TEXTS BY

- * Michel Agier
- * Benno Albrecht
- * Giulio Barazzetta
- * Pierre-Arnaud Barthel
- * Maria Antonia Barucco
- * Simon Bekker
- * Edoardo Bernasconi
- * Viola Bertini
- * Alexandra Biehler
- * Naeem Biviii
- * Catherine Blain
- * Marie Bridonneau
- * Victor Brunfaut
- * Pieter Burssens
- * Bernard Calas
- * Eleonora Carrano
- * lérôme Chenal
- * Armelle Choplin
- * Gerald Chungu
- * Monica Coralli
- * Giuseppe D'Acunto
- * Maddalena d'Alfonso
- * Viviana D'Auria
- * Silvia Dalzero
- * Filippo De Dominicis
- * Kim De Raedt
- * Thorsten Deckler
- * Abdoulaye Dia
- * Nicolas Donner
- Nicolas Donne
- * Xavier Dousson
- * Robin Duponnois
- * Saad El Kabbaj
- * Jasmine Faes
- * Sabina Favaro
- * Alberto Ferlenga
- * Massimo Ferrari
- * Roberto Filippetti
- * Antoni Folkers
- * Enrico Fontanari

Cecilia Fumagalli
Luigi Gaffuri
Jacopo Galli
Arturo Gallia
Philippe Gervais-Lambony
Inbal Ben-Asher Gitler
N'buéké Adovi Goeh-Akué
Kim Gurney
Kai Gutschow
Jeffrey Head

* Didier Houénoudé

* Franck Houndégla

* Antonella Indrigo

* Driss Kettani

* Richard Klein

* Johan Lagae

Languetin

* Avala Levin

* Anna Magrin

* Laura Marino

* Hugo Massarive

* Cécilia Meynet-Diakité

* Martha Mezzedimi

* Marcello Mezzedimi

* Charles Nach Mbak

* Marie Morelle

* Daniela Nacci

* Bachir Oloudè

* Cristina Pallini

* Laszlo Mester

de Paraid

* lean-Christophe

- * Elisabeth Peyroux
 * Styliane Philippou
 * Petros Phokaides
 * Marguerite Pienaar
 * José Luís Possolo de Saldanha
 * Christophe Pourtois
 * Panayiota Pyla
 * Marcelle Rabinowicz
 * André Ravéreau
 * Bethan Rayner
 * Peter Rich
- * Daniela Ruggeri
- * Annalisa Scaccabarozzi
- * Dubravka Sekulic
- * Francis Sessou * Renato Severino
- * Mohamed Amine Siana * Kathleen Murphy
- Skolnik
- * Amandine Spire * Łukasz Stanek
- * Jean-Fabien Steck
- * Jean-Charles Tall
- * Claudia Tinazzi
- * Paulo Tormenta Pinto
- * Jean-François Tribillon
- * Joseph Tsigbé Nutépé
- * Ola Uduku
- * Fabio Vanin
- * Ana Vaz Milheiro
- * Giovanni Vio
- * Jaco Wasserfall
- * Vanessa Watson
- * Maria Anita Palumbo * Ilze Wolff
- * Gianguido Palumbo Pagi
- * Raul Pantaleo
- * Giannis Papadopoulos
- * Maria Chiara Pastore
- * Domenico Patassini
- * Perkins+Will
- Perkins+Will



N 978-887794844-1 / 28.00 E



AFRICA BIG CHANGE BIG CHANCE IS AN EXHIBITION OF AFRICA'S ARCHITECTURE AND THE TRANSFORMATIONS TAKING PLACE ON THE CONTINENT. Changes involve the control of large numbers and show huge shifts of people, pressures brought to bear by urbanization, the inappropriate use of natural resources and territories. The transformation – the Big Change – and the opportunity – the Big Chance – reflect the order of prospects available today for a better and sustainable future in Africa.

<u>The continent will be the theatre of a new modernity,</u> where a different global and cosmopolitan culture may be <u>developed.</u> The huge change in Africa's physical environment shows the traces – some problematic – of new infrastructure, the impact of large dams, and solar and wind power plants. There are also the tangible signs of major projects for reforestation (needed to stop the desert), in the lead up to the conquest of new areas.

The Africa of villages is becoming the Africa of cities. The African urban model is hard to read and classify. Western thought processes and conceptual strategies are ineffective. It may well be possible that the city of globality – the African megalopolis – will serve as a workshop for seeking alternatives to Western and Asian contemporary city. The spotlight turns to the figures involved in design fielding remedies for extreme situations, and which show the technical horizons of architecture related to passive environmental control. The exceptional nature of these experiments suggests that Africa was – and is – a training ground for a challenging concept of modernity.





It was no military march but Joseph Kabasele Tshamala GRAND KALLE'S Indépendance Cha Cha served as the theme music for the Congo's struggle for independence, led by PATRICE LUMUMBA.

We wait, with trepidation, and dedicate the exhibition AFRICA BIG CHA-NGE BIG CHA-NCE to that proud spirit of joyful Freedom.

