

ARUP

Global Research Challenge 2013

Transit oriented development
in the Global South:
Leading examples, case studies
and a discourse on sustainable
features



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Developing the rationale

The Arup track record in Transit Oriented Developments in the developed economies is significant in terms of project complexity and range of project engagement. This experience is further enhanced by the insight gained from the several geographic and context specific locations that each of these projects has occurred in. The mechanisms of delivery of these developments are well documented and cover a range of financial vehicles and instruments for delivery. Historically, these vehicles were based on tried and tested norms of behaviour and delivery. This is known territory for us, and we are well versed and knowledgeable as players in the market from transaction advice through to design and delivery. Yet, the financial crisis changed all those readily accessible financial norms and a new series of questions arose.

The Global South, has not historically benefited from readily available financial structures and sources and access to funding. Innovative techniques and relationships between government and the private sector have led to significant innovation in financial structures and co-delivery of TOD's in the Global South. This has been undertaken in the midst of unprecedented growth in the informal sectors in urban structures and has resulted in a rich seam of success in delivery of TOD's. It is of significant interest and indeed opportunity for Arup, to research, discover and learn from the success stories in the Global South economies and apply these as informants to shape our new developed economies reality.

Aim

The aim of the project is to research and identify new master planning approaches to Transit Orientated Development (TOD) in the Global South. The project will draw from the extensive global knowledge that exists within the fields of practice and academic discourse. Comparative analysis will be undertaken of leading examples, case studies, trends and theory to examine the enabling and inhibiting powers at play within the development and implementation of TOD in the Global South with projects identified in; Caracas (Venezuela), Baranquilla (Columbia), Johannesburg and Philippi (South Africa), Nairobi (Kenya) and Mumbai (India).

The core focus is to investigate how Transit Orientated Developments are delivered in cities where parastatal systems are failing and the role the private sector can play within this context.

Two core themes underpin the research:

- The first is the topic of governance in both political and institutional structures, with the aim of establishing the common characteristics at play.
- The second concerns the climate and requirements for commercial private sector investment in enabling successful outcomes to be achieved.

An inter-disciplinary core team has been identified (UK-SA-Mexico). The team will be supported by specialist advisors in planning policy, PPP, governance, socio-economics development and will during the process engage with actors party to TOD such as developers, investors, operators, retailers, politicians.

The research aims to understand the contradictory forces at play and identify the critical success factors that can inform TOD strategy, design and development in emerging economies of the Global South.

The engagement process and workshops will be fully documented and the resulting outcome will be distilled into a research report as well as a comparative reader published as a special periodical edition with the aim to inform Arup's design approach in the future and disseminate the latest thinking to a broader audience to unlock future TOD opportunities in the Global South.

Overarching Methodology

The overarching approach is based on focussed trans-national research undertaken by a project core team, open forums of engagement by means of Research Labs, expertise provided by the partnering institutions and non-core collaborators. The methodology is based on collaboration in order to maximise the reach and depth of research. The overall process will be project managed by Arup in order to bring all parties together with a joined focus and as a result reduce the associated project risk.

An inter-disciplinary core team has been established which will collaborate and develop the research project under Arup guidance. The trans-national team consists out of professionals and academics from South Africa, Mexico and the UK with expert knowledge related to urban planning and Transit Orientated Development within emerging economies. A digital research interface will be set up to facilitate collaboration between the various entities and geographies.

The core team will be supported by specialist expertise provided by the organisations they represent which include the African Centre of Cities (ACC) and the University of Cape Town (UCT) in South Africa, the Educación Continua and the Universidad Iberoamericana in Mexico and Arup, predominantly from the UK. The team will further liaise with non-core collaborators, on an as required basis, for input related to a specific context or problematic posed by the case studies.

The programme will be further substantiated by two focussed Research Labs which aim to bring academics, practitioners, public and private sector together to test the initial research and observations established by the core team. Consecutive forums will be held in Mexico and Cape Town and aim to capture the multiple dimensions and complex interests of the various actors within the TOD context regionally and within the broader context of the Global South. The engagement process and insights gained will be documented and will inform directly the undertaken research and further refinement of the outcomes in terms of theory and practice.

Dissemination

Dissemination of knowledge forms an integrated component of the research programme with the aim to share outcomes within Arup as well as a broader public audience. The objective is to assimilate the lessons learned within Arup's broader practice, to establish relationships on the basis of knowledge transfer and ultimately unlock opportunities for TOD development in the Global South on the basis of advocacy.

Within Arup knowledge sharing will take place throughout the research process and includes:

- The Research Lab workshops will be documented and shared by means of the Skills Network (Cities, Urban design and master planning, Infrastructure).
- The outcomes will be presented at a Final Research Presentation held at Arup for Arup staff and invited external guests.
- The presentation will be pod-cast for a broader Arup audience.
- A synthesis article will be published on the Arup website.
- A final research report.

It is further proposed to distribute the research output as a special periodical edition, similar to the special Arup Sustainability edition of GA. The proposed magazine represents a recognised urban periodical, which focuses on the discourse of contemporary urbanism in the Global South. Cityscapes is an on-going initiative by the African Centre for Cities in South Africa. It is widely distributed in various parts of the world including India, Brazil and the UK. The special edition will accompany the March 2014 issue, which for the first time will be distributed in Portuguese in addition to the English version. The profile of the periodical is included within the proposal for further reference.

Strategic Partners

The research project is based on a collaborative research relationship between Arup and the African Centre for Cities (ACC) which articulates the Global South from an African context and the Educación Continua at the Universidad Iberoamericana which provides the Latin-American perspective. Both research partners have been selected on the basis of their inter-disciplinary approach, extensive local and global network and its critical role in evaluating new approaches and discourse within a Global South context.

African Centre for Cities (ACC)

The ACC seeks to facilitate critical urban research and policy discourses for the promotion of vibrant, democratic and sustainable urban development in the global South from an African perspective.

Background

In mid 2007, University of Cape Town (UCT) Signature Theme funding was awarded to the Cities in Africa Project, which was a collaborative venture between the Faculties of Engineering and the Built Environment (EBE), Science and Humanities. The initiative is located within the EBE Faculty.

The Signature Theme builds on an interdisciplinary network of academics across these three faculties, which emerged during 2005 and 2006, and which was supported in 2006 by EBE funding. This network in turn, had emerged as a result of an initiative by the Ove Arup Foundation, which had committed funds towards

the establishment of an interdisciplinary masters programme in EBE (Urban Infrastructure Design and Management) in 2005, on the understanding that faculty staff would raise further funding for a related research initiative. In 2007, the proposed new director of the Theme was also granted an NRF Research Chair in Urban Policy, allowing the alignment of these two initiatives.

Professor Edgar Pieterse was appointed to lead the Theme and take up the Chair, and he took up office in August 2007. Since then, there has been a process to rename the initiative as the African Centre for Cities to denote the focus on urban research in the global South but from an African perspective.

The ACC is a response to the growing recognition world-wide of the importance of cities, and particularly cities in the developing world. In South Africa this is reflected in the increasingly urban emphasis in policy documents at both national and provincial level. The sense is one of impending crisis, with the realisation that rapid urbanisation also raises issues of adequate food supply, affordable shelter, employment opportunities, water and waste management, public transportation, crime and disease, and environmental degradation and climate change. These challenges intertwine with critical social processes such as exclusion and conflict, which require effective socio-political management institutions and processes. Achieving well governed and sustainable cities is becoming increasingly important to the future health of the planet. And yet most policy 'solutions' continue to be generated by the large aid and development agencies

of the global North, with a generally poor track-record of successful interventions in the very different context of Africa and the global South.

The central objective of the African Centre for Cities is to provide a base from which critique and alternatives in relation to urban issues can be launched. In Africa, South Africa and across UCT, urban-related research is highly fragmented. The aims of the Centre are therefore two-fold to partner closely with policy-making centres in the public sector in South Africa (national, provincial, local) and subsequently more widely to provide an alternative perspective on dealing with critical urban issues; secondly to provide an intellectual base and home for interdisciplinary, urban-related research at UCT, from which relations can be established with selected international funders and think-tanks.

Reference: <http://africancentreforcities.net>

Dirección Educación Continua, Universidad Iberoamericana, Mexico

Universidad Iberoamericana (IBERO) is one of the country's private leading academic and research institutions. It offers students a unique educational experience through its community of faculty, alumni and professionals dedicated to real-world learning.

Established nearly 70 years ago, Universidad Iberoamericana (IBERO) is one of the nation's oldest Catholic universities and the oldest Jesuit university.

The Dirección Educación Continua (DEC) provides for continuing education within the university. Its mission is to design and deliver sustainable education programs with academic excellence, which develop the integral formation of persons in the field of human and professional, to respond to the current needs of the society and its environment.

It aims to be the leader in continuing education in Mexico with international recognition, forming fully competitive and competent people globally, with a focus on the well-being of society. It promotes intellectual honesty, the search for truth, the promotion of interdisciplinary dialogue and, above all, the integral formation of those who learn or teach in their classrooms.

The management of continuing education is highly committed to the professional and personal development of all students, offering various possibilities for updating and learning according to the needs of each individual.

<http://www.uia.mx>

Links to prior work at Arup

The quantum of projects that Arup has undertaken in Transit Oriented Developments in the developed economies is significant, and well documented. Prior work in the sector includes global examples such as Hong Kong and London.

Arup experts in the field include Arup Interchange Design under the leadership of Leszek Dobrovolsky, the masterplanning / planning leaders under the leadership of Malcolm Smith, and cover the leaders in the UK (Einstein), Latin America (Gutierrez), Europe (Tejada) and Asia (Lau). Expertise in site infrastructure also exists as centre of excellence across a range of locations, and in the UK, Mark Bidgood leads the skill area in this regard. Development economics under the leadership of Peter Gist is also a skill area that will be referenced. Mark Bidgood and Malcolm Smith, have agreed to be Peer Reviewers of this proposal and body of work.

Prior work in the Global South for Arup are in the early stages of skill development, however both the proposed Project Leader / Manager and also Project Director of this proposal have significant experience in the field in leadership roles in Sub-Saharan Africa and also now in Latin America.

