bibliotheks- und Informationssystem der Univ. Oldenburg, 1997)

<<https://books.google.co.uk/books?id=FqSBAAAACAAJ>>

Lorde, Audre, 'Sister Outsider: Essays and Speeches (Trumansburg, NY)', *The Crossing Press*, 44 (1984), 111

———, *The Master's Tools Will Never Dismantle the Master's House* (Penguin UK, 2018)

Lotz-Sisitka, Heila, Arjen EJ Wals, David Kronlid, and Dylan McGarry, 'Transformative, Transgressive Social Learning: Rethinking Higher Education Pedagogy in Times of Systemic Global Dysfunction', *Current Opinion in Environmental Sustainability*, 16 (2015), 73–80

MacGregor, Sherilyn, *Beyond Mothering Earth: Ecological Citizenship and the Politics of Care* (UBC Press, 2011)

Macionis, John J., and Linda M. Gerber, 'Sociology, 7th Canadian Edn', *Toronto, Ontario, Canada: Prentice Hall*, 2011

Maina, Joy Joshua, 'Architecture Education in Nigeria: Problems and Way Forward' (PhD Seminar present at the Department of Architecture, Ahmadu Bello University Zaria, Nigeria, May, 2008)

Majeski, Robin, and Merrily Stover, 'Interdisciplinary Problem-Based Learning in Gerontology: A Plan of Action', *Educational Gerontology*, 31.10 (2005), 733–43

Manen, M. van, 'Researching Lived Experience', *State University of New York Press, New York*, 1990

Mansilla, Veronica Boix, 'Interdisciplinary Work at the Frontier: An Empirical Examination of Expert Epistemologies', *Issues in Interdisciplinary Studies*, 2006

Marquardt, Michael, and Shannon Banks, 'Theory to Practice: Action Learning', *Advances in Developing Human Resources*, 12.2 (2010), 159–62

Mason, J., *Qualitative Researching* (SAGE Publications, 2002)
<<https://books.google.co.uk/books?id=ot5zndXhrNEC>>

Mau, Bruce, and Institute without Boundaries, *Massive Change* (London; New York: Phaidon, 2004)

May, T., *Social Research: Issues, Methods and Research* (McGraw-Hill Education, 2011)
<<https://books.google.co.uk/books?id=mcOszOsWo6wC>>

Maynard, M. Travis, Deanna M. Kennedy, and Christian J. Resick, 'Teamwork in Extreme Environments: Lessons, Challenges, and Opportunities', *Journal of Organizational Behavior*, 39.6 (2018), 695–700

McAllister, Keith, 'The Design Process-Making It Relevant for Students', *ArchNet-IJAR*, 4 (2010)

McClure, Laura, 'Feminist Pedagogy and the Classics', *The Classical World*, 94.1 (2000), 53–55

McCorquodale, Duncan, Katerina Ruedi, and Sarah Wigglesworth, *Desiring Practices: Architecture, Gender, and the Interdisciplinary* (Black Dog Publishers, 1996)

- McEwan, Cheryl, 'Postcolonialism, Feminism and Development: Intersections and Dilemmas', *Progress in Development Studies*, 1.2 (2001), 93–111
- McLaren, Peter, 'Che: The Pedagogy of Che Guevara: Critical Pedagogy and Globalization Thirty Years after Che', *Cultural Circles*, 3 (1998), 29–103
- , *Critical Pedagogy and Predatory Culture: Oppositional Politics in a Postmodern Era* (Psychology Press, 1995)
- , *Life in Schools: An Introduction to Critical Pedagogy in the Foundations of Education*, 3rd edition (New York: Longman., 1998)
- Meredith, Paul, 'Hybridity in the Third Space: Rethinking Bi-Cultural Politics in Aotearoa/New Zealand', Paper Presented to Te Oru Rangahau Maori Research and Development Conference, 7-9 July 1998, Massey University, New Zealand', in *Meredith Hybridity in the Third Space: Rethinking Bi-Cultural Politics in Aotearoa/New Zealand Te Oru Rangahau Maori Research and Development Conference*, 1998, pp. 7–9
- Merriam, Sharan B., 'Andragogy and Self-directed Learning: Pillars of Adult Learning Theory', *New Directions for Adult and Continuing Education*, 2001.89 (2001), 3–14
- Mertens, Donna M., 'Mixed Methods and the Politics of Human Research: The Transformative-Emancipatory Perspective', *Handbook of Mixed Methods in Social and Behavioral Research*, 2003, 135–64
- Mertens, Donna M., and Pauline E. Ginsberg, *The Handbook of Social Research Ethics* (Sage, 2009)
- Meyer, Jan HF, and Ray Land, 'Threshold Concepts and Troublesome Knowledge (2): Epistemological Considerations and a Conceptual Framework for Teaching and Learning', *Higher Education*, 49.3 (2005), 373–88
- Meyer, Jan, and Ray Land, *Threshold Concepts and Troublesome Knowledge: Linkages to Ways of Thinking and Practising within the Disciplines* (Citeseer, 2003)
- Mezirow, Jack, *Learning as Transformation: Critical Perspectives on a Theory in Progress. The Jossey-Bass Higher and Adult Education Series.* (ERIC, 2000)
- Michael Marquardt¹, and Shannon Banks, 'Theory of Practice: Action Learning', *Advances in Developing Human Resources*, 2010, 159–62
- Miller, N. E., & Dollard, J., *Social Learning and Imitation.* (New Haven: Yale University Press, 1941)
- Mills, C. Wright, *The Sociological Imagination* (New York: Oxford University Press, 1959)
- Mills-Tetty, Ralph, 'Roles of the Regulatory Body in Quality Architectural Education in Nigeria', *Architects Registration Council of Nigeria*, 2010
- Misro, A., M. Hussain, T. L. Jones, M. A. Baxter, and Vikas Khanduja, 'A Quick Guide to Survey Research', *The Annals of The Royal College of Surgeons of England*, 96.1 (2014), 87–87
- Mitgang, Lee, and Ernest Boyer, 'Building Community A New Future for Architectural Education and Practice', *Carnegie Foundation for the Advancement of Teaching*, 1996

