

European Architectural Envisioning Conference



Envisioning AMBIANCES

Representing (past, present and future) atmosphere

Conference Guide

SUMMARY

Acknowlegments

Practical information

Chairs Welcome

Conference Committees

Program

Keynotes

Selected articles:

. Tuesday 3 September

. Wesnesday 4 September

. Thursday 5 September

. Friday 6 September

Visit

Gala Dinner



Conference under the aegis of the EAEA European Architectural Envisioning Association

https://eaeanet.wixsite.com/eaea



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ACKNOWLEDGMENTS

PRACTICAL INFORMATION

The EAEA14 Organizing Committee would like to thank the following partners for their organizational, financial and institutional support:

Graduate School of Architecture of Nantes (ENSA Nantes)

AAU-CRENAU Laboratory

The French Ministry of Culture

CNRS, National Centre for Scientific Research

International network Ambiances

Regional council for the Pays de la Loire

West Creative Industries Programme

Kauffman&Broad Real estate development company







CNIS

ambiances ITERNATIONAL INTERNATIONAL NETWORK







The Venue

Graduate School of Architecture of Nantes (ENSA Nantes): • "Amphi 150" for keynote conferences and for sessions

- **"Foyer Bas"** for breaks
- "Cafétéria" for lunch breaks

Communication

• WIFI access:

- SSID: EAEA14

• EAEA14 website: https://eaea14.sciencesconf.org Contact: communication@crenau.archi.fr

• To follow live updates:

- Password: MYBD4pnT

- Twitter @LaboratoireAAU - Facebook @EAEA.group



WELCOME

COMMITTEES

n behalf of the EAEA14 Organizing Committee, we are happy to welcome you to the Graduate

School of Architecture of Nantes!

CRENAU, one of the research teams forming the Ambiances Architectures Urbanités Laboratory, is honoured to organise the fourteenth EAEA conference in 2019. It only seems fitting, since its research covers multiple themes associated with architectural ambiances.

Indeed, the concept of "ambiance" has been formed over the years by questioning the interactions between three attractors: architecture and the city, climatic and sound phenomena, uses and perception. Studied in pairs, each of these attractors refers to very different disciplinary fields, architecture and phenomena concern the physics of the city, architecture and uses interest sociology and uses and phenomena are rather turned to comfort.

Studies concerning ambiances are therefore highly interdisciplinary and open to many questions: living spaces, urban renewal and heritage, urban prospective and the city as a stage. For this, many conceptual and technical tools are mobilized: digital tools for simulation and immersion, investigation, surveys and storytelling, prototyping, field action. What may be new in the field of academic studies is the awareness of artistic creation as a resource for the use of digital tools, storytelling and the representation of complexity through original means.

Therefore, the EAEA14 conference revolves around three clearly identified research themes:

- Ambiance, storytelling and immersion (representation and communication of medium including analogue, digital and immersive environment);
- Ambiance and education (tools, techniques, and strategy of design teaching);
- Ambiance and Design (process, analysis, observation and execution of design for objects, space, built-form and urban environment).

The EAEA14 International Scientific Review Committee selected 49 articles out of the 85 abstracts submitted, which resulted in a solid program, with a balanced distribution of communications between each theme, and original papers that will highlight the evolution of the research topics within the EAEA community.

We are honoured and privileged to welcome Yan Breuleux, Professor at the École des arts numériques, de l'animation et du design of Montreal, Anke Jurleit, Researcