

Aarhus School of Architecture // Design School Kolding // Royal Danish Academy

Challenging the Concept of "informal" in Sub-Saharan African Cities

Eskemose Andersen, Jørgen

Published in:

Cities in transformation : research & design

Publication date:

2014

Document Version:

Early version, also known as pre-print

[Link to publication](#)

Citation for pulished version (APA):

Eskemose Andersen, J. (2014). Challenging the Concept of "informal" in Sub-Saharan African Cities: the case of Maxaquene A, Maputo, Mozambique. In M. Bovati, M. Caja, G. Floridi, & M. Landsberger (Eds.), *Cities in transformation : research & design: ideas, methods, techniques, tools, case studies* (pp. 201-210). Ipoligrafo.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



CITIES IN TRANSFORMATION RESEARCH & DESIGN

Ideas, Methods, Techniques, Tools, Case Studies

edited by Marco Bovati, Michele Caja, Giancarlo Floridi, Martina Landsberger

EAAE Transactions on Architectural Education no 57

ILPOLIGRAFO

VOLUME I

Cities in Transformation Research & Design

Ideas, Methods, Techniques, Tools, Case Studies

edited by

Marco Bovati, Michele Caja

Giancarlo Floridi, Martina Landsberger

scientific supervision

Adalberto Del Bo, Ilaria Valente

VOLUME I

CITIES IN TRANSFORMATION
RESEARCH & DESIGN

EAAE / ARCC

Milano, International Conference on Architectural Research



Politecnico di Milano, European Association for Architectural Education
Association Européenne pour l'Enseignement de l'Architecture



ARCC Architectural Research Centers Consortium



POLITECNICO
DI MILANO

Scuola di Architettura Civile
Scuola di Architettura e società
Dipartimento di Architettura, Ingegneria delle Costruzioni e Ambiente Costruito - ABC
Dipartimento di Architettura e Studi Urbani - DASTu

SCIENTIFIC SUPERVISION

ADALBERTO DEL BO, ILARIA VALENTE

EDITORS

MARCO BOVATI, MICHELE CAJA

GIANCARLO FLORIDI, MARTINA LANDSBERGER

SCIENTIFIC COMMITTEE

POLITECNICO DI MILANO

MARCO BOVATI, FEDERICO BUCCI, MICHELE CAJA, ADALBERTO DEL BO

GIANCARLO FLORIDI, MARTINA LANDSBERGER, MAURIZIO MERIGGI, ILARIA VALENTE

EAAE

PER OLAF FJELD - Oslo School of Architecture and Design (AHO)

EBBE HARDER - The Royal Danish Academy of Arts

MAIRE HENRY - Waterford University of Applied Sciences

STEFANO MUSSO - Università di Genova

HERMAN NEUCKERMANS - Katholieke Universiteit of Leuven

AART OXENAR - Amsterdam Academy of Architecture

DAVID VANDERBURGH - Université Catholique de Louvain

CHRIS YOUNÈS - École Spéciale d'Architecture de Paris

ARCC

LEONARD BACHMAN - University of Houston

J. BROOKE HARRINGTON - Temple University

PHILIP PLOWRIGHT - Lawrence Technological University

HAZEM RASHED-ALI - The University of Texas at San Antonio

KATHERINE WINGERT-PLYDON - Temple University

REVIEWERS

LEONARD BACHMAN - University of Houston
ROBERT BARON - The University of Texas at San Antonio
MARCO BOVATI - Politecnico di Milano
FEDERICO BUCCI - Politecnico di Milano
MICHELE CAJA - Politecnico di Milano
ANDREA CAMPIOLI - Politecnico di Milano
ALESSANDRA CAPUANO - Università La Sapienza di Roma
GIOVANNA D'AMIA - Politecnico di Milano
ADALBERTO DEL BO - Politecnico di Milano
CAROLINA DI BIASE - Politecnico di Milano
PER OLAF FJELD - Oslo School of Architecture and Design (AHO)
GIANCARLO FLORIDI - Politecnico di Milano
GIOVANNA FRANCO - Università di Genova
ESTHER GIANI - Università Iuav di Venezia
ANDREA GRITTI - Politecnico di Milano
JONATHAN BROOKE HARRINGTON - Temple University
RICHARD HAYES - Columbia University
MAIRE HENRY - Waterford Institute of Technology
CHRIS JARRETT - University of North Carolina Charlotte
JOHANNES KÄFERSTEIN - ETH Zürich
SUSANNE KOMOSSA - TU Delft University of Technology
MARTINA LANDSBERGER - Politecnico di Milano
MARIA CRISTINA LOI - Politecnico di Milano
SERENA MAFFIOLETTI - Università Iuav di Venezia
MAURIZIO MERIGGI - Politecnico di Milano
BRUNO MESSINA - Università di Catania
VALERIAN MIRANDA - Texas A&M University
CORINNA MORANDI - Politecnico di Milano
MICHEL MOUNAYAR - Ball State University
STEFANO MUSSO - Università di Genova
HERMAN NEUCKERMANS - Katholieke Universiteit of Leuven
LUCA ORTELLI - École Polytechnique Fédérale de Lausanne
AART OXENAAR - Amsterdam Academy of Architecture
CRISTINA PALLINI - Politecnico di Milano
PHILIP PLOWRIGHT - Lawrence Technological University
UTE POERSCHKE - The Pennsylvania State University
DAVIDE PONZINI - Politecnico di Milano
SARA PROTASONI - Politecnico di Milano
HAZEM RASHED-ALI - The University of Texas at San Antonio
MICHELLE RINEHART - The Catholic University of America
ALESSANDRO ROCCA - Politecnico di Milano
GIANNI SCUDO - Politecnico di Milano
BRIAN SINCLAIR - University of Calgary
ARON TEMKIN - Norwich University
ILARIA VALENTE - Politecnico di Milano
DAVID VANDERBURGH - Université Catholique de Louvain
KATHERINE WINGERT-PLAYDON - Temple University
CHRIS YOUNÈS - École Spéciale d'Architecture de Paris