WITH REGARD TO THE IMAGES THAT APPEAR IN THIS BOOK, LA TRIENNALE DI MILANO REMAINS AT THE DISPOSAL OF RIGHTS HOLDERS THAT IT WAS NOT POSSIBLE TO TRACE

© 2014 TEXTS AND LAYOUTS

FONDAZIONE LA TRIENNALE DI MILANO VIALE ALEMAGNA 6, 20121 MILANO TEL. 02 724341 WWW.TRIENNALE.ORG

EDITRICE COMPOSITORI IS A TRADEMARK OF COMPOSITORI COMUNICAZIONE © 2014 COMPOSITORI COMUNICAZIONE SRL VIA STALINGRADO 97/2 — 40128 BOLOGNA TEL. 051 3540111 — FAX 051 327877 INFO@EDITRICECOMPOSITORI.IT WWW.EDITRICECOMPOSITORI.IT

ISBN 978-887794844-1



FONDAZIONE LA TRIENNALE DI MILANO Board of Directors

Giovanni Azzone

David Bevilacoua Clarice Pecori Giraldi

Carlo Edoardo Valli

Auditors Committee

President

Barbara Premoli

Giuseppe Puma

General Director

Handicraft

Andrea Cancellato

Scientific Committee

Silvana Annicchiarico.

Design, Manufacturing,

Visual Arts and New Media

Eleonora Fiorani, Fashion

Maria Eugenia Notarbartolo

Library, documentation, archives

Edoardo Bonaspetti.

Alberto Ferlenga, Architecture and Territory

General Affairs

Franco Romeo

Paola Fenini

Elvia Redaelli

Laura Agnesi

Luca Lipari

Tommaso Tofanetti

Claudia Di Martino

Projects Department

Roberta Sommariva Laura Maeran

Violante Spinelli Barrile Alessandra Cadioli

Alessandro Cammarata

Administrative Services

Communication Department

Antonella La Seta Catamancio

Partner for Art and Science

Fondazione Marino Golinelli

CORRIERE DELLA SERA

Institutional partner

Triennale di Milano

Carla Morogallo

Technical Services

Cristina Gatti

Luca Pagani

Xhezair Pulaj

Paola Monti

Silvia Anglani

Marco Martello

Dario Zampiron

Micol Biassoni

Franco Olivucci

Claudio De Albertis, President

Maria Daniela Muscolino.

TRIENNALE DI MILANO SERVIZI SRL

FONDAZIONE MUSEO DEL DESIGN

Claudio De Albertis, Presidente David Bevilacqua

> Maurizio Scazzina Technical Services Marina Gerosa

Valeria Marta

Giulia Zocca

Administrative Services Anna Maria D'Ignoti Isabella Micieli Chiara Lunardini

Marketing Office Valentina Barzaghi Olivia Ponzanelli Caterina Concone

TRIENNALE DESIGN MUSEUM

Museum Activities Producer Roberto Giusti

Museum Research Marilia Pederbelli

Italian Design Collections and Archives Giorgio Galleani

Projects Department Maria Pina Poledda

Press Office and Communication Damiano Gullì

Triennale Design Museum Kids Activities Michele Corna

Administrative Services Marina Tuveri

Logistics Giuseppe Utano

Restoration, Research and Preservation Laboratory Barbara Ferriani, coordination Rafaela Trevisan

Board of Directors Carlo Edoardo Valli, President

Arturo Dell'Acqua Bellavitis, President Andrea Cancellato, CEO Maria Antonietta Crippa Carlo Alberto Panigo Supervisory Body Anty Pansera

Scientific Committee

Arturo Dell'Acqua Bellavitis, President Silvana Annicchiarico Mario Bellini Anna Calvera Pierre Keller Alessandro Mendini

Triennale Design Museum

Board of Directors

General Director

Andrea Cancellato

Maria Rosa Festari

Andrea Vestita

Board of Statutory Auditors

Salvatore Percuoco, President

Director Silvana Annicchiarico

AFRICA BIG CHANGE | BIG CHANCE

TRIENNALE DI MILANO **VIALE ALEMAGNA 6**

15 OCTOBER 28 DECEMBER 2014

Benno Albrecht

Curator

Sections

FUTURE

Massimo Ferrari,

EU MS AND PHOTOS

Maddalena D'Alfonso

Claudia Tinazzi

GEOGRAPHY OF NUMBERS Luigi Gaffuri

CONTINENTAL ARCHITECTURES Filippo De Dominicis

CITIES IN THE GLOBAL CONTEXT

Monica Coralli, Anna Magrin

Curator Triennale Architettura Alberto Ferlenga

Video Editing Davide Preti

Research on innovative

Marketing

Valentina Barzaghi

/Marketing Office

La Triennale di Milano

materials ARCHITECTURES OF MODERNITY Maria Antonia Barucco Jacopo Galli, Daniela Ruggeri with Margherita Ferrari, Laboratorio ArTec – Università IUAV di Venezia

> **Display Installation** Plotini Allestimenti

Materials for the exhibition

PCR s.r.l. - panels and fibreglass

beams in thermosetting resin

SPH s.r.l. - steel-profile con-

structions CIPA, cold formed

Ti Vu Plast s.r.l - honeycomb

3M Italia srl - resealable velcro

honeycomb panels

cardboard strips.

fastening systems

3D Printers

3D Modelling

coordination

models review:

Niccolò Grossi

Giuseppe d'Acunto

with Luisa Vittadello

and Armando Zappalà

Diletta Baiguera, Francesca

Basso, Tomas Berto, Daniele

Bettin, Pietro Bigatello, Gio-

vanni Bordin, Andrea Borgato,

Matteo Brighenti, Lisa Brunel-

Callegari, Raffaele Camputaro,

Chieregato, Giacomo Conzato,

Valentina Corà, Alberto Cosaro,

Giovanni Matteo Cudin, Danie-

la da Ronch, Matteo Dainese,

della Toffola, Giovanni Donaz-

zon, Alberto Doncato, Martina

Eavaretto, Chiara Garbelotto

Alice Garbuio, Nicolò Golin,

Davide Grandi, Anna Griso,

Andrea Dalla Vittoria Silvia

lo, Monica Busetto, Matteo

Marco Cecchinato, Luca

Baldi, Nicolò Ballarin, Elisa

Sharebot

steel

RODECA ITALIA - polycarbonate

Lighting Marzoratimpianti

Logistic Services "African Photography" section Koiné

curated and produced by CIVA - Centre International pour la Ville l'Architecture stands et le Paysage - Brussels CELENIT s.p.a. - mineralized Christophe Pourtois and wood fibres bound with Marcelle Rahinowicz with cement Marcelline Bosquillon, Jacques MOVE s.r.l. - honeycomb de Neuville, Meryem Moulay cardboard panels