- Mohanty, Chandra, 'Under Western Eyes: Feminist Scholarship and Colonial Discourses', *Feminist Review*, 30.1 (1988), 61–88
- Mohanty, Chandra Talpade, "'Under Western Eyes' Revisited: Feminist Solidarity through Anti-capitalist Struggles', *Signs: Journal of Women in Culture and Society*, 28.2 (2003), 499–535
- Moody, Daniel, 'Empirical Research Methods', *Research Method Class, March*, 8 (2002), 15
- Moon, Jennifer A., *Learning Journals: A Handbook for Reflective Practice and Professional Development*, 2nd ed (New York, NY: Routledge, 2006)
- Morris, Neal, 'The Schools Pioneering Practice Based Learning'
<<https://www.architecture.com/knowledge-and-resources/knowledge-landing-page/the-schools-pioneering-practice-based-learning>> [accessed 12 December 2017]
- Morrow, Ruth, 'Architectural Assumptions and Environmental Discrimination', *Changing Architectural Education: Towards a New Professionalism*, 2005, 36
- , 'Live Project Love: Building a Framework for Live Projects.', in *Architecture Live Projects: Pedagogy into Practice*, ed. by Harriet Harriss and Lynnette Widder (London & New York: Routledge, 2014)
- , *Street Society 2017* (Belfast, UK: Queen's Architecture Press, 2017)
- Morrow, Ruth, and James B. Brown, 'Live Projects as Critical Pedagogies', *Live Projects: Designing with People*, 2012, 232–74
- Morse, Janice M., Michael Barrett, Maria Mayan, Karin Olson, and Jude Spiers, 'Verification Strategies for Establishing Reliability and Validity in Qualitative Research', *International Journal of Qualitative Methods*, 1.2 (2002), 13–22
- Mosley, Jonathan, and Rachel Sara, 'Architecture and Transgression: An Interview with Bernard Tschumi', *Architectural Design*, 83.6 (2013), 32–37
- , 'The Architecture of Transgression: Towards a Destabilising Architecture', *Architectural Design*, 83.6 (2013), 14–19
- Mullin, Stephen, 'Cedric Price: 1934–2003', *Arq: Architectural Research Quarterly*, 7.2 (2003), 113–18
- Munby, Hugh, 'Reflection in Action and Reflection on Action', n.d
<<http://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1390&context=eandc>> [accessed 26 March 2017]
- Mungazi, Dickson A., *The Mind of Black Africa* (Greenwood Publishing Group, 1996)
- Nabudere, Dani Wadada, 'Towards an Afrokology of Knowledge Production and African Regeneration', *International Journal of African Renaissance Studies*, 1.1 (2006), 7–32
- Nalbantoglu, Gülsüm Baydar, 'Toward Postcolonial Openings: Rereading Sir Banister Fletcher's "History of Architecture"', *Assemblage*, 35, 1998, 7–17
- Newell, William H., 'Academic Disciplines and Undergraduate Interdisciplinary Education: Lessons