Each author takes responsibility for any copyright issues
that may arise from the images published in his or her essay

pictures introducing every section

© Marco Introini

progetto grafico

Il Poligrafo casa editrice

Laura Rigon

© Copyright giugno 2014

Il Poligrafo casa editrice

35121 Padova

piazza Eremitani - via Cassan, 34

tel. 049 8360887 - fax 049 8360864

e-mail casaeditrice@poligrafo.it

ISBN 978-88-7115-829-7

Table of Contents

VOLUME ONE

- 23 Foreword
Stefano Francesco Musso
- 25 Urban Transformations: Research and Design
Adalberto Del Bo
- 32 Occupying space and re-ordering place:
Looking forward and backward in 21st century Lahore
Masood A. Khan
- 42 Teaching Architecture. The Troubled School
Daniele Vitale

PART ONE

NEW SCENARIOS OF THE CITY AND DWELLING

- 55 Thinking the City
Martina Landsberger
- I. THEORY AND TOOLS FOR DESIGN
- 61 In Search of a *Modus Operandi* for a Specific Urban Architecture.
A Critical Approach to the Collective Amnesia of Urban Design
Nicolai Bo Andersen
- 69 What is the Role of Architecture in the Contemporary City?
Structure and Form of the Design of the City. The Case of Milan
Pellegrino Bonaretti
- 78 The Transformation of Cities
Emilio Corsaro, Raffaele Mennella
- 85 Redefining Modern Housing Settlements.
The Hypothesis of "Adequate Discontinuity"
Francesco Costanzo
- 92 Somewhere / Nowhere
Carlo Gandolfi
- 100 Landing Areas
Alessandro Isastia

- 109 The Elemental Unit of the City
Raffaella Neri
- 116 Picturesque Tools in the Idea of Modernity. Learning from John Soane
Laura Anna Pezzetti
- 126 Revealing the Urban Plan. The Configurational Analysis
as a Support for the Evaluation of Urban Plans and Projects
Valerio Cutini, Giovanni Rabino
- 133 Places in Transformation.
Designing the Urban Identity Reinterpreting the New Needs
Marichela Sepe
- 142 Do Public Housing Companies Design our Cities like Large Houses
and our Houses like Small Cities?
Karel Vandenhende
2. TYPOLOGY
- 149 Understanding Privacy in Domestic Space:
A Study of Transformation of Urban Houses in the Context of Dhaka
Catherine Daisy Gomes, Farida Nilufar
- 158 The Convivial Housing *Modus* for “Singletown”
Sylvain De Bleeckere, Sebastiaan Gerards
- 166 Transferring Single-family Home Qualities to Multi-family Housing
Amelie Mayer, Ulrike Sturm, Peter Schwehr
- 175 Compose the Siedlung: The Project Of Niddatal (1925-1930)
vs The Project Of Riedberg (1997-2017) in Frankfurt
Manlio Michieletto
- 183 Process Typology and Formative Processes of Middle Eastern Urban Open Spaces
Giulia Annalinda Neglia
- 192 Authentic Communal Housing in America
Marc Roehrle
3. ARCHITECTURE OF THE CITY: TOWN AND CITY PROJECTS
- 201 Challenging the Concept of “Informal” in Sub-Saharan African Cities.
The Case of Maxaquene A, Maputo, Mozambique
Jørgen Eskemose Andersen
- 211 Archi-objects of Desire in the Information Age and their Future Role
in City Positioning. Medellin, Colombia as Case Study
Juan Pablo Aschner Rosselli
- 219 Public Space in the Microcosmopolis.
Two New Business Districts of Manchester and Salford
Eamonn Canniffe
- 227 Delirious Tirana
Isotta Cortesi
- 235 Spontaneous Public Space: Resource or *Nonsense*?
Ester Dedé

- 244 Designing in the Historic Centers: Strategies and Tactics
in the Transformation of Collective Open Spaces
Michele Di Santis, Francesco Lenzini, Xianya Xu
- 251 The Grammar of Public Space. Reclamation, Functional Restoration,
Redesign and Urban Reorganisation of Lorenzo Berzieri Square
in Salsomaggiore Terme (Parma)
Emilio Faroldi
- 259 Density. New frontier for Post-soviet Urbanism. Minsk Case Study
Filippo Lambertucci
- 268 Living Utopia - Leaving Utopia. Brussels: Modernist Urban Forms
Evaluated against Pre-Existing Row Houses
Gérald Ledent, Olivier Masson
- 280 Process of Morphological Transformation and the Emerging Pattern
of Built-Form along Gulshan Avenue in Dhaka
Farida Nilufar, Nuzhat Zereen
- 289 Milano: a New Dock on the Site of the Porta Genova Railway Station
Giovanni Cislighi, Marco Prusicki
- 296 Contemporary Mutations in the Complexity of Bogotá
Claudio Rossi
- 303 The idea of Complementary Uses to the Residential
in the City Growth Strategies
Ana Ruiz
- 310 "Soundscape" and the Identity of the Place.
The Case Study of Kichijoji Station Area, Tokyo
Pega Sanoamuang, Darko Radovic
- 317 Space as a Place for Social Interaction: the Cases of Housing in Bangkok
Sutida Sattayakorn
- 326 Modern Moscow: from City Planning to City Improvement.
Autobiography of the Place
Yuriy Volchok
- 335 A Hope for Athens
Sotirios Zaroulas
4. METHODS AND TECHNIQUES
- 343 A Different Approach: CastelloZINE. Tools and Methodology
of Civil Journalism Applied to the Urban Context
Barbara Cadeddu, Valeria Piazza, Patrizia Sulis
- 351 Mixing Algorithms in Urban Analysis and Transformation
Mike Christenson
- 361 Happiness in the City. Experimental Teaching and Research
in the Methodological Design of the Collective Space of the City
Roberto de Paolis, Marinella Ferrara, Danilo Morigi
- 370 The City as an Organism
Matteo Ieva

- 380 Blocks, Schools and Books
Dirk Janssen, Katrijn Apostel
- 388 Building for Diversity: Residential Areas as a Socio-spatial Context
for Diverse Neighbourhoods
Angelika Juppén, Alex Willener
- 396 Teaching as Research: Vomero, Storkterrein and Other Places
Pasquale Miano, Giorgia Aquilar
- 404 New Urban Conditions: Epistemological and Pedagogical Issues
Andrzej Piotrowski
- 412 Rione Luzzatti in Naples: Conforming Measure of an Intervention
of Urban Redevelopment
Federica Visconti, Renato Capozzi
- 420 Athens in Crisis: Education on the Issue of Emergencies. Beyond Didacticism
Ariadni Vozani