Photographers

Ali Charabi, Nadia Ferrouhki, Mouna Karray, Kirippi Katembo, Ala Kheir, Mack Magagane, Pierrot Men, Charles Okerke, Justin Plunkett, Guy Tillim

Slideshows

Michael Poliza, Yann Arthus-Berthrand /Altitude

Scientific Consultants Antoni Folkers, Ola Uduku, Vanessa Watson

Display Design Benno Albrecht, Enrico Guastaroba

Visual Identity and Graphic Design Stefano Mandato

Information Graphics Valerio Pellegrini

Exhibition Coordination

Roberta Sommariva / Projects Department, La Triennale di Milano with Luca Lipari /Projects Department La Triennale di Milano

Technical Coordination

Marina Gerosa, Cristina Gatti /Technical Services, La Triennale di Milano

Communication

Antonella La Seta Catamancio. Micol Biassoni, Marco Martello /Communication Department. La Triennale di Milano

Pasqua, Matteo Pauletto, Valeria Polato, Damiano Polo, Federico Quaia, Caterina Ribolla, Ermanno Rizzo, Manolo Rossi, Josep Soler, Alberto Sorgato, Jessica Spagnolo, Andrea Sparzani, Edoardo Stradiotto, Irene Todero, Andrea Tommasin. Matteo Tozzo Elisa Vendemini, Rossella Villani, Eleonora Zambon, Edoardo Zanchetta Riccardo Zaniol

3D Printing

Sharebot, Università IUAV di Venezia, The Fab Lab Make -Milano Fahlah - Milano Fah Lab - Ivrea, Fab Lab - Settimo Torinese, MakeinBo – Bologna, Talent Lab – Padova, Fab Lab -Verona, Spazio Yatta! - Milano, Fab Lab - Bergamo, Fab Lab -Biella, MADesign - Lecco, Fab Lab VdA - Aosta, 3Ditaly - Milano

African Future section

Designs by

Bom architecture. Gabinete de Arquitectura + Solano Benítez /Taller E/Laboratorio de Arquitectura + Javier Corvalán, Mariam Kamara, Anupama Kundoo Architects, Sebastian Irarrázaval Arquitectos, Metro Arquitetos Associados, NLF architects, Boubacar Seck.

Sincere thanks for their kind cooperation to

Kunlé Adevemi, Firmin Bail, Alba Balmaseda, Ghazal Banan, Solano Benítez, Macarena Burdiles, Marta Casarin, Gustavo Cedroni, Javier Corvalan, Martin Corullon, Rafe Copeland, Ali Dabirian, Andrea De Toni, M. Julieta Dentice, Chérif Diattara, Khalid Ait Fl Madani, Riccardo Gadotti, Pedro Torres Ga-Cantó, Isabelle Godineau, Elizabeth Golden, Mariam Kamara, Anupama Kundoo, Ana Ibañez, Sebastian Irarrázaval. Nicole laquet. Sergio Lobato, Marta Melotti, Giorgio Marafioti, Laura Mosconi, Segun Omodele, Chryso Onisiforou, Charles Ouédrogo, Chamss Doha Oulkadi, Rocio García Peña, Vikramaditya Prakash. Valentina Rossi, Martina Ruini, Laurent Sanz, Boubacar Seck, Mbaye Sène, Luciana Senna, Stephanie Jacks Serrati, Fabiana Steele, Berend Striiland, Monica Velasco

Models BRG studio

Eros Maggiolo Manuel Magnaguagno, Giovanni Magri, Guido Mosca, Carolina Niero, Carlo Olivato, Alessio Oliviero, Sara Pace. Costantino Paparella, Andrea

CATALOGUE

Editor Benno Albrecht

Scientific and Editorial Coordination Filippo De Dominicis. Jacopo Galli, Anna Magrin