- from the School of Interdisciplinary Studies at Miami University, Ohio', *European Journal of Education*, 27.3 (1992), 211–21
- Nicholson, Robin, *Changing Architectural Education: Towards a New Professionalism* (Taylor & Francis, 2005)
- Nicol, David, and Simon Pilling, 'Architectural Education and the Profession', *Changing Architectural Education: Towards a New Profession*, 2000, 1–22
- , 'Architectural Education and the Profession: Preparing for the Future', in *Changing Architectural Education: Towards a New Professionalism* (Taylor & Francis, 2005)
- , *Changing Architectural Education: Towards a New Professionalism* (Taylor & Francis, 2005)
- Nigeria, Federal Republic of, *National Policy on Education* (NERDC press Lagos, 2004)
- 'Nigerian Economy Slips into Recession', *BBC Business News*, 2016
<<https://www.bbc.co.uk/news/business-37228741>> [accessed 15 June 2018]
- Nigerian Educational Research Council (NERDC), *A Philosophy for Nigerian Education* (Ibadan: Heinemann Educational Books, 1972)
- Nigerian Enterprises Promotion Decree* (Decree no. 4, 1972)
- Nkoane, Molebatsi Milton, 'The Africanisation of the University in Africa', *Alternation*, 13.1 (2006), 49–69
- Noble, Helen, and Joanna Smith, 'Issues of Validity and Reliability in Qualitative Research', *Evidence-Based Nursing*, 2015, ebnurs-2015-102054
- Nwokocha, Remigius, focused group interview discussion with Nkemakonam Okofu, 2017
- Nwoye, Ugochukwu, Justina Obiorah, and Ekesiobi Chukwunonso, 'Effect of Nigeria Macroeconomic Environment on the Performance of the National Economy: Implications', 2015
- Nygreen, Kysa, 'The Central Paradox of Critical Pedagogy', *Culturally Relevant Pedagogy: Clashes and Confrontations*, 2010, 61
- Okofu, Nkemakonam, 'Architecture at the Edge of Practice: A Pedagogical Approach to Social Architectural Education.', in *ARCC 2015 Conference Architectural Research Centers Consortium* (presented at the Future of Architectural Research, Chicago, USA: Perkins + Wills, 2015), pp. 557–63 <http://www.arcc-arch.org/wp-content/uploads/2015/04/ARCC2015_Perkins-Will-Conference-Proceedings.pdf>
- , 'Integrated Design Studio Learning: Unquestioned Assumptions of How Students Learn', *Journal of Association of Architectural Educators in Nigeria*, 5.3 (2008)
- Okojie, Julius A., 'Licensing, Accreditation and Quality Assurance in Nigerian Universities: Achievements and Challenges' (presented at the CHEA Summer Workshop, Abuja, Nigeria, 2008)
<https://www.chea.org/userfiles/Conference%20Presentations/2008_SW_Julius_Okojie_aper.pdf> [accessed 20 January 2014]

- , 'National Universities Commission: Bench Mark Minimum Academic Standards For Undergraduate Programmes In Nigerian Universities', *NUC, Abuja*, 2011
- Olotuah, Abiodun Olukayode, 'At the Crossroads of Architectural Education in Nigeria', 2006
- , 'In the Making of an Architect: The Zaria Experience, Higher Education Pedagogies', *Higher Education Pedagogies*, 2016 <<http://dx.doi.org/10.1080/23752696.2015.1134202>> [accessed 18 April 2017]
- Olotuah, Olukayode Abiodun, 'Architect-Educators and the Curriculum in Architecture: Roles and Expectations in the 21 St Century.', 1.5 (2000), 29–32
- Olubunmi, Awolore Oluwafunmilayo, 'Challenges Facing Architects in Practice in Nigeria', *Unpublished Thesis*, 2011
- Onyegiri, Ikechukwu, Nkemakonam Okofu, and Alozie Chinedu, 'The Value of Architectural Education in Nigeria: Students' Expectations in Six Schools of Architecture in South-East Nigeria.', *AAE Conference Proceedings*, 2014
<<https://architecturaleducators.files.wordpress.com/2015/06/onyegiri-okofu-and-chinedu-2014-the-value-of-architecture-education-in-nigeria-students-expectations-in-six-schools-of-architecture-in-south-east-nigeria.pdf>> [accessed 10 June 2015]
- Opoko, Pearl Akunnaya, and A. A. Oluwatayo, 'Architectural Education for Today's Challenges', *Arts and Design Studies*, 38 (2015), 24–30
- 'Oriel House', *Live Projects*, 2015 <<http://www.liveprojects.org/2015/oriel-house/>> [accessed 18 September 2016]
- Origin Learning, '4 Ways to Apply the Situate Learning Theory', 2015
<<http://blog.originlearning.com/4-ways-to-apply-the-situated-learning-theory/>> [accessed 25 April 2017]
- Ørngreen, Rikke, and Karin Levinsen, 'Workshops as a Research Methodology.', *Electronic Journal of E-Learning*, 15.1 (2017), 70–81
- Osborn, Alex, *Unlocking Your Creative Power: How to Use Your Imagination to Brighten Life, to Get Ahead* (University Press of America, 2009)
- Oxford Business Report, 'Media and Entertainment'
<<https://www.oxfordbusinessgroup.com/nigeria-2015/media-entertainment>> [accessed 22 April 2017]
- Ozigi, Albert O., and Lawrence Ocho, *Education in Northern Nigeria* (Unwin Hyman, 1981)
- Palinkas, Lawrence A., Sarah M. Horwitz, Carla A. Green, Jennifer P. Wisdom, Naihua Duan, and Kimberly Hoagwood, 'Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research', *Administration and Policy in Mental Health and Mental Health Services Research*, 42.5 (2015), 533–44
- Paynter, Sharon, 'Tackling Wicked Problems through Engaged Scholarship', *Journal of Community Engagement and Scholarship*, 7.1 (2014), 48
- Petrescu, Doina, *Altering Practices: Feminist Politics and Poetics of Space* (Routledge, 2007)

