

2019

TIRANA
DESIGN
WEEK



DESIGN
&

NON
NORMA

tIVITY

CONFERENCE PROCEEDINGS

TDW2019 International Scientific Conference

from 19th to 21st September 2019 / POLIS University

scientific coordinators / Editors / Conference Chairs

Skënder Luarasi
Valerio Perna
Merita Guri

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FORESEEING UNCERTAINTY:

DESIGN & NON-NORMATIVITY

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Dear participant of Tirana Design Week,

Thank you for joining us in TDW 2019. I strongly believe that all together we are making an historic step directly or indirectly related to Tirana's and Albanian's architecture, city and landscape. In addition, this is also a contribution for the region and wider on. At present time Europe is struggling with the instability of one of the worst recessions of its own history. Europeans are tired of the lack of flexibility and rigidity of overregulated societies where nothing happens. But here in Balkans and specifically in Albania, despite similar symptoms, things are still evolving, not because of delayed projections but because people here are very active, entrepreneurial spirit survivals, and the creativity of society is in a never-ending process. In Tirana, Albania or anywhere – as they say – in Western Balkans, we are still doing fine, so we might have to learn but also to offer something to the rest of the continent, despite our endless effort to join EU. This is a land of creativity where all architects and city experts feel just great: amazed, shocked, revolted, confused, enthusiastic, inspired, etc. This is due to the fact that there are layers of a real self-generative city.

Let's not forget that Tirana is an example of creativity. So, let's use such energy in a positive way and let's open a debate that might be useful for everyone. TAW is an academic event which gives you the opportunity to come and share your professional passion or nightmare. Enjoy time with us. There is not a clear recipe but there is always a solution out there to be discovered with passion and commitment. Join POLIS University, Co-PLAN Institute and our network of creative partners. I believe we all have something in common that can help to educate the new generation of architects who can re-appropriate the city and its needs, including those of real dignitary architecture. This is the point where the architect rediscovers its own place, space and meaning within society.

Enjoy TDW 2019! Enjoy U_POLIS and Tirana!

Prof PhD Besnik Aliaj
Rector of POLIS University

Dear participant of Tirana Design Week, Tirana Design Week (TDW) this year, in 2019, approaches Tirana's 100th anniversary as the capital of Albania. Comparing photos of a bucolic Tirana in 1920 with what one sees from Polis University's fourth floor today, inevitably raises doubts about the endurance of design, while conspicuously evincing the fluctuating tendency of what constitutes a norm in a world continuously oscillating between what is desired or imagined as an endogenous equilibrium and exogenous menaces. The objective of Tirana Design Week is to draw current research and design practices, as well as theoretical speculations on the topic of uncertainty and non-normativity in multiple scales and contexts, in and from the city of Tirana, with the latter understood as a dis-position, a tendency to change position.

The significance of addressing such topic from Tirana is that this city is a harsh and unmediated example of what is already a global symptom: a strong contrast between an ideology of normativity on the one hand, and its actual impossibility on the other; between the aim for responsible design practices and ethical boundaries impossible to overcome; between education and merciless economic reason, between standardized production and mass-customized desires, between daily ideologies of inclusivity and an increasingly predominant exclusivity, between plain design narratives and irresponsible political decision making; between expensive normativity affordable only by few, and not-so-cheap sub-normativity for the many; between frenzied building development and destruction of urban artifacts; between 'glittery' shapes in the center and chaotic sprawl in the periphery; between style and non-style. What happens in-between is dimmed as 'uncertain'. TDW this year aims precisely to enhance such uncertainty from the perspective of different practices such as design, architecture, sociology, urban and environmental studies, theory and history, innovation, writing, research and pedagogy, among others. Not so much to propose another new agenda - we already have plenty of those, but rather to juxtapose these practices with what is already happening 'out there', and speculate how they can potentially inflect, positively or negatively, this 'out there': the un-reason of non-normativity and the commodification of normativity.



Skënder Luarasi is an architect and writer. His research investigates the relationship between architecture and geometry. His PhD dissertation, received at the Yale School of Architecture on 2018, focuses on how design processes end, and how the question of finitude intersects with style, geometry and parametricism in history.

Luarasi has presented his research in numerous ACSA conferences, and has published in Haecceity, A+P Forum, and other Journals. In collaboration with Adil Mansure is currently working on the book *Finding San Carlino: Collected Perspectives on Geometry and the Baroque*, to be published by Routledge in Fall 2019. Skender Luarasi also holds a Master of Architecture from Massachusetts Institute of Technology, and a Bachelor Degree in Architecture from Wentworth Institute of Technology. He is currently the Dean of the Faculty of Research and Development at Polis University in Tirana, Albania.

He has previously taught at the Yale School of Architecture, the Department of Interior Architecture at Rhode Island School of Design, Wentworth Institute of Technology, Boston Architectural College, the Architecture + Design Program at University of Massachusetts Amherst, the School of Architecture at Washington State University, and Massachusetts Institute of Technology. He has worked as a designer for dEcoi architects/MIT Digital Design Group, Kennedy & Violich Architects Ltd and Finegold + Alexander Associates Inc.



Valerio Perna (Rome, 1988) is an architect and holds Ph.D. in Architecture 'Theories and Design' at Sapienza, University of Rome.

He is the Coordinator of the INNOVATION_Factory (IF) unit and Head of the Research Center of Architecture, Engineering, and Design, at POLIS University where he also teaches both architecture and design.

His research agenda explores the role of playfulness and ludic processes in contemporary architectural practice using both analog and digital tools. His research goal is developing a multiscale design methodology, based on a strong RtD (Research Through Design) approach - affecting creativity, education and complex urban challenges - and on the application of a ludic design strategy to tackle multiple crises in the contemporary era. Furthermore, he has been working for years on the new possibilities related to the IT Revolution in Architecture.

Parallel fields of interest are:

- Multitasking infrastructures enriched by IT and Interactive Technologies to revitalize the urban environment and activate bottom-up civic engagement processes;
- Computational and Parametric design;
- Studio and Theory of Architecture and Design;
- Design education based on an RtD (Research Through Design) and Learning by Doing approach



Doc. Dr. **Merita Guri** is the coordinator of the Civil Engineering program at the Faculty of Architecture and Design.

Since 1988, he has been part of the academic life in Albania with a wide experience in the field of designing residential, industrial and social facilities. He received the title of Doctor from the Polytechnic University of Tirana in 2015 with a research topic focused on the techniques of strengthening buildings with a masonry structure.

The interest of the teaching field focuses on masonry constructions, steel constructions, building materials as well as studio and diploma projects with the students of the scientific master.