Three key example projects include :


Passenger Rail Authority of South Africa (PRASA) : Strategic advisor to PRASA Board on TOD and maximising revenue from non-core assets (2008 – 2012). This

involved strategic development of a financially viable approach, design and masterplanning and the identification of 24 locations ripe for TOD development.

Park Station (Johannesburg) masterplan and development : Multi-disciplinary design and planning leader (2010 – current) for the redevelopment of Africa's busiest transport hub and the surrounding 54 Hectare city centre site.

The Western Cape Transport Precincts Initiative: Masterplanning lead for 12 TOD sites in South Africa, with the methodology and approaches set out and published for implementation.

In Latin America for example, our work with Metro de Santiago also covers advice on TOD and also the triggers involved to leverage in active urban regeneration and redevelopment.



Links to external work and potential collaborators

The recognised external experts in the field are located at; University College (Development Planning Unit), London; the African Centre for Cities at the University of Cape Town, Sao Paulo University and also the Indian Institute for Human Settlements.

Leading researchers at all of these Universities will contribute to the research under the agreement that we have reached under the auspices of the ACC at the University of Cape Town.

The Latin American component is covered under agreement reached with 2 active research institutions being; Studio of Architecture Research (SOFAR) and further Educación Continua (IBERO).

This is a significant opportunity for Arup to actively collaborate in the field and engage at the cutting edge of discourse and research, in terms of producing a technical document as an outcome of the research.

As a vehicle to then effectively communicate this research to a wider audience, a crucial part of the output is the public dissemination of the work via a specially produced and co-Arup badged publication of Cityscapes, a journal with the production infrastructure and track record of quality and delivery, and a partner collaborator. This is an ambitious project, yet with the already committed partners, researchers, writers and thinkers onboard, it bears all the hallmarks of success for Arup.

Team

The project is based on comparative case research between Arup and academic institutions located in South Africa and Mexico with the aim to generate enriching debate and cross-border comparison as a means of contributing to a 'global learning process' and knowledge production in understanding Transit Orientated Development in the Global South.

The network configuration and the hand-picked collaborators reflect this underlying approach. The interacting components are outlined in detail below.

The Arup contribution

Core activities:

Overall project champion, project coordination, strategic framing, practice based analysis and research, global technical expertise, specialist expertise in TOD development and implementation, access to live case-studies.

Research and Collaboration:

Leszek Dobrovolsky: Project Director, researcher
Caroline Sohie: Project Manager, researcher
Arup Americas: Master planning or Development Economist Contributor
Arup UKMEA: Master planning or Development Economist Contributor

Peer reviewers:

Chris Luebke (Innovation/strategy), Malcolm Smith (Planning), Mark Bidgood (Infrastructure)

The ACC Contribution (Africa/ India Research)

Core activities:

Strategic framing, theory based analysis and research, Global South expertise, specialist knowledge in urban trends and processes, governance and institutional restructuring, access to ACC research and African case-studies, knowledge dissemination by means of Cityscapes, access to research network, coordination of South African Research Lab.

Research and Collaboration:

Edgar Pieterse: Coordinator and liaison for Africa/ India geography, principal researcher, supported by local researchers and non-core collaborators

The Educación Continua (IBERO) Contribution (Latin America Research)

Core activities:

Strategic framing, theory based analysis and research, Latin American expertise, liaison with public and private sector, access to IBERO network, coordination Latin American Research Lab.

Research and Collaboration:

Juan Carlos Sánchez Tappan: Coordinator and liaison for Latin American geography, principal researcher, supported by local researchers and non-core collaborators



Publication entity - Cityscapes

Core activities:

Publication brief development, Commissioning of contributors, coordination of execution of briefs (Writing/ photography), editing, design & layout, printing, launch, distribution.

Research and Collaboration:

Tau Tavengwa: Publisher, Co-Editor & Creative Director

Sean O'Toole: Co-Editor

Edgar Pieterse: Consulting Editor

Caroline Sohie: Consulting Editor

The Think-Tank

Core activities:

Establish strategic direction of the research, conceptual and thought leadership, internal quality monitoring, identification of key outcomes, integrated coordination of activities, alignment of outcome with project gates.

Research and Collaboration:

Core group consisting of the coordinator/ principal research lead of each entity.

Methodology

The project process is structured according to 5 principle streams of activity:

1. Conceptual framing (01/09/13 – 30/09/13)

Mobilisation of teams, inception meeting

The 3 research parties collate base material including references to case studies, discourse and benchmark examples.

Based on initial observations the problem statement is framed and a research focus statement is created and a joined research activities are identified.

2. Preliminary research stage (01/10/13 – 31/10/13)

Analysis and research is undertaken by the 3 parties to unpack the various actors, processes and contradictory powers at play.

Key outcomes are assembled and jointly assessed.

Core themes, overarching narrative and basis of argumentation is developed.

3. Research Lab engagement (01/11/13-30/11/13)

A research Lab workshop is organised in Cape Town and Mexico

A platform of consultation and engagement is created, assembling researchers, collaborators, public sector, private sector, practitioners and academics.

The preliminary research outcomes are tested and workshopped , reformulated and refined.

Outcomes are fully documented.

4. Consolidation of outcomes (01/12/13- 15/01/14)

The Research Lab outcome is jointly assessed, structured and way forward agreed.

The research outcomes are further developed and consolidated.

Concluding lessons are to be consolidated.

Critical success factors for a TOD strategy, design and implementation are distilled.

5. Dissemination stage (16/01/14- 31/03/14)

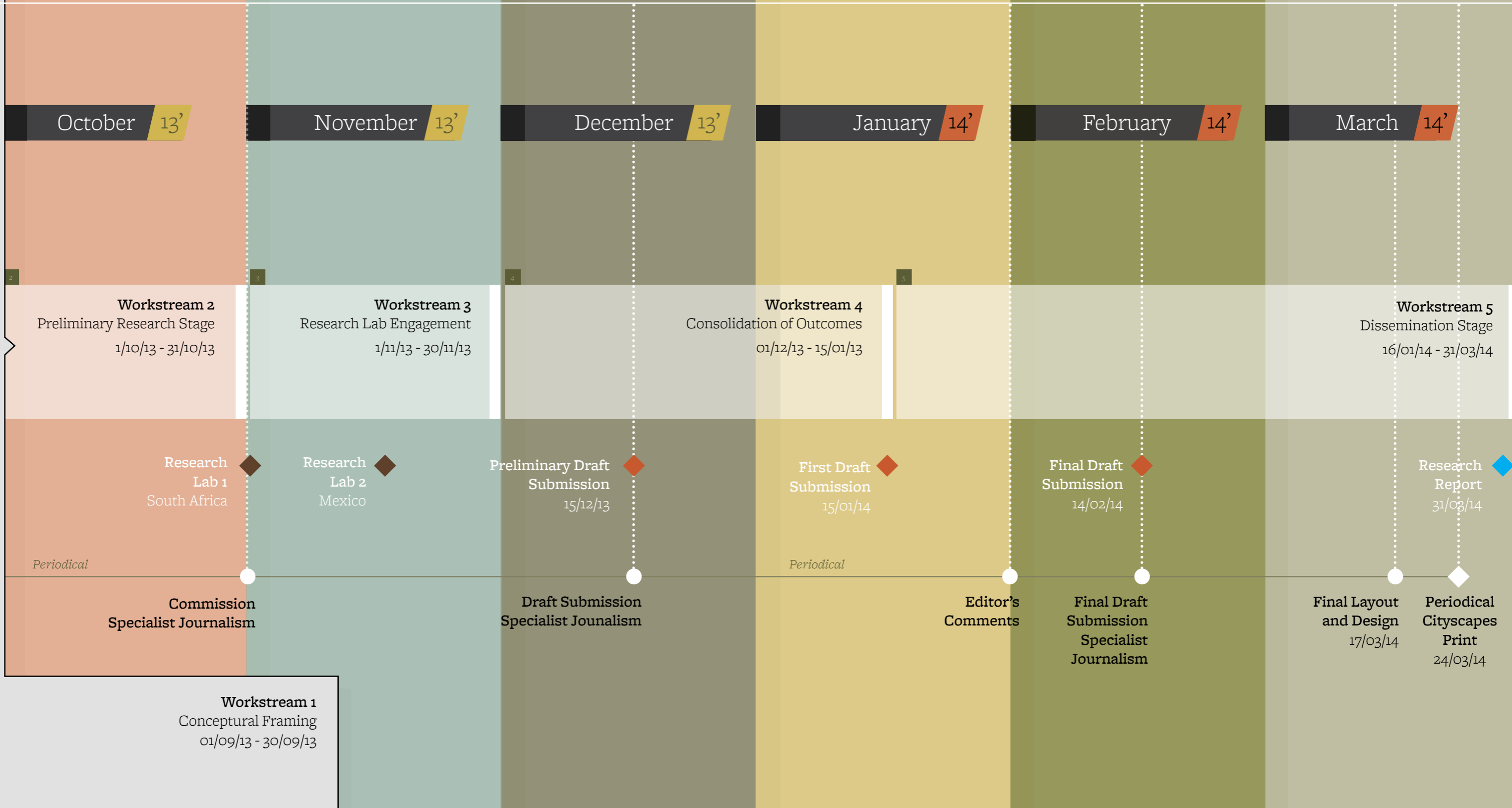
Information is distilled, interpreted and shaped for knowledge dissemination.

Research report is produced.

Publication is produced.

Final distribution of publication, associated presentations and launch events.