PART TWO

CITIES BETWEEN HISTORY AND FUTURE

- 431 Learning from the Historic City
Michele Caja

I. RECONSTRUCTION AND URBAN RENEWAL

- 439 Astrakhan: Principles of Reconstruction of Historically-Composed
Development and their Use for Planning of New Central Territories
Oleg I. Adamov
- 448 Potsdam and the Brandenburg Region:
Monumentality as Principle for Urban and Territorial Construction
Ivan Brambilla
- 457 Between Heritage Conservation and Urban Renewal.
A Case Study: Paris, from Haussmann to the Present Day
Alessio Cardaci, Antonella Versaci
- 465 Reconstructing the Cambel's Yali at Bosphorus
Francesco Collotti, Serena Acciai
- 472 The Fluidity of Scale and Time in Jože Plečnik's Ljubljana
Jennifer Gaugler
- 479 The Paddington Terrace House: An Example of Incrementally
Accommodating Change from the House to the City
Corey T. Griffin
- 488 Recomposition's Paradoxes. A Research Case Study on a Concert-hall in Ferrara
Alessandro Massarente
- 498 Munich, Urban Development: Model and Form of the Modern City
Nicola Panzini
- 506 Urban Renewal in the Late Nineteenth Century. The Case of Via Dante in Milan
Pierfrancesco Sacerdoti

- 515 Duisburg 1945: *Stunde Null?*
Benedetta Stoppioni
- 522 Westernization Effects on the Planning and Architectural Approaches
in Historic Commercial Center of Kadikoy between Late 19th and Early 20th Centuries
Ege Uluca Tumer

2. HERITAGE, CONSERVATION AND TRANSFORMATION

- 531 The Archaeology of Urban Change: 19th Century Jaffa
Yoav Arbel
- 539 Libya of the Post-war Reconstruction. Recreation of a Tradition:
the Jebal Nafousah and the Routes to Ghadames between the Artisan
and Touristic Economy
Paola Cofano
- 548 Dealing with Change in the World Heritage Site of Old Rauma
M. Anca Dumitrescu
- 557 Archaeology and Architectural Design: Projects for Alexandria (Egypt)
and Alexandria in Aria-Herat (Afghanistan)
Luisa Ferro
- 566 Managing Transformations in Historic Urban Cores between Conserving
and Developing. A Case Study
Mariacristina Giambruno, Raffaella Simonelli
- 575 The Medina of Tripoli, Libya. The Future of an Urban Living Heritage
and Cultural Landscape
Ludovico Micara
- 584 Working Techniques and Restoration Methods
for Plaster Decorations on Façades in New and Old Design
Søren Vadstrup

3. REPRESENTATION AND URBAN IMAGE

- 591 The GIS *Forma Urbis Romae* Project: Creating a Layered History of Rome
Allan Ceen, James Tice
- 600 Perspective, Visual Perception and Urban Planning
Sylvie Duvernoy
- 608 Imperatives of Craft: Making in Beginning Design as it Prefigures Urban Response
James Eckler, Karl Wallick
- 617 Mapping the Spatial Identity of a Location Relying on Methods
from Visual Art
Yvonne Knevels, Oswald Devisch
- 625 Culture as a Determinant of City Form.
The Case of the Former Jewish District in Lodz
Małgorzata Hanzl
- 635 Reviewing Design References with Diagrams
Guilherme Lassance

4. CRITICAL REVISION, MEMORY, IDENTITY

- 645 Industrialisation of the Building of Post-War Residential Estates in Milan.
Specific Features, Issues, Strategies for Conservation
Francesca Albani
- 654 Planning in the Gray Zone, Challenges and Opportunities: The Case
of Independent Zoning Plans in East Jerusalem (work in progress)
Michal Braier
- 662 Forgotten Project: Plan de la Ribera, 1964-1972, Barcelona
Nadia Fava
- 671 The Antimodernist Polemic as Rhetorical Construct:
Prince Charles and "populist realism"
Federico Ferrari
- 680 New Models for the Foundation Cities in Puglia and Basilicata
Graziella Fittipaldi, Francesco Scricco
- 689 Memory, Values and Destiny of Twentieth Century Inheritance
Giovanna Franco
- 697 Architecture. Essay On The City
Gaetano Fusco
- 707 Chinese Architectural Education in the Rapid Economic Development
Han Linfei
- 713 From Alberti to Team 10: Towards a Welfare Humanism
Nelson Mota, Gonçalo Canto Moniz, Mário Krüger
- 722 Managing Memory in City. Case-study of Complex
of the Federal Secretariat for National Defense (Generalstab Building)
Milica Muminović, Vladimir Parežanin, Darko Radović
- 730 The Contemporary City in a Deceiving Search of Identity
Roberto Recalcati
- 738 Evolution of Moscow Housing Development
Stanislav A. Sadovsky
- 744 Identity and Transformation. The Designing of the Historical Urban Landscape
Fabrizio Toppetti

VOLUME TWO

- 773 Regaining Lost Time: Design and Architectural,
Urban and Environmental Resources
Ilaria Valente
- 781 City's Architecture and Research by Design
Ferran Sagarra Trias
- 788 Italian Architecture of the Twentieth Century. Issues and problems
Franco Purini

PART THREE STRATEGIES FOR SUSTAINABILITY

- 797 Sustainability Strategies (for Cities in Transformation)
Marco Bovati

1. SUSTAINABLE URBAN AND LANDSCAPE DESIGN

- 811 Khedivial Cairo: An Evolved Metabolism
Eman M. Abdel Sabour, Stephen Luoni
- 819 Setting Priorities: Sustainability, Environmental Health,
and Embedded Value Judgments for the Urban Design Process
Anirban Adhya, Philip D. Plowright
- 828 A Morpho-energetic Optimization Tool for a Low Energy
and Density Reasoned City Area
Laëtitia Arantes, Olivier Baverel, Daniel Quenard
- 836 Urban Acupuncture: Improving the Public Space between
the Socialist Block of Flats and the Old City in Bucharest
Cosmin Caciuc
- 844 Transformation of Urban Landscapes
Antonia M.A. Chiesa
- 852 How Environmental and Energy Issues Shape the Cities:
A Case-Study in Barcelona, Spain
Giovanni Marco Chiri, Helena Coch Roura, Alessandra Curreli, Ilaria Giovagnorio
- 861 An Integrated Approach to Urban Transformation
for Polycentric Development of Settlement Areas
Calogero Montalbano
- 871 Concept - Ecological City
Maxim Poleschuk