Conference Chairs

Skender Luarasi

PhD - POLIS University (ALB)

Valerio Perna

PhD - POLIS University (ALB)

Merita Guri

PhD - POLIS University (ALB)

International Scientific Committee

Besnik Aliaj

Full Prof PhD - POLIS University (ALB)

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Dr. Doc. - POLIS University (ALB)

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PhD - POLIS University (ALB)

Sonia Jojic

PhD - POLIS University (ALB)

Llazar Kumaraku

PhD - POLIS University (ALB)

Saimir Kristo

PhD - POLIS University (ALB)

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PhD - POLIS University (ALB)

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PhD - NCOI Rotterdam (NLD)

Hassan Osanloo

Full Prof PhD

Michelangelo Russo

Full Prof PhD - Università Federico II di Napoli (ITA)

Alessandra Battisti

Ass Prof PhD - 'Sapienza', Università di Roma (ITA)

Alessandra De Cesaris

PhD - 'Sapienza', Università di Roma (ITA)

Marco Pietrosante

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Vincenzo Paolo Bagnato

PhD - Politecnico di Bari (ITA)

Domenico Pastore

Adjunct Professor PhD - Politecnico di Bari (ITA)

Zeila Tesoriere

Ass Prof PhD - Università degli Studi di Palermo (ITA)

Gökçen Firdevs Yücel Caymaz

Ass Prof PhD - Istanbul Aydin University (Turkey)

International Speakers



POLIS University
14th September 2019

Mario Botta (Switzerland) was born in Mendrisio, Ticino, on April 1, 1943. After an apprenticeship in Lugano, he first attends the Art College in Milan and then studies at the University Institute of Architecture in Venice. Directed by Carlo Scarpa and Giuseppe Mazzariol he receives his professional degree in 1969. While studying in Venice, he has the opportunity to meet and work for Le Corbusier and Louis I. Kahn. Botta's professional career begins in 1970 in Lugano. Known for his single-family houses in Ticino, his work encompasses many other building types including schools, banks, administration buildings, libraries, museums and sacred buildings. Along his work he teaches extensively in giving lectures, seminars and courses in architectural schools in Europe, Asia, North- and South America. Since the beginning of his career, his work has been recognized internationally and honored with prestigious awards, besides being presented in numerous exhibitions and publications. In 1996, he is one of the founders of the Academy of architecture of the Università della Svizzera Italiana in Mendrisio, where he still teaches and held the directorship. His steady professional and educational commitment, his role as chairman of the award jury of the BSI Architectural Foundation and his current involvement in the realization of the Theatre of architecture, allow him to impart his knowledge of a profession that is, first and foremost, his passion.



POLIS University
16th September 2019

Marcio Sequeira de Oliveira (Brazil) is a Brazilian architect and Master of Science in civil engineering. His research focuses on finding educational solutions that can help to bridge the gap between architecture and structural engineering. Since 2004 he has been working on the Mola Structural Model project – an educational physical model designed to simulate real structures behavior. In 2014, after 10 years of design development, he launched Mola's first edition on the internet (Mola Structural Kit 1). In 11 days Mola became the largest crowdfunding campaign in Brazil. Today his solution is being used by universities and companies from more than 70 countries around the world. He has received some important design awards with Mola project, including the winner prize of "31º Prêmio Design Museu da Casa Brasileira" in 2017 (the most traditional and prestigious design award in Brazil)



POLIS University
17th September 2019

Ben Schouten (Netherlands) holds degrees in arts and mathematics. In 1996 Ben Schouten founded Desk.nl, providing innovative internet related solutions. Together with the Dutch Design Institute (Vormgevings Instituut), Desk was internationally acknowledged with a webby award in gaming. In 2001 he received his PhD for his thesis on content based image retrieval and interfaces that allow browsing & searching for images in an intuitive way, according to human perception. Ben Schouten founded a research group in Biometrics and Human Behavior Analysis at the Centre for Mathematics and Computer Science (CWI, Amsterdam) and taught at the Utrecht School of Art & Technology (HKU) in Interaction Design and Gaming. In 2010 he was appointed Full Professor Playful Interactions in Smart Environments at Eindhoven University of Technology and in 2013 Lector of Play & Civic Media Research at Amsterdam University of Applied Sciences. His group focuses on play for social innovations, citizen empowerment and culture. He is an advisor for the European Commission on the 'Internet of Things' and has written 100-plus publications at the intersection of play, games, participatory design and citizen empowerment.



*POLIS University
18th September 2019*

Alireza Taghaboni (Iran) is a practicing architect since 2004, founded Next Office in 2009. Taghaboni is also a painter and holds a Ph.D. in Architecture. A frequent contributor to Iranian architecture and urbanism magazines and periodicals, he is a tutor and partner at the Contemporary Architects Association of Iran (CAAI), a private institute in Tehran that offers an alternative education program to formalized pedagogical frameworks of the country. Next Office, based in Tehran, aims to provide a contemporary alternative to traditional Iranian architecture, responding to the climate conditions, economic, sociopolitical, and cultural context of each project as well as the peculiarities of each project's site.

The practice's work ranges from single-family houses to residential, commercial, and mixed-use large-scale complexes, to urban master plans. Over the past decade, the practice has won several Memar Awards, a prestigious national award for architecture in Iran held annually, making it one of the top prize-winning practices in the country.

Sharifi-ha house, with its revolving rooms, adapts to a shifting lifestyle and demonstrates a critical take on building regulations and zoning by-laws.

The project was shortlisted at the World Architecture Festival in 2014 and has been acknowledged internationally in professional and public media. In 2018, Taghaboni was awarded the inaugural Royal Academy Dorfman award in recognition of his talent that "represents the future of architecture".



*POLIS University
19th September 2019*

Antonino Saggio (Italy) is an Architect and Full Professor of Architecture Theory and Design at 'Sapienza – Università di Roma.' He has been for several years coordinator of the Ph.D. School in 'Theory and Design' and director of the International book series 'The IT Revolution In Architecture.' He has written several books among which one of the most important ones - 'Architecture and Modernity: from Bauhaus to the IT Revolution' - has also been edited in Albanian by POLIS University.

Three main guidelines distinguish his work: first, the confidence in the concrete possibility of teaching architectural design through making its methods evident and transmissible. This approach has been tested with many students and graduands, with the members of nITro (New Information Technology Research Office), and with many assistants and collaborators that are currently teaching in foreign institutions such as POLIS University.

The second fundamental aspect of Saggio's work is the continuous interrelation between the critical historian moment and the concrete design phase. Particularly, this research path permeated his intense critical historian activity and led to the birth of books regarding Giuseppe Terragni (published by Laterza), Giuseppe Pagano (published by Dedalo), Louis Sauer (published by Officina Edizioni), Peter Eisenman and Frank O. Gehry (published by Testo&Immagine).

The third peculiarity of his work concern the belief of today's catalyzing role of IT in the definition of a proper 'IT Revolution in Architecture.'

This topic has been part of his early teaching years at Carnegie Mellon-Pittsburgh and has continued at ETH Zürich and is currently part of his commitment at the Faculty of Architecture at 'Sapienza – University of Rome.'

The book series 'The IT Revolution In Architecture,' founded by Saggio in 1998 and also edited in English by Birkhäuser, has been a focal point for the deepening of this topic and contributed to influence a whole generation of architects that are currently at the forefront of the international debate.

Furthermore, the presence of IT also characterized critical urban projects for the city of Rome (Urban voids, Urban Green Line, Tevere Cavo, UNLost Territories) that link together the different historical and landscape peculiarities of the city that urgently needs for the development of new infrastructures within the urban fabric that can treasure the impact of the new IT possibilities.

International Speakers



*POLIS University
20th September 2019*

Marcos Novak (Venezuela) is the founding Director of the transLAB at the Media Arts and Technology Program at UCSB, where he is also affiliated with the AlloSphere research facility and CNSI (the California NanoSystems Institute).