Project Timeline



Workstream 1
 Conceptual Framing
 01/09/13 - 30/09/13

Budgeting

TRANSIT ORIENTED DEVELOPMENTS IN THE GLOBAL SOUTH - RESEARCH CHALLENGE							
Commencement date	Gateway	Gateway Payment	Phase	ZAR	GBP	Item / Contributors	Activity / Description
02 September 2013	27 September 2013	Full brief definition	Initial refinement of research focus	8,000.00	571.20		Review of Project objectives, confirmation
				5,000.00	357.00		Mobilisation / IT / systems
01 October 2013	25 October 2013	Flight bookings	Research Laboratory 1	24,000.00	1,713.60		3 Flights for collaborators
				10,000.00	714.00		3 Accommodation costs
				10,000	714.00		Expenses / Travel
02 December 2013	20 December 2013	Flight bookings	Research Laboratory 2	32,000.00	2,284.80		4 Flight for collaborators
				10,000.00	714.00		4 Accommodation costs
				10,000.00	714.00		Expenses / Travel
01 October 2013	24 March 2014	Completion of research	Research resources : ACC	30,000.00	2,142.00		1 Lead Researcher ACC : Edgar Pieterse
				10,000.00	714.00		1 Collaborator 1
				10,000.00	714.00		1 Collaborator 2
01 October 2013	24 March 2014	Completion of research	Research resources : Educacion Continua	30,000.00	2,142.00		1 Lead Researcher : Juan Carlos Sanches Tappan
				10,000.00	714.00		1 Collaborator 1
				10,000.00	714.00		1 Collaborator 2
01 October 2013	24 March 2014	Completion of research	Research and Strategy resources : Arup	14,000.00	999.60		1 Project Director
				25,000.00	1,785.00		1 Project Leader
				10,000.00	714.00		1 Collaborator 1
				10,000.00	714.00		1 Collaborator 2
06 January 2014	14 February 2014	Completion of research	Technical delivery : Report production	8,000.00	571.20		1 Compilation of produced papers
				5,000.00	357.00		1 Layout and production
04 November 2013	24 March 2014	Publication of Journal	Public dissemination : Cityscapes Journal production	20,000.00	1,428.00		4 Text articles and papers (4000 words)
				45,000.00	3,213.00		9 Opinion provocations (1200 words)
				7,500.00	535.50		3 Photographic responses
				20,000.00	1,428.00		Graphic production and design
				20,000.00	1,428.00		Editor and direction
				35,000.00	2,499.00		Printing
24 March 2014	30 April 2014	Launch of Journal	Cityscapes Arup : Special edition launch	4,500.00	321.30		Reception
				324,000.00	30,916.20		

Budgeting Proposal subject to detailed finalisation of scope.

Contributors Arup



Leszek Dobrovolsky

Leszek has extensive international experience in the leadership, planning and design of major transport and development projects in both public and private sectors. His key skills in the development of planning strategies have been developed in the leadership of several commissions. Testing these strategies in terms of transport and planning criteria has been achieved through rigorous analysis of architectural and physical development implications. Other key skills lie in the coordination of architectural production and the development of station planning briefs and manuals used in the design, development and tender or planning processes. The range and depth of transportation projects covers the full breadth from feasibility through to implementation. Leszek leads the Arup interchange design, transport architecture and planning unit and our accessible environments team from London.



Caroline Sohie

Caroline has attained wide-ranging international experience across a wide range of architectural projects including buildings and infrastructure related to transportation. Her skills further expand into the realm of strategy and urban planning with specialist knowledge in development opportunities around transport nodes. She demonstrates a focused creative attitude towards the design of transport infrastructure and the catalytic nature of transport as an enabler towards socio-economic upliftment and urban regeneration. Caroline led the Transport Architecture and Planning capability in South Africa till her transfer to the UK office in September 2012. She is currently undertaking a Master Programme in Urban Infrastructure Design and Management at the African Centre for Cities (UCT) which focuses on sustainable development in the Global South.



Mark Bidgood

Mark specializes in civil engineering for property development - everything except the buildings. Also engineering masterplanning and design of large mixed-use developments, particularly for regeneration of urban brownfield sites. He is responsible for Site Development activities in the London Arup Office, principally covering London and South-East England, but also active in Europe, the Middle East, and East Asia. Mark is an Arup Trustee.



Malcolm Smith

Malcolm is an Arup Fellow in the field of masterplanning and urban design. He was the founding design director for Arup Urban Design, London. In this role he undertakes a wide variety of projects that address the issues of sustainable urbanism around the world. He is currently directing the design on a number of major urban design commissions including North Tottenham Regeneration Strategy; National Food Resilience Programmes; Northstowe, the new town north of Cambridge; NOMA manchester for the Cooperative Group; Bethlehem Development Initiative; and Preston Beach new Town in Australia. Key projects he has previously worked on include the Dongtan Eco-city project in Shanghai, a 8400ha masterplan adjacent sensitive ecological habitats, on an island in the Yantzee river, Stratford City, the new metropolitan centre for London incorporating the London Olympic village, Pinewoods studios, and BSkyB broadcasting campus, UK. He is a fellow of the Royal Society of Arts. He has served as a design reviewer for the Commission of Architecture and the Built Environment. He has been a visiting teacher at Yale University. He is by the City of Amsterdam as Lead Designer for Zuidas, the new commercial hub of Amsterdam.



Chris Luebke

Educated as a geologist, structural engineer, and architect, Chris Luebke currently leads the Global Foresight & Innovation team at Arup, a global firm of engineering and design consultants. He has served as a faculty member of the Departments of Architecture at the Swiss Federal Institute of Technology, University of Oregon, the Chinese University of Hong Kong, and Massachusetts Institute of Technology. He was named a Senior Fellow of the Design Futures Council, in 2004, and was listed as one of the ten future speculators and shapers "Who will change the Way we live", in Wallpaper Magazine (2002). Luebke is currently working with some of the world's leading companies to develop future scenarios to better understand the opportunities created by future change in the built environment. He speaks on the issues of sustainability and thoughtful design, and applies the lessons learned in the design of the built environment to business. His keynotes, workshops, and strategy sessions are created for executives seeking better design sensibility for their products, services, and processes. Through his unique user-centric methods, Luebke helps clients better understand the needs and desires of consumers, customers, and citizens.

Contributors Africa



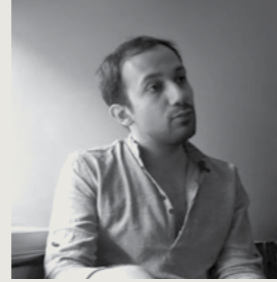
Edgar Pieterse
Cape Town

Professor Edgar Pieterse is holder of the NRF South African Research Chair in Urban Policy and directs the African Centre for Cities at the University of Cape Town. His books include *City Futures: Confronting the Crisis of Urban Development* (Zed, 2008); *Counter Currents* (Jacana, 2010) and *Rogue Urbanism* (Jacana/ACC, 2013). He holds a PhD from London School of Economics, an MA in Development Studies from the Institute of Social Studies (The Hague, The Netherlands) and BA-Honours from the University of the Western Cape. Review, Eye, ID and Kyoto Journal among other publications.



Tau Tavengwa
Cape Town

Tau Tavengwa is a designer/editor and project co-ordinator attached to the African Centre for Cities at the University of Cape Town. He has previously worked as a designer in the architectural field and as creative director / senior interpretation designer on the Maropeng (Cradle of Mankind) and De Beers' Big Hole Museum projects. He is the former creative director of Art South Africa magazine (2006-09) and founding editor of the quarterly photographic magazine *Snapped* (2008). His most recent publishing project with the ACC is *Rogue Urbanism* (ACC/Jacana, 2013), edited by Edgar Pieterse and AbdouMaliq Simone.



Gautam Bhan
Delhi

Dr. Gautam Bhan is a Senior Consultant for Curriculum Development and Policy and Advisory Services at the Indian Institute for Human Settlements - India's first prospective National University for Research and Innovation addressing the challenges of urbanisation. Bhan is co-Principal Investigator of "Re-framing Urban Inclusion," a three-year research project that explores new frameworks in thinking about practices and conceptions of more egalitarian cities in India. He is the co-author of *Swept off the Map: Surviving Eviction and Resettlement in Delhi* (Yoda Press: 2006) as well as several journal articles, including "This is not the City I once Knew: Evictions, the urban poor, and the right to the city in millennial Delhi" (*Environment & Urbanisation*). He is an active part of urban social movements as well as a frequent columnist and writer in diverse media.



Roger Behrens
Cape Town

Roger Behrens is an Associate Professor in the Department of Civil Engineering (University of Cape Town), Director of the Centre for Transport Studies (CfTS), and Director of the African Centre of Excellence for Studies in Public and Non-motorised Transport (ACET). Master Degree in City and Regional Planning (with distinction) from UCT in 1991 and with a PhD degree in 2002. He has 20 years of experience in research and in the management of commissioned research projects. His core research and consultancy experience is in travel surveys and travel behaviour, site layout planning and neighbourhood movement networks, growth management, low-income housing and infrastructure provision.



Gordon Pirie
Johannesburg

Dr Gordon has studied, taught and researched as a geographer at universities in South Africa, the USA and the UK. In his principal research field of transportation and travel he has published on racialised mobility (and resistance to it) before, during and after apartheid. His papers on the creation of South African urban race-spaces and dislocated lives have used a variety of approaches to examine housing, health, mobility, renewal and law, as well as the injury and rage conveyed in discourse and artistic representation. Other publications include conceptual studies, inquiry into South Africa's de- and re-internationalisation, migrant labour transport, and two research monographs on the geo-politics and social history of British imperial aviation. Gordon edits the *Journal of Transport History*.

Contributors Latin America



Juan Carlos Sanchez Tappan

Mexican/Spanish architect, writer and educator based in Mexico City. Partner Director of the Mexico-Barcelona practice Studio of Architecture and Research, SOFAR, with experience in architecture, interior architecture, landscape design, urban planning, temporary installations and theory and criticism.



Jose Luis Cortes Delgado

José Luis currently holds the position of Director at the Continuing Education at the University Iberoamericana. As an architect he holds a Master of Urban and Regional Planning, Urban Design and Housing Settlements. He became a Master of Urban Planning at the Metropolitan Autonomous University and later on a Master of Urban Planning at the Universidad Iberoamericana, where he also served also as Director of the School of Architecture for 7 years. Since 2007 he is member of the University Senate at the Universidad Iberoamericana. In government he performs a role as Technical Coordinator of the Specialization of Government and Regional Metropolitan Administration and the INAP over 10 years. He has published various books on urban systems, planning and housing and is a guest teacher at various universities and institutions abroad including in Sweden, India and Japan.



Luis de Andrade Villafranca

Luis is Deputy Director of Continuing Education at the University Iberoamericana. He has a Master in Architecture from Harvard University, with specialisation in Real Estate Development and Computer Aided Design. He worked at IBERO between 1981-2012 as a professor, served as coordinator of the Bachelor of Architecture and became responsible for Liaison and Academic Excellence, Department of Architecture. Luis was awarded the Medal "University Merit" for his academic career at the Universidad Iberoamericana in 2009. Luis worked as Director of Architectural Digest Magazine and was Director of the College of Architects of Mexico. He participated in numerous international symposiums and has been active at various universities including Harvard University, Cambridge, Berkeley, San Francisco, California College of Arts, San Francisco, University of the Andes, Colombia, Universidad Javeriana, Guatemala.