Graphic Design Stefano Mandato

Layout Ilaria Rassi Compositori Comunicazione

Translations Angela Arnone, Sonia Atkinson, Robert Norris, SOGET est srl, Simon Turner cooperation to loe Addo. Kunlè Adevemi. Laura Agnesi, Deyemi Akande, American University in Cairo - Rare Books & Special Collections Library & Archives, Association ALADAR: "les amis d'André Ravereau". Paul Andreu. Conchita Añorve-Tschirgi. ArchiAfrika, Archives d'Architecture Moderne - Bruxelles, Arup Archive Department. Romarick Atoké, David J. Azrieli, Central Archives and Israeli Research Center for Architecture - Tel Aviv, Marco Ballarin, David Barrow, Angela Reddard Cory Revington Archive, Bibliothèque Éricde-Dampierre - Archives des Ethnologues - Université Paris Quest Nanterre La Défense. Paolo Brescia, Roberto Brizi, Hervé Brugoux, Isabelle Bruneau, Daniel Bruun, Angela Buckland, Laura Candelpergher, Giuliano Cannata, Éliane Castelnau, Aziza Chaouni. Chicago History Museum, Andre Christensen, Jacek Chyrosz Personal Archive, Alice Aga Khan Colombo, Serena Cominelli, Giulia Ciliberto, Civici Musei e Gallerie di Storia e Arte -Udine, Andrew Clunies-Ross, Leana Clunies-Ross, Fernanda De Maio, Bruno De Meulder, Deutsches Architektur Museum - Frankfurt am Main, Paul Devenish, Issa Diabatè, Koffi Diabatè Architects, Claudio Di Luzio, Riccardo di Sisto, Anna Djigo, Costantinos A. Doxiadis Archives, Axel Ducorneau Richard Eeles, Julian Elliott, Zalman Enav, Dorian Erkoci, Gawie Fagan, Caterina Failla, Pierlorenzo Fantozzi, FARE Studio, Candace Felt, Umberto Ferro, Roger Fisher, Carlo Frassinelli, Cecilia Furlan, Gallerie del Progetto, Giuseppe Giau, John Godwin & Jilian Hopwood, Angus Gordon, Pauline Hayward, Mark Horner, Huntington Library - San Marino CA, Jain Jackson, Fitan Karol, Nana Kofi Acquah/IWMI, Guillaume Koffi, Leon Krige, Les Turbulences - Frac Centre - Orléans, Hannah le Roux, Romana Longrigg, Vincenzo Lizier, LOCI Architectural Archives - Brussels, Enrico Lodigiani, Gervais Lombe Yao Kouassi, Marjolein Lyssens, Andrew Makin, Benjamin Malinge, Janina Masojada, Anne McAuley, Paul Mikula, Sara Montani Marie-Dominique Mouton, Jussi Murole, Adele Naudè Santos, Lorenzo Nassimbeni lérôme Nicod NI F Architects, OBR Architects, Jason Oddy, Emmanuel Oko Adjetey, OMM Design Workshop, William O'Reilly, Vittorio Ortalli, Stella Papanicoulaou, Giota

Sincere thanks for their kind

Pavlidou, Perkins+Will, Morne Pieenar, Studio Ing. Giorgio Pietrangeli, Hernan Pitto Bellocchio, Emilie Poirson, Luca Porqueddu, Gianni Porta, Tommaso Princini Angela Randolph, Maya Ravéreau, Maurizio Riva, Valerié Reats, Salini-Impregilo, Francesco Saraò Elisa Siffredi, Nadia Simeon, David Southwood, Berend Strijland, Maurizio Tarlà, Michael Tedros, Peter Tolkin, Alexis Tronchet, University of South Africa Archive - Pretoria Simon Vaillant, Dick Van Gameren, Louise Van Riet, Remi Vaughan-Richards. Luigi Vianello, Stefano Vighi, Wolfgang Welker, Petterik Wiggers/IWML Heirich Wolff

A La Triennale di Milano exhibition in cooperation with

CIVA - CENTRE INTERNATIONAL POUR LA VILLE L'ARCHITECTURE et le Paysage - Bruxelles

AWARD FOR ARCHITECTURE

and

Cité de l'Architecture et du Patrimoine - Centre d'Archives d'Architecture du XXe siècle - Paris

Special thanks to Farrokh Derakhshani. Marie Hélène Contal, David Pevceré.

UNDER THE HIGH PATRONAGE OF

Ministere degli Affari Esteri della Ceoperazione, Internazion

Regione Lombardia

CAMERA DI

COMMERCIO

fondazione caripio

cultura dell'energia mergia della cultura

MILANO.

PARTNER

175

eni

TECHNICAL PARTNERS

ATM

SHAREBOT

TRIENNALE ARCHITETTURA

PARTNERS









INTRODUCTION

11 — Claudio De Albertis

0. FOREWORDS

LEARNING FROM AFRICA

16 — Alberto Ferlenga

AFRICA BIG

20 — Benno Albrecht

1. GEOGRAPHY OF NUMBERS

AFRICA IN FIGURES

34 — Luigi Gaffuri

2. CONTINENTAL ARCHITECTURES

CONTINENTAL ARCHITECTURES

52 — Benno Albrecht, Filippo De Dominicis

LIMES AFRICAE. ANATOMY OF A FRONTIER

62 — Filippo De Dominicis THE GREAT GREEN WALL OF AFRICA INITIATIVE 63 — Abdoulaye Dia, Robin Duponnois DOXIADIS'S ONE BIG PAN-AFRICA 66 — Panayota Pyla, Giannis Papadopoulos FROM DISPUTED LAND TO PLURALISTIC LANDSCAPE? FORMATION AND (RE) CONSTRUCTION OF A TERRITORY: THE VOLTA RIVER PROJECT IN GHANA 70 — Viviana D'Auria MAKING THE DESERT BLOOM: THE TOSHKA PROJECT 72 — Arturo Gallia FROM AN ARCHEOLOGICAL PERSPECTIVE. MICHEL ECOCHARD IN GHARB 76 — Victor Brunfaut FIVE PROJECTS FOR ABU SIMBEL 78 — Cristina Pallini

AFRICA: FINALE OF TRAGIC IRONY, AND A NEW DEVASTATING OBSCURANTISM SHADOW SPACES... TERRITORIAL RESERVATIONS 86 — Silvia Dalzero