Marcos Novak is an artist, theorist, and transarchitect, and an internationally recognized pioneer of the study of virtual environments as architectural spaces, and of algorithmic, generative, and responsive approaches to architectural design and the transactive arts. As early as 1990, with his friend Michael Benedikt, he co-organized “CyberConf: The First International Conference on Cyberspace,” the first of an eventual eight international conferences on cyberspace. Later, his concept of “transarchitectures” became the focus of yet another series of international conferences, exhibitions, symposia, and publications that helped establish the digital, computational, generative, and virtual in advanced architectural design.

His projects, theoretical essays, and interviews have been translated into over twenty languages and have appeared in over 70 countries, and he lectures, teaches, and exhibits worldwide.

In 2008, “Transmitting Architecture”, the title of his seminal 1995 essay, became the theme of the XXIII World Congress of the UIA (Union Internationale Des Architectes), the largest architectural organization in the world (representing 3.2 million architects worldwide).

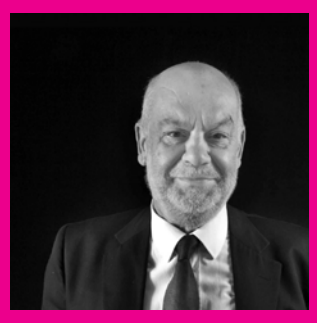
Deeply interested in worldmaking, the future, and the avant-garde in all modalities, he is also the fortunate recipient of a classical education in Greece, where he grew up. Born into a family of filmmakers, he retains and exercises a fascination for understanding worlds as constructs — in fact, in fiction, in action. In 2000, he was honored to be chosen to represent Greece at the Venice Biennale. His work has been exhibited at the Venice Biennale several times since, and he has participated in numerous other international exhibitions and biennials since.

More recently, Professor Novak has developed the futuristic, humanistic, and design-oriented model of THEMAS for research, practice, and pedagogy. THEMAS stands for the holistic, integrative, and creative fusion of <Technologies, Humanities, Engineering, Mathematics, Arts, Science> and is a framework that contains and extends the familiar approaches of STEM and STEAM, adding the creative humanities as an equal participant, and insisting on a designing/making approach that balances the theoretical and the empirical, the qualitative and the quantitative. More than a mere acronym or framework, THEMAS is a thoroughly developed <model> that draws upon the many traditions of “well-rounded” education that have appeared across cultures through the centuries, learning from the past, respectful of the present, and aiming boldly into the sustainable future.

THEMAS has been positively received in many places including: Taiwan, Qatar, New Zealand, China, Japan, Korea, Scotland, Switzerland, England, France, Greece, the US, and more.

His current research explores worldmaking for social XR (extended reality), media field navigation, selective reality substitution (for autonomous vehicles, for instance), archimusic and habitable cinema, and the symmetries of narrative spaces and spatial narratives, among others.

He is a Fellow of the World Technology Network, a Distinguished Affiliated Scholar of the Alexander Fleming Biomedical Sciences Research Center, and serves on the editorial boards of several journals.



*POLIS University
21st September 2019*

Franco Purini (Italy) was born in Isola del Liri in 1941. He studied architecture and was a student of Maurizio Sacripanti and Ludovico Quaroni. In 1966 he founded a design studio in Rome, along with Laura Thermes. Since 2015 he is Professor Emeritus in "Architectural and Urban Composition" at Sapienza University in Rome. Purin is a member of the Accademia delle Arti del Disegno in Florence and the Accademia Nazionale di San Luca in Rome. In 2013 he was awarded by the Presidency of the Italian Republic Diploma di Medaglia d'oro di Benemerito della Scuola, della Cultura e della Arte. In 2016 he is honored with a career gold medal by the Milan Triennale. One of his latest builds is the Eurosky tower in Rome.



*POLIS University
24th September 2019*

Rudolf Lückmann (Germany)

He studied architecture at RWTH Aachen University. Since 1993 he has a professorship at the University of Anhalt.
WRITINGS_ Built pastoral care. The buildings of St. Peter and Paul in Dessau. Edition Anhalt University.



*POLIS University
24th September 2019*

Gernot Weckherlin (Germany) Rationality and Design Decisions in Architecture: From Bauhaus to BIM

This presentation will offer a critical view upon 'rationality' as a paradigm for design decisions from modernist Bauhaus to today's Building Information Modeling in Architecture.

Concepts of rationality and rationalism had a long lasting effect upon design decisions as they offer a role model for architects and engineers to open the way for 'objective' or even 'scientific' ways of professional action. A closer analysis of rationality in architectural design beyond the history of modernism may open up a new discussion of its relevance today.

International Speakers



*POLIS University
25th September 2019*

Kiersten Muenchinger (USA) is an Associate Professor in the Department of Product Design at the University of Oregon. Muenchinger researches the intersection of materials and design, and quantitative and qualitative sustainable design strategies. Her experimental sustainable design work has been exhibited with the Green Product Award, Germany; ShowPDX, Portland, Oregon; and Salão Design, Brazil. In 2016, she was a Fulbright scholar in Industrial Systems Engineering at Hong Kong Polytechnic University. She received the Sustainable Impact Practice Award in entrepreneurial education from VentureWell in 2018. Before joining UO, Kiersten was a design engineer with IDEO, Fitch, Sottsass Associati, and Walt Disney Imagineering.



*POLIS University
26th September 2019*

Maja Lalic (Serbia) Architect, Founder of Mikser organization, Belgrade

Maja Lalic is the founder and creative director of Belgrade's Mikser organization and creative director of Mikser Festival dedicated to sustainable development and urban culture. As an urban designer by education, Maja advocates for participatory design, community engagement and nature-based solutions in her initiatives. Maja collaborates frequently with UN Women and UNDP on projects connecting social cohesion with actions for positive climate change and circular economy. She is a co-founder of the regional platform Young Balkan Designers dedicated to discovery and development of local design talents and restoration of the creative exchange in the Balkan region. Maja is an activist of the international initiative Blue Green Solutions, a co-founder of Women Architects Association (ŽAD) in Serbia and one of the initiators of Refugee Aid Miksaliste community center for refugees and migrants for which Mikser organization received numerous awards, such as European Citizenship Award 2016 for Social Campaign of the Year, Fulbright Alumni Trailblazer Award and Contribution to Europe Award by European Movement International.



*POLIS University
26th September 2019*

Jelena Matic (Serbia) Full Professor, University of Belgrade

Jelena teaches Furniture and Interior Design at Department of Wood Technology and Science at University of Belgrade, Serbia and invests large efforts in additional education and practical training of the new generations of Serbian furniture designers. She is also active in promoting works of Balkan fresh design talents in the region and abroad, as well as putting in contact young designers with the local furniture manufacturers.

Since 2008, Jelena merged her activities with the agenda of Mikser organisation dedicated to development and promotion of Balkan creative industries. She contributes as one of the key selectors and the member of the curating team of the annual talent exhibitions Young Balkan Designers and Ghost Project.