Juan Filipe Ordonez Cervantes

Architect with experience of over 35 years in Urban Regional Planning, has produced studies of national, regional, state, municipal, town centers including both partial and sectoral land use planning, housing, and mobility and sustainable urban development .



Maria Teresa Diniz *Sao Paolo*

An architect and urban planner Maria Teresa Diniz is the executive coordinator of USP Cidades, a Center for research, development and dissemination of innovative solutions for urban management in Brazil. She holds a master degree in Geography from Université Panthéon-Sorbonne. She has coordinated the Design Team at the São Paulo Municipal Housing Secretariat, leading a team of experts who have developed the design guidelines for slum upgrading and social housing projects. She has also occupied the position of Coordinator of Paraisópolis Slum Upgrading and Land-tenure Regularization Program.



Contributors Journalism



Sean O'Toole

Cape Town

Sean O'Toole is a journalist and author based in Cape Town. He has written extensively on Arts and culture for various international magazines and has become a respected commentator on urban culture and contemporary art on the continent. O'Toole has recently carried out a series on transport oriented development around Ekurhuleni in Johannesburg and is co-editor of Cityscapes magazine. He has written for the Financial Mail; BBC Focus on Africa, Colors, Creative Review, Eye, ID and Kyoto Journal among other publications.



Ore Disu

Lagos

An analyst and writer based in Lagos, Ore Disu has written extensively about various aspects of rapidly urbanising Lagos, from the city's food culture to its transport system. Disu holds a Masters degree in urban policy, planning and development practice from UCL and a BA in architecture from Cambridge University.



Julie Ruvolo

Rio de Janeiro

Ruvolo is a writer and editor living in Rio de Janeiro. Her writing about the city has ranged from culture, governance and the various large infrastructure investments currently going on in Rio. She edits Riochromatic, and has written for the Daily Beast, Forbes and Newsweek among other publications.



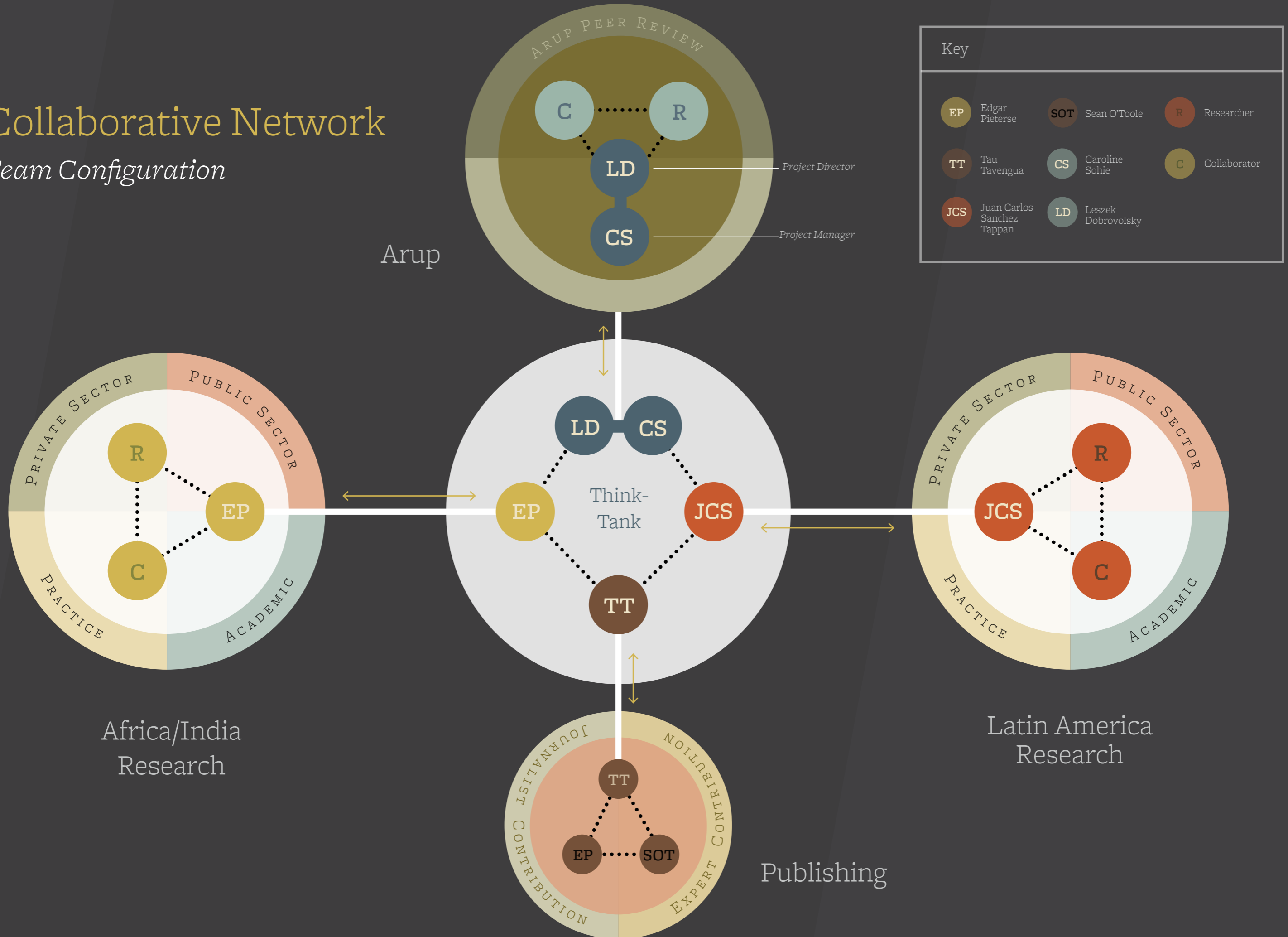
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Delhi

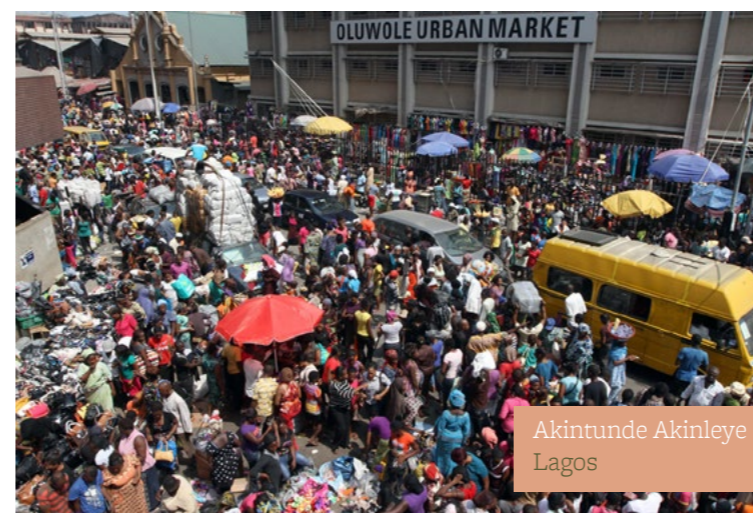
Journalist with degree from Pennsylvania State University and a Master's in international relations from Columbia University's School of International and Public Affairs. By preference, he gravitates towards the long-form, narrative version of journalism - waning today, but still rewarding and revealing to both writers and readers. His longer reported articles occupy the confluence of politics, culture and history, examining the impact of these forces upon life and society. He has written for The New York Times, Mint, Newsweek, the Wall Street Journal and Foreign Policy and Caravan magazine among other publications.

Collaborative Network

Team Configuration



Contributors Photography



Cityscape Periodical

In the next 2 decades, the population of Africans living in cities will double. This will mark one of the biggest transitions in the history of the continent, which is currently struggling to cope with the 400 million people living in its cities. This growth will just be the beginning, marking a shift of more than 2.5 billion people across the global south from rural to urban citizenship by 2060.

The African Centre for Cities (ACC) is an interdisciplinary urban research centre at UCT established in 2007. Its primary focus is on applied research to address complex, intractable urban problems and challenges, and is undertaken in a manner that advances novel ways of thinking about and understanding urbanism across the global south, yet is rooted in the realities of African urban spaces. The purpose of the ACC is to facilitate critical urban research and policy discourse for the promotion of vibrant, democratic and sustainable urban development in the global south, from an African perspective.

Experience has demonstrated that there is a pressing need to translate academic discourse and insights into genres and formats that might allow for wider engagement, take-up and, potentially, impact. To this end, a high-quality publishing initiative titled Cityscapes was launched in September 2011. Innovation, elegance and strategic wit are the cornerstones of the new initiative.

CITYSCAPES

The project is co-published by Tau Tavengwa and the African Centre for Cities. Tavengwa co-edits the publication with Sean O'Toole and Professor Edgar Pieterse, the ACC's director, and Dr Camaren Peter act as consulting and associate editors respectively. The purpose of this biannual publication is to fairly represent the complexity and multi-dimensionality of the urban, with particular emphasis on articulat-

ing emergent practices and ideas from across the world. The publishing initiative is intended to serve as a forum to disseminate and discuss the rich potential of cities in the global south.

