

# All the worlds. Just one world. Architecture 21.

# PAPER PROCEEDINGS | Volume I

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## Introduction

The theme of the 27th World Congress of the International Union of Architects – UIA2020RIO highlights the urban reality of the contemporary world and involves the role of Architecture. It expresses the diversity and multiplicity of urban forms and modes of production of cities.

Multiple cities, full of contrasts, possibilities, inequalities and right answers. There are many urban worlds requiring specific attention, for which Architecture, in its large dimension, has responsibility never too exaggerated. Our actions of planning, design and construction are of interest to all these worlds and to each one have repercussions.

In Brazil, of 200 million inhabitants, 175 million live in cities. It is a proportion that is manifested in most of the continents. The notion of finitude imposes new challenges on the search for preservation and the sustainability of environmental conditions and on urban cultural and spatial conditions.

We all live in one era. Just one world. Communications make us instantaneous and the unfolding reaches all.

In this context, architecture enriches its experience without dogmas. It stimulates the diversity of modes of intervention, the symbiosis between popular culture and that of the architects, the production of the new city of tolerance and recognition of countless contributions and preexistences. Cities that can be the desired answers to the century of the urban, respect for the environment and the needs of future generations.

Brazil has twenty metropolis and two megacities interconnected territorially. It presents cityarchitectures that illustrate the myriad possibilities and the enormous challenges of 21st century architecture. Slum poverty and slum dynamism architectures; the rich enclaves and the poverty of the enclaves; the public space of interaction and the space of monofunctionalism. New cities, old cities asking for our reflection of architects, thinkers of the urban, of agents producing cities, of citizens.

The intense asymmetric flows that characterize the city today are manifested in processes such as the uneven circulation and location of investments and services, the vertigo of the transit of images, products and information, and in the new social frontiers. Real estate production remains focused on capital accumulation. Environmental disasters, the depletion of natural resources, the swelling and shrinking of cities collaborate in the increase of social conflicts, exacerbating inequalities and fragilities.

The speed and scale of the changes accentuate the sense of loss of local cultural values and traditions and weaken resilience. Protectionist economic measures, exacerbated nationalisms, and struggles between ethnic groups set the clock back on history, counteracting universalism, tolerance and efforts for cross-cultural and transnational dialogues.

The globalization of the problems is accompanied by the internationalization of the professional performance. Architects and town planners working simultaneously in different countries disseminate concepts, constructive technologies and design strategies. Equal appearances everywhere, not always attentive to the contribution of local populations and their cultural heritage.

The professional practice of the architect and town planner faces a wide and complex re-signification of their social and cultural place; the possibility of crisis, but also of expansion of the field of. of the architect deserves a necessary and profound reflection.

# **CONTENTS: Volume I of III**

- **19 Participation is a Right** GRAEME BRISTOL
- 25 Learning from Rio: Promoting Resilience in Zona Oeste JOSÉ L.S. GÁMEZ MARIA FERNANDA LEMOS
- 31 DESIGN AND BUILD! Re-thinking the Self- Built Informal Housing in Sao Paulo EDUARDO PIMENTEL PIZARRO JOANA CARLA SOARES GONÇALVES
- 38 Biza Chair: Um estudo sobre a influência da tecnologia no design de móveis aplicado ao envelhecimento humano e pessoas com mobilidade reduzida. THAMARA GOMES DE SOUZA
- 42 Urbanidade e a sua influência na vida cotidiana: análise dos passeios públicos do bairro do Calhau, São Luís – MA MARIA PAULA FERNANDES VEL TEN PEREIRA ANDREIA JANE LEANDRO CAMARA MÁRCIO RODRIGO DA SILVA PEREIRA
- 47 Avaliação das Áreas de Especial Interesse Social-AEIS nas principais capitais do Brasil EDUARDO ALBERTO MANJARRÉS TRELLES
- 55 Inequality in Development Futures: Tourism Economies and Construction Technology in Tai O, a Village near Hong Kong DANIEL KEITH ELKIN WANG XIAOLU, NORAH CHI-YUEN LEUNG
- 61 Recovery of urban landscape and biodiversity through phytopurification

ADRIANA FAVACHO CURTY

- 68 Projeto de Aplicativo para Inventário do Patrimônio Cultural. Participativo: Uso da TIC no planejamento urbano de Taubaté LETÍCIA CURSINO DOS SANTOS ADEMIR PEREIRA DOS SANTOS
- 75 Walkability infrastructure as a significant variable in explaining social inequalities between central region and MAURO CALLIARI
- 82 Acessibilidade e equidade: abordagem a partir da oferta de empregos e dos padrões de viagem na Região Metropolitana de Goiânia ERIKA CRISTINE KNEIB ANA STEFANY GONZAGA
- 92 Habitação social e financiamento: políticas públicas e fragilidades no acesso à moradia no Brasil EBEL, CARLA RAFAELA PRADE, MARELIZE AMANDIO
- 98 Doce\_SSA: Pollinating Urban Meliponary Network in the city of Salvador GEORGE ANTÔNIO DE ALMEIDA GOMES

- 100 Exclusão e auto-segregação: Uma leitura da urbanização dispersa a partir do território de Bragança Paulista/SP LUCAS NAKAMURA CEREJO LAURA MACHADO DE MELLO BUENO
- 107 OUTROS BAIRROS, desafios de um devir coletivo ÂNGELO LOPES NUNO DUARTE
- 116 Improved Publicity-oriented Regeneration of Railway Heritage Community: Case Study of Xujiapeng Community attached to Wuchang North Station LIUJUN CHEN MIAO SUN
- 123 The Public Sphere in Light of Architectural Practice Providing for invulnerability and equality MICHAEL KARASSOWITSCH
- 132 Healthcare Outcome Related Inpatient Unit Environment Function Requirements Extraction: A Multidiscipline Collaborated Investigation SHANSHAN ZHANG LIN JIANG
- 140 Thinking about Healthcare Building and Environment Design in Terms of the Principles of Biomedical Ethics SHANSHAN ZHANG LIWEI ZHU LIN JIANG
- 149 The frieze for territorial futures: a sustainable prospective and participative design tool WATKIN THOMAS BELINDA REDONDO
- 157 Trespassing Barriers: An Architectural Intervention on the India-Pakistan Border GABRIEL RIBEIRO DA SILVA MARTINEZ MAURÍCIO ADDOR NETO
- 159 Spontaneous Living Spaces: a research project on places' culture of living CORINNA DEL BIANCO
- 165 Utilização da Felicidade Interna Bruta em diagnósticos, proposições e aferições de políticas públicas em unidades de vizinhança MARIA PAULA FONTANA DE FIGUEIREDO

SOLANGE IRENE SMOLAREK DIAS ROBERTO ZANON

170 Bamboo Canopy: Towards a Light Construction of Bamboo

YIFAN WANG NAN XIANG SASA JIANG LINGNA LI YUE HUANG XING YAN XIANGYU LI YU JIANG **172** As Manifestações por Moradia em Niterói ANA CLARA AGUIAR MACIEL DANIEL MENDES MESQUITA DE SOUSA GABRIELLE SILVA LAURINDO GLAUCO BIENENSTEIN

#### 178 Broken Sites

DASHA KHAPALOVA

- 186 Barreiras urbanas, segregação territorial e vulnerabilidade: social na várzea do Cangaíba, São Paulo DANIELA C. VIANNA GETLINGER JULIO LUIZ VIEIRA
- 192 An urban management system for the sustainable regeneration of the favela of Rocinha FRANCESCO CAUSONE MASSIMO TADI GABRIELE MASERA ANGELA M. GABRIELLA ROSSI
- **198 Preguntas desde la Nueva Generación** AGUSTÍN JOSÉ CHAVES SIENRA
- **206 Autoconstrução: expressão do ser no mundo** THAIZA LUIZA COSTA SANTOS

#### 212 Manual da Arquitetura Kamayurá

ANNA JULIA DIETZSCH LUIS OCTAVIO DE FARIA E SILVA AMANDA KLAJNER ANDRÉ GARCIA ANNICK MATALON CIBELE FORJAZ CLARA MORGENROTH FLORA CAMPOS GABRIELA RUDGE JORGE FORJAZ KEREXU GUARANI LÍGIA LANNA **LUCIANA FERNANDES** LUISA VALENTINI MARIANA POLLGORTAN MARINA SZNAJDER PAULLA MATTOS SABRINA DIAS SOFIA BOLDRINI THOMAS WEBER MARCELLO KAMAYURÁ KOTOK KAMAYURÁ MAYARU KAMAYURÁ CHIKITO KAMAYURÁ SALKUMÃ KAMAYURÁ JATOBÁ KAMAYURÁ MAWALAYÁ KAMAYURÁ TAKUMÃ KAMAYURÁ KYRIMATÁ KAMAYURÁ MAPULU KAMAYURÁ, TURRUN KAMAYURÁ ROSANA KAMAYURÁ POVO KAMAYURÁ ALDEIA IPAVU

214 The Evolution Games and Sustainable Development of Shijiazhuang Railway Station Hub and Its Surrounding Urban Space WENJING LUO 220 China Drug Store with On-site Healthcare Service in Qing Dynasty: from Perspective of City, Architecture and Traditional Chinese Medicine LIN JIANG

