CITIES OF CHANGE
ADDIS ABABA
TRANSFORMATION STRATEGIES FOR URBAN TERRITORIES IN THE 21ST CENTURY

MARC ANGÉLIL
DIRK HEBEL

ETH
Federal Technical University of Zurich
DARCH
Faculty of Architecture
The research investigates the performance of cities in view of resource fluxes – the interplay and transformation of stocks and flows of resources according to changing parameters in time. Specifically, seven trajectories are identified, acknowledging both physiological and morphological transformations of urban systems: stocks and flows of people, water, space, material, capital, information, and energy.
CITIES OF CHANGE
ADDIS ABABA

CONTEMPORARY STRATEGIES FOR URBAN TERRITORIES IN THE 21ST CENTURY
CONTENTS

1 MIRROR, MIRROR, ON THE WALL
   URBAN PRODUCTION AT ECONOMIC CROSSROADS // MARC ANGÉLIL AND CARY SIRESS

15 URBAN LABORATORY – ADDIS ABABA
   DESIGN RESEARCH ON TERRITORIAL TRANSFORMATION // MARC ANGÉLIL AND DIRK HEBEL

30 MIRRING RESEARCH // MARC ANGÉLIL AND JESSE LECALAVIER

29 STOCKS AND FLOWS OF PEOPLE

30 THE PORTRAIT OF AN ISOLATED NATION
   ABYSSINIA/ETHIOPIA // ZEGEYE CHERENET

38 INTEGRATING URBANITY
   // XENIA KOKOULA AND CHRISTIAN SCHÄRMER

45 DISPLACEMENT ON THE HORN OF AFRICA
   // SANDER LAUREYS AND LINCOLN LANDON LEWIS

48 CAPITALS ON THE MOVE
   AN URBAN HISTORY OF ETHIOPIA // FASIL GIORGHIS

54 PROXEMICS
   ENCLAVE URBANISM // RAEGAN ALBRIGHT AND JASMINE KASTANI

60 AN IMPERIAL COLONIAL CITY IN AFRICA
   ITALIAN CITY PLANNING FOR ADDIS ABABA (1936–40) // ELIANA PEROTTI

66 EDUCITY
   // LAURA MACCIONI AND DARÍK ZEBENIGUS

75 STOCKS AND FLOWS OF WATER

76 A CONNECTION TO INDIA?
   LALIBELA AND LIBONOS, THE KING AND THE HYDRO-ENGINEER OF 13TH CENTURY ETHIOPIA // MARK JARZOMBEK

