



**UIA
2021
RIO**

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

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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 city-architectures 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
WANTANEE SUNTIKUL
- 61 Recovery of urban landscape and biodiversity through phytoremediation**
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 BAIROS, 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 POLI GORTAN
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
- 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 Iquitos**
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 LI YU**
- 439 Small fragments of resistance**
CONCETTA TAVOLETTA

- 441 Architectural Diversity in Contemporary Contexts The Role of Design between Time and Scale**
GIULIA SETTI
- 443 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
CELSON 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

Alessandro Rocca
Professor of Architectural Design
Head of the PhD AUJD Program “Architectural Urban Interior Design”
POLITECNICO DI MILANO – Department of Architecture and Urban Studies
P.zza Leonardo da Vinci 26 - 20133 Milano
alessandro.rocca@polimi.it
[AUJD](#) – [POLIMI](#)

A Design Agenda for Rural Vulnerable Territories

By Alessandro Rocca

The concentration of people and resources in the metropolitan areas, in Italy as in Europe, provokes the weakness, the abandon and the decay of the rural territories. We are developing design theories and methodologies for intervene in these places introducing architectural elements which generate a strong upgrading in terms of centrality, accessibility, appeal, comfort, cultural identity. A new architecture, especially oriented to public facilities and open spaces, can change the course of the natural decay, and offer, to investors, inhabitants and stakeholders, a better perspective of a more sustainable and human friendly development.

Fragility as Agent of Innovation

“Designers are always understood as solving a problem. Artists, intellectuals, and writers are expected to ask questions, to make us hesitate, to see our world and ourselves differently for a moment, and therefore to think. Why not design as a way of asking questions? Why not design that produces thought-provoking hesitations in the routines of everyday life rather than simply servicing those routines? Why not design that encourages us to think? Design as an urgent companion species have become?” (Beatriz Colomina & Mark Wigley, *Are we human?*, Lars Müller, Zürich 2016/18)

In the last years, territorial fragilities and vulnerabilities became the central challenge and the common ground for many programs and actions which involve any physical transformation. In Italy, the ground is collapsing, in many sloping maritime and mountain areas, and modern infrastructures, such as highways and railways, are facing processes of obsolescence and decay, asking intervention of maintenance but also demanding the elaboration of a new way of thinking the relation with the territories, the countryside, the landscape.

What is fragility? It is “the quality of being easy to break” (Cambridge Dictionary); fragile means “a: easily broken or destroyed; b: constitutionally delicate: lacking in vigor” (Merriam-Webster Dictionary). That is, fragile is something, or someone, which tend to evolve into a state of alteration, or to its destruction. Then, fragility means that the status quo is no more stable and it has to, or it is going to, change: this is a perspective that embodies destruction and regeneration, catastrophic and cathartic events, but also, and it is equally important, it suggests the possibility of an evolution towards a better status.

In other words, fragility can be assumed as a relevant factor of disruption, of collapse, but also innovation. Since that, it should be easy to come to the point that everything is vulnerable and fragile, but for the ones who study territorial transformations, it is convenient to imagine that we look at places, settlements and constructions where the levels of fragility have some

evidence, or where is ongoing a process of weakening, of “fragilization”, which is a threat, an attempt to forcibly change an existing state, a situation.

In the Italian context, fragility and vulnerability are very useful to define the weak condition of the underpopulated and abandoned villages and countryside on the Apennines, where agricultural activities are no more profitable, and where people prefer to leave their homes and fields to reach the coasts and the cities, looking for a modern and comfortable life. There is a large debate about the different strategies that could revitalize these regions, but, of course, there is no recipe to solve a problem that last from a century, at least, and that is now evolving along many different perspectives. Arts and crafts enterprises, biological agriculture, migrant hospitality, green tourism, accommodation for elderly people, are just some of the many ideas and projects which sometime success, in giving a new life to environments suffering of process of abandon and decay.

For us, the question is: how can architecture elaborate answers for these areas? How can we imagine a new future, new settlements, new facilities and lifestyles? How to give a promise of a better horizon, a vision of growth and health, of social and economic wellbeing?

In this frame, we want to test an option based of the effectuality of architectural design in transforming the environment, in giving new life and energy to these places, in establishing new points of quality, of attraction, of production. So, the goal is to define a set of tools that, in different conditions, can be used to reclaim and transform neglected, ruined, abandoned places.