SHANSHAN ZHANG LIWEI ZHU

229 Parque Curiá: A landscape design proposal for ambiental education

DANIELE LIRA ELID FROTA EMMANUELLE DE ALENCAR ARARIPE ISABELA NUNES PIRES PEDRO VITOR AQUINO KARENINA MATOS

- 231 Arch-Edu Architecture and Education: From Macro to Micro-from past to future GAVRIELA NUSSBAUM
- 236 Conservação e Restauração das Bicas Públicas de Olinda:São Pedro, Quatro Cantos e Rosário - Sistema Colonial de Abastecimento d'Água VANIA AVELAR DE ALBUQUERQUE
- 243 El Legado 'concreto' de Rafael Leoz en Brasilia Reactivación del Patrimonio desde su entendimiento RUBÉN PICADO FERNÁNDEZ MARÍA JOSÉ DE BLAS GUTIÉRREZ DE LA VEGA
- 251 PRAÇA LIVRE PARA AS CRIANÇAS: Um projeto participativo com crianças da periferia AMANDA SCOTTON ANDREA MUNER CAMILA FERRARA MAYTE ALBARDIA ANNA AYUMI BEATRIZ MARTINEZ CAMILA SAWAIA GABRIELA VIOLA
- 253 Hybridity, Isolation and Conflict in Urban Renewal: A Case Study of Chuanbanhutong in Beijing during Relocating Non-Capital Functions YISHAN CHEN MINGBO WU
- 260 RENOVACIÓN PAISAJÍSTICA Y LÚMINICA DE TRUJILLO A PARTIR DE LA VALORIZACIÓN ENERGETICA DE LOS RESIDUOS SÓLIDOS MARÍA LUCÍA D. BOGGIANO BURGA
- 268 Conversational Model for a Digital Tectonic Architectural Education MARINA FERREIRA BORGES

MARINA FERREIRA BORGES

- 274 The Fusion of Local Creation and Professional Practice Green transformation in traditional communities in Beijing XIYAO ZHAO
- 279 Direito à Cidade: O (Não) Planejamento da Mobilidade Urbana dos Moradores do Programa Minha Casa Minha Vida

ADAIL PEREIRA DOS SANTOS NETO DANIELE SOUSA DE ALMEIDA RODRIGO PINHEIRO TÓFFANO PEREIRA

284 Reconnecting with Nature: Designing Urban Spaces in Balance with Green Space STEFFEN LEHMANN

- 291 O Programa "Urbanista por Um Dia", Secretaria de Urbanismo - Prefeitura de Maricá | RJ | Brasil ANA CLAUDIA GARCIA DE SOUZA OLIVEIRA MÔNICA MARIA CAMPOS JALINE LIMA DE SOUZA WILL ROBSON COELHO
- 297 Arborização Urbana em Condomínios Residenciais Horizontais: Um estudo no Litoral Norte de Maceió – Alagoas

GABRIELA CAVALCANTE DOS SANTOS NÓIA ISABELA CRISTINA DA SILVA PASSOS TIBÚRCIO KATHAYNNE ISABELLY ROCHA DA SILVA LESSA MILENA DE OLIVEIRA MARINHO

- 303 A field study on use of urban office building external space during winter in winter cities and relating planning inspirations
   HONG LENG
   QING YUAN
   SHUYUAN LI
- 309 De migrantes y turistas: las disputas por la ciudad patrimonial MARINA INES DE LA TORRE

DAVID NAVARRETE ESCOBEDO ALMA PINEDA ALMANZA

- **316 Cidades saudáveis e a função social da propriedade** BLOES, RODRIGO BRANDINI GUARNIERI, JUSSARA SPERANDIO, ANA MARIA GIROTTI
- 321 BIG DATA SOCIAL COMMUNITY STEFAN FIRIMITA ANAMARIA INGRID ANDRITOIU ARTYOM ALIMPIYEV
- 328 The Litani Basin in Lebanon: A Metabolic Conversion of Politics into Cancer MOHAMAD NAHLEH
- 330 Climate Impact on Electrical Energy Consumption in Residential Building in Different Building Climate Zones of China SHIYI SONG HONG LENG RAN GUO
- 337 Architecture of De-Settlement: Geopolitical Planning for an Agreement in the West Bank MATANYA SACK URI REICHER
- **345 O Parque Urbano e a resiliências às cheias** PARQUE DA PRAINHA, ARRAIAL DO CABO - RJ LEONARDO HENRIQUE SILVA DOS SANTOS RAQUEL HEMERLY TARDIN-COELHO ALINE PIRES VERÓL RODRIGO RINALDI DE MATTOS
- **352 Escolas modernas em São Paulo: Passado e Presente** NICOLÁS SICA PALERMO
- 365 PAVILHÃO STK | Montável, Desmontável, Transportável, Modular. Versátil MARIA JO STECK