- , 'Losing Control, Keeping Desire', *Architecture and Participation*, 2005, 43–64
- Petrescu, Doina, Constantin Petcou, and Corelia Baibarac, 'Co-Producing Commons-Based Resilience: Lessons from R-Urban', *Building Research & Information*, 44.7 (2016), 717–36
- Philip, Ayuba, Remi Olagunju, and K.O Akande, 'Architectural Education and Research: A Responsive Tool to Meet Contemporary Challenges in Architectural Practice', *Journal of Association of Architectural Educators in Nigeria*, 6.3 (2007), 36–40
- Pilane, Pontsho, *Three Reasons Why# FeesMustFall Protests Will Continue*. *Mail&Guardian*, 2016
- Pindar, Ian, and Paul Sutton, 'Translators' Introduction', *The Three Ecologies*, 2001
- Pitchforth, Judith, 'Broomhill Community Library Developments: An Update', 2016
<<http://www.broomhill-library.org.uk/newsletter>> [accessed 15 January 2017]
- Polkinghorne, Donald E., 'Narrative Configuration in Qualitative Analysis', *International Journal of Qualitative Studies in Education*, 8.1 (1995), 5–23
- Polycarp, Benson, and Yakubu Ahmed Ubangari, 'The Current Economic Situation and Its Impact on the Built Environment Contribution to the Gross Domestic Product in Nigeria', 1 (2017), 1–9
- Potter, Leigh Ellen, Liisa von Hellens, and Sue Nielsen, 'The Practical Challenges of Case Study Research: Lessons from the Field', *Qualitative Research on IT*, 2010, 1–5
- Price, Cedric, *Cedric Price*. ([London]: [Architectural Association], 1984)
- , *Cedric Price: The Square Book* (Wiley-Academy, 2003)
- Pritchard, Alan, *Ways of Learning: Learning Theories and Learning Styles in the Classroom* (Oxford, UK: Routledge, 2009)
- Prue Chiles, and Ana Holder, 'The Live Project. The Oxford Conference, A Re-Evaluation of Education in Architecture Conference Proceedings, S. Roaf and A. Bairstow, (Eds.) Presented at The Oxford Conference 2008, 50 Years On Resetting the Agenda for Architectural Education, University of Oxford, UK (Pp.195-200)'
- 'Purpose & History of the Rural Studio' <<http://www.ruralstudio.org/about/purpose-history>> [accessed 4 July 2017]
- Qu, Sandy Q., and John Dumay, 'The Qualitative Research Interview', *Qualitative Research in Accounting & Management*, 8.3 (2011), 238–64
- Ramadier, Thierry, 'Transdisciplinarity and Its Challenges: The Case of Urban Studies', *Futures*, 36.4 (2004), 423–39
- Ramsden, Paul, *Learning to Teach in Higher Education* (Routledge, 2003)
- Rendell, Jane, 'Critical Architecture: Between Criticism and Design', in *Critical Architecture*, ed. by Jane Rendell, Jonathan Hill, Murray Fraser, and Mark Drrian (Routledge, 2007)
- Revans, Reginald W., *The Origins and Growth of Action Learning* (Studentlitteratur, 1982)