LARGE DAMS IN AFRICAN DECOLONIZATION

82 — Annalisa Scaccabarozzi

3. ARCHITECTURES OF MODERNITY

AFRICAN MODERNITIES 92 — Benno Albrecht, Jacopo Galli

NEW AFRICAN ARCHITECTURE

104 — Antoni Folkers

AFRICAN ARCHITECTURE 1950-1990: A BRIEF

WEST AFRICAN PERSPECTIVE 116 — Ola Uduku

NORMAN EATON 128 — Marguerite Pienaar

WALLACE NEFF 129 — Jeffrey Head EDWIN MAXWELL FRY & JANE DREW 132 — Jacopo Galli ERNST MAY 133 — Kai Gutschow LOUIS MIQUEL 136 — Daniela Ruggeri, André Ravéreau **CLAUDE STREBELLE & YENGA** 137 — Johan Lagae JEAN-FRANCOIS ZEVACO 140 — Edoardo Bernasconi IEAN BOSSU 141 — Xavier Dousson ROLAND SIMOUNET AND LOUIS MIQUEL 144 — Richard Klein HARRY WEESE 145 — Kathleen Murphy Skolnik PANCHO GUEDES 148 — Fabio Vanin PIERRE DUFAU 149 — Hugo Massarive LUÍS POSSOLO 151 — José Luís Possolo de Saldanha ATELIER DE MONTROUGE 153 — Catherine Blain ARTURO MEZZEDIMI 154 — Martha Mezzedimi, Marcello Mezzedimi ANTÓNIO SARAGGA SEABRA 156 — Paulo Tormenta Pinto

ARIEH & ELDAR SHARON 157 — Inbal Ben-Asher Gitler ALFREDO DA SILVA E CASTRO 160 — Ana Vaz Milheiro CHYROSZ & RYMASZEWSKI 162 — Łukasz Stanek RENATO SEVERINO 164 — Renato Severino MARCELLO D'OLIVO 165 — Antonella Indrigo ZALMAN ENAV & MICHAEL TEDROS 168 — Avala Levin HASSAN FATHY 169 — Viola Bertini ANDRÉ RAVÉREAU 170 — Daniela Ruggeri LUIGI MORETTI 173 — Eleonora Carrano OSCAR NIEMEYER 176 — Styliane Philippou ROELOF SAREL UYTENBOGAARDT 177 — Giovanni Vio FERNAND POUILLON 180 — Giulio Barazzetta, Daniela Nacci PIER LUIGI NERVI 183 — Christophe Pourtois EUGENIO PALUMBO AND FERNAND TALA N'GAI 184 — Kim de Raedt ADÈLE NAUDÉ SANTOS, TONY DE SOUZA SANTOS 185 — Ilze Wolff ABDESLEM FARAOUI AND PATRICE DE MAZIERES 188 — Jacopo Galli ANTHONY B. ALMEIDA 189 — Pieter Burssens ENERGOPROIEKT 101 — Dubrayka Sekulic, Petros Phokaides LASZLO MESTER DE PARAID 193 — Laszlo Mester de Parajd FABRIZIO CAROLA 194 — Benno Albrecht PATRICK DUIARRIC 197 — Roberto Filippetti HERVÉ BRUGOUX 199 — Laura Marino STUDIO PROPOLIS 201 — Naeem Biviji, Bethan Rayner WOLFF ARCHITECTS 202 — Kim Gurney WASSERFALL MUNTING ARCHITECTS 204 — Jaco Wasserfall PETER RICH 206 — Peter Rich

EL KABBAJ, KETTANI, SIANA

207 — Saad El Kabbaj, Driss Kettani, Mohamed Amine Siana 26'10 SOUTH ARCHITECTS

208 — Thorsten Deckler

TAM ASSOCIATI 211 — Raul Pantaleo

PERKINS+WILL

213 — Perkins+Will

4. CITIES IN THE GLOBAL CONTEXT

AFRICAN CITIES: WORLD-CLASS VERSUS PRO-POOR? 220 — Vanessa Watson

URBAN AFRICA. THE CITY OF MIXED USES, THE DESIGN OF SPECIALISED SPACE 230 – Anna Magrin

HOUSING IN URBAN AFRICA. LIFE IN THE CITY 238 — Monica Coralli THE EXISTENCE OF REFUGEE CAMPS. TIME, SPACE AND POLITICS OF THE PRESENT 246 — Michel Agier

CAPITAL CITIES 249 — Simon Bekker THE HABITATS OF THE MIDDLE CLASS: BETWEEN ELITES AND DIASPORA 252 — Jérôme Chenal IS HOMO URBANUS STILL "TERRESTRIAL"? SPACE-NAUTIC FANTASIES PROJECTED FROM AN OIL FACILITY 254 — Nicolas Donner EXERCISES IN PLANNING 257 — Enrico Fontanari THE CONTEMPORARY CITY ABUZZ WITH BUDDING IDEAS. PLUS THE BOMB-CITY 261 — Jean-Christophe Languetin INSTANT CITIES, OR THE CAPACITY TO REPRODUCE SPACE AND TIME IN AN URBAN CONTEXT OF EXCHANGE 265 — Maria Anita Palumbo SHAPING AFRICAN WATER AND SANITATION SYSTEMS. THE CHALLENGE OF THE CITIES 266 — Maria Chiara Pastore CHINA REHEARSES HEGEMONY IN AFRICA 268 — Domenico Patassini