2. ARCHITECTURAL AND URBAN REGENERATION

- 879 Territories of Energy and Urban Shape
Pepe Barbieri, Alberto Ulisse
- 887 Strategies for the Regeneration of Suburban Sprawl. Case Studies in Rome
Alessandra De Cesaris

- 895 Sustainable Façade Technologies: High-rise Building Retrofitting
Kyoung-Hee Kim
- 903 Living the Compact City: the Case of San Salvario in Turin
Silvia Malcovati, Stefano Suriano
- 912 The Regeneration of Public Housing Neighbourhoods.
The Example of Tor Bella Monaca in Rome
Domizia Mandolesi
- 921 Regenerating Public Residential Areas in the Modern City
Carlo Alessandro Manzo
- 929 Reinhabiting, the House, the Street and the City
Magda Mària, Pere Fuertes, Roger-Joan Sauquet, Anna Puigjaner
- 937 Continuity of Urban Culture.
Challenges and Opportunities Facing Urban Conservation
Valeria Pracchi, Heba Elsayed
- 945 Chinese Puzzle: A Tangle of Space in Shanghai's *Shikumen* Architecture
Peter Wong
3. ECOLOGICAL LIVING: FORMS, TYPOLOGIES, TECHNIQUES
- 953 Domestic Green Spaces in Contemporary Cities
Elisa Bernardi
- 961 Methodology for the Implementation of Solar Strategies in Architecture
Doris Ehrbar, Ulrike Sturm, Peter Schwehr
- 970 Groundscrapers. Vitalizing the Tradition
of the Urban Low Rise, Mixed Hybrid Building
Susanne Komossa, Nicola Marzot, Roberto Cavallo
- 979 Unité 2.0: Housing in Time of Austerity
Luca Lanini
- 987 Urban Transformation, Energy Consumption and CO₂ Emission
Monica Lavagna, Paco Melià, Paolo Pileri, Viktoriya Sendyureva
- 995 Sober, Sustainable and Urban: Recent Housing Experiences
Marco Lucchini
- 1003 The Rational Maintenance of Social Housing (with a Warlike Modesty)
Marina Montuori, Barbara Angi, Massimiliano Botti, Olivia Longo
- 1011 Building Products Made from Recovered Paper and Cardboard:
Applicability and First Conclusions
Rossana Paparella
- 1019 Solar Control in the Architectural Composition
Stefano Perego
- 1026 Vegetation, Architecture and Sustainability
Katia Perini
- 1034 The Sufficient House: Housing Design for Suburban Bangkok
Based on Sufficiency Economy Philosophy
Saithiwa Ramasoot

- 1044 Plants: a Model for Design? Plant Plasticity, Mutation and Adaptability: Qualities Open to Interpretation
Patricia Ribault, Sara Lubtchansky, Patrick Nadeau
- 1052 Form of the Settlement, Energy and Housing Typologies. Contemporary Research and Education in Architecture
Francesca Scotti
- 1059 Advocating for Agility, Adaptability + Appropriateness: Innovations + Inspirations for an Environmental Design of the 21st Century
Brian R. Sinclair, Somayeh Mousazadeh, Ghazaleh Safarzadeh
4. METHODS AND TECHNIQUES: EDUCATION FOR SUSTAINABILITY
- 1069 The Adaptive City
John Brennan
- 1078 Education for Sustainable Architecture: Professional Competencies and Responsible Ethics
Bing Chen
- 1087 To a “Integrated Multiscale Project” Design Method. Transecting Sections and Action Contracts
Roberta Ingaramo, Angioletta Voghera
- 1096 Performance and Form: New Pedagogical Approaches to Designing the Building Envelope as an Adaptive Interface
Ulrike Passe, Robert Demel

PART FOUR

INFRA STRUCTURES, LAND AND LANDSCAPE

- 1109 Structures of Picturesque
Giancarlo Floridi
1. LAND AND URBAN SHAPE
- 1117 Schools as Catalysts for the Urban Environment
Ulrike Altenmüller-Lewis
- 1127 Residential metropolization process and new forms of urban centralities
Priscilla Ananian
- 1135 Stand-By Landscapes: Designing Residual Spaces for Urban Regeneration. “Small Green Ring” Landscape Promenade: An Experimental Case Study on Milano Navigli Areas
Anna Arioli
- 1145 Historical Evolution of Urban Segregation: Mechanisms of Differentiation Through Space and Time
Nadia Charalambous
- 1155 The Border as a Place of Experience
Andrea di Franco
- 1163 Examining Material Flows for the Study of a Settlement. A Historical Perspective
Leila Marie Farah

- 1171 Squares and Streets without Town.
Settlement Patterns in Puglia's Landscape: the Borgo Segezia
Anna Bruna Menghini
- 1180 Learning from Ksour. The Valleys of the Drâa and the Ziz in pre-Saharan Morocco
Carlo Moccia
- 1187 The Waterfront Project for the Historic Centres:
The Case of the Redevelopment of the Historic Port of Cala di Palermo
Sebastiano Provenzano, Giuseppe Pellitteri
- 1195 Cities of Salt. Toward a New Analysis Method for a New Planning Strategy
Giuseppe Rociola
- 1202 Activating Emptiness: Bricolage of Japanese urban context
Marja Sarvimäki
- 1209 Notes for a Design for the 900 km Nile City
Pier Paolo Tamburelli
- 1216 Copenhagen - Øresund - Malmö: city borders and construction of the landscape
Carlotta Torricelli
- 1225 The Carbon-neutral Settlement of Broeset.
Towards a new paradigm in urban planning?
Dag Kittang
2. INFRA STRUCTURES
- 1235 The Next Generative Infrastructure for Detroit
Constance C. Bodurow
- 1248 Urban Mobility Footprints
Fabio Casiroli
- 1256 Regional Infrastructures
Sara Queen
- 1265 Landscape as Infrastructure: Ideas for Urban transformation
of Placa de les Glories as a New Public Node for Barcelona, Spain
Arunjyoti Hazarika
- 1273 New Element of Settling (NER) as Search of Future City
Ilia G. Lezhava
- 1283 Knowledge and Design for Assembled Urban Landscapes
Rejana Lucci
- 1290 Integration between Infrastructural Design and Territorial Planning.
Case Study of the Third Policy Document *Shaping the Netherlands.*
Architectural Policy 2001-2004
Stefano Sabatino
- 1298 Infrastructure and the Just City
Maurizio Sabini
- 1306 Identity and Landscape along the Way from Jaffa to Jerusalem
Alessandra Terenzi