- RIBA, *Code of Professional Conduct For Members of the Royal Institute of British Architects*, 2005
- , 'RIBA Procedures for Validation and Validation Criteria', 2011
<<https://www.architecture.com/knowledge-and-resources/resources-landing-page/validation-procedures-and-criteria>> [accessed 10 June 2014]
- , *Strategic Study of the Profession: Phase 2. Clients and Architects*, (London: RIBA, 1993)
- Richards, Kay-Ann, 'The Importance of Learning Theories', *Why Are Learning Theories Important to Education and Training*, 2012 <<https://instructionaltech.quora.com/>> [accessed 25 April 2017]
- Roberson Jr, Donald N., 'The Potential of Self-Directed Learning: Practical Implications for Facilitators of Older Adults', *Activities, Adaptation & Aging*, 29.3 (2005), 1–20
- Rodgers, Paul, and Michael Smyth, *Digital Blur: Creative Practice at the Boundaries of Architecture, Design and Art* (Libri Publishing, 2010)
- Rogers, Paul, and Michael Smyth, eds., *Digital Blur: Creative Practice at the Boundaries of Architecture, Design and Art* (Faringdon: Libri Pub, 2010)
- Rose, Suzanna, 'The Protest as a Teaching Technique for Promoting Feminist Activism', *NWSA Journal*, 1.3 (1989), 486–90
- Rossmann, Gretchen B., and Sharon F. Rallis, *Learning in the Field: An Introduction to Qualitative Research* (Sage, 2012)
- Rowland, Ingrid D., and Thomas Noble Howe, *Vitruvius: 'Ten Books on Architecture'* (Cambridge University Press, 2001)
- Saint, Andrew, *The Image of the Architect* (Yale University Press, 1983)
- Salama, Ashraf, *New Trends in Architectural Education: Designing the Design Studio* (Arti-arch, 1995)
- Salama, Ashraf M., 'Critical Characterisation of Traditional Design Teaching Practices', in *Spatial Design Education: New Directions for Pedagogy in Architecture and Beyond* (Surrey, England: Ashgate Publishing Limited, 2015)
- , 'Knowledge and Design: People-Environment Research for Responsive Pedagogy and Practice', *Procedia-Social and Behavioral Sciences*, 49 (2012), 8–27
- , 'Seeking Responsive Forms of Pedagogy in Architectural Education', *Field Journal*, 5.1 (2013), 9–30
- , *Spatial Design Education: New Directions for Pedagogy in Architecture and Beyond* (Routledge, 2015)
- Sanders, Elizabeth B.-N., and Pieter Jan Stappers, 'Probes, Toolkits and Prototypes: Three Approaches to Making in Codesigning', *Co-Design*, 10.1 (2014), 5–14
- Sanoff, Henry, *Participatory Design and Planning*, (Ed.) Carswell, A. T., *The Encyclopaedia of Housing* (Sage, 1998)

- Sanoff, Henry, and Zeynep Toker, *Three Decades of Design and Community: History of the Community Development Group* (NC State University, School of Architecture, College of Design, 2003)
- Sara, Rachel, 'Between Studio and Street: The Role of the Live Project in Architectural Education' (University of Sheffield; 2004)
- , 'Introducing Clients and Users to the Studio Project: A Case Study of a Live Project', *Changing Architectural Education: Towards a New Professionalism*, Spon Press, London, United Kingdom, 2000, 77–83
- , *Live Project Good Practice: A Guide for the Implementation of Live Projects* (CEBE, 2006)
- Sara, Rachel, and Rosie Parnell, 'Fear and Learning in the Architectural Crit', *Field Journal*, 5.1 (2013), 101–25
- Sasaki, Betty, 'Toward a Pedagogy of Coalition', in *Twenty-First-Century Feminist Classrooms* (Springer, 2002), pp. 31–57
- Schalk, Meike, Thérèse Kristiansson, and Ramia Mazé, eds., 'Introduction', in *Feminist Futures of Spatial Practice: Materialisms, Activisms, Dialogues, Pedagogies, Projections* (AADR/Spurbuchverlag, 2017)
- Scharphie, Mia, *Emerging Modes of Architecture Practice: Reframing the Value Proposition of Architecture*, 2015
<https://issuu.com/neuarchitecture/docs/emerging_modes_of_architecture_prac_3b339b819de15> [accessed 24 June 2017]
- Schneider, Tatjana, 'More Slack Space, Please', in *Radical Pedagogies Architectural Education and the British Tradition*, ed. by Harriet Harriss and Daisy Froud (Newcastle, UK: RIBA Enterprise Ltd, 2015)
- Schneider, Tatjana, and Jeremy Till, 'Beyond Discourse: Notes on Spatial Agency', *Footprint*, 3.1 (2009), 97–112
- Schön, Donald A, *Educating the Reflective Practitioner: Towards a New Design for Teaching and Learning*. (San Francisco: Jossey Bass, 1987)
- Schön, Donald A., 'The Architectural Studio as an Exemplar of Education for Reflection-in-Action', *Journal of Architectural Education*, 38.1 (1984), 2–9
- , *The Reflective Practitioner: How Professionals Think in Action* (London: Ashgate Publishing Limited, 2011)
- School of Architecture, 'Architecture: Collaborative Practice MArch', 2019
<<https://www.sheffield.ac.uk/architecture/march/collaborative-practice>>
- Schuetze, Hans, 'Community Engagement and University Ranking', *PASCAL International Observatory*, 2012 <pascalobservatory.org>
- Schunk, Dale H., *Learning Theories: An Educational Perspective*, 6th edn (Boston, USA: Allyn & Bacon, 2012)