#### 367 "Com a cabeça, o coração e o Pé na Estrada": relato de uma experiência pedagógica

AMORA DE ANDRADE MACHADO JULIA LOPES SOARES ANA PAULA CAMPOS GURGEL JULIANA ALBUQUERQUE CAMPOS DA SILVA

- 375 UMA ANÁLISE DA OCUPAÇÃO TERRITORIAL AO LONGO DO TEMPO NO CAMPUS PAMPULHA DA UFMG: CASO DO SISTEMA BÁSICO DO ICB EDGARDO MOREIRA NETO
- **382 Emergency Housing Mexico** ANTONIO APARECIDO FABIANO JR JOSÉ HENRIQUE CARRARI FILHO DANILO PENA MAIA RAISSA GATTERA BEGIATO
- 384 CARTOGRAFILME: Cartografia e audiovisual como instrumentos de apreensão do espaço público e comércio informal na Boca do Rio, Salvador, Bahia, Brasil MARIA CLARA MATOS QUINTELA TAINÁ OLIVEIRA DOS SANTOS
- 392 UMBRAL: Escuela Secundaria María Auxiliadora

RODRIGO BALLINA BENITES VALENTIN AYALA RODRIGO ANDRES CARDOSO LUCIANO ARIEL DEL VALLE

- 394 ORIGAMI: Casa dos Cajueiros RENATO PERON
- **396 (de)othering: empathic design thinking for race + culture in urban landscapes** ELGIN CLECKLEY
- 403 The non-nonsense New Zealand houses; A modern paradigm in disguise DANIELE ABREU E LIMA NIGEL ISAACS
- **411** Miradas y reflexiones para la renaturalización del territorio y paisaje de lquitos MOISÉS GUILLERMO PORRAS RAMÍREZ
- **419 Plaza de las Carretas: Paisaje de Convivencia** ROBERTO CIDES
- 421 Diversity History Oriented Mixture Urban Transformation Project analyzing of Hongkou historical district, Shanghai, China CHI ZHANG
- 429 Sol Nascente (Praça + Edifício)

ANA P. VENTURINI ANNELISE WEBER ARNAU MUÑOS BRUNO CASSOL CLARISSA PEREIRA CRISTIAN FAGUNDES ESTEVAN BARIN JENIFER VESCIA

- 431 Study on the Evaluation System of Health-Oriented Street Design of contemporary Beijing from the Perspective of LIYU
- **439 Small fragments of resistance** CONCETTA TAVOLETTA

- 441 Architectural Diversity in Contemporary Contexts The Role of Design between Time and Scale GIULIA SETTI
- 448 A Design Agenda for Rural Vulnerable Territories ALESSANDRO ROCCA
- 452 What world can learn from Australia: A critical review of the trend of internationalism in architecture JAMILEH JAHANGIRI
- **457** Experimentação 360°: A realidade virtual como meio de imersão e análise de espaços coletivos FERNANDO PACHECO DO NASCIMENTO RAUL DE ARAUJO CIRNE
- 463 Landscapes of Extraction: A visual genealogy on the cultural exchange between Switzerland & Serbia MITESH DIXIT RYAN OCKENHOUSE
- 465 Network-Popular Architecture: its Production in Network Media and its Influence on Concrete YUNNI GAN
- 471 Blossom: a flexible cable tension opening and closing space steel-wood composite bionic structure pavilion
  FENG DENG
  AN GUO
  ZISHUO HUANG
  BINGJIE LI
  YANBING QIU
  YUNNI GAN
  JIN LIAO
  YONGHAO XU
- 473 Kowloon Walled City: La visión social de un organismo vivo autorregulado a través de la fotografía de G. Lambot e I. Girard y los dibujos the T. Kazumi SOFIA QUIROGA FERNÁNDEZ

479 Programa "Urbanista por Um Dia" Prefeitura da Cidade de Maricá – RJ | Brasil ANA CLAUDIA G. DE JALINE LIMA DE SOUZA MÔNICA M. CAMPOS WILL ROBSON COELHO CELSO CABRAL NUNES SANDRO W. COELHO CALDAS

481 Assistência Técnica Habitacional de Interesse Social em Área de Usucapião Coletivo - Chácara do Catumbi – RJ | Brasil WILL ROBSON COELHO SANDRA HIROMI KOKUDAI

DENISE THIRY PENNA FIRME LUCIA DE CÁSSIA DA SILVA VIANA

487 Experiência de Assistência Técnica Habitacional de Interesse Social – Regulação Urbanística - Chácara do Catumbi - RJ WILL ROBSON COELHO

SANDRA HIROMI KOKUDAI RAFAEL SOARES GONÇALVES BIANCA DIAS DENISE PENNA FIRME LUCIA DE CÁSSIA DA SILVA VIANA JOSIANE APARECIDA DO VALE