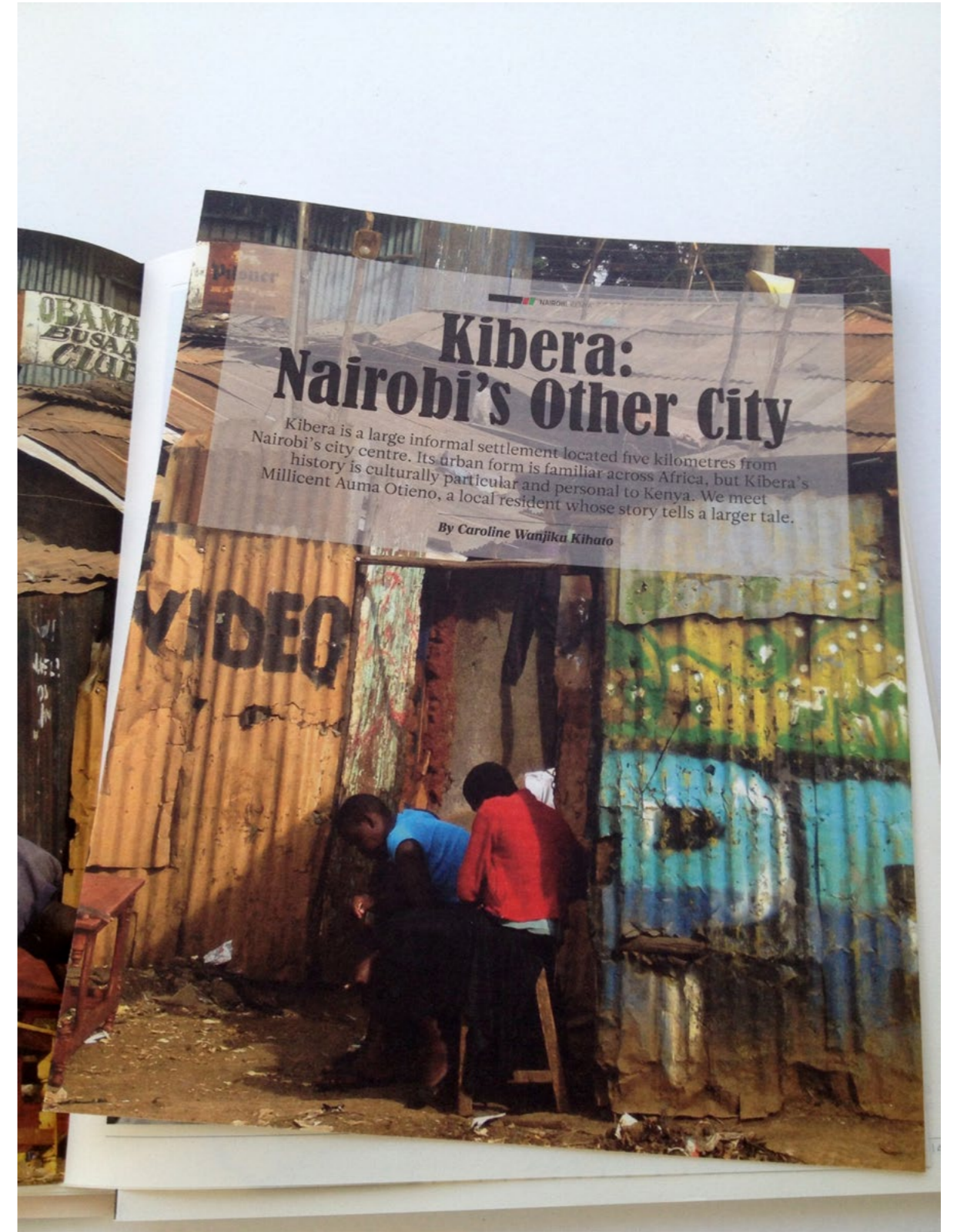
Cityscapes explores the links between academia/research and a variety of city practices. It tries to engage a wide range of interests around cities and the urban environment by being a platform on which key developmental issues ranging from governance, citizenship, culture and health among others are discussed factually and intelligently. We seek to do this in a manner that fosters a culture of debate and more nuanced understanding of key challenges using the city as the lens through which all these disparate activities can be looked at and understood more intently.

We believe that the African city, like cities elsewhere, is a multi-form, multi-storied and multi-nodal organism. Rather than present a priori assumptions, the magazine assumes the position that knowledge is empirical and accretive, plural not singular, a constellation of possibilities rather than a set of known variables. We believe that inquiry is not an end. The very act of inquiry produces a new destabilisation and reconfiguration, which demands further investigation but also allows for action without losing criticality.

The content of the publication is comprised of conversations and interviews; long-form journalistic reportage on key urban policy developments and actors; discursive and narrative essays as well as revolving opinion-editorials by invited opinion-makers. Additionally, each issue features data and information visualisation; photo essays; an edited selection of news reports, literary writing and ephemera.

The magazine is distributed widely via key partners in various parts of the world. The March 2014 edition will launch a Portuguese version of the magazine.





Leszek Dobrovolsky



Profession

Transport Strategy + Architecture
+ Planning

Current Position

Director

Joined Arup

1996

Years of Experience

26

Nationality

South African / British

Leszek has extensive experience in the leadership, planning and design of major transport projects worldwide in both public and private sectors. His key skills in the development of planning strategies have been developed in the leadership of numerous commissions.

Other key skills lie in the co-ordination and development of planning briefs and manuals used in the design, development and tender or planning processes. He is a specialist in transport interchanges and regeneration strategies.

The range and depth of transportation projects he has undertaken covers the full breadth from feasibility through to implementation.

Leszek leads the Interchange Design + Planning, and Accessible Environments team for Europe, Africa, Americas and the United Kingdom from London.

Metro de Santiago, Santiago, Chile

The expansion of the Metro, requires a new design and planning approach to Station design and integration into the urban fabric in Santiago. Leszek is Project Director for this commission with a multi-disciplinary team, developing a range of prototypes before undertaking the Concept Design.

Baku International Airport, Azerbaijan

Leszek was UK Project Director for the overall airport project, involving the upgrade of the existing terminal and the new terminal project of a capacity of 4mppa.

Park Station and City Masterplan, Johannesburg, South Africa

The regeneration of Johannesburg is focused around the catalyst of Africa's busiest and most complex transport interchange. Leszek as Project Director leads a multi-disciplinary team on the Station and also the 16 city blocks in the immediate environs in an ambitious urban and economic regeneration project.

High Speed 2, United Kingdom

The proposed new high speed line from London through to the north of England encompasses a number of modal connections and Stations in cities. Leszek is the Station Planning lead for the Stations along the route.

Western Cape Transport Precincts and Urban Regeneration, Cape Town, South Africa

The revitalization of public transport in South Africa is based around a comprehensive investment of rolling stock, rail planning

and several stations and associated urban regeneration. Leszek leads the team exploring and executing several Stations upgrades including urban regeneration in several of the most deprived communities around these nodes.

Rea Vaya Bus Rapid Transit, Johannesburg, South Africa

The new Johannesburg Bus Rapid transit has revolutionized travel within the greater city of Johannesburg. Leszek led the team for the planning and design of all the passenger depots for the BRT.

Moses Mabhida Station, Durban, South Africa

The Station was designed and constructed in time for the FIFA Football World Cup in South Africa. Leszek led the design and planning team on this award winning building.

Crossrail, London, United Kingdom

The proposed new £5 Billion project intends joining east to west London. Leszek is the discipline lead for the conceptual design and planning of new Stations at Paddington, Bond Street and Tottenham Court Road Stations.

Hefei Airport, Hefei, China

Leszek led the team for the competition winning submission for this 500,000m² airport development in China. Innovation and sustainability were key themes highlighted by the assessors in their adjudication.

Gauteng Stations Precinct Initiative, Johannesburg, South Africa

The Director General in the Province appointed Arup to lead the technical aspects of the commission, involving a regeneration strategy for the regeneration of Stations. Leszek led the technical aspects as the International technical expert for the commission.

Amsterdam Zuidas Transport Interchange, Netherlands

A significant new financial and residential district is being developed in Zuidas, 8 minutes from Schipol airport and just south of Amsterdam. Leszek is leading the Interchange design and planning on this strategic project for Amsterdam. Multi-modal solutions are being developed to accommodate significant development above the interchange, consisting of high speed rail, metro, bus, car, cycling and regional rail services.

Network Rail Property Redevelopment, UK

Leszek is leading the Interchange component and is part of the team advising property consortia, in the regeneration opportunities around 3 of London's main rail termini. Proposals include release of residual Station land holdings and re-development associated with Station upgrades.

Shenzhen International Railway Station, Shenzhen, China

The requirement for a new International and regional Station led to an International competition to design a major new facility for Shenzhen. Leszek led our architectural and urban environment team on this submission.

Docklands Light Railways, Stratford International Extension, London, UK

The North London Line route is being replaced with the Docklands Light Railway service over 8 Stations. Leszek is currently leading the team undertaking all the architectural development work and design on the Stations as part of the Reference Design.

Mestre Infrastructure, Venice, Italy

Large scale infrastructure, tunnelling and bridges works are planned just to the north-west of Venice. Leszek led the design team on an innovative concept to use the tunnel spoil to create a man made landscape to either side of the infrastructure works as landscape mitigation elements and to place water in between the roads creating a series of man-made lakes.

Wuxi Airport, Wuxi, China

Leszek led the architectural team in the development of a concept and scheme design for a new small International airport to serve the 9 million inhabitants of Wuxi in China.

Euston Station, London, UK

Euston is London's busiest terminal for connections to the north west of England. The redevelopment of Euston entails a wholesale evaluation of the needs of rail and underground passengers and proposals for implementation of this £ 200million project. The detailed design study proposes an enlarged ticket hall, improved access, an underground connection to Euston Square and the redevelopment of the Station Piazza. Leszek led the 60 strong multi-disciplinary team on the development of these proposals.

RAVXpress, Vancouver, Canada

A new metro line from Vancouver International Airport to downtown Vancouver was designed to provide additional capacity for both the Winter Olympics and to meet demand. Leszek led the Arup architectural/transport planning/services / station planning team for all the 7 Stations and the urban space planning at ground level. He co-ordinated a project office in Vancouver back with specialists in London as part of the Tender design for the JV consisting of Bombardier / Bouygues / AMEC Canada / Sandwell and Arup for this Can\$ 1.80billion scheme.

Dublin Area Rapid Transit, Dublin, Ireland

The Arup commission covers the regeneration of 4 Stations on the DART and surrounding area. Leszek is leading this joint multi-disciplinary project as a precursor to the redevelopment of the other 25 Stations on the route.

East London Line, London, UK

As part of the strategic upgrade of this line for the Strategic Rail Authority. Leszek was Technical Advisor for the 19 Stations being redeveloped. He led the architectural team in developing an Architectural vision for 4 of the Stations.

Victoria Transport Interchange, London, UK

Leszek led the station planning and architectural design team (up to RIBA Stage D) for a proposed £100 million upgrade of the interchange facilities at the congested Victoria Station, between 1998 - 2001. The study required the development of a number of strategic planning options based on the requirements of several transport operations (London Underground, taxis, buses, and rail) along with the integration of the needs of the passenger. An air rights development of 250,000ft² was integrated into the proposal to provide funding.