- Scotland, James, 'Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms', *English Language Teaching*, 5.9 (2012), 9
- Sevtsuk, Andres, "' How We Shape Our Cities, and Then They Shape Us', *MAJA: The Estonian Architectural Review*, 2012, 2–2012
- Shay, Suellen, 'Decolonising the Curriculum: It's Time for a Strategy', *The Conversation*, 2016
- Sheffield School of Architecture, *A Handbook for Live Projects*, 2013
- , *MArch Student Handbook 2018-2019*
- 'Sheffield School of Architecture: MAUD 2015/2016 Urban Design Project 1', 2015
- Shrewsbury, Carolyn M., 'What Is Feminist Pedagogy?', *Women's Studies Quarterly*, 21.3/4 (1993), 166–73
- Simons, Helen, 'The Paradox of Case Study', *Cambridge Journal of Education*, 26.2 (1996), 225–40
- Sincero, Sarah Mae, 'Explorable', *Social Learning Theory* <<https://explorable.com/social-learning-theory>> [accessed 27 March 2017]
- Singh, Penny, and Renitha Rampersad, 'Communication Challenges in a Multicultural Learning Environment', *Journal of Intercultural Communication*, 23 (2010), 1404–1634
- Slessor, Catherine, 'Architectural Education: A Call to Arms', *The Architectural Review, Education Issue*, 2012 <<http://www.architectural-review.com/view/editorial-view/architectural-education-a-call-to-arms/8636434.article>> [accessed 30 June 2014]
- Smith, Alison M., 'Research Methodology: A Step-by-Step Guide for Beginners', *Nurse Education in Practice*, 12.3 (2011), e25
- Smith, Linda Tuhiwai, 'Decolonising Methodologies', *Research and Indigenous Peoples*, 1999
- Smith, Mark, 'What Is Pedagogy?', 2012 <<http://infed.org/mobi/what-is-pedagogy/>> [accessed 17 February 2017]
- de Sousa Santos, Boaventura, *Epistemologies of the South: Justice against Epistemicide* (Routledge, 2015)
- Spalding, Bob, Steve Ferguson, Phil Garrigan, and Ron Stewart, 'How Effective Is Group Work in Enhancing Work-based Learning? An Evaluation of an Education Studies Course', *Journal of Further and Higher Education*, 23.1 (1999), 109–15
- Spivak, Gayatri Chakravorty, 'Can the Subaltern Speak?', *Can the Subaltern Speak? Reflections on the History of an Idea*, 1988, 21–78
- Stake, Jayne E., and Frances L. Hoffmann, 'Putting Feminist Pedagogy to the Test: The Experience of Women's Studies from Student and Teacher Perspectives', *Psychology of Women Quarterly*, 24.1 (2000), 30–38
- Stein, David, 'Situated Learning in Adult Education. ERIC Digest No. 195.', 1998