- 1317 Railway Station between Architecture and City.
Western Models, Chinese Cases and Urban Transformation
Zhen Chen

3. TERRITORY AND FORM

- 1327 Inventory, Assessment and Evaluation of Historic Resources
in HemisFair Park for the New Master Plan
William Dupont, Sedef Doganer, Saadet Beeson, Adriana Munoz, Laura Carrera
- 1336 Defining the Metropolitan Central Park, a Special Item
in the Contemporary Open-Space-System
Joan Florit Femenias
- 1344 Growing Cities, Growing Roofs: Vegetative Systems' Response to Urban Runoff
Elizabeth J. Grant, Shouib Ma'bdeh
- 1352 War Ruins, Peace Landscapes, Metropolitan Nomadism.
["Natura Artificialis" and Urban Mobility | Olympiapark-München]
Andreina Maahsen-Milan
- 1360 Instrumental Restitching and Perceptual Rotation:
Spatial Recalibration Strategies for Monumental Parks in Historic Cities
Deborah A. Middleton
- 1370 Landscapes of Survival: the OASIS System
in the Contemporary Mediterranean City
Veronica Salomone
- 1378 Philadelphia Green Structures
Kate Wingert-Playdon

4. METHOD AND TECHNIQUES

- 1385 Cybertown: Another Façade of the Postindustrial City
Leonard R. Bachman
- 1394 Retooling Architectural Pedagogy: Community-based Design in Haiti
Jim Lutz, John Comazzi
- 1403 Ma.Chi.Na.
Alessandra Como
- 1411 Archetypes in-formation. Strategies of Transition in Architecture
and Urban Design
Yannis Zavoleas, Panayotis Tournikiotis

3. Architecture of the City: Town and City Projects

Challenging the Concept of “Informal” in Sub-Saharan African Cities. The Case of Maxaquene A, Maputo, Mozambique

Jørgen Eskemose Andersen
The Royal Danish Academy of Fine Arts, Denmark

Introduction

Current definitions of urbanity lead to claims that a large proportion (75% according to UN Habitat) of Sub-Saharan Africa's (SSA) urban population is housed in “informal” settlements with almost all new housing stock provided “informally” in contradiction to the “formal” that is defined as planned and regulated by the state. In most cases in SSA cities urban development has no professional assistance in the form of architects or engineers, and what is characterised as “disorder”, as is the case with informal urbanisation, is considered as undesirable, inappropriate, dangerous, unhealthy and un-modern (Folkers, 2009; Hardoy, 1990; Jenkins, 2011; Nielsen, 2008; Nguluma, 2003; Mitlin, 2004; Koolhaas, 2006).

In 2003 the UN adopted a new terminology for what over decades used to be labelled as “informal-”, “squatter-”, “illegal-”, “unplanned-”, “spontaneous” “shanty towns” with the term “slum” (UN habitat, 2003). However, defining what slum implies is complex and this author consider the term as

This paper draws on the research programme “Home Space Maputo”, funded by the Danish Research Council for Innovation 2009-2011, under the management of Jørgen Eskemose Andersen of the School of Architecture, Copenhagen. The programme is based on a conception and research design by Paul Jenkins of the School of the Built Environment, Heriot-Watt University / Edinburgh School of Architecture and Landscape Architecture. It is implemented in partnership between the above institutions (led by Andersen and Jenkins) and the Centre of African Studies at the ISCTE - Instituto Universitário de Lisboa (represented by Ana Bénard da Costa) and the centre for Development of Habitat Studies at the Faculdade de Arquitetura e Planeamento Físico, Universidade Eduardo Mondlane, Mozambique (represented by Júlio Carrilho and Carlos Trindade). The fieldwork was undertaken with participation of students of architecture and anthropology from Universidade Eduardo Mondlane, and had key involvement from architect Silje Erøy Sollien and Mozambican academics Adriano Biza and Judite Chipembe. Generous support from Mozambican Faculty Director Luís Lage, and time donated by Edinburgh and Lisbon institutions for their academics' inputs have been a key aspect of the programme's success.

prejudiced and not covering the diversity most informal settlements represents. Further the term stigmatises a remarkable share of any city population in SSA (Huchzermeyer, 2011; Davis, 2007; Harber, 2011; Garau, 2005).

The basis for classifying housing areas developed by poor people as “slums” is underpinned by a public health and safety agenda, but in the absence of government recognition and improvement of service provision categorising them as “slums” in essence shall make many informal settlements ripe for “re-development”, which is generally private sector driven. The outcome is often negative for the poor and lower income populations that are pushed out and/or are unable to capitalise on the rising property values (Jenkins, 2000; Jenkins, 2011). The urbanism and architecture this kind of development is producing is with limited reference to the context in SSA as most new middle- and upper class housing is as prestigious villa type or as gated communities (Adjaye, 2011; Andersen, 2011; Folkers, 2009; Lage, 2004).

This paper draws on in-depth longitudinal studies of the peri-urban settlements of Maputo and demonstrates that the “informal” process is producing self-improving urban form and housing (Jenkins, 2012). The paper refers to a current project that was aimed at upgrading an informal settlement in Maputo with infrastructure improvements accepting the right of the existing settlers to stay put. However the political reality has proven to take a different stand allowing the private sector a prominent role and a *comprehensive redevelopment project has now substituted* the upgrading project.

The paper argues for government recognition of informal urban areas as a valid and productive form of urbanism. This is, as seen by the author, unfortunately not what is happening currently in the case of Maputo and a new era of urban development in Mozambique is ostensibly emerging based on market principles leaving the urban poor in a vacuum with limited if any influence. The “disorder” such areas seem to represent and hence by international standards labelled as *slums* is in fact underpinned by social order and the current research evidences this in describing the *living conditions* and the emerging form of *social architecture* in such housing areas referring to the organisation of space i.e. plot organisation, the building technology and the architectural expression that this organisation represent (Andersen, 2012; Carrilho, 2005; Galicai, 2009; Jenkins, 2012; Lage, 2004).