*POLIS University
27th September 2019*

Fernando Menis (Spain) Over the course of 40 years of acclaimed architectural practice, Fernando Menis has materialized a wide range of designs, from congress centers, concert halls, sports facilities to waterfronts, parks, plazas, housing and schools. He is the founder of Menis Arquitectos, an architecture and urban planning office based in Tenerife, the designs of which stand out for their respectful integration of buildings in their context, the innovative use of traditional materials, recycling and a unique expressiveness all of which are accomplished strictly within established budgets. The quality of Menis' s production and research has been recognized worldwide with prestigious awards among which: German Design Award 2018 - "Interior Architecture"; Iconic Award 2017 - "Public Building"; Best Concrete Building at WAN Awards 2016; Gold Award to the Best Public Building at Taipei Intl. Design Awards 2016; Special Award to Accessibility at CEMEX Intl. Awards 2016; Best Cultural Building 2015, awarded by the Polish Architects Association; First Prize at World Architecture Festival 2012 in "New & Old" category and the "Special Director's Award" at the same edition; the Ambuja Cement Foundation Award for Architectural Innovation with Concrete, 2016; Best Future Cultural Project Award at World Architecture Festival 2016; Spanish National Architecture and Decoration Award 2000.

A PhD Architect, he was a Visiting Professor at Hong Kong University, the American University of Sharjah, Universidad Europea de Madrid, Akbild Wien Academy and ESA Paris. He chairs the Laboratory for Innovation in Architecture, Design and Advanced Tourism of Tenerife, a non-profit that aims to promote energy efficiency, new construction systems, creative urban planning and technological innovation in tourist destinations.

Notes

All papers presented at this conference have undergone a process of **single blind review** by the members of the international scientific committee. The quotation system adopted is the **Harvard Referecing System**.

As stated in the call for papers, **all copyright responsibility is fully and solely on the author(s) of the text**. The coordinators, organizers and scientific committee are not legally responsible for any claims for compensation if the author(s) have included figures, tables or text which have already been published.

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Smart Cities. Science fiction and Reflections on the city of the future

Valerio Perna¹

Faculty of Architecture and Design, INNOVATION_Factory, POLIS University, Tirana, Albania

abstract

The urban spaces of the contemporary city, present architects with some of the most urgent challenges in a world in constant transition between old and new paradigms. The growing complexity of our world, characterized by significant changes in the economic, social and cultural spheres compared to the previous century, requires a re-evaluation of the operational categories that shape these spaces and of the categories of social interaction that they can trigger and enhance. Furthermore, the urban and territorial planning of some regions, including ours and a large part of the southern European and Balkan area, remains bound to quantitative systems based on standards and mechanically analyzed data as the heritage of previous political regimes and centralized top-down planning. The studio explores the relationship between play and architecture, positioning play as an inclusive process that opens doors to imagination. Recognizing play as a synthetic and ethical driving force in architecture, the article highlights its role in fueling ongoing investigations, openings and contradictions within polysemic art. In response to these challenges, the paper advocates a methodological approach and digital implementations to equip the next generation of architects with tools to address evolving challenges. These tools aim to inspire creative solutions through a "design game" that embraces continuous changes in perspective and incorporates multidisciplinary and original systems.

keywords Architectural Design, Game Mechanics, Ludic Strategy, Urban Voids, Bottom-up Tools

1. Introduction

«Smart cities are those that consciously manage their resources. Traffic, public services, and the ability to cope with situations pre - and post (Author's note) - disaster, should be aimed at reduction of costs, the reduction of carbon emissions, and the increase of performance.» ((Eduardo Paes 2017, Brazilian Politician)

Smart City is just one of the recent labels to identify a approach based on information clusters and aimed at renewal and urban development. The latter uses the so-called Big Data¹ to stimulate new forms of organization and management of resources, and to guarantee greater active involvement by citizens. Singapore was the first city, during the 1990s, to define itself as a 'smart island' (NBC 1992) and from that moment on the concept of 'smart' nations - and cities - was introduced on a global scale. Referring to the term 'intelligent' it is difficult to give an answer unambiguous definition of intelligence as it is necessary to define whether we are referring only to the qualities of recent technological systems implementation; to their ability to develop components of intelligence

1. Big Data identifies a collection of data of such dimensions - in terms of volume, variety, and speed - that it requires specific methods and technologies for the extraction of value. For further information, see: De Mauro, A., Greco, M., Grimaldi, M. (2016) A Formal definition of Big Data based on its essential features, in Library Review, vol. 65, no. 3: 122-135

that involve above all the inhabitants to stimulate a their greater participation and problem solving skills; or if the term addresses the possibility of a greater understanding of related concepts to social and behavioral sciences (*swarm intelligence*², *collective intelligence*, *emerging intelligence*, etc.) Furthermore, it is interesting to note how speculative research regarding futuristic cities devoted to technology have always been a topos of previous century.

In sci-fi³ literature, in fact, the reader is often put compared to dystopian worlds where cities are controlled by technology – in a dual relationship between positive/negative uses of the latter – which is implemented in different protocols and accessible in a diversified manner to multiple categories of users. Rereading some of the key texts of the last century⁴ today is almost smile, as those imaginative journeys in urban - public environments and private - populated by technological implementations - as well as systems.

Upon revisiting some of the seminal texts of the last century⁴, the experience is almost lighthearted, evoking a sense of amusement. The imaginative journeys through urban settings, encompassing both public and private environments, populated by technological implementations—including systems of responsive and dynamic sensors and actuators—have gradually evolved into tangible realities in numerous contemporary cities today.

Architects and artists (Nijholt 2017) have also proposed in the futuristic visions of urban spaces over time. The same words by Le Corbusier «*the house is a machine for living*» (Le Corbusier 1923) turn out to be prophetic if you think about it, in addition to the undeniable components intrinsic to it aimed at optimizing domestic space, also from a contemporary perspective regarding control issues regarding these new buildings (and above all whether the latter is carried out by humans or delegated to machines). In his *New Babylon* (Wigley, 1998), Constant Nieuwenhuys (1959), questioned himself in the 1950s and Sixty on cities as huge gaming machines and relational spaces playful. In his *Ludic Society*, humans have been set free from work thanks to automated production and can follow their desire to play and freely modify the environment in which they live. The media audio-visual and telecommunications are named as factors fundamental for the total transformation towards a founded society entirely about the game.

The Dutch architect's proposal is also systemic from one point of environmental sensitivity point of view: all natural elements can in fact become instruments for the act of playing. These are treated as real 'building materials' of

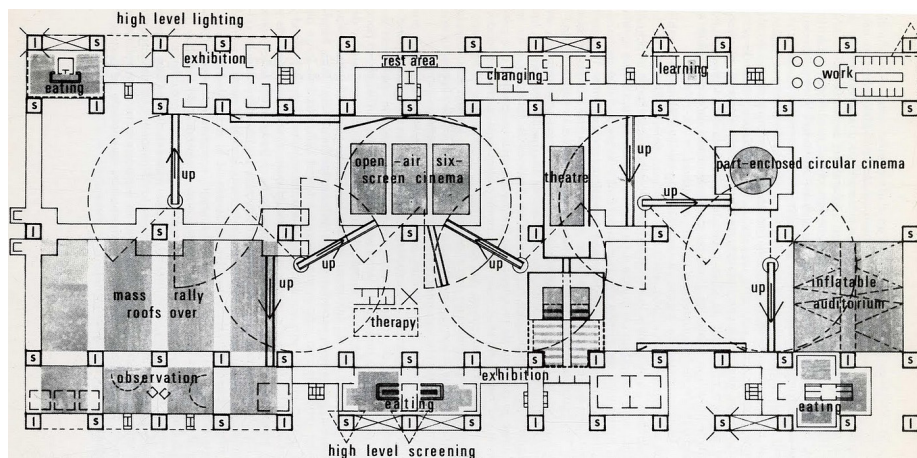


Fig. 1 Cedric Price, *Fun Palace*, (1959-1961). Plug-in spaces programmable - and interchangeable - according to users' wishes