- 489 Os caminhos e a forma urbana: metamorfoses no tempo do Eixo Maruípe FLAVIA RIBEIRO BOTECHIA
- **496 Praça Victor Civita Museu Aberto da Sustentabilidade** ADRIANA LEVISKY ANNA JULIA DIETZSCH
- **498 Design activates the villages: Micro-intervention construction practices in rural area** FENG DENG AN GUO
- 505 agri [culture]: CENTRE FOR AGRICULTURE RESEARCH AND COMMERCE SAMANYU BHATNAGAR SUJAY SEN GUPTA
- 507 Temporary Housing in a Permanent Building DAVID MAYERNIK
- 512 Architecture as an art of care in historically marginalised communities: the case of Heidedal, South Africa HENDRIK AURET DAVID VAN DER MERWE
- 520 Stones of Rio de Janeiro in its Built Heritage NURIA FERNÁNDEZ CASTRO MARIA HELOÍSA BARROS DE OLIVEIRA FRASCÁ KÁTIA LEITE MANSUR
- 526 INFLUÊNCIAS MODERNAS NA CONCEPÇÃO DO PATRIMÔNIO ARTÍSTICO E CULTURAL BRASILEIRO ARGEMIRO RIBEIRO DE SOUZA FILHO AKEMI BEATRIZ YAMAGUCHI CARNEIRO PINTO HÉRCULES SOUZA DE CARVALHO
- 531 RRRolling Stones: Transforming Public Interactions and Urban Environments Through Technology SASA ZIVKOVIC LESLIE LOK
- 533 An Investigation on sustainable education provision for the migrated Rohingya minority children living in the settlements camps across Cox'sbazar Bangladesh (Vulnerabilities & Inequalities) MEHEROZE AL HASSAN MEHERUB AL HASSAN

SABIN HUDA SUREYA HUDA

540 Binary Opposites: What do you know about Palestine? TAHER ABDEL-GHANI ZEINAB TAHOON

547 A Simbiose dos Rios, das Cidades e das Pessoas
 CÍRIO FERNANDES FORTUNATO
 DOUGLAS VIEIRA FERNANDES
 JONATHAN GRASEL WENSING
 MICHELLE SOUZA BENEDET
 PEDRO MENDES NUERNBERG

- 549 Aplicação de Parques Lineares na recuperação ambiental de comunidades carentes: Caso Rio das Pedras MARIA VITÓRIA RIBEIRO GOMES VICTOR ANDRADE CARNEIRO DA SILVA ALINE PIRES VERÓL
- 556 Dichotomies, Dilemmas and Divergent Pathways: Cities and Nature-Based Solutions FABIANO LEMES DE OLIVEIRA

561 Research On the Development From Architecture To Architectural Heritage: Take Industrial Architecture Heritage as an Example

MENG FANLEI HU YANING LIN ZITENG YU QIANG

564 In-Between: Reframing Civic Life

YUTING ZHANG YUE SHI

- 566 This O House: Housing Light, Air, Water and Earth ZUI NG
- 568 Lam Son Sustainable Bamboo Education Campus Lam Son, Thanh Hoa, Vietnam TUAN MANH NGUYEN RICHARD LUCAS

- 570 Foreigners' Roles in Preserving Historical Houses: A Case Study in a Rural Town in Japan ARNO SUZUKI
- 577 A diversidade e resiliência cultural da Avenida Paulista LUCIA KAZUMI KURIMOTO ROSANA HELENA MIRANDA
- 584 A dimensão urbanística da preservação do patrimônio na Área Central da Cidade do Rio de Janeiro GUILHERME MEIRELLES MESQUITA DE MATTOS ANDRÉA DE LACERDA PESSÔA BORDE ANDRÉA DA ROSA SAMPAIO
- 590 Regularização fundiária em áreas de preservação ambiental: O caso do assentamento Coqueiral no município de Aracaju/SE DAUANE CONCEIÇÃO SANTOS DE SANTANA INGRID CARVALHO SANTOS OLIVEIRA HELOÍSA THAÍS RODRIGUES DE SOUZA

# Architectural Diversity in Contemporary Contexts The Role of Design between Time and Scale

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#### Abstract

The essay reflects on the relationship between diversity in architectural design, by observing design strategies and projects implemented in two cities, different but interesting for the actions undertaken: Milan (Italy) and Ahmedabad (India).

Starting from a broader debate on the conditions in which our planet is located and, on the fragilities, and emergencies that increasingly affect cities and their inhabitants, the text tries to reflect on the design strategies necessary to act in uncertain and fragile contexts. Opening up a critical discussion focused on two key issues of the contemporary project: the ability and capacity to 'adapt' to events and, therefore, to be resilient and the role of 'time' in architecture.

The first part of this text defines a critical premise with respect to the current situation and the necessity to modify strategies and projects in relation to the instability and lack of care that characterize contemporary territories. In the second part, two very different design experiences are described and analyzed which, however, raise important questions about the role of architectural design in the contemporary conditions. Milan and Ahmedabad have been chosen because they could give different answers at urban and architectural scale, to the questions about the relationship between time, design and adaptation or resilience processes. Milan has chosen to show its 'new' image through iconic objects, creating new landmarks in the city; Ahmedabad works on the dichotomy between informality and permanence, showing how punctual and

flexible projects could accommodate the needs of fragile territories, constantly evolving.