Maxaquene A

Maxaquene A is located close to the city centre and represents a long-term unplanned occupation, originating back to the 1920s. Maxaquene is a classic “informal” settlement, developed organically and incrementally without a formal plan, but however with a system of plot allocation as the social order has structured the physical space with some rigour. Today approximately 25,000 inhabitants live in Maxaquene A.

The attractiveness of Maxaquene A is due to the proximity to employment centres, i.e. the central city, the international airport and three industrial areas.

The area represents a number of typical problems in such areas among which high density, few public amenities, poor access roads, poor drainage and rudimentary service provision. Furthermore the area suffers with severe environmental and public health problems linked to the topography as most of Maxaquene A is located in a depression with frequent floods (Município de Maputo, 2011b).

Background

The Portuguese colonial government excluded Africans from settling in the "recognised" area of Maputo, which was developed as a modern city for the white settlers. The black indigenous population working as servants and other manual labourers either lived as in-house servants or were settled just outside the cement city in precarious houses built with reeds (*caniço* in Portuguese; and hence these areas were referred to as "the caniço").

The colonial government only accepted such type of housing as these would be easier to demolish when the long-awaited urbanization arrived. This development led to the proliferation of houses built with reeds which was harvested along the riverbeds in Marracuene district approximately km 25 from Maputo. This produced the most striking characteristic of the colonial city: an area called the cement city (*cidade de cimento*) where the white settler population lived and the suburban area called the reed city (*cidade de caniço*) where the indigenous population lived under temporary condition under strict control by the colonial administrators (UN Habitat, 2001).

Informal Settlements in Mozambique and in Southern Africa

The first generation of informal settlements in Maputo resembles developments in the first years after independence in other Capital cities like Lusaka, Dar es Salaam, Addis Ababa, Ouagadougou and Nairobi.

While in many African cities, renting soon came to dominate also the informal areas with Kenya as the most extreme case, while Lusaka and Maputo maintained a predominance of home owner-occupiers, but mainly in the buildings nationalised after independence and hence the corresponding figure for the informal settlements is significant lower making rental accommodation in informal settlements in peri-urban Maputo a rare phenomenon still today. However this may be under transition as recent research has evidenced that renting out living spaces in the inner informal settlements in Maputo is on the rise (Jenkins, 2012).

Low Income Housing

Attempts were made in most of Sub-Saharan Africa after Independence to meet the demand for housing with publicly built so-called "decent" houses. However this only became showcases for politicians to demonstrate their willingness to care for the growing number of urban poor. The strategy failed throughout and the informal sector took over as the predominant supplier of housing.

Already in the 1950s, UN advocated for *sites and services* and other types of schemes combining state planning (land) and investment in infrastructure with self-help construction as the approach to solve the growing housing deficit (Abrams, 1966; Payne, 1977). Despite the obvious difficulties these strategies have faced the political system continues to promote plots and self-help construction as the solution to the shelter issue, e.g. the latest housing strategy in Mozambique (2001) reads..." approximately 300,000 plots and 100,000 houses will be distributed until 2014..." (Canalmoz, 2001).

Strongly promoted by World Bank from the mid 1970s a number of sites and services schemes was implemented, e.g. in Zambia and Kenya, but the number of plots remained insignificant compared to demand. The strategy of delivering plots with minimal services was also used from the early 1980s in Maputo where the intervention has had some impact with more than 10,000 plots being developed which partly is targeted in the Home Space Research project (www.homespace.dk). As the Home Space Research project documents these site and service schemes are today considered as rather ideal housing areas for the emerging middle class in Maputo, however often complaining on the plot size which predominantly was m 12,5 × 25 (Jenkins, 2012; Hamdi, 1995).

However the burgeoning informal settlements were, by the time, often cleared as illegal. Such practices still continue in many countries albeit often at a modest scale with the 2005 internationally condemned Operation Murambatsvina in Harare as an exception. However Zimbabwe is a unique case and in most countries in the global South it is understood that demolitions do not contribute to solving the housing problem. "Upgrading" of existing living environments has become the recommended strategy, in most countries often adopted in housing policy documents (Galacai, 2009). This is however under threat in a number of countries including in Mozambique.

The historic Maxaquene Project 1976

In the eve of the colonial period, the government had plans to finally eradicate the problem of illegally constructed settlements: this implied construction of neighborhoods "perfectly integrated in Lourenço Marques City, by eliminating the reed houses; the re-accommodation of 50% of the current population; transfer the remaining 50% to transition areas where they would receive assistance for their social improvement". This however never came into being. (UN-Habitat, 2001).

After Independence, "The National Directorate for Housing developed a major upgrading pilot project in bairro Maxaquene just north of the cement city (1977-1979)" (Pinsky, 1983: 7). In a participatory manner the Maxaquene project succeeded to relocate the surplus population that were to give way for roads and open spaces. This resettlement took place in nearby Polana Canico on land that at the time was relatively vacant as it was owned by a Portuguese land speculator awaiting the city to expand. Polana Canico is today a quite densely occupied area still undergoing transformation with signs of two storey buildings rising as the area is close to the city centre and pressure for well located land is high.

In fact Polana Canico is today considered as blocking the expansion of the cement city and recently the municipal authorities have launched an international tender for technical proposals for the *re-development* of the entire Polana Canico an area housing some 60,000 inhabitants.

The “Maxaquene Project” became a model for upgrading projects (UN Habitat 2001) and a “blueprint” for the future of the towns in Mozambique was issued in 1979 (Pinsky, 1983). In the period 1981-1987 planned subdivisions continued as a strategic attempt to plan ahead of the urban front and hence avoid the need for later expensive upgrading exercises. The City Authority planners took advantage of the political climate at the time with a pro-poor planning approach and the key issue with availability of land was relatively easily solved as land was nationalised in 1975 and hence the city authorities were in a position to identify appropriate land for urban development.