- Stevenson, Robert B., 'A Critical Pedagogy of Place and the Critical Place (s) of Pedagogy', *Environmental Education Research*, 14.3 (2008), 353–60
- Stone, D., S. Maxwell, and M. Keating, *Bridging Research and Policy: An International Workshop Funded by the UK Department for International Development. Warwick University, July 2001*
- Straus, Anselm, and Juliet Corbin, *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (Thousand Oaks, CA: Sage, 1998)
- 'Teaching and Social Justice: Integrating Multicultural And Feminist Theories In The Classroom | Carolyn Zerbe, Ph.D. Enns, Ada L. Sinacore | Download' <[https://book-ok.cc/book/972005/do8256](https://book.ok.cc/book/972005/do8256)> [accessed 24 May 2019]
- Thaman, Konai Helu, 'Decolonizing Pacific Studies: Indigenous Perspectives, Knowledge, and Wisdom in Higher Education', *The Contemporary Pacific*, 15.1 (2003), 1–17
- The Glossary of Education Reform, 'Critical Thinking', *The Glossary of Education Reform*, 2013 <<http://edglossary.org/critical-thinking/>> [accessed 2 March 2017]
- The Ministry of Budget and National Planning, 'Federal Republic of Nigeria Economic Recovery and Growth Plan 2017-2020', 2017
- The World Bank Group, 'Nigerian Economic Report', 2015
- Thorne, Sally, *Interpretive Description* (Walnut Creek: CA: Left Coast Press Inc, 2008), II
- Till, Jeremy, *Architecture Depends* (MIT press, 2009), LV
- , 'Contingent Theory: The Educator as Ironist', *Stoa*, 1 (1996), 66–79
- , 'How Will Architects Be Educated in 20 Years Time', *Building Futures Think Pieces: The Future of Architectural Education*, 2012 <<http://www.buildingfutures.org.uk/think/theme/2/2>> [accessed 24 July 2017]
- , 'Lost Judgement', *EAAE Prize*, 2005 (2003), 164–81
- , 'The Knowledges of Architecture', in *Proceedings of Architectural Education, New Perspectives*, (York University: Institute of Advanced Architectural Studies, 1997), pp. 107–113.
- Till, Jeremy, and Wigglesworth, Sarah, 'The Margins', in *Samuel Mockbee and the Rural Studio* (Birmingham, Alabama: Birmingham Museum of Art, 2003), pp. 66–68.
- Tracy, Sarah J., *Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact* (John Wiley & Sons, 2012)
- Trede, Franziska, and Celina McEwen, 'Critical Thinking for Future Practice: Learning to Question', in *The Palgrave Handbook of Critical Thinking in Higher Education* (Springer, 2015), pp. 457–74
- Tristan, Jose Maria, 'Henry Giroux: The Necessity of Critical Pedagogy in Dark Times', 2013 <<https://truthout.org/articles/a-critical-interview-with-henry-giroux/>> [accessed 18 June 2018]

- Tyagi, Ritu, 'Understanding Postcolonial Feminism in Relation with Postcolonial and Feminist Theories', *International Journal of Language and Linguistics*, 1.2 (2014), 45–50
- Uchendu, Victor Chikezie, *Education and Politics in Tropical Africa* (Conch Magazine Owerri, Nigeria, 1979)
- Ugochukwu, Iwuagwu Ben, and M. Iwuagwu Ben Chioma, 'Local Building Materials: Affordable Strategy for Housing the Urban Poor in Nigeria', *Procedia Engineering*, 118 (2015), 42–49
- Uji, Zanzan A., 'Beyond the Critique of the Curriculum of Architectural Education in Nigeria', in (Ed). Prof. U. O Nkwogu in *Architects and Architecture in Nigeria a Tribute to Prof. E.A Adeyemi* (Akure, Nigeria: Soft Design Computer Consultants, 2001)
- Ukanwa, Emma, 'Integrated Studio Method as a Sustainable Architectural Module: Procedures, Prospects, and Problems: Association of Architectural Educators in Nigeria', *Association of Architectural Educators in Nigeria (AARCHES)*, 3.1 (2004), 17–22
- Uma Narayan, and Sandra Harding, 'Decentering the Centre', in *Essence of Culture and a Sense of History: A Feminist Critique of Cultural Essentialism* (Bloomington: Indian University Press, 2000)
- 'Unsolicited Architecture', *Office for Unsolicited Architecture*, 2010
<<<http://issuu.com/archis/docs/unsolicitedarchitecture>>> [accessed 1 November 2017]
- Unwin, Simon, *Analysing Architecture* (Routledge, 2003)
- Urban-Act: Practices, Groups, Networks, Workspaces, Organisations, Tools, Methods, Projets, Data & Texts* ([Paris]: Atelier d'architecture Autogéré, 2007)
- Vanderstoep, Scott W., and Deidre D. Johnson, *Research Methods for Everyday Life: Blending Qualitative and Quantitative Approaches* (John Wiley & Sons, 2009), xxxii
- Vandeyar, Saloshna, 'Why Decolonising the South African University Curriculum Will Fail', *Teaching in Higher Education*, 2019, 1–14
- Vodanovic, Lucia, 'Obsolescence and Exchange in Cedric Price's Dispensable Museum', *Invisible Culture: An Electronic Journal for Visual Culture*, 11, 2007
- Vygotsky, Lev S., *Mind in Society: The Development of Higher Mental Process* (Cambridge, MA: Harvard University Press, 1978)
- Wa Thiong'o, Ngugi, 'Moving the Centre', *The Struggle for Cultural Freedoms*, 1993
- Wadsworth, Barry J., *Piaget's Theory of Cognitive and Affective Development: Foundations of Constructivism* (Longman Publishing, 1996)
- Walsham, Geoff, 'Interpretive Case Studies in IS Research: Nature and Method', *European Journal of Information Systems*, 4.2 (1995), 74
- Webb, Lynne M., Myria W. Allen, and Kandi L. Walker, 'Feminist Pedagogy: Identifying Basic Principles', *Academic Exchange Quarterly*, 6.1 (2002), 67–72
- Webster, Helena, 'Architectural Education after Schön: Cracks, Blurs, Boundaries and Beyond',