Woolwich Arsenal Station, Woolwich, London, UK

Leszek led the architectural team on the redevelopment of the Docklands Light Rail Station to incorporate an air-rights development. The design formed part of the Tender documentation for the Docklands Light Rail tender package.

Stratford International Station, London, UK

The new International Station at Stratford has been designed to take Eurostar services from the continent and further Domestic services from Kent.

Channel Tunnel Rail Link, UK

Through his appointment as Station lead in 1996, Leszek led the early concept design for a new International Station at St. Pancras in the first half of 1996, before assuming the Role of Design Leader for Stratford International (£ 35million) and Ebbsfleet International (£ 40million) and 186 (£ 110million) buildings and structures along the Channel Tunnel Rail Link route. He led a multi-disciplinary team of 28 Arup staff, in the design / consents / detailed design and tender of these buildings and structures.

Gautrain, Johannesburg International Station, South Africa

A new high-speed connection between Johannesburg International Airport and downtown Johannesburg is planned to open in 2010. Leszek provided the key Architectural and Station Planning inputs into the Client bid brief and definition.

Translink Bay Terminal, San Francisco, USA

A new Rail terminal is planned to meet capacity requirements in the bay area. Leszek wrote and contributed to the key Station and Planning section of the Client Brief.

Camden Underground Station, London, UK

The refurbishment and enlargement of Camden Underground Station is a key part to meeting the requirements of capacity problems due to the increased passenger throughput in the general area. Leszek led a multi-disciplinary Arup team of 32 staff, who represented a series of landowners in developing alternative proposals at Camden Underground Station.

Waterloo International Station, London, UK

The redevelopment of Waterloo International following the removal of Eurostar services from 2007 required careful consideration. Leszek led a multi-disciplinary team of 12 Arup

staff to review architectural and planning proposals for the facility post 2007.

Wembley Stadium Station, London, UK

As part of the redevelopment of the new national Stadium and the surrounding area, Leszek led the concept redesign of the transport Interchange to cope with the additional demands arising out of the new Stadium.

Wolverhampton Transport Interchange, Wolverhampton, UK

Leszek led the architectural and Station Planning team in the Scheme design for the redevelopment of Wolverhampton Station and urban square as part of a £ 6million scheme for Network Rail, Virgin Trains and the Local Authority

Finsbury Park Station, London, UK

Leszek led the joint Railtrack / London Underground commission for the Congestion relief scheme for Finsbury Park Station. A second commission was undertaken in 2002 for Network Rail in order to assess the Station redevelopment requirements post the opening of the Channel Tunnel Rail Link, London Terminal at St. Pancras International Station.

Channel Tunnel Rail Link, UK

Leszek worked as part of the Reference Design and Route optioneering team from 1998–1991, with a specific remit to provide Strategic and Station Planning input and Station Options. In 1992, Leszek was part of the Strategy team of 6 appointed by the British Railways Property Board to investigate the relocation of the proposed International Station beneath Kings Cross to St. Pancras. This successful study led to the modification of the Hybrid Bill in Parliament to allow this to occur.

Limehouse Link Tunnels, London, UK

Leszek lead a multi-disciplinary team for the development of the numerous buildings for the tunnels, which included the control centre, emergency facilities and support maintenance vehicle accommodation. The remit covered site appraisals, design, planning submissions, building regulations and site supervision.

Waterloo International Station, London, UK

As part of the team appointed as transportation planners for the development, Leszek was responsible for station planning and pedestrian modelling in the context of terminal planning.

Durban and Tongaat Railway Stations, Durban and Tongaat, South Africa

Leszek worked as part of the architectural team on the urban planning / station planning and architectural concepts for the redevelopment of these Stations. The plans involved a phased implementation strategy together with a 3 phase masterplan.

Caroline Sohie



Profession
Architecture

Current Position
Associate Director

Joined Arup
1999

Years of Experience
15

Nationality
Belgian

Qualification
B Arch (Hons)

Professional Associations
RIBA
ARB
OA (Council of Belgian Architects)
SACAP (South African Council of Architects)

Caroline Sohie has attained extensive experience across a wide range of architectural projects including buildings and infrastructure related to aviation, land transportation, education, performing arts, sports and office development.

Since joining Arup, she has used her expertise in design, construction and coordination on a variety of schemes with experience around the world including Chile, South Africa, India, China, Qatar, UK and Europe.

Her skills further expand into the realm of strategy and urban planning with specialist knowledge in development and regeneration opportunities around transport nodes.

She demonstrates a focused creative attitude towards the design of transport infrastructure and the catalytic nature of transport as an enabler towards socio-economic upliftment and urban regeneration.

Caroline led the Transport Architecture and Planning capability in South Africa till her transfer to the UK office in September 2012.

She is currently undertaking a Master Programme (MPhil) in Urban Infrastructure Design and Management at the African Centre for Cities (University of Cape Town) which focuses on critical research and academic discourse towards sustainable development in the Global South.

She has been a guest speaker at numerous symposia around the world and is a guest lecturer/ external jury at the Sint Lucas School of Architecture in Brussels and University of the Witwatersrand in Johannesburg, South Africa.

Caroline's focus on quality of design and reimagining transportation as part of an integrated sustainability solution put her at the forefront of driving sustainable transport initiatives around the world.

Doha Metro, Qatar

A new Metro network will be commissioned for the Qatar 2022 FIFA World Cup. Caroline contributed as the Station Design lead to a multi-disciplinary joint venture team, developing the tender response for the Design and Build tender.

Metro de Santiago, Santiago, Chile

The expansion of the Metro, requires a new design and planning approach to Station design and integration into the urban fabric in Santiago. Caroline is the Arup representative architect, based in Santiago, Chile on the commission. She contributes to leading the

project and fulfills the Client interface design and Station planning role, with the Arup multi-disciplinary team, developing a range of prototypes before undertaking the Concept Design.

Park Station Sub-Precinct, Johannesburg

Caroline is the Project Lead for the Development framework for a 35ha area around Park Station, owned by the Passenger Rail Agency of South Africa. The project includes an extensive Status Quo Analysis, the identification of an overarching vision and strategy, planning of the development framework for the area, development of an implementation framework; all with the aim of ultimately securing and facilitating a basket of rights for the area. The project is being developed in collaboration with the City of Johannesburg. If successful, this project could prove catalytic in terms of city making and joining the upper reaches of Braamfontein through Park into the Central Business District. It has the potential of meshing both parts of the City together, without having to effectively deck all or part of the railway tracks, that currently divide the area.

Bus Rapid Transport (BRT) Bus Stations, Tshwane

Caroline is the Project Director of the team responsible for the architectural design and implementation of the BRT bus stations. As a winning entry to an architectural design competition, Arup Interchange Design was commissioned by the National Roads Agency and the Public Works and Infrastructure Development Department of the City of Tshwane, to develop the winning concept as one of the four to be implemented.

Polokwane Nodal Development Framework, Polokwane

The Polokwane Municipality commissioned Arup to prepare a development framework to support the application for a National Treasury grant towards the re-development of six neighbouring townships. The framework includes assessment of needs and identification of catalytic projects as well as the development of a viable business plan.

Braamfontein Scoping Study, Johannesburg

Caroline was Project Director for the study commissioned by the JDA to unlock the unique potential of the Braamfontein Urban Area and integrate the development opportunities around the Park Station and Gautrain Station precinct. The proposal demonstrates that Braamfontein exhibits potential to reposition a culture of true city living, supported by an extensive student community, mixed-use opportunities and a high quality public transport network.

Polokwane 2010 FIFA World Cup regeneration and city beautification strategy

The Polokwane Municipality commissioned Arup to develop a city re-generation and city beautification strategy for the 2010 FIFA World Cup and a legacy vision for the City of Polokwane. The strategic vision was developed in line with the framework set out in the NMT Strategy and Masterplan for Polokwane previously developed by Arup. The project included the design and implementation of products such as street furniture, signage.

street lighting, bus shelters, bridge upgrade and public pavilions.

Lesedi Development Framework, Sedibeng

Caroline was Project Director for this commission instigated by the Sedibeng District Municipality which focuses on the revival of previously disadvantaged and economically depleted townships. The framework focussed on planning proposals which address a broad socio-economic spectrum of needs and requirements including sustainable job creation, the need for base infrastructure and addressing the Agenda for the Poor.

Kaserne Integrated Road based Long distance Transport Facility, Johannesburg

Caroline was the design and planning lead for the Kaserne feasibility study, commissioned by the JDA. The objective was the assessment of building a large integrated transport facility to house long distance taxis and buses (holding and ranking) in proximity of Park Station.

Design and rebranding of the Premier Lounges of South African Airways

Caroline was the Design Lead for the rebranding strategy, the Interior design and Product design services for the First Class and Business Class Lounges for SAA. This includes the International First Class and Business Class Lounge, the Arrivals Lounge and Kerbside check-in VIP Lounge at the OR Tambo Airport in Johannesburg, the domestic Platinum and First Class Lounge at Cape Town International Airport and the domestic Business Class Lounge at King Shaka International Airport in Durban.

NMT Strategy and Masterplan for Polokwane

The City of Polokwane has been selected to host the prestigious 2010 World Cup event. Caroline is leading the team for the development and implementation of the Master Plan for Polokwane and the 2010 Beautification Plan. The project has a particular focus on 2010 vs legacy infrastructure, the development of sustainable settlements and the integration of Public Transport and NMT Strategy.

Durban 2010 Station, Durban

Caroline led the Architectural Design of the new Moses Madhiba Station in Durban from concept through to completion on site. The new station was central to the 2010 World Cup events at the Moses Madhiba Stadium.

Rea Vaya Bus Depots and Termini, Gauteng

Caroline is responsible for the development of 8no. Rea Vaya Bus Depots associated Administration Buildings including the site analysis stage, through to architectural design and completion on site.

Philippi Phased Urban Development Framework, Western Cape

Caroline is leading the development of a co-ordinated and phased Urban Development Framework and Masterplan centred around the Philippi Station which can deliver real, tangible and pragmatic

improvements for the benefit of travellers and public, leading to the urban and economic regeneration of the area.