#### Introduction

Integration, *mixité* and diversity represent possible future research lines in architectural design; today, more than ever, we are witnessing to complex and radical phenomena, which show how the conditions of the contemporary contexts have drastically changed. There is a change on different levels: a climatic, environmental, social change, but also a change in political and economic conditions; architectural design must face new forms of emergency that mark the beginning of a new era in which we are living: the *Anthropocene*.

In the continuous change of contemporary contexts, architectural design must rediscover languages and tools to act in transitory and informal places; today, we could say that architecture must become *resilient*, it must be able to act in uncertain times but, above all, it must be able to adapt, thus modifying its state and redefining links and synergies with landscapes and architectures.

In an exhibition hosted at MAST Foundation in Bologna (Italy), called "*Anthropocene*"<sup>1</sup>, the scenario illustrates a world subject to violent mutations, where waste and fragments, derived both from industrial productions and from the exaggerated abuse of resources of our planet, represent the design materials for a possible (and near) future. It is a future that has already, and partially, become past; it is a *past* because without the ability to imagine new design strategies, oriented and sustainable, there will be no possible or imaginable life. The idea to define the context – urban and environmental – where we live is a recent process, but useful to understand the speed of transformations that



Figure 1. Norcia: the plaza, the heart of the city, August 2019. Giulia Setti

affect our planet and, at the same time, the design tools that could be considered.

«(...) the presence of geological signals of Anthropocene in very recent layers it makes possible to define comparisons in equivalent terms with the climate change signals preserved in the most ancient strata, which makes it possible to measure the anthropic impact on a planetary scale of time and space and not only as a phenomenon of human history or ecology» (Hackett et al. 2018, 41).

#### **Architectural Diversity**

How architecture could organize itself in front of radical changes that challenge its role, but also its survival as a discipline?

In the immediate future, architecture will have to develop important forms and processes of *adaptation*, not only to different places but also, and above all, to adverse environmental and climatic conditions, or uncertain social and political issues that tell about scenarios no longer fixed and immutable, as it happened in the past, but of a fluid environment in continuous, and rapid, evolution. Therefore, the ability to adapt implies a change of state in the subject, in a territory and/or in an architecture, and recalls the ability to change continuously, innovating and establishing, where it is possible, a new balance after a sudden shock or an unexpected event. The essay will describe, through some paradigmatic case studies, the role of contemporary design in situations marked by diversity (social, cultural, political) and, at the same time, of a *mixture* of traditions and architectural forms. The critical exploration will understand how architectural design could work, today, according to different scales and times; integrating specific projects on a larger scale, highlighting how diversity – and its preservation – represents a resource for contemporary design.

It has been said that architectural design could no longer remain indifferent to forms of change that are taking place nowadays; before reflecting on the selected case studies, it seems significant to highlight how the change in the duration of projects has raised some significant questions. Firstly, if we look more closely at some contexts, like the Italian one, but also the European and international one, we could see how these areas are increasingly affected by unpredictable and violent events. Extreme climatic events, shocks caused by earthquakes, floods or, unfortunately, by extensive conflicts, show how the necessity to adapt in architectural design processes could no longer be considered secondary.

Italy, like many other places, is a country that has been able to rebuild itself time and again following disasters like earthquakes and floods, recurring cyclically after World War Two. Today, it must face process of reconstruction, maintenance and care of buildings and infrastructures both at urban and territorial scale; precisely because the inability to learn from the past – and from catastrophic events that have affected it – has highlighted the lack of a shared memory and knowledge of projects and actions useful in case of emergency, as well as the lack of care for a vulnerable and fragile territory, but extremely rich in its diversity.

At the same time, however, there is a lack in the definition of strategies able to support decisions and design actions; if the emergency represents an unpredictable state, therefore, by definition, capable of catching unprepared, it is from the *past* that we should learn practices and projects useful to intervene, with rationality, downstream of sudden events and shocks.

For this reason, architectural design could try to build forms of adaptation, changing and innovating, to intervene in unstable territories, marked by violence of various aspects. Adaptation implies a radical, strong and precise design action; capable of constructing strategies to protect and care, through actions not only linked to emergency and post-emergency processes but capable of acting preventively, safeguarding territories, buildings and inhabitants.

The ability to adapt is often accompanied by the concept – often abused – of *resilience*, or the ability to modify, partially, to overcome sudden changes; being resilient is a property of architecture where it adapts according to different times and, therefore, changes its state. Resilience is, at the same time, a property of the inhabitants in different places who, tenaciously, manage to act through strategies and projects in the post-emergency phases, remaining in the same places affected by shocks thanks to synergistic relationships with those contexts.