- Journal for Education in the Built Environment*, 3.2 (2008), 63–74
- , 'Facilitating Critically Reflective Learning: Excavating the Role of the Design Tutor in Architectural Education', *Art, Design & Communication in Higher Education*, 2.3 (2004), 101–11
- , 'The Analytics of Power: Re-Presenting the Design Jury', *Journal of Architectural Education*, 60.3 (2007), 21–27
- , 'The Design Diary: Promoting Reflective Practice in the Design Studio', in *Proceedings of Architectural Education Exchange Conference*. Retrieved from [Http://Cebe.Cf.Ac.Uk/Aee/Sessions/Dis3a.Html](http://Cebe.Cf.Ac.Uk/Aee/Sessions/Dis3a.Html), 2001
- Webster, Leonard, and Patricie Mertova, *Using Narrative Inquiry as a Research Method: An Introduction to Using Critical Event Narrative Analysis in Research on Learning and Teaching* (Routledge, 2007)
- Weedon, Chris, 'Feminist Practice & Poststructuralist Theory', 1997
- Weiler, Kathleen, 'Freire and a Feminist Pedagogy of Difference', *Harvard Educational Review*, 61.4 (1991), 449–75
- Weiner, Frank, 'Five Critical Horizons for Architectural Educators in an Age of Distraction', *EAAE PRIZE 2003-2005*, 2005, 21–46
- Wenger, Etienne., 'Communities of Practice', 2009, 57
- Wenger, Etienne, *Communities of Practice: Learning, Meaning, and Identity* (Cambridge university press, 1998)
- Willenbrock, Laura L., 'An Undergraduate Voice in Architectural Education', *Voices in Architectural Education: Cultural Politics and Pedagogy*. New York: Bergin and Garvey, 106 (1991)
- , 'An Undergraduate Voice in Architectural Education', *Voices in Architectural Education: Cultural Politics and Pedagogy*. New York: Bergin and Garvey, 106 (1991)
- , 'An Undergraduate Voice in Architectural Education', *Voices in Architectural Education: Cultural Politics and Pedagogy*. New York: Bergin and Garvey, 106 (1991)
- Williams, Herman, 'The Importance of Learning Theories', 2012
<<https://instructionaltech.quora.com/>> [accessed 25 April 2017]
- Williamson, Kirsty, and Graeme Johanson, *Research Methods: Information, Systems, and Contexts* (Chandos Publishing, 2017)
- Willimack, Diane K., Lars Lyberg, Jean Martin, Lilli Japoc, and Patricia Whitridge, 'Evolution and Adaptation of Questionnaire Development, Evaluation, and Testing Methods for Establishment Surveys', *Methods for Testing and Evaluating Survey Questionnaires*, 2004, 385–407

- Willis, Jerry W., and Muktha Jost, *Foundations of Qualitative Research: Interpretive and Critical Approaches* (Sage, 2007)
- Wilson, Arthur L., 'The Promise of Situated Cognition', *New Directions for Adult and Continuing Education*, 1993.57 (1993), 71–79
- Wink, Joan, *Critical Pedagogy: Notes from the Real World* (Pearson/Allyn & Bacon New York, NY, 2005)
- Winkler, Astrid, 'Sheffield City Report', 2007
- Woodside, Arch G., *Case Study Research: Theory, Methods and Practice* (Emerald Group Publishing, 2010)
- Woolman, David C., 'Educational Reconstruction and Post-Colonial Curriculum Development: A Comparative Study of Four African Countries', *International Education Journal*, 2.5 (2001), 27–46
- Yin, Robert K., *Case Study Methods* (Washington DC, USA, Cosmo Corporation, 2004)
<<http://www.cosmoscorp.com/docs/aeradraft.pdf>> [accessed 5 December 2017]
- , *Case Study Research and Applications: Design and Methods* (Sage publications, 2018)
- , 'Case Study Research: Design and Methods. SAGE Publications', *Thousand Oaks*, 2009
- Young, Robert, 'Colonialism and the Desiring Machine', *Postcolonial Discourses: An Anthology*, 2001, 73–99
- Zinn, Maxine Baca, and Bonnie Thornton Dill, 'Theorizing Difference from Multiracial Feminism', *Feminist Studies*, 22.2 (1996), 321–31