2. *Swarm Intelligence* is a term first coined by Gerardo Beni, Susan Hackwood and Jing Wang (1988) during a project based on robotic systems. By this we mean the study of self-organized systems, where a complex action develops starting from a collective intelligence derived from the individual sub-components of the system. The most direct examples can be found in the behavior of colonies of insects or flocks of birds, or schools of fish, or herds of mammals. According to the definition of scholars of these systems, *swarm intelligence* can be described as the "properties of a system in which the collective behavior of (unsophisticated) agents interacting locally with the environment produces the emergence of global functional patterns in the system" (Beni, G., Wang, J. *Swarm Intelligence in Cellular Robotic Systems*, in Proceed NATO Advanced Workshop on Robots and Biological Systems, Tuscany, Italy, June 26-30;

3. *Sci-fi* (science fiction) is a genre of speculative storytelling that generally focuses on imagery involving science and technology, space and time travel, and extraterrestrial life. *Sci-fi* often anticipates themes - and experiments - which over the course of a few decades are then implemented in the real world. For this reason it is also defined as the 'literature of ideas';

4. Huxley, A. ([1932] 1933) *Il mondo nuovo*, Milano: Mondadori; Orwell, G. ([1949] 1984) 1984, Milano: Mondadori; Bradbury, F. ([1953] 1999) *Farheneit 451*, Milano: Mondadori; Dick, P.K. ([1968] 1971) *Il cacciatore di androidi* | Do

architecture and define its spatial qualities, while the elements psychological (visual, sound, olfactory, and taste-related *stimuli*) have considerable effects on behavior and communication. Other scientists and researchers also questioned themselves during the course of time on the cities of the future. In 1923, Nikolas Tesla (Kennedy, 1926) spoke of communications 'wires' that would transform the planet in a big brain; the poet Valéry (1928) predicted the advent of *Sensor Delivery* for domestic spaces, that is, the possibility of being supplied directly via electricity and water pipes in our homes.

Furthermore, the transition from the notion of intelligent to smart city is well documented by Deaking and Alwaer (2011). According to them, this is increasingly confirmed by the growing attention to systems of sensors and actuators in urban spaces, and the appearance of computers omnipresent but at the same time increasingly less perceptible in terms in size.

It is since 2000 that the term smart city has been used to define environments where big data clusters, using systems of digital collection and processing, can help monitor and organize the activities of citizens or simple visitors. Bowermann (2009) what characterizes a smart city is «*the advanced - and integrated - use of sensors, materials, electronic components, and networks, which are interfaced with computer systems that include databases, and algorithms dedicated to tracking and decision-making*».

Many researchers (Hollands 2008; Townsend 2013; de Lange, de Waal 2013) have expressed several doubts in recent years on the nature of smart cities, and have complained about how the use - and implementation - of such data is not democratic and for everyone, but is controlled by large stakeholders who make effective use of it mainly for economic and productive reasons. These scholars fight for a relational urban space characterized by aggregative and emergent dynamics, and against one widespread tendency to pigeonhole planning and development interventions within top-down logics - often technology-pushed and industry-driven - rather than on participatory and bottom-up mechanics.

An interesting point of view on the relationship between bottom-up practices applied to the idea of smart cities is provided by Townsend (2014). The latter affirms the importance of an open data system⁵ to everyone, so that citizens themselves can use them to write programs and codes capable of solving problems and crises perhaps



Fig. 2 teamLab, Sketch Town, 2014. An evolutionary city that grows thanks to the drawings of children/players taking shape in space. Source: teamlab.art

less so interesting in the eyes of the administrators but which involve citizenship more directly, Townsend's proposal is rooted in a type philosophy hacker that characterizes contemporary city-makers, who using simplified and off-the-shelf tools demonstrate the intent to reactivate a wide range of infrastructures, services, and systems, within the own cities.

2. Playful Cities. Bottom-up smart and technology based solutions in urban environment

«When the power of wireless transmissions is commercialized, transport and communications will be revolutionized [...] To date, images have already been successfully transmitted through cables - have in fact successfully wired through the Point System about thirty years ago. However, when the power of wireless transmissions becomes widespread, these

5. Open data is a type of data that is freely accessible from anyone and whose possible restrictions concern only the obligation to cite the source or to keep the database always open.

methods will be as primitive as the steam locomotive compared with the electric train» (Nikolas Tesla 1926)

Urban environments have historically served as hubs for recreational activities and leisure. The spatial context within cities, wherein individuals engage in social interactions and freely allocate their time, constitutes the backdrop for various forms of entertainment. Ray Oldenburg (2001) conceptualizes these locales as 'third spaces,' a classification that demarcates them distinctly from 'first spaces' (domestic settings) and 'second spaces' (professional environments). These third spaces, characterized by a convivial atmosphere, serve as gathering points where individuals can foster social connections and cultivate enduring relationships.

Moreover, a conceptual framework of interest has emerged in recent years, shared by numerous European, American, and Asian nations. This framework envisions recreational activities not only as a means to address intricate urban challenges but also as a conduit for disseminating virtuous practices in city development. Simultaneously, it perceives recreational pursuits as potential catalysts for innovative strategies that can breathe new vitality and direction into the realm of architectural projects. The prevailing sentiment underlying these inquiries is rooted in the acknowledgment that the rapid transformations characteristic of the 21st century necessitate novel planning methodologies and problem-solving approaches capable of encapsulating the intricacies of an ever-expanding global landscape.

Conventional top-down strategies have, over time, demonstrated their inefficacy, prompting a shift in contemplation towards uncharted territories where creativity, collective experiences, and meaningful dialogue among diverse stakeholders can engender sustainable urban design methodologies. Consequently, there is a recognized imperative to adopt a bottom-up model that integrates myriad voices, empowering them to actively partake as protagonists in a decision-making process that can no longer be confined to traditional centers of authority. In this context, games assume significance as an unexplored reservoir of potential capable of catalyzing transformative change. Its incorporation into long-established dynamics, such as those pertaining to urban planning, facilitates the infusion of fresh perspectives and novel realms of application. This integration serves to enhance the branch of design addressing intricate urban challenges, thereby fostering innovation in outcomes. Moreover, it promotes collaborative decision-making processes wherein the ludic dynamic serves as the engine to establish non-conflictual communication among the diverse stakeholders. Additionally, it suggests an alternative system for visualizing and analyzing information derived from Big Data. The utilization of digital tools, including sensors, actuators, AI, and digital media, further empowers users to enhance these spaces and render cities more playful and appealing. These systems alter the physicality of locations and the temporality of gameplay, transforming urban environments into boundless playgrounds where spontaneous ludic processes can be