The design experiences described below do not tell of contexts in an emergency conditions, from an environmental or climatic point of view, nor that these are projects that intervene downstream of sudden catastrophes; on the contrary, these studies have been carried out in a *peace condition*, to reflect on how architectural design could act in different times and scales in contemporary places, be able to show a resilient approach to transformations.

The essay will describe two cities, different and incomparable, on one side Milan (Italy), and its force of change, on the other Ahmedabad (India), a metropolis in the East, marked by a



Figure 2. Norcia, fragility. Giulia Setti

continuous cyclic nature of uses – and projects – that constantly change the city and its public spaces. The essay does not want to compare, nor find pre-packaged solutions, but to reflect on how architecture could act, today, and which forms of inclusion or segregation could be implemented.

#### Milan: redefining a new identity

In Milan, the recent projects of transformation have radically changed the image of the city, on one hand giving back spaces that have been abandoned and forgotten for long time, on the other, generating strong processes of gentrification and removal of intrinsic identity in those neighbourhoods.

The projects of Porta Nuova, City Life or the Feltrinelli Foundation represent, in many aspects, the power of solid real estate actions, aimed at taking the best from the glossy image of contemporary architecture, at the same time they pose crucial questions on how the surrounding architectures could be integrated within the completed transformations.

The long-time of architectural projects in Milan highlights the latent *tensions* that these operations could trigger. Architecture has acted with the transparent objective to transform the urban and architectural form of these places. This has generated deep contradictions, but



Figure 3. Milan, Porta Nuova project and Gae Aulenti plaza: pseudo public-space, 2017. Ivan Ashkinadze.



Figure 4. Ahmedabad, stratification between informality and permanence, 2018. Ottavio Pedretti

interesting results: firstly, it highlighted the necessity of public spaces, of how strong is the idea of sharing and finding ourselves in the open spaces of cities. But it also showed, with extreme frankness, the economic and financial power that moved these operations: private clients who wanted to show themselves and open a window on the city.

This led to different consequences in the neighborhoods marked by the aforementioned projects; if we consider the case of Porta Nuova and Gae Aulenti plaza this reflection may appear clearer; the traditional and historical city of the Isola district has been, in fact, separated from the new projects, the sparkling new architectures of Gae Aulenti plaza, including the tower designed by Cesar Pelli and the Vertical Forest by Stefano Boeri no longer look back and show a wound between past and future.

Integration and diversity of architectural objects that characterize Porta Nuova project are the icon of a fundamental step in the design development; a semantic passage, after all, that gives back to architecture –in all its plastic and expressive strength – the role of undisputed protagonist of the scene.

The relationship between the new projects in Milan and the extremely precarious situation that Italian (and European) territory shows emphasizes that there is a critical distance between the precise actions, on a small scale, that would be necessary for the safeguard of the country and the great transformations taking place, icons of the global city that builds its public showcase.

Porta Nuova project shows how a progressive separation between new architectural objects, which look at a certain typology of social class, and the traditional city neighborhood was outlined. These are conditions where cultural and social diversity are gradually removed, where the slow time of the historical city is almost completed lost. Porta Nuova and City Life show, in their own way, a different form of integration, in the use and construction of public spaces, in that common ground that is the background for informal and spontaneous activities that populate the open spaces of the described projects.

In the case of City Life, and of the three towers built by Daniel Libeskind, Arata Isozaki and Zaha Hadid (2004 – ongoing), the scale of the entire project contrasts with a city that was, up to that point, mostly horizontal. A change in the spatiality of Milan, in its third dimension, which necessarily places the attention on the lost integration between new and old; finding and copying common images in many international cities, now sadly homologated.

Time, project and life of these architectures will give some answers about the success of these interventions and their future impact on the city and its inhabitants. Perhaps, even the towers of City Life could, tomorrow, adapt to sudden changes, and become, in turn, resilient.

#### Ahmedabad: a continuous space

The second place, subject of this study, is instead the city of Ahmedabad, capital of the state of Gujarat, located in northwest of India: *why do we focus on Ahmedabad?* 

Ahmedabad represents, for different reasons, a fertile ground for theoretical and design experimentation<sup>2</sup>; it is a laboratory of projects and ways of transforming the architectural space that appear very interesting in understanding the processes of integration between diversity and forms of emergency or recovery, at different scales. Ahmedabad, like many other cities in the Indian context, presents a strong and radical overlap between informality and permanence of places, architectures and spaces; an informality that is not only shown in the extended development of temporary settlements, but which is also seen in the uses and forms that *public* or *collective* space assumes.

It becomes even more interesting if we could understand how architectural design, in this context, unequivocally loses its ability to be lasting, to go through extended times. Furthermore, designing in the context of Ahmedabad means working in a fluid context, always subject to new and unpredictable needs; it is a project that, even when it does not encounter emergencies, always works in a precarious state, never clearly defined.