Western Cape Transport Precinct Initiative, Western Cape

Caroline has contributed to this initiative through working with governmental bodies to establish local principles at a range of transport nodes to optimise transport functionality together with urban development in the Western Cape Province.

Midrand Urban Development Framework, Midrand

Caroline led the development of an integrated Framework for the City of Johannesburg to promote the economic development, social and spatial integration in the region and the development of a spatially and economically integrated transport precinct as a catalyst for regeneration for the Midrand Area.

Sedibeng Strategic Framework, Vereeniging

Caroline was the Interchange Design Lead for the Arup consortium commissioned to develop a 2010 and legacy regeneration strategy for Sedibeng. This Framework was to support the District's "2010 Strategy" which identifies a number of flagship projects, using the World Cup as a catalyst for urban renewal. The Strategy included revitalising the Civic Precinct in the Vereeniging CBD, the development of the Vaal river front and the regeneration of the Sharpeville Heritage Precinct.

Intersite Northern Areas, South Africa

Arup was commissioned to develop a national transport precinct strategy for Intersite. This was illustrated with examples at Park, Langa and Denneboom Stations. Caroline led the Interchange Design of the precincts with the objective to bring public transport provision into the heart of economic development and urban design decisions.

Zonk'izizwe, transport strategy, Midrand

Caroline led the development of a fully integrated transport strategy and transport design vision as a mechanism to maximise the opportunities for a new mixed – use development in Zonk'izizwe, the economical centre between Johannesburg and Pretoria.

Park City Interchange, Johannesburg

Caroline took part in the development of an encompassing vision for Park City. Through an interpretation of movement analysis, the interchange facility framework is to be identified which is to inform a holistic urban framework and masterplan for the area.

Sandton Central, Johannesburg

As a Transport precincts designer Caroline has participated in identifying the broader vision for Sandton as an integrated transport hub and a catalyst for further development.

Drivers of Change, Arup

"Drivers of Change" are think-tank workshops led by the Arup Innovation, Foresight and Incubation team which aims to review themes, trends and forces that are driving global change. She is

currently contributing to the drivers “Station retail of the Future” and “Interchange of the Future”.

Mowbray Interchange, Mowbray

Caroline led the feasibility study for a new transport interchange at Mowbray including the restructuring of the rail-bus-taxi transfer and architectural design concepts.

Gauteng Transport Precincts Initiative, Gauteng

Caroline contributed to this initiative through working with governmental bodies to establish local principles at a range of transport nodes to optimise transport functionality together with urban development.

Jiangxi Nanchang Airport, Nanchang

Caroline was centrally involved in the planning, the architectural design development and coordination of the project and led the production for the architectural design competition for a regional airport in Nanchang, China. The submission was successful and Arup won in collaboration with CACC.

Zuidas International Station, Amsterdam

Caroline was the transport precincts designer and project architect in the development of the detailed proposals for a new multi-modal interchange (High speed Rail, Rail, Metro, Tram, Bus) in the new financial district of Amsterdam. The interchange is at the centre of a 3 million square metre mixed-use development.

Liverpool Street Underground Station / Crossrail, London

Caroline led the Station design team for the re-development of a major London underground Station in response to new routes by Crossrail. Clear station planning strategies resulted in major developments to the underground station proposals and maximisation of development value.

Hackney Central / Hackney Downs Transport Interchange, London

With the coming London Olympics, Caroline has led the team creating a new transport interchange to address significant increases in passenger usage.

Battersea West Station & Hotel, London

As a design architect Caroline was centrally involved in the concept design of the 5 star West Hotel and Railway Station, as part of the 14ha Battersea Power Station redevelopment site in London.

Vauxhall Cross Interchange, London

Caroline was responsible for the design and development through all RIBA stages and became project architect during the construction phase of the new Transport Interchange at Vauxhall Cross in London. She was leader of a multi-disciplinary team including structural engineering, Public Health and M&E services. This strategic project provides an integrated transport scheme in a key regeneration area with a direct connection to

existing Underground and Rail services. The landmark structure incorporates London’s second busiest bus station with associated facilities and public convenience.

Plantation Place, London

Caroline was part of a team responsible for the design of the external cladding of a major [1.02 Hectare] office development in the City of London. She was a designer for floor plate development, project massing, rights of light issues, and the external building envelope with an integrated environmental approach.

Druk White Lotus School, Ladakh, India

As an integral member of a multi-disciplinary team, Caroline was responsible for concept, design development and production of the master plan and building design for a new school of 850 pupils, in the Indian Himalayas. In 2001 she was resident architect coordinating site construction.

London Olympic Bid

Caroline was part of a multi-disciplinary Arup team commissioned with the feasibility and business case study for London’s City bid for the Olympic Games in 2012. Her main focus was the analysis of the urban impact of the Games and the development of a strategic master plan and legacy framework.

City of Manchester Stadium

Caroline formed part of the Arup design team and contributed to the development of evacuation strategies, design development and production of tender packages including turnstile product design, gating and external cladding.

Ponti Parodi Genoa, Italy

As a member of a multi-disciplinary team, Caroline participated as a design architect in the International competition for rejuvenation of the old port basin Ponte Parodi in Genoa.

Fyr Hus Opera Oslo, Norway

As a member of a multi-disciplinary team, Caroline participated as a design architect in the International competition for a new Opera House for Oslo.

Plantation Place, London

Caroline was part of a team responsible for the design of the external cladding of a major [1.02 Hectare] office development in the City of London. She was a designer for floor plate development, project massing, rights of light issues, and the external building envelope with an integrated environmental approach.



Prof. Edgar Pieterse

South African Research Chair in Urban Policy & Director of ACC

Biography.

In my research and teaching I stretch myself across theoretical and applied concerns. As an urbanist, I am deeply fascinated by the drama of cities everywhere and at different moments in time, including the future, the past and science fiction invocations. Simultaneously, I endeavour to remain grounded in the tough and messy realities of cities—invariably always on the move—working with materialist and aesthetic optics. My own work is grounded in two South African cities, Johannesburg and Cape Town but I also track the fortunes of African cities as part of a larger discourse on sustainable urban transitions.

During 2008-2012, I mapped this implied conceptual canvass through a book, *City Futures* (Zed 2008), and number of edited volumes (see below). In addition I oversaw the conceptualisation and emergence of a vibrant interdisciplinary research agenda at the African Centre for Cities, located at the University of Cape Town. One of my key tasks is to continuously evolve a theoretical frame that can suture the diverse topics and scales of work at ACC, without necessarily providing a comprehensive synthesis or overarching argument.

More recently I have become seduced by the power of the written word rubbed against visual registers of representation and interpretation. This stems from a related concern about how scholars and universities can do better to animate publics that can complicate and shape the city; i.e. constituencies outside of the academy that truly invoke cityness. These concerns have led to the creation of a hybrid magazine/journal—*The African Cities Reader* that I co-edit with Ntone Edjabe and an international magazine on emergent urbanisms in the global South—*Cityscapes*. I am also presently co-curating a substantial exhibition on "city divides and potentialities" through the prism of Cape Town. The exhibition will manifest in 2014.

Finally, on the applied end of things, I am presently leading a team of experts working on an Urban Development Framework for South Africa. The draft policy is meant to lead to more coherent and effective urban regimes in South Africa over the next few years.

Recent Publications:

Books:

Parnell, S. and Pieterse, E. (eds) (forthcoming 2013) *African's Urban Revolution: Policy Pressures*. London: Zed Books.

Pieterse, E. and Simone, A. (eds) (2013) *Rogue Urbanism: Emergent African Cities*. Johannesburg: Jacana Publishers in association with African Centre for Cities.

Edjabe, N. and Pieterse, E. (eds) (2011) *African Cities Reader II: Mobilities & Fixtures*. Cape Town: Chimurenga Press & African Centre for Cities.

Pieterse, E. (ed) (2010) *Counter-Currents: Experiments in Sustainability in the Cape Town region*. Johannesburg & Cape Town: Jacana Publishers in association with African Centre for Cities.

Edjabe, N. and Pieterse, E. (eds) (2010) *African Cities Reader: Pan-African Practices*. Cape Town: Chimurenga Press & African Centre for Cities.

van Donk, M., M. Swilling, E. Pieterse & Parnell, S. (eds.) (2008) *Consolidating Developmental Local Government: Lessons from the South Africa Experiment*. Cape Town: UCT Press.

Pieterse, E. (2008) *City Futures: Confronting the Crisis of Urban Development*. London and New York: Zed Books.

Book chapters:

Pieterse, E. (forthcoming 2013) "Development, Planning and Sustainability", in Greg Young and Deborah Stevenson (eds) *The Ashgate Research Companion to Planning and Culture*. Ashgate Publishers.

Pieterse, E. (forthcoming 2013) "Inclusion", in Ronan Paddison and Tom Hutton (eds) *Cities and Economic Change*. Sage Publishers.

Pieterse, E. (forthcoming 2013) "Exploratory notes on a socially-grounded policy frame for African cities", in Richard Stren and Dickson Eyoh (eds) *The Urban Experience in Africa: The Living City and its Local Policy Challenges*. New York: Routledge.

Pieterse, E. & M. van Donk (2013) "Local Government and Poverty Reduction", in U. Pillay, G. Hagg, J. Jansen & F. Nyamnjoh (eds) *State of the Nation 2012-13. Addressing Inequality and Poverty*. Pretoria: HSRC Press.

Pieterse, E. (2013) "Rethinking the purpose and modalities of community development in South African cities", in GGLN. *Active Citizenship Matters*. Cape Town: Good Governance Learning Network.

Pieterse, E. (2013) "Introducing rogue urbanisms", in Pieterse, E. and Simone, A. (eds) *Rogue Urbanism: Emergent African Cities*. Johannesburg: Jacana.