80 PARALLEL URBANISM
   // SEBASTIAN ALFARO FUSCALDO, NOBORU KAWAGISHI, AND MATTHEW GERALD SKJONDSBERG

89 REFORESTING ETHIOPIA
   // DIMITRIS ANAGNOSTOPOULOS, HUI-JU LEE, AND DARÍK ZEBENIGUS

90 FORESTICITY
   // DIMITRIS ANAGNOSTOPOULOS AND HUI-JU LEE

98 KEN CITY
   // FUJAN FAHMI AND TOMAS POLACH

105 WATER HARVESTING
   // KATRINA STOLL

107 STOCKS AND FLOWS OF SPACE

108 HOUSING ADDIS
   THE GRAND HOUSING PROGRAM // DIRK HEBEL AND BISRAT KIFLE

114 LEARNING FROM BOLE
   // XENIA KOKOULA AND CHRISTIAN SCHÄRMER

119 THE MAKING OF THE INFORMAL HOUSING SECTOR IN ADDIS ABABA
   // DIRK HEBEL

120 CULTIVATING ADDIS
   // HÉLAWI SEWNET AND THOMAS VERMEULEN

124 MERCATO
   DENSIFICATION WITHOUT SEGREGATION // SIMON KRAMER VRSCAJ AND LINCOLN LANDON LEWIS

131 INFORMAL CITIES
   // RAINER HEHL

132 SUBURBING ADDIS
   MARKETING AN AFRICAN SUBURBIA // JÖRG HIMMELREICH

138 IN-URBIA
   FUSING TOGETHER SUBURBIA AND URBAN INFORMAL HOUSING // NICOLÒ FENU AND RONALD EMERSON YEARWOOD

142 DESIGNING THE NEGATIVE
   // DIMITRIS ANAGNOSTOPOULOS AND HUI-JU LEE

147 TRANSFORMALISM
   // LAURA MACCIONI
149 STOCKS AND FLOWS OF MATERIAL

150 DUBAI FEVER
THE DREAM OF AN URBAN MODEL IN ETHIOPIA // KATRINA STOLL

156 CONFUSION CORNER
TAPPING INFRASTRUCTURE // ANDRÉ VAN DER WESTHUIZEN AND ANDREAS WESTNER

162 INFRASTRUCTURAL TALES.
// JASMINE KASTANI, TOMAS POLACH, HELAWI SEWNET, AND ANDRÉ VAN DER WESTHUIZEN

164 ADDISBUILT
Build Up / M&SEs / Pre-Fab / Self-Built / Off-Grid // SARAH GRAHAM

173 CEMENT DREAMS
// KATRINA STOLL

175 STOCKS AND FLOWS OF CAPITAL

176 BEANS OR BUTTERFLIES
ETHIOPIA’S COFFEE TRADEMARKS // JESSE LECALVIER

182 SYNERGIC URBANISM
// RAEGAN ALBRIGHT AND JASMINE KASTANI

187 POVERTY IN THE CITY
// FASIL GIORGHIS

191 THE LPD EFFECT
// CHARIS CHRISTODOULOU

196 ADDIS 2020
SPORT AS TROJAN HORSE // VALENTINA GENINI AND ANNE-CHARLOTTE MALTERRE BARTHEES

203 STOCKS AND FLOWS OF INFORMATION

204 MIXCITY
// DUAN FEI, KATHRIN GIMMEL, IMKE MUMM, AND STEFANIE SCHERER

207 ETHNIC-CITY: ETHNICITY IN THE CITY
// TIBEBU DANIEL DESTA

210 DYNAMIC PLAN
// LAURA MACCIONI AND DARIK ZEBENIGUS

215 EDUCATION IN ETHIOPIA
// MARTIN GRUNDER

216 LINKED ETHIOPIA
TOWARDS A SYNCHRONIZED URBANITY // ANDRÉ VAN DER WESTHUIZEN AND ANDREAS WESTNER

223 STOCKS AND FLOWS OF ENERGY

224 EMPOWERING A NATION
HYDROPOWER TODAY AND TOMORROW // SELAMAWIT BERHE AND FABIO FERRARESI

230 SOL-URBIA
// NICOLÒ FENU AND RONALD EMERSON YEARWOOD

237 BOTTOM-UP SOLAR ENERGY
// NICOLÒ FENU, XENIA KOKOLIA, LAURA MACCIONI, AND RONALD EMERSON YEARWOOD

238 THE IDEA OF A TOWN
NESTOWN – NEW ENERGY SELF-SUSTAINED TOWN // FRANZ OSWALD

241 URBAN MUTATIONS ON THE EDGE: EMERGENT PHENOMENA IN DEVELOPING TERRITORIES
ETH D-ARCH 2005/06 // CARY SIRESS

242 URBAN MUTATIONS ON THE EDGE: TERRITORIES OF MODERNIZATION, GLOBALIZATION AND NEO-LIBERALISM
ETH D-ARCH 2006/07, 2007/08 // DEANE SIMPSON

243 URBAN MUTATIONS ON THE EDGE: TECHNOLOGY AND URBANISM IN AN AGE OF PERVERSIVE CAPITALISM
ETH D-ARCH 2008/09 // JESSE LECALVIER

244 ACTOR-NETWORK ACKNOWLEDGEMENTS
The Urban Laboratory – Addis Ababa is a research initiative launched by the Swiss Federal Institute of Technology (ETH) Zurich in collaboration with Addis Ababa University (AAU) and the Ethiopian Engineering Capacity Building Program (ECBP). The laboratory sets as its objective the development of sustainable strategies for urban environments. Rather than upholding an a priori vision of an ideal city, the publication *Cities of Change: Addis Ababa* acknowledges the heterogeneous and at times messy conditions of urban territories, and makes a case for their transformation over time. One of the key aspects of the work encompasses scenario planning: designing processes for potential ‘futures’ according to varying constraints. Urban design as a discipline is reframed in view of an understanding of the city as a dynamic system, one delineated by stocks and flows of resources – with specific attention given to fluxes of people, energy, water, material, capital, space, and information. Emphasizing the specific case of Addis Ababa, the research brings to the forefront general questions of method and procedure that can be transferred to other ‘cities of change,’ whether in the developing or the developed world.

The research was undertaken at ETH Zurich’s Department of Architecture in the context of the Master of Advanced Studies Program in Urban Design, led by Marc Angélib and Dirk Hebel. Both have taught architectural and urban design at universities in Europe and the United States. Their research focuses on contemporary developments of large metropolitan regions. Over the last three years, their interest has centered on Ethiopia, one of the fastest growing nations in the world. The publication *Cities of Change: Addis Ababa* documents the research and exposes its findings to critical observations by invited authors.