In Ahmedabad, the classic places of the city community, such as squares, streets, are not uniquely defined, but cyclically changing; therefore, they show a strong capacity to be resilient, as well as to adapt effectively to changing conditions.

Manek Chowk Square, the heart of Ahmedabad Old City that is part of the Unesco World Heritage, is a melting pot of different cultures, activities and spaces; *diversity* is the emblem of this paradigmatic place in the life of the city. It is the perfect stage for a succession of different activities. It is a place for grazing and foraging the sacred cows of the city; later, the commercial activities gradually started to operate and the central area hosted parking areas. The clearest







Figure 5. Ahmedabad, Manek Chowk Square: diversity as a design resource. CEPT University Winter School 2015.

and most fascinating change occurs during the evening hours: on the fronts that delimit the square, food kiosks open and transform the central area into an open-air restaurant. The extensive use is a fundamental characteristic of the Indian public space that wants to intercept the most diverse categories of users in few, crucial, places.

Although in a condition of uncertain stability, the Indian context shows how the design of space, as well as of buildings, must take into account a series of complex variables, linked both to the dynamics of uses and traditions, and rooted in the image of a sacred, monumental architecture - the one of representative and religious buildings - which contrasts with a more uncertain architecture - usually destined to public life. Architectural design is called to respond to conditions of diversity, but also of vulnerability. To interventions of large scale and urban impact that persist in peripheral areas closest to the city, measured interventions must be countered on a local scale, working both on the design of flexible structures (pavilions, shelters) that could accommodate collective activities and, at the same time, change radically according to different necessity.

#### **Architectural Oppositions**

Milan and Ahmedabad present opposing and different responses which, however, try to reflect on the role of the contemporary architectural design called to intervene in uncertain contexts, sometimes in search of new landmarks, new icons, sometimes in search of precise and flexible interventions in contexts facing rapid transformation.

It opens a reflection on the relationship between diversity/integration, time and scale of architecture. Milan chooses the massive scale to transform the city with the inclusion of iconic and powerful architectural objects; it chooses to bet on the iconic strength of author's project, giving up, partially, to a more measured relationship with its context and with the existing urban and architectural space.

Ahmedabad does not choose, but represents a flow of actions, projects, strategies that work by fragments, trying to intercept the variety of times, conditions and scales that the Indian context shows.

The diversity that emerges in this essay tells about how it is fundamental to develop a certain capacity for adaptation (to different contexts, conditions, policies and cultures) as a key design strategy in the contemporary imaginary. The diversity of times and scales, involved in the project, is a resource, particularly in face of growing forms of emergency and uncertainty affecting our continent: it is a possible form of actions and interventions.

#### Endnotes

- "Antrophocene. E. Burtynsky, J. Baichwal, N. De Pencier" is an exhibition curated by S. Hackett, A. Kunard, U. Stahel from 16 May 2019 to 05 January 2020, it has been shown at MAST Foundation, Bologna, Italy.
- Since 2015, it has been established a cooperation between CEPT University (Ahmedabad) and Politecnico di Milano; this has brought to develop research and activities focused on transitory, diversity and understanding of public life and architectures.

#### Bibliography

Bhatt, Mihir. Understanding Slums: Case studies for global report. London: University College London, 2003.

Bonneuil, Christophe, Fressoz, Jean-Baptiste. The Shock of Anthropocene. London, New York: Verso, 2016.

Cerruti, Michele But, Kërçuku, Agim, Setti, Giulia, Vassallo, Ianira. *Tensioni Urbane. Ricerche sulla città che cambia.* LetteraVentidue: Siracusa, 2017.

Gunderson, Lance H, Allen, Craig C., Holling, C. S. *Foundations of ecological resilience*. Island Press: Washington, 2009.

Hackett, Sophie, Kunard, Andrea, Stahel, Urs. Anthropocene: Burtynsky, Baichwal, de Pencier. Art Gallery of Ontario: Canada, 2018. Jain, Ashok Kumar. The Informal City. Inclusive Growth for Poverty Alleviation. Readworthy: New Delhi, 2011.

Krishna, Shrestha, Hemant, Ojha, McManus, Phil, Rubbo, Anna, Dhote, Krishna. *Inclusive Urbanization: rethinking policy, practice and research in the age of climate change.* Routledge: New York, 2014.

Morton, Timothy. *Ecology without Nature*. *Rethinking environmental aesthetics*. Harvard University: Cambridge, 2009.

Pandya, Yatin. *The Ahmedabad Chronicle. The Imprints of a Millenium*. Vastu-Shilpa Foundation: Ahmedabad, 2002.

Spodek, Howard. *Ahmedabad: Shock City of Twentieth Century India*. Indiana University Press: Bloomington, 2011.