The city council planning staff focused on developing basic land layouts in expansion areas, especially areas that were highly likely to be occupied spontaneously, attempting to create a zone of planned residential land around the city in the most suitable areas, hence pre-empting spontaneous occupation this was called the “Basic Urbanization Programme. (Jenkins, 2011: 77)

The 1977 Maxaquene project was in line with the FRELIMO ideology at the time and popular participation was put into practice. The lay-out in blocks, public and open areas was possible due to intense meetings in locally established planning committees and aided by innovative, non-bureaucratic land registry and building permit systems (Pinsky, 1983). Plots were organized in blocks of 300 inhabitants each (70 to 80 families) per hectare (UN Habitat 2001). A major achievement was the improved pit latrines. This was followed up by the city wide

Sanitation Program in 1985 that was then transformed into a National Low cost Sanitation Program. This programme is still active today albeit at a much lower scale however over the years an unknown number of improved pit latrines have been built and the concept of an improved pit latrine is common knowledge in today’s Maputo’ informal areas. (Brandberg, 1985: 18)

According to Pinsky, in the late 1970s, only ten percent of the houses in areas like Maxaquene were built in cement blocks. As there was and is a high sense of security of tenure, improvements gradually changed Maxaquene and today very few houses are built in *caniço*. Mozambican scholars have labelled this process the “cementification” of the *caniço* highlighting the enormous investment this individual building process represents with no assistance from neither government nor the private sector (Carrilho, 2009).

To facilitate more comprehensive strategic urban development, “Maputo City Structure Plan” was approved in 2008. Key elements and objectives of the Plan include: The restructuring and re-development of 3750 ha of urban “slums” in the 2008-2018 period.

The structure plan hence established two main categories of urban development: already “urbanized” areas and areas to be “urbanized” – urbanisation here meaning an acceptable level of urban development in terms of land use planning and control, infrastructure and services provision. The plan indicated

that some 40% of the “areas to be urbanized” have formally marked plots “Areas to be urbanised” – otherwise known as “un-planned” areas – had no formal land demarcation and registry, generally deficient infrastructure and often relatively high density, and were estimated to cover about 47% of the total area of the city (Município de Maputo, a 2008).

Participation

According to a newly approved housing *Policy and Strategy* (Política e Estratégia de Habitacao 2011) participation is still a key element when developing housing projects in Mozambique:

Participation by various segments of society, such as, the public, private and civil society, to facilitate each family access to urban land and housing, environmentally sustainable, in order to enable the control of actions and transparency in decisions and procedures. (Política e Estratégia de Habitacao, 2011: 7)

The case of Maxaquene A raises a number of issues related to participation:

- To which extent have the residents been involved in discussions concerning the first upgrading plan?
- Was the process allowing time enough for the residents to understand the project and the consequences for their individual lives?
- Have the conducted workshops had substantial numbers of active residents?
- Was the process guided and facilitated only by the local political structures *informing* the population on the plan?
- What expectations have been raised during the process?
- Have the residents been informed formerly to the change in municipal approach to the solution of the Maxaquene A problem?
- What is the reaction on part of the local political structure on the recent development and how are these structures approaching the local resident’s vis-à-vis the current situation?

Many of these issues are complex and interwoven into local power struggles and municipal ambitions to create the best conditions for the *modern* city to emerge with as limited as possible of public spending. Hence the private sector is expected to intervene and follow-up after the municipal planning has paved the way with local urban plans to be followed-up with bylaws enabling the private sector to buy out the residents at market conditions and subsequently develop the land. The draft bylaws do however envisage a certain percentage of social housing as a pre-condition when developers are intervening. Experiences from other African countries does however indicate that such social housing programmes rarely reach the poor and most often the middle class moves in and transform such areas into what by them is considered as proper and decent dwellings (Nkya, 2008).

This raises a number of legal issues as to what extent such developments are in accordance with the spirit of the law (Conceicao, 2004; Dinageca, 2001). According to an official document on land regulation, people are supposed to be included in the investigations: “The investigation on the occupants is carried out

on a continuous manner in the area of the plan by a technical team, which must also hear the representatives of the local community” (Mozambique land regulation 2006). A paper worked out for the Government by the Centre for Habitat Studies and Development, Eduardo Mondlane University emphasizes the role of participation:

The first and indispensable element in any planning strategy is participation. There are no formulas for the eradication of the slums. The key to success is participation, and participation is not obtained by interpreting and applying technical documents. It must be achieved and take shape in the field, with residents, through constant contact and relations. (UN Habitat, 2001: 26)

In the case of Maxaquene A, NGO's have been active for some years assisting the residents in minor improvements such as better drainage and improved pit latrines. These NGO's are operating as partnerships between local Mozambican NGO's and international NGO's and the activities are to a certain extent coordinated with the local structures and hence formerly coordinated with the relevant city authority departments. However in practice such NGO's often works quite independently directly with the residents and at times with residents associations however in general the impact of these interventions are limited (Almansi, 2001).

Conclusion

The political interest in the re-development and modernisation of the city adjacent to the cement city is obvious as the pressure on well located land near the city centre is growing. The private sector in Maputo is more active than ever since independence and appropriate land is now a scarce resource as all land outside the formal city is occupied “informally”.

In attractive locations close to the sea this process has been taking place for some years with a number of gated communities being built and consequently residing informal settlers have been bought out. This process is now moving into other sites in the interface between the formal and the informal city giving way for condominium type of middle and upper class housing schemes. As Maxaquene A is located along the major road leading to the airport, politicians has for years seen the entrance to the city as an eyesore. Closer to the airport, which has recently been rebuilt by a Chinese consortium and hence represents modernity and progress, the municipal authorities, has fenced off the informal settlement with a high wall making the informal settlement invisible for visitors arriving in Maputo. By the local population this wall bears the name “the wall of shame” (“Muro de vergonha”). Time will tell which metaphor the local population shall invent as Maxaquene A over the coming years evolves: developing *either* as a people oriented process continuously providing space for the existing population *or* driven by market forces supported by the political and professional planning elite eventually eliminating and eradicating almost 50 years of informal urbanisation that has facilitated poor people with access to housing which both the state and the private sector has failed to support sufficiently.