PLANNING THE AFRICAN CITY: THEORY AND PRACTICE 273 — Jean-François Tribillon

ABIDJAN

276 — Jean-Fabien Steck

ACCRA

276 — Amandine Spire

ANÉHO

276 — N'buéké Adovi Goeh-Akué

ВАМАКО

277 — Franck Houndégla

CAPE TOWN

278 — Sabina Favaro

COTONOU

278 — Bachir Oloude

281 — Jean-Charles Tall

DIOL BABA KADD

282 — Gianguido Palumbo Pagi

FIGUIG

283 — Cecilia Fumagalli

GREATER CAIRO

283 — Pierre-Arnaud Barthel

EKURHULENI

284 — Philippe Gervais-Lambony

FREETOWN

284 — Charles Nachback

KAMPALA

285 — Bernard Calas

LALIBELA

285 — Marie Bridonneau

LUSAKA

286 — Gerald Chungu

MOPTI

286 — Cécilia Meynet Diakité

NOUAKCHOTT

289 — Armelle Choplin

OUAGADOUGOU

289 — Alexandra Biehler

PORTO-NOVO

290 — Didier Houénoudé

SANVEE CONDJI AND HILLA CONDJI

290 — Joseph Koffi Nutépé Tsigbé

SAVALOU

293 — Francis Sessou

YAOUNDE

293 — Marie Morelle

WINDHOEK

294 — Jasmine Faes, Elisabeth Peyroux

5. MEDIA AND MATERIALS

HUMAN LANDSCAPES, A PHOTOGRAPHIC APPROPRIATION 298 — Christophe Pourtois, Marcelle Rabinowicz ADDITIVE MANUFACTURING AND ARCHITECTURE: A NEW FRONTIER?

301 — Giuseppe D'Acunto THE SENSE OF MATERIALS

305 — Maria Antonia Barucco IMAGINING THE FUTURE 307 — Massimo Ferrari A COLLECTIVE PROJECT

312 — Claudia Tinazzi

315 — Maddalena d'Alfonso

One of the main tasks of La Triennale is to reflect not simply on its own country and its own city but rather to look at the changes affecting the world.

With the great universal expos of the past and, in particular, the XVII Triennale di Milano, *World Cities and the Future of the Metropolis* and, more recently, with *USE Uncertain States of Europe* and *Architecture of the World*, our institution has entered the great debate on metropolitan and other areas, and on how they are changing and will change in the future.

The *Africa: Big Change Big Chance* exhibition takes up this line of research pursued by La Triennale, focusing its investigation on the urban and architectural transformations and huge changes sweeping through Africa. It reflects on the character of the continent and on the great problems and on the opportunities that it offers the world.

With regard to Africa, there is a general feeling of guilt about colonialism, and about the wars and exploitation of nations and peoples, especially by the countries of the northern hemisphere. We do however believe that these feelings should also be accompanied by serious analysis of, and reflections on, the changes currently under way. These include rapid population growth,

NEW AFRICAN ARCHITECTURE

Fifty years of New Architecture in Africa

- ANTONI FOLKERS

Udo Kultermann wrote his book New Architecture in Africa in 1963, followed by New Directions in African Architecture in 1969. The first book was a proud exposé of the achievement of architectural modernism for the new African nations, the fresh start for a new world embodied. The second book stated "architecture" as new to the continent, and African Architecture an ambition that would have to be achieved through the import of European and American thought in the first place.

The architects featured in Kultermann's books were, without exception from firm modernist stock, all trained in the western modernist context. Their purist and pristine buildings, displayed in sharp black and white print, conveyed the new world in the making. Together they confirmed the great narrative of modernism, providing the beholder with an image of a well organized and ideal world.

Africa provided fertile ground for the visions of these architects. Within the European context there was a lot of resistance against the modernist ideas, whereas in Africa, their ideas for a new world created on a clean slate, were embraced by the leaders of the newly independent nations. Hence, these architects were able to build their dreams in Africa that they could often not realize in their home country. Such a effectively realised utopia in an alien context can be called a *heterotopia*: the creation of real space that is other.

This western-dominated romantic vision on the development of African architecture continued well after the demise of modernism in the late 1970ies. The technocratic dream of the modernists made room for the back-to-the-roots movement ignited by the oil-crisis and subsequently broadcasted doom scenarios on the future of the Earth. And again, as with the preceding modernist vision, the proposed solutions to better the world, this time through the application of Appropriate Technology, was welcomed in Africa. In Europe, Appropriate Technology would however remain province of a marginal underground scene, whereas in Africa projects were being realised making use of reused glass bottles, sand bags, bamboo, straw bales and, first and foremost, mud. Mud befitted the image of African Arcadia, the romantic image of the African village that proofs to be incredibly persistent and still clouds the retinas of many in Europe and the rest of the world.

The dream of the Appropriate Technology movement, a mission now forgotten, but replaced by the mission of Sustainability, is still influencing architectural education directed to the African continent in Europe and America. Mud, reused glass bottles, sand bags, bamboo and straw bales are again being promoted as the technological solution for Africa. Pretty projects, such as community centres, schools and homes are being designed and built by European and American university students and their teachers, with the ever so welcoming African hands. Pet-projects that often collect a lot of press attention and even international architectural prizes, as they are both aesthetically pleasing and socially correct.

It is not that these experimental building techniques have no value in themselves, but they will not pose the answer to the huge architectural challenge met on the African continent. Providing decent shelter for the exploding urban population is the obvious challenge in the field of architecture and urbanism.

This explosion of the African city – some cities expand by over 5% a year – feeds the other western-centred vision of the continent. A pessimistic vision this time, in which Africa is the lost continent, unable to free itself from a continuous visitation by plagues, hunger and wars. In the much acclaimed book *Planet of Slums*, Mike Davies depicts the future of the African city as a slum without end. Such has been and still is by and large the western perception of Africa, a paradise lost and a dystopia to be. This mantra has provided fertile ground to acquire the much needed help to the continent.