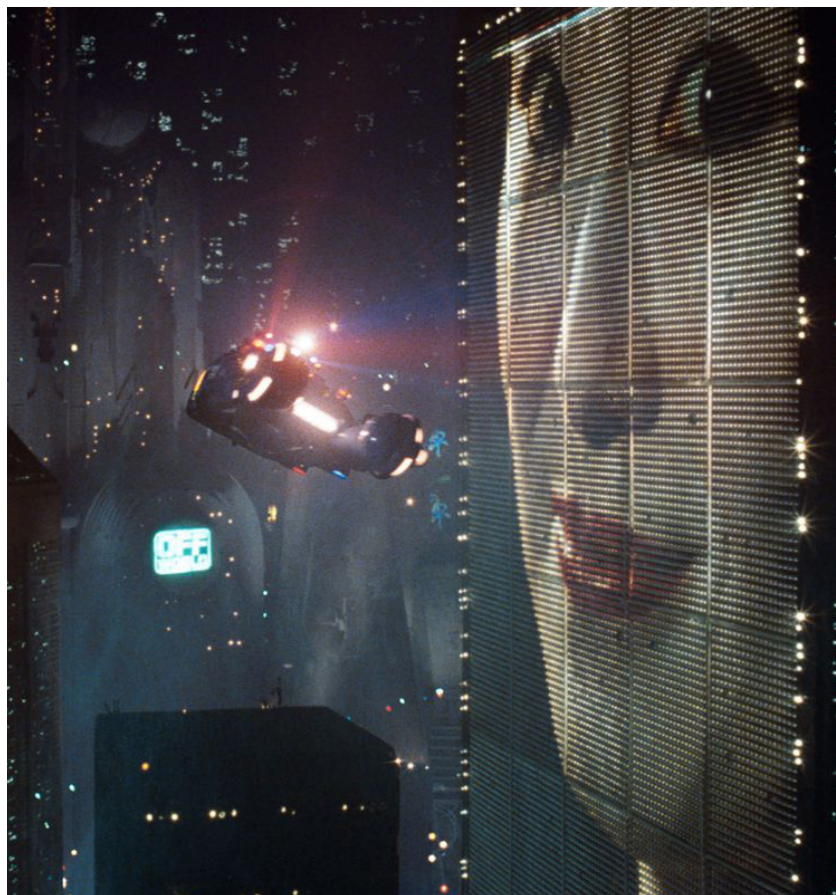


Fig. 3 Ridley Scott, *Blade Runner*, 1982



Fig. 4 Lateral Office, Impulse, Montreal, 2016 - Playful installation to reactivate areas unused buildings in the Quartiere des Spectacles

activated in real-time.

According to Bateson and Martin (2013), play is not solely confined to childhood activities. It also occurs when adults come together and establish relationships through playful social interactions. Furthermore, playfulness manifests not only through physical behaviors but also through 'playful thoughts.' Digital technologies and embedded smartness enable us to visualize these thoughts and communicate them through new media, fostering the notion that these intangible elements are the catalysts for initiating physical changes in the urban spaces where they are reflected.

Moreover, among the characteristics of play defined by the two scholars, the sixth, termed playful play - in an (im)possible Italian translation 'gioco giocoso' - is particularly relevant to our discussion. It asserts: "*Playful play is accompanied by a sense of positivity in which the subject is inclined to act (and in the case of human beings, to think) in a spontaneous and flexible manner.*"

The challenge for architects is therefore not just to understand the importance of games in the daily creative practice of the process planning, but above all questioning which interfaces can be made develop - and in this the interactivity and use of the electronic calculator offer new and fascinating perspectives - so you can transfer them peculiar structures of the discipline in a playful modeling system, production and interaction. The way this interfaces can communicate and the language used then becomes the key main to allow the object of our reflection to reveal itself to the extent that the subject is able to express himself (Pareyson 1985).

A playful design breaks the logic of the artefact as manifestation of the exclusive will of the designer but opens a dialogue between the object, the designer, the context, and the purposes.

The customization of this approach lies in the tension that is generated between the way in which the user tries to appropriate the object and the vision that the designer transmits to you. Although we want to diverge from extremely optimistic hypotheses - video games (games) they will save the world (McGonigal 2011) - and find our frame of reference in visions that focus on appropriation and interactivity ludic the basis with which to develop new directions for the project and the creative thinking, and able to deal with specific crises in contexts real: "*playing is not doing what we want but what we can with what we encounter along the way*" (Bogost 2011). IT and the potential offered by information Technology, have directed interest towards responsive interfaces, completely customizable according to the user's wishes, whichever is the case he appropriates it in a free and dynamic way (that's enough to confirm this see consumer interest in devices that are as open as possible and hackable, whether it be personal computers or smartphones. At this juncture, having scrutinized and preliminarily structured our concept of a playful city through literature reviews and contemporary debates, we proceed to introduce a diverse array of examples drawn from various domains, including architecture, design, and game design. This exploration aims to assess the extent to which this model aligns with recent experimentation in these fields.

3. Zighizaghi: a multisensory garden for urban bees

«It should be underlined that when children play they are not actually 'playing' at all; we should consider their games as one of the most serious activities that ever existed» (De Montaigne [1580] 2007: book I, cap. 23)

Purpose: to donate a new interactive play space to the citizens of Favara (AG, Italy)

Client: Milia arredamenti

Partner: OFL Architecture (Francesco Lipari and Giuseppe Conti) + Blu Network (Gabriele Giambertone and Enrico Piraino) for the interactive part

Actors involved (engagement): Milia Arredamenti, citizens of Favara

Duration of the project: 2016

Area: 320 m²

Zighigahi is a successful combination of geometry, nature, biology and design, and is configured as an interactive multisensory garden. Thanks to the architecture project, technologies that stimulate social interaction, and vegetation, transform urban space into an intimate and regenerative environment enriched by an automated irrigation system.

The idea was born from the need to create a welcoming place for the residents of Favara and, at the same time, give the city a new idea of public space created thanks to an intelligent combination of different components: technology, plants, and wood. There are two levels that characterize the installation: a vertical one (the lighting system), and a horizontal one (the platform). The first is made up of sixteen red vertical prisms, called Super Pods, composed of a light part and a sound speaker system.

These elements are used to 'contaminate' the space through inserts of architecture, music and art, and are supported by six slender bars that give them the appearance of futuristic devices straight out of a science fiction film. The second level - the horizontal one - is instead composed of an aggregation of hexagonal modules in phenolic plywood and joints in Okoumè⁶, designed to be arranged in different configurations thanks to the modularity and flexibility of their geometry. The automated irrigation system also allows the plants housed (lavender and lavender-cotton) to grow luxuriantly. Thanks to its interactive character, Zighizaghi creates a dynamic outdoor space where music acts as a medium between human beings and nature. The definition of a multisensory garden is therefore not random but is enriched by a series of other motivations that strengthen the concept and meaning



Fig. 5 OFL Architecture, Zighizaghi (2016) Detail of the hexagonal modular system

6. Okoumè - *Aucoumea klaineana* - is a tree of the Burseraceae family, widespread in the tropical forests of West Africa. It is considered to be the most water-repellent wood ever; it belongs to the mahogany family and therefore has a pinkish colour

of the entire operation. In fact, the project satisfies a multitude of senses - sight, hearing, smell, and even touch - and allows physical interaction with the individual elements that compose it. Touching the rods that support the individual pods generates a stimulus of information that transforms the vibrations in music, materialized by the speakers contained in the individual modules who create a symphony that gives a new meaning to the square. Engaging technology, architecture, and nature make Zighizaghi much more than a single urban happening, and make it a real playful device capable of bringing about a paradigm shift to resolve the crisis of urban voids where the vectors of this transformation are the citizens themselves who live there, and often forget.