1. The informal city is in a constant process of transformation. A canico house (reed house) being replaced by a cement block house
2. A typical informal settlement in Maputo. Urban services are rudimentary and access roads few. However most houses have electricity and some have water have individual water connections. Selling water to households without connections is a widespread business. No houses are connected to a sewer system and hence either pit latrines or septic tanks is the norm

This paper has pointed to contradictions in the urban planning system in the case of Maputo and highlighted the issue of access to housing for the urban poor. Former deliberately pro-poor approaches to housing in Maputo appear to be in a transition towards more market oriented approaches. The paper hence ends with the following question for reflection: Why was it that Maputo Municipality in the first run deliberately developed terms of reference based on participatory methods in the case of Maxaquene A, but after being presented to the project developed by the hired consultants the project was turned upside down and the plan elaborated by the consultants was abolished. An alternative re-development plan was developed which in turn paves the way for the private sector to intervene?

Bibliography

- Abrams C. (1966), *Housing in the Modern*. London: Faber and Faber.
- Adjaye A., Allison P. (2011), *Adjaye - Africa - Architecture: A Photographic Survey of Metropolitan Architecture*, London: Thames & Hudson.
- Almansi F. (2011), *Los Limites de la Praticipacion*. Buenos Aires: IIED America Latina Publicaciones.
- Andersen J. et al. (2011), "Land and revenue in a 'traditional town' in Ghana: The case of Nkwanta sub-division in Mpasatia". *Environment & Urbanisation*, vol. 23, 2, 539-561.
- (2012). *Built Environment Study*. www.homespace.dk
- Brandberg B. (1985), *Manual de Latrinas Melhoradas*. Maputo: Secretaria de Estado do Planeamento Fisico.
- Canalmoz (2011), *Governo aprova nova politica e estrategia de habitacao*, http://macua.blogs.com/moambique_para_todos/2011/03/governo-aprova-nova-pol%C3%ADtica-e-estrat%C3%A9gia-de-habita%C3%A7%C3%A3o.html.
- Carrelho J. et al. (2009), *Desafios para Mozambique 2010*. Desafios no Dominio da Habitação. Marimbique-Conteudos e Publicacoes, LDA.
- (2005), *Era uma vez uma palhota. História da casa Moçambicana*. Maputo: FAPF.
- Conceicao M. (2004), *Manual de Direito da Terra*. Maputo: Centro de Formacao Juridica e Judiciaria.
- Davis M. (2006), *Planet of Slums*. New York: Verso.
- DINAGECA (2001), *A Terra. Lei e Regulamento sobre o Uso e Aproveitamento de Terras*, <http://www.fd.ul.pt/Portals/0/Docs/Institutos/ICJ/LusCommune/ChizianeEduardo2.pdf>.
- Folkers A. (2009), *Modern architecture in Africa*. Amsterdam: Sun.
- Galicaí S. (2009), *Urbanismo Informal*. Azcapotzalco: Universidad Autonoma Metropolitana.
- Garau P. et al. (2005), *A Home in the City*. London: Earthscan.
- Hamdi N. (1995), *Housing without Houses*. London: Intermediate Technology Publications Ltd.
- Harber A. (2011), *Diepsloot*. Johannesburg and Cape Town: Jonathan Ball Publishers.
- Hardoy E. (1990), *The Poor Dye Young*. London: Earthscan.
- Homespace (2013), <http://homespace.dk> (website under construction)
- Huchzermeyer M. (2011), *Cities with "slums". From informal settlement eradication to a right to the city in Africa*. Capetown: UCT Press.
- Jenkins P. (2000), *Emerging urban residential land markets in post-Socialist Mozambique: The impact on the poor and alternatives to improve land access and urban development. An action-research project in peri-urban areas of Maputo*. Edinburgh: Centre for Environment & Human Settlements.

- (2011), “Querying the concepts of formal and informal in land access in developing world-case of Maputo”. In *The Formal and Informal City: what happens at the Interface*, eds M. Vaa, K. Hansen. Uppsala: Nordic Africa Institute.
- Jenkins P. et al. (2011), *Governing informal settlements, on whose terms? Developing Cities between the formal and the informal*. ECAS 2011 - 4th European Conference on African Studies. Uppsala: NAI.
- Jenkins P. (2012a), *Understanding “home space” in the African city. A case study in Maputo, Mozambique*. Synthesis Report. www.homespace.dk
- (2012b), *Understanding “home space” in the African city. A case study in Maputo, Mozambique*. Context Report. www.homespace.dk
- Koolhaas R. et al. (2006), *Lagos wide & close: interactive journey into an exploding city* (DVD).
- Lage L. et al. (2004), *Traditional Informal Settlements in Mozambique: from Lichinga to Maputo*. Maputo: FAPF.
- Mitlin D. (2004), *Empowering Squatter Citizen. Local Government, Civil Society and Urban Poverty Reduction*. London: Earthscan.
- Mrema L. (2008), *Public Open Spaces as Everyday Architecture*. PhD Dissertation. The Royal Danish Academy of Fine Arts, School of Architecture.
- Mozambique Land Regulation (2006). December 26, DINAGECA, Mozambique Government.
- Município de Maputo (2008), *Plano de Estrutura Urbana do Município de Maputo*.
- (2011), *Maxaquene A. Plano Parcial de Urbanicacao*.
- Neuwirth R. (2006), *Shadow Cities. A billion Squatters a New Urban World*. London: Routledge.
- Nkya T. (2008), *Why Planning Does not Work*. Dar es Salaam: Mkuki na Nyota Publishers Ltd.
- Nielsen M. (2008), *In the vicinity of the State. House Construction, Personhood and the state in Maputo, Mozambique*. PhD dissertation. Copenhagen University.
- Nguluma H. (2003), *Housing Themselves. Transformations, Modernisation and Spatial qualities in Informal Settlements in Dar es Salaam, Tanzania. Built Environment Analysis*. PhD dissertation. The Royal Institute of Technology (KTH), Stockholm.
- Payne G.K. (1977), *Urban Housing in the Third World*. London: Leoard Hill.
- Pinsky B. et al. (1983), *Territorial Dilemmas: Urban Planning and Housing in Independent Mozambique*. WUS-Denmark.
- Politica e Strategia de Habitacao* (2011). Boletim da Republica de Mozambique, 8 marts, 1 serie, 23.
- UN Habitat (2001), *Cities without Slums-Cities Alliance*. London: Earthscan.
- (2003), *The Challenge of Slums. Global Report on Human Settlements 2003*. London: Earthscan.