- Pieterse, E. (2013) "Grasping the unknowable: Coming to terms with African urbanisms", in Pieterse, E. and Simone, A. (eds) *Rogue Urbanism: Emergent African Cities*. Johannesburg: Jacana.
- Tavongwa, T. & Pieterse, E. (2013) "Designing against the Grain: Confronting the political economy of knowledge production", in Pieterse, E. and Simone, A. (eds) *Rogue Urbanism: Emergent African Cities*. Johannesburg: Jacana.
- Pieterse, E. (2012) "Notes towards an alternative framework for urban development", in Bruys, G. and Graafland, A. *African Perspectives – [South] Africa. City, Society, Space Literature and Architecture*. Rotterdam: 010 Publishers.
- Pieterse, E. & Gurney, K. (2012) "Johannesburg: Investing in Cultural Economies or Publics?" in Helmut K. Anheier and Yudhishtir Raj Isar (eds) (2012) *Cultural Policy and Governance in a New Metropolitan Age. The Cultures and Globalization Series. Volume 5*. Sage Publishers.
- Pieterse, E. (2012) "World Cup Promise & Cold Comforts for South African Cities". in Asmal, Z. (ed) *Designing South African Since 2010*. Johannesburg: DesignZA.
- Pieterse, E. (2012) "Slum Urbanism and Africa's Future". in Randers, J. (ed) *2052: A Global Forecast for the Next Forty Years*. Rotterdam: Chelsea Green Publishers.
- Pieterse, E. (2011) "Building Brave New Worlds: Design and the Second Urban Transition", in Cynthia Smith (ed) *Design for the other 90%: Cities*. New York: Cooper-Hewitt National Design Museum.
- Pieterse, E. (2011) "Cape Town" in Johnson, K. and Jacobs, S. (eds) *Encyclopedia of South Africa*. Boulder & London: Lynne Rienner.
- Gotz, G., Pieterse, E. & Smit, W. (2011) "Desenho, limites e perspectivas da governança metropolitana na África do Sul" [Design. Limits and Prospects of Metropolitan Governance in South Africa], in Klink, J (ed) *Governança das metrópoles: conceitos, experiências e perspectivas [Comparative Perspectives on Metropolitan Governance for Brazil.]* Sao Paulo: Annablume, pp. 127-156.
- Manuel, T. & Pieterse, E. (2011) "Global Civics via Global Solidarity", in Altinay, H. (ed) *Global Civics Responsibilities and Rights in an Interdependent World*. Washington DC: Brookings Institution Press, pp. 61-78.
- Pieterse, E. (2010) "Alternative City Futures", in Pinther, K. (ed) *Afropolis*. Koln: Verlag der Buchhandlung Walther Konig, pp. 24-33.
- Pieterse, E. (2010) "Planning and Land-use Conflicts amidst the Search for Urban Integration: The Case of Wingfield", in B. Freund & H. Witt (eds) *Development Dilemmas in Post-Apartheid South Africa*. University of Kwazulu Natal Press, pp. 139-72.
- Pieterse, E. (2010) "Popular Youth Cultures and the Mediation of Racial Exclusion/Inclusion in Brazil and South Africa", in Kihato, C., M. Massoumi, B. Ruble, P. Subirós and A. Garland (eds) *Urban Diversity: Space, Culture, and Inclusive Pluralism in Cities Worldwide*. Washington DC & Baltimore: Woodrow Wilson Centre Press & John Hopkins University Press, pp 187-211.
- Pieterse, E. (2010) "Introduction", in Pieterse, E. (ed) *Counter-Currents: Experiments in Sustainability in the Cape Town region*. Johannesburg: Jacana Media, pp. 13-24.
- Pieterse, E. (2010) "Conclusion: Reimagining Cape Town through the rebus of identity, economy and ecology", Pieterse, E. (ed) *Counter-Currents: Experiments in Sustainability in the Cape Town region*. Johannesburg: Jacana Media, pp. 259-265.
- Pieterse, E. (2010) "Apartheid". in Hutchinson, R. (ed.) (2009) *Encyclopedia of Urban Studies*. New York: Sage.
- Journal articles:
- Sitas, R. & Pieterse, E. (forthcoming 2013) "Democratic renovations and urban imaginaries", *Third Text*.
- Pieterse, E. (forthcoming) "Rethinking African urbanism from the slum", *Sustainable Urban Development*.
- Pieterse, E. (2012) "High Wire Acts: Knowledge Imperatives of Southern Urbanisms", *The Salon*, Volume 5: 37-50.
- Pieterse, E. (2011) "Recasting urban sustainability in the South". *Development*, 54(3): 309-316.
- Pieterse, E. (2011) "Rogue Urbanisms: Introduction to Symposium on African Urbanism", *Social Dynamics*, 38(1): 1-4.
- Pieterse, E. (2011) "Grasping the unknowable: coming to grips with African urbanisms", *Social Dynamics*, 38(1): 5-23.
- Pieterse, E. (2010) "Cityness and African Urban Development", *Urban Forum*, 21(3), 205-19.
- Pieterse, E. (2010) "Hip Hop Cultures and Political Agency in Brazil and South Africa", *Social Dynamics*, 36(2): 428-447.
- Parnell, S. & Pieterse, E. (2010) "Realising the 'right to the city': institutional imperatives for tackling urban poverty", *International Journal for Urban and Regional Research*, Volume 34(1): 146-62.
- Pieterse, E. (2009) "African reverberations of the Mumbai Attacks", *Theory, Culture & Society*, 26(7-8): 289-300.
- Parnell, S., Pieterse, E. & Watson, V. (2009) "Planning for Cities in the Global South: A Research Agenda for Sustainable Human Settlements". *Progress in Planning*, 72(2): 233-241.
- Pieterse, E. (2008) "Art Affects: Passageways between the epic and the ordinary", *International Journal of Urban and Regional Research*, Vol. 31(4).
- Pieterse, E. (2007) "African Urbanism as Paradox. Reflections on: For the City yet to Come". *Politique Africaine*, n° 107: 189-193.

Pieterse, E. (2007) "Tracing the 'Integration' Thread in the South African Urban Development Policy Tapestry", Urban Forum, 18(1): 1-30.

Pieterse, E. (2006) "Blurring Boundaries: Fragments of an Urban Research Agenda", Urban Forum, 17(4): 398-412.

Teaching:

I teach on the Masters Programme linked to the ACC, entitled: Urban Infrastructure: Design and Management, offered in the EBE Faculty. My teaching inputs are made in two modules of the MA. The first one is titled: 'Developing Cities: Sustainable Urban Transitions' (CIV5064Z); and the second: "Urban Renewal" (CIV5065Z). See: www.urbaninfrastructure.uct.ac.za/prog

I am also responsible for a PHD Seminar Series on African Urbanism and Sustainable Cities that spans across departments and faculties at the University of Cape Town.

Outside of UCT, in my capacity as Visiting Extraordinary Professor at the University of Stellenbosch, I teach a Masters Module on "Sustainable Cities" with Professor Mark Swilling. This module forms part of a MA in Sustainable Development offered by the School of Public Management and Planning and the Sustainability Institute. See: www.sustainabilityinstitute.net

I am also attached to the University of Cambridge Programme for Sustainability Leadership, which provides leadership development programmes, dialogues and other learning services for senior individuals and major organisations around the world so that they can respond creatively to global challenges. Specifically, occasionally I participate as a member of Faculty on their flagship course: "Business and the Environment Programme". See: www.cpsl.cam.ac.uk

I supervise seven PhD students, one MPhil student and three Post-Doctoral candidates.

Research Affiliations:

I am a member of the Research Advisory Committees of: the Gauteng City-region Observatory, the Indian Institute for Human Settlements, LSE Cities, and the Low Carbon Mobility Stakeholder Board of the Smith School of Enterprise and Environment at the University of Oxford. I am a founder member of Isandla Institute where I act as a board member, and also serve on the Boards of the Sustainability Institute and the Open Society Foundation of South Africa.



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As Professor, Instructor, Critic, and Lecturer, he has been directly involved in directing and collaborating in undergraduate and postgraduate programs with prestige institutions, universities and clusters in Mexico, USA, Canada, Spain, UK and Taiwan with ample experience in rethinking agendas, designing syllabi, leading seminars and studio programs. He is co-director of Visiting Universities Mexico-Barcelona Summer School program with Institute of Advanced Architecture of Catalonia (IAAC). He is faculty professor at the Metropolis-FPC/CCCB, Postgraduate Program in Architecture and Urban Culture Metropolis. He has designed academic agreements between Instituto Tecnológico de Monterrey-Fundación Politécnica de Catalunya (FPC), Universidad Iberoamericana (UIA) /Instituto Tecnológico de Estudios Superiores de Oriente (ITESO)-ELISAVA, UIA-Metropolis. He has been Co-director of Visiting Universities Mexico-Barcelona with ELISAVA in 2011, and in 2012 in association with UIA/ITESO/Anahuac Norte and ITESM Querétaro. He has been External Consultant on the design of a national/international Cluster for the areas of architecture and design for Universidad del Valle de México (UVM) Laureate Universities. He has been faculty studio professor in the faculty of architecture at the FPC-Barcelona Architectural Center (BAC) where he has taught in association with Clemson University, Texas A&M, the University of Texas San Antonio in USA; the U. of Montreal in Canada; ITESM and UIA in Mexico. He is a regular studio course instructor and lecturer in the University of Calgary EVDS Barcelona Autumn term-abroad program. He has taught at Carleton University term abroad program in Barcelona, Elisava Escola Superior de Disseny at Universitat Pompeu Fabra (UPF); UPC, ETSAB and Escola Superior de Arquitectura (ESARQ) at Universitat Internacional de Catalunya (UIC) in Barcelona; UIA in Mexico City and he has been guest critic in many programs and institutions and visiting lecturer at Tung Hai University, Taipei and London Metropolitan University.

He has worked in the architectural offices of Isaac Broid (México D.F.), S.O.M. (London), BCQ (Barcelona) among others.

His writings and designs have been published in Architectural Design magazine, in Corporate Fields (2005), AAX AADRL documents, Taschen, Art4D, AAFiles, ACTAR among others. His work has been exhibited at the AA. He is a member of the group Urban Flashes.

His design and research projects and studios make emphasis on the importance of passion, curiosity, and criteria on individuals; the need of integral design (architecture, landscape, sustainability, environmental design) and collaboration on team working; the criticality of city debate, urban systems, multiple scales, experimentation, competition, etc.

He has research work on Alternative sustainable housing; Tourism and new urban Interiors (SOFAR); Technology and resistance (PhD candidate at the UPC); The architecture of urban densities and accumulation (Urban Research Bureau, URB-BCN); Public space in relation to art, architecture and the city (Metropolis); Incubation and working environments, etc.

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