However, it is to be questioned whether Africa really cannot stand on its own legs and or its future is truly that grim. The African citizens have been able to make the shift from the rural to the urban, and this shift indeed is taking place at an incredible speed, as we speak, but to state that the African cities are seas of slums is wrong. Even worse, it is a vision that is does not pay the due respect to the efforts and achievements of the people. Over the past fifty years, African citizens have been able to adopt modern building technology and adapt it to their modest means in building decent and clever dwellings. Of course there are also places and suburbs of great poverty and squalor, but they are not representative for the larger part of the African city of today.

104

AFRICA | BIG CHANGE | BIG CHANCE

The main reason for this distorted and western-romanticized vision of the state of Africa is a very simple one: the Africans have scarcely been writing and the description of the continent was always in the hands of western authors - as this piece is again, for the records. It as the African saving goes: "Tant que les lions n'auront pas leurs propres historiens, les histoires de chasse continueront de glorifier le chasseur". Or, as the Ghanaian architect Joe Addo puts it: "We are in a difficult position of being defined by others and not by ourselves. We have been quite lazy intellectually or have not shared with the world who we are through our contemporary architecture."

Yet, intellectual initiatives to redefine Africa in the contemporary context were not absent during the last fifty years. Statesmen like Nyerere of Tanzania, Senghor of Senegal and Nkrumah of Ghana developed African rooted philosophies in the 1960ies, but it was not until the 1990ies that African thinking touched firmer ground through the work of Ali Mazrui of Kenya, Kwame Anthony Appiah of Ghana and Thabo Mbeki of South Africa with the creation of the Afrenaissance, advocating a new era in African history, kick started in 1994 with South Africa's departure from Apartheid and the simultaneous recovery of economic growth the continent all over.

106

AFRICA | BIG CHANGE | BIG CHANCE

The economic growth of African countries has taken momentum over the first decade of the 21st century, and did not slow down over the past five years crisis that hit the western world. This development caused an increase in self confidence of the African continent and this confidence translates itself in the creation of new cities. All over Africa, new cities are being planned, telling the story of African success and confidence. These cities start from a clean slate, negating the existing city. The Cité du Fleuve in Congo, as an example, is an entirely new city for the new elite, turning its back to the existing city of Kinshasa. Like the work of the modernists in the post-war years, these new cities embody the belief in a shining new future, a fresh start sweeping away the deteriorated past. This is as much a 'great narrative' as the modernist one, but this time by African initiative. The start of this great narrative can be established with the introduction of Bodys Isek Kingelez' work at the 1993 Home and the World exhibition at the Museum of African Art in New York. Kingelez builds models of the imaginary African city, the *ville fantôme*, or the city as dreamt up but not vet realised. These models have become popular at art exhibitions, but more importantly so, they are being built now.

It can be argued that a conscious search for a new African architectural identity by architect is nonsense. Heinrich Wolff quotes Barnett Newman in "an idea of what cultural identity should be, should have as much relevance to the architect as ornithology has to the birds" to support his view that ascribing cultural identity to architecture is a retrospective act by theoreticians and thus irrelevant to the creation of architectural work as such. For the architect to consciously design a building starting from the notion of cultural identity











would mean that this cultural identity has to be created beforehand by the architect himself.

Besides, what is African architecture as a distinct architectural style, methodology or typology? What makes the architecture of a continent of over fifty countries distinctly different from the rest of the world? Do, for instance, North American or European architecture exist in this sense?

The world of today is shared by all now, and there is no such thing as, for instance, conscious Dutch architecture anymore, if ever it existed. Yet there are Dutch elements that survive in a globalised architecture. Similarly there are typical Swahili elements that can be discerned in contemporary East African architecture, Dogon anthromorphic spatial patterns in Malian architecture, Akan symbols in Ghanaian architecture and so forth.

It can thus be positioned that African architecture as a cultural identity is nonexistant. However, as was concluded at the second ArchiAfrika conference in Kumasi in 2007, *African Architecture Today*, African Architectures, as a distinct family, may exist.

109

ARCHITECTURI

OF MODERNITY

There are a couple of binding factors that make such an African family of architectures credible. The first and most important binding factor is the homogeneity of the continent in terms of political and economical position in time and place. Most African countries were colonized within the brief period between 1875 and 1890, gained independence in, again, a short time span between 1957 and 1975 and are also undergoing the current economic boom simultaneously.

The second binding factor is following Wolff's position, of retrospectively ascribing cultural identity by outsiders which ricochets onto the African artists themselves. The foreign perception of African culture is rooted in a position of ignorance of the richness of African culture and history. Who knows, for an example, the difference between cultures of Ghana and Tanzania, or, of South Africa and Congo?

Responding to this ignorance, the African arts and craft market has created a homogeneous offer of art products, which, in turn may have triggered a continental cultural chauvinism, or a *cultural continentalism*. Traditional textiles from the Kuba of Congo, Ndebele puppets from South Africa, Fang masks from Gabon, Dogon doors from Mali and Ashante cloth from Ghana can be purchased at almost any art market or airport on the continent. The fact that they are representing a culture specific to areas that are thousands of kilometres apart is of little relevance, neither for the tourist, nor for the seller, possibly even not for the maker who might just be a local craftsman belonging, traditionally, to an entirely different culture. Such continentialism is something the European Union might look upon in envy. Within this context of responding to foreign perception and to feed self confidence due to growing economic strength, the search or desire for a new African architecture is undeniably present on the continent. And it seems that Kingelez' *ville fantôme* of the middle 1990ies is one of the strongest inspirations in this search. Almost simultaneously to the appearance of Kingelez' first works, buildings from the *ville fantôme* were popping up in Senegal, Mali and Togo, designed by the Senegalese architect Pierre Goudiaby Atépa and his colleagues. Goudiaby's bank buildings are erected in materials and with technology that are used in any contemporary bank elsewhere in the world, but the exuberant mix of tinted glass, shining metal and colourfully plastered concrete, make them at the same time distinctly different from the generic international bank building, and are clearly applying the same language as Kingelez in his art work. It this language that now has become paramount in the design and building of the new cities in Africa, as well as in the study work of a new generation of students at the African schools of architecture.