Fig. 6 OFL Architecture, Zighizaghi (2016) Inauguration day with the participation of the population of Favara (AG)

4. AlbulaCC: recreational phytoremediation for the city of Rome

«Precisely the threat of ecological catastrophe should suggest [...] that we learn the great lesson of ecology, that everyone is linked to everyone else» (Valerio Pocar, Italian lawyer, sociologist and professor)

Purpose: develop an ecological awareness in the citizens of Rome through a phytopurifying recreational carousel

Client: YAP (Young Architects Program) MAXXI 2016

Partner: deltastudio + partners

Actors involved (engagement): YAP, public administration, citizens of Rome

Duration of the project: 2016

Area: 200 m²



Fig. 7 deltastudio + partners, AlbulaCC, 2016. Final rendering of the project

AlbulaCC is an experimentation that has its roots in the plug-in design philosophy, and at the same time an example of creative common architecture²¹⁶. It is an interactive, implementable and scalable architecture, distributed under the CC-BY-NC-SA 3.0 license together with the script that regulates the operation of the Arduino electronic board that controls the operation of the proximity sensors.

The project is therefore an open source device that addresses two of the major crises affecting the Tiber river and its ecological system: inquinamento e degrado. pollution and degradation. At the same time, the installation aims to present itself as an urban space, capable of involving and activating citizens in a playful way, as well as recalling the now forgotten imagery of the water mills that populated the river in past centuries.

If in the past the mills were used to supply energy to the city and its citizens, the logic of the project overturns this relationship, with the latter being called to activate - in the square of the MAXXI Museum in Rome - a cycle of reverse ecology⁸ aimed at purifying the river water through its own energy. AlbulaCC offers a phytoremediation cycle thanks to a suspended system integrated into the structure which at the same time satisfies the need for meeting, socializing and cooling off during the torrid Roman summers.

Inside the groups of pockets, a series of purifying plants are inserted (such as *myosotis palustris*, *mentha aquatica*, *nuphar luteum*, etc.) capable of activating virtuous processes and choices based on the ARPA report (2015) regarding the conditions of river pollution. The structure is able to accommodate a total of 10,000 liters of contaminated river water and return approximately 2,000 liters cleaned of all waste to the citizens.

The latter feeds the underlying swimming pool which is part of AlbulaCC and which guarantees a playful urban play system. It is interesting to point out how the entire installation is activated only starting from a direct interaction with the citizens, who are involved in it direct and sensitized manner - therefore using mechanics of civic engagement and citizen empowerment - to resolve a major crisis in one's urban space.

To this end, a series of Arduino proximity sensors - the aforementioned low-cost programmable board of Italian invention - identifies the position of the visitors/players and activates a motor that generates the movement of the large water wheel.

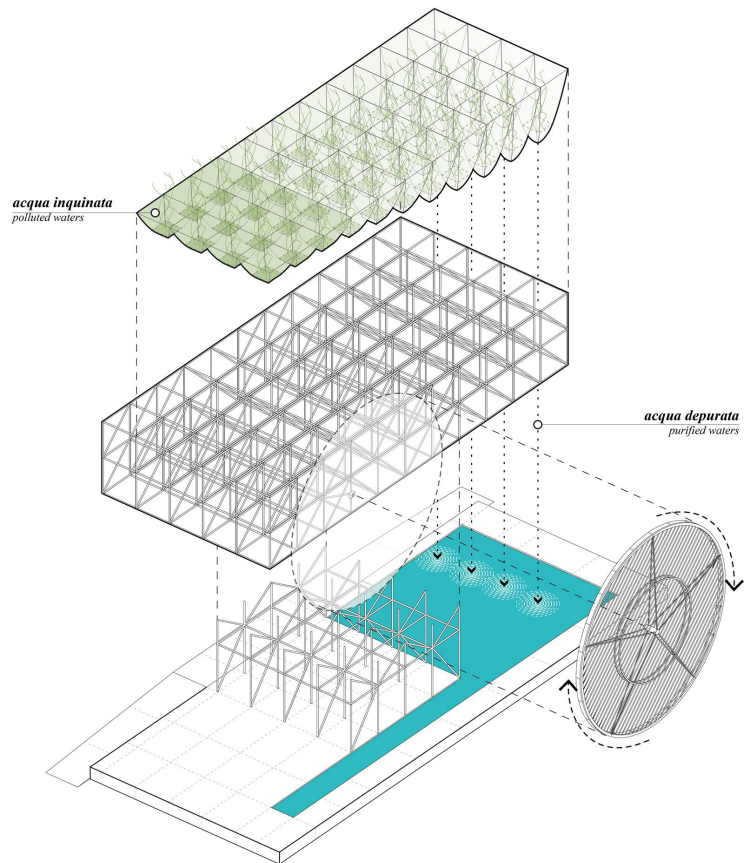
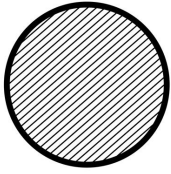
The rotation of the latter causes the transfer of water from one vessel to another, with the latter which, through this system of communicating vessels, is gradually purified up to the last three rows of pockets destined to house the final product of the phytoremediation process. From these the water is made to flow into the swimming pool which stimulates citizens to play under the installation and thus once again starts an endless process linked to

7. Creative Common (CC) is an American non-profit association that deals with the expansion of works available to the public in a transparent and legal manner. The organization has produced a series of licenses known as 'Creative Common licences' - or CC licenses - which provide a way to safeguard copyright and allow it to be shared with the general public.

8. Reverse ecology is a method of genomic study - therefore studying the structure, function, evolution, mapping, and modification of the genome of living organisms - used to address ecological problems. Through the study of bacteria, researchers are able to reconstruct the environments in which living beings live, or lived millions of years ago. For further information, the reader is referred to: Li, Y.F., Costello, J.C., Holloway, A.K., Hahn, M.W. (2008) 'Reverse ecology' and the power of population genomics, in *Evolution*, 62 (12): 2984-2994

Albula ^{CC}

Open source device for polluted waters



Creative Commons Architecture

Albula è un'architettura mobile interattiva, concepita come un modello implementabile e scalabile per essere riproducibile in diversi contesti. Il progetto è distribuito sotto Licenza Creativa Commons CC-BY-NC-SA 3.0, insieme allo script che regola il funzionamento della scheda elettronica Arduino per i sensori di prossimità.

Albula is an interactive mobile architecture, it is conceived as a implementable and scalable model in order to be reproduced in different contexts. The project is distributed under Creative Commons license CC-BY-NC-SA 3.0, along with the script which regulates the correct working of the Arduino electronic board for proximity sensors.

Fig. 8 deltastudio + partners, AlbulaCC, 2016. Axonometric Exploded View

human presence.

Specifically, the structure is made up of four parts: a 'raft platform'; a T-shaped metal structure to which the wheel, the purification bags and a water collector are attached.

The roof is made up of purifying pockets filled with river water which also guarantee shading and cooling; the latter are real micro-ecosystems of different sizes in which the plants inserted behave like 'natural machines' capable of absorbing pathogens, chemicals and heavy metals.