In a way, we think that we can take out of the city some of its characters, in terms of density, of visual impact, of quality, of appeal. Our challenge is: how to express this intention in practical design terms. We can choose among so many references that we decide to go straight to a sample that, under many aspects, is a perfect representation of the city without the city, embodying all its symbolic and political elements without the real matter of it.

This sample, the inspirational model, is the Acropolis of Athens, maybe the most relevant architectural place, in Europe, and the clearest representation of how architecture can fix a centrality, a point of reference, for an entire territory (that, in this case, is the entire western civilization). Then, looking at the august acropolitan place, we can elaborate some guidelines that can be used to establish a program, a generic one, to be applied and developed in different situations.

The most important character of the Acropolis is that it is composed of three buildings that are completely different and specific, under any profile. The Propylaea, are the more urban of them, a building that is a gate, a point of transit from the wilderness of the mountain, located in the center of the city, and the monumental architectural compound on the top of it. The Erechteion is the more introflexed one, a complicated and stratified sum of parts, of different ages and destination, with a relatively low impact on the surrounding, with the exception of the sculptural presence of the Cariathidis. The third is the most iconic, the Parthenon, that is the landmark that keeps all buildings and space together and that represents the possibility that is relevant mostly for the effectiveness of the spatial relation with all that is around it.

Simplifying, as a programmatic act of design, these three buildings create a pattern, a model of settlement, that can be taken and repeated in whatever situation, in any place that needs a new centrality, new quality, new public space and architecture. We want to assume the

Acropolis as a model, to be applied to the recovery and the urban development of the rural depressed areas.

Driven design research, an experimental approach

We are developing this project on fragile territories through a driven design methodology of research, trying to establish clear processes and new tools which can work on the two lines: research and design. This effort is ongoing now at the doctoral program of Architectural Urban Interior Design (<http://www.auid.polimi.it>) at Politecnico di Milano. Doctoral research projects are expected, by definition, to comprise high quality academic work, independently developed; it is, however, through collaboration, the exchange of ideas and the sharing of experiences, that research projects are enriched – especially in a field as intensely diverse and informed by other disciplines, as it is architectural design. There is no doubt that design is more a technique - or an organized and flexible system of different techniques - than a science, and that it is difficult for it to fit into the parameters that many other, so called scientific, disciplines share without particular complexities.

For architecture, study, observation, recording and understanding of reality are always aimed at a construction that, however convincing, remains questionable, and based on elements that cannot be completely objectified and plainly communicated. The personal and creative aspect, which is the living core of design, turns out to be an irreducible obstacle to any scientific codification. Indeed, this ambiguous status of architectural design, its specificity, its interweaving of various implications with many different branches of knowledge - techniques, humanities, arts, social sciences - are the elements of its richness and uniqueness.

Looking at academic research in the field of architectural design, we meet, from the very beginning, deep insights, complicated questions and very few practical instructions and solutions. Some international organizations, such as the European Association of Architectural Education (EAAE), have tackled the topic on several occasions, and the best universities have sought to establish fruitful connections between design and research by elaborating formulas such as “research by design” and “research through design”. In our AUID doctoral program, we choose the “Design driven research” formula, which implies that research activities always stay in a close relation with design and that this relation can be managed through many different options.

Therefore, the carrying out of a doctoral program, if based on architectural design, must openly address these disciplinary problems, and it must clearly identify the topics that compete with it. The possible contiguities with historical, urban and technical studies should be explored with a positive inclusiveness but also treated with caution, to avoid research paths which drive far away from the focus of architectural design. How to avoid these ambiguities, it is something that cannot be told once and forever, and it is necessary that researchers in architectural design accept the challenge that every research must somehow design its own premises, motivations and disciplinary boundaries, just in the same way that every architectural project is being called upon to express, through its form, the reasons of the order through which it informs and regulates itself. As our field is characterized by fluid and recurrent issues, our discourse needs to be of a kind that self-determines its profile, balancing,

in a continuous oscillation, a process that combines learning by doing with a critical gaze, open to comparison and change.

Our program, through its seminars, cannot provide recipes that do not exist, but can give access to some tools indicated for a full awareness of the terms that each research project addresses, of the methods that can be developed and of the results that the research aims to achieve. Being AUID a founding partner of the Erasmus+ Strategic Partnership called CA2RE, we work in this doctoral network composed by the following higher education institutions: University of Ljubljana, Aarhus School of Architecture, KU Leuven of Ghent, Politecnico di Milano, TU Berlin, Cofac – Lusofona University of Porto, Hafencity University Hamburg, Norwegian University of Science and Technology of Trondheim, and TU Delft.

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