This architectural style, baptized *surmodernité* by Danièle Diwouta, is the surrealist quantum leap into Kingelez' future that, for instance in the Cité du Fleuve, juxtaposes the new African image next to the crumbling skyline of old Kinshasa. It is noteworthy that this language is so strongly embraced by African clients and their architects all over the continent. Kingelez apparently struck the right string.

The *architecture surmoderne* is not the style that the international academic architectural scene will easily embrace. Though full of strong symbolical architectural expression, and thus transpiring aspirations, it is singular and rather shallow in its statement. It is architecture that often lacks the layering that make up a good building. Response to climatic context, communication with urban life and physical context, optimal functionality, economic construction and reference to local culture have more often than not been sacrificed to make place for the strong symbolic message.

It looks like that, recently, *architecture surmoderne* in Africa has been remodelled to Asian modernist templates, finished with a slight African vernacular touch. After Europe and America, Dubai seems now to be the new example for African aspirations. Ammar Osman described the new *surmoderne* Burj Alfateh building in Khartum as "the Arabic essence (that) blends with the African rhythms were they synchronize at the European creativity resulting in a gorgeous piece of art of the international architectural orchestra".

Joe Addo's complaint about African intellectual laziness comes back to the mind in the above analysis of *architecture surmoderne*, but there is another side to it. Africa has been welcoming foreign cultures for many centuries, and been very successful in observing, adopting and adapting these influences into their own culture. This open and cosmopolitan attitude created, amongst others, the ancient and rich Swahili culture of the African East Coast, which was





blended from African, Persian, Chinese, Indian and Arabic cultures. As Abdul Sheriff beautifully said about Zanzibar that it 'was not merely an odd mixture of diverse peoples and cultures, each maintaining its distinctness. It is the fashioning of a new amalgam that incorporates different elements while transforming them to weave a new social tapestry. This has become the hallmark of Zanzibar, whether one looks at the rainbow of colours in the faces of its inhabitants flowing through its narrow streets, the clothes that they wear, the food they share, or the music and dance they relish in, or indeed the language they speak'. Nnamdi Elleh speaks in this context of the tripartite heritage of African architecture, formed by Animist African, Islamic Arabian and Christian European influences, accommodating, adapting and appropriating these in a slow, ruminating manner. Elleh sees this process repeated in the work of some acclaimed work of contemporary architects in Africa. Francis Kéré, in his school at Gando and Laurent Séchaud in his market at Koudougou, both in Burkina Faso, but also Peter Rich in his South African Mapungubwe Interpretation Centre, Dick van Gameren in his Netherlands Embassy in Addis Ababa and Kunle Adejemi in his floating school in the Lagos lagoon, create a localized modernity in an attempt to combine European-inspired conceptions of space with traditional vernacular sensibilities. These architects have not at all been intellectually lazy. They studied the traditional vernacular, accepted the reality of contemporary technology and materials, but dared to add a new interpretation of the local culture and context to their creations.

113

ARCHITECTURES OF MODERNITY

Similarly, but searching inspiration from the contemporary instead of the traditional vernacular, accepting if not celebrating popular architecture of tin sheets and cement blocks commonly so much ignored by the architectural scene, Joe Noero and Heinrich Wolff created their school at Khayelitsha (Cape Town), 'Ora Joubert her own house in Pretoria and Koji Tsutsui his Annular Orphanage at Rakai in Uganda. These architects are not afraid to embrace this banal architecture and technology in works that are translating typical African space arrangements into a new and complex form.

New African Architecture is of course not limited to the works that embody a strong component of search into cultural context, whether by conscious intention by the architect or retrospectively attributed by the theoreticians. Many fine and innovative buildings have been erected over the past decade that did not deal with such components, through still responding to the local context in a respectful way.

Architecture of high standard, designed by more than competent architects, is being built over the continent, from Martin Kruger in Cape Town to Abderrahim Kassou in Casablanca, from Danièle Diwouta-Kotto in Douala to in Nadir Therani in Dar es Salaam and from Joe Osae-Addo in Accra to Zelele Balay in Addis Ababa. These are works that fit smoothly in a late modernist picture of intelligent, well conceived and detailed architecture, which can easily compete with buildings elsewhere in the world. To conclude this search into new African architecture of today, it is befitting to pay homage to three old African heroes, still alive and active: Anthony Almeida (b.1921,Tanzania), Pancho Guedes (b.1925, Portugal), and Demas Nwoko (n.1935, Nigeria). These three architects stand proof of African intellectual diligence, they tirelessly sought for a new African architecture within the context of global modernity, local restrictions and cultural riches. Almeida and Guedes already prominently featured in Kultermann's books in the 1960ies; Nwoko, the younger of the three, was not yet discovered by Kultermann, but is possibly one of the few African architects that so far managed to escape from the strict bonds of modernism to create a completely new and meaningful African architectural language.

Guedes' remark, towards the end of Kultermann's New Directions in African Architecture of 1969, has lost nothing of its relevance: "Yet our hunger for buildings as symbols, messages, memorials, chambers of ideas and feelings is so strong that even if their faded medicine has lost the original potency of sign and idea, our need constantly recharges them."





* | Laurent Séchaud, Koudougou Central Market, Koudougou Burkina Faso, 2005.