The result is therefore an installation that guarantees a playful engaging experience and stimulates processes of re-appropriation of the river by its citizens who, feeling themselves the triggering element of a series of virtuous processes, develop a sense of empathy and interrelationship towards the spaces of their city.



Fig. 9 deltastudio + partners, AlbulaCC, 2016. Render for the social interaction

5. Pokémon GO: urban drifts 3.0

«By traveling you can realize that the differences have been disappearing: all the cities tend to resemble each other, the places have changed their shapes and arrangements. A formless dust was able to invade the continents» (Italo Calvino, Italian journalist and writer)

Purpose: capture digital monsters called Pokémon; apply new spatial writings thanks to augmented reality devices

Partner: Niantic, The Pokémon Company

Actors involved (engagement): different types of users

Duration of the project: 2016-on going

Area: N/A

Although the example proposed here is apparently not very relevant to the field of architecture and design commonly understood, one of the most famous examples of urban play of recent years could not be missing from a section dedicated to playable cities.

Pokémon Go was in fact the first digital game for smartphones to make expert use of augmented reality (AR) which, from a simple device dedicated to the static transmission of content, has become a fundamental device for pushing citizens/players into a new mode of exploration urban.

Thanks to the gaming mechanics, exposed below, the game has been able to spread a sense of curiosity in residents towards the spaces of their cities and has also encouraged relationships between people from different social fabrics - and areas - who, driven by the desire to capture the little monsters digital have broken down physical - and mental - barriers and have launched themselves into urban drifts resulting from the long Situationist tradition. The reader will gradually understand as the text flows why this example was included, and what strange - but fun - relationship exists between Pokémon and the reactivation of city spaces.

5.1 Hybrid games and urban spaces. A new challenge

Pokémon Go is a hybrid reality game (HRG) that allows the player to occupy space both physically and digitally. The novelty of its gaming system, and the undoubted appeal of the Pokémon brand, have made it one of the most downloaded smartphone applications ever with download numbers close to 750 million units.

Unlike other HRG apps already launched on the market a few years earlier - Mogi (2004), Foursquare (2009) - the success of this game is mainly due to its perfect implementation of augmented reality.

Thanks to the use of GPS (global position system) and gyroscope systems - present in the most common smartphones today - the fusion between the real and virtual world comes to life on phone screens. The player is catapulted into a complex and multilayer urban environment where he is himself represented through the appearance of the character chosen during the registration phase.

Since its launch, there have been mixed reactions regarding its effects on the relationship between its users and city spaces.

On the one hand, very critical voices emerged which wanted to highlight the potential dangers that users face by focusing more on the digital nature of the telephone than on the physical effectiveness of the real world (Frank 2016, Rosenberg 2016), or the inappropriate access of the latter in places loaded with symbolic values such as Holocaust museums or churches (Humphreys 2017: 15-16).

On the other hand, many scholars have highlighted its ability to reactivate previously depressed urban spaces (Perry 2016) and its be able to produce genuine human-to-human interaction (Wawro 2016).

This is not the place to deal exhaustively with these two strands, nor is it the purpose of this section of the text. We will therefore focus on the game's ability to create, through its mechanics, a bridge between real life and the digital world where the proposed recreational activity allows the population to be activated to act in their own spaces in order to project new views on them and give them new meaning.

To this end, it is important to introduce the concept of urban ambient play, as a playful practice that intends to merge locative play²²¹ and everyday life together (Hjorth and Richardson 2017), and understand its relationship with new generation hybrid reality games.

The aim of Pokémon Go is to 'find out' and capture hundreds of digital monsters (Pokémon). To complete this mission, players must physically move within the real spaces of the city and, by reporting their position on the smartphone display, capture the different species located in the various districts.

Once the Pokémon has been identified, the capture mode involves throwing a pokéball (a small trap ball) which is launched at the prey through one's mobile phone and its gyroscope system which analyzes the player's arm movements. Furthermore, during your urban hunting trips, there is the possibility of visiting significant places in the game universe which are superimposed on real places and allow you to carry out specific actions (Pokéstops - generally associated with museums and historical interest, where to collect objects; gyms, where you can make your prey fight each other).



Fig. 10 Pokémon Go, Niantic, 2016. Augmented Reality Game Dynamics

A further level of engagement and social interaction is guaranteed by the presence of seasonal events, located in specific physical locations, which allow you to access special content or obtain rewards - otherwise impossible to earn - based on your level of involvement and score. in the game.

Some scholars point out that Pokémon Go requires a high level of "time, patience, skill, and the freedom to explore the physical spaces represented on the digital map" (Salen Tekinbaş 2017: 35, TdA), but at the same time contains within itself the characteristics to be able to have direct effects on our ways of living, and socializing, in urban spaces that are increasingly in crisis as «[mobile] location-based and augmented reality games [...] are environmental, since they are inserted in a concrete way into our daily routine, in our travels without cars, and they encourage different ways of relating to our neighbors and spaces we populate" (Hjorth and Richardson 2017: 5).

These games push us to develop a what if experiential approach (Saggio 2007) and transform the city in a playful way into our playground. The difference with other types of mobile apps is that while in the latter the real space represents a limitation to the gaming experience - as well as a source of possible dangers due to a loss of perception with respect to the physical environment -, in Pokémon Go (et similia) this becomes the triggering element without which the entire gaming process - based on its ability to modify, adapt and transform daily activities - and discovery could not exist.

6. Conclusions and discussions

Encouraging citizens to modify their habits and urban pathways is an inherently challenging task. Successfully disrupting established behavioral patterns and motivating individuals to disregard external factors such as traffic and weather conditions requires the implementation of tangible urban strategies. These strategies enable architects, planners, and designers to convey novel messages and foster new modes of interaction and living. Given that the urban spaces of the contemporary city, along with the myriad elements that shape and imbue them with meaning (buildings, parks, squares, as well as infrastructural systems, etc.), currently represent one of the foremost challenges confronting architects. The escalating complexity of the world in which we reside, markedly distinct from the previous century in economic, social, and cultural terms, necessitates a shift in the operational categories through which these spaces are molded. Furthermore, urban planning and territorial planning, at least concerning our country and a significant portion of the South European and Balkan region, remain tethered to quantitative systems grounded in standards and mechanically and rationally analyzed data.

Social tensions, pockets of conflict, segregation, isolation, and abandonment are just a few of the phenomena transmitted daily by contemporary media, for which finding an effective solution appears increasingly challenging. The issue also arises from the misconception that the process undertaken to address these problems begins with the search for a universal 'solution' applicable to every situation and location, without analyzing the unique and site-specific causes that have given rise to them. Considering play in relation to architecture is not mere speculation; rather, it is part of an inclusive process that opens the doors to imagination. It has always been a synthetic and ethical driving force in architecture, which is a polysemic art fueled by continuous investigations,

openings, and contradictions. This occurs in an ongoing synergistic relationship between theory and practice, all contributing to the architectural composition process.

For this reason, the methodological approach and digital implementations aim to provide a new generation of architects with tools to confront ever-changing challenges. They seek to discover new creative inspiration in a 'design game' structured through continuous shifts in perspective. This involves embracing multidisciplinary and original systems within their work to operate in the complex fabrics of our urban spaces, seeking new meanings and directions. Whether in board games, playful installations, or video games, ludic dynamics can offer unexpected turning points for architects and all those who reflect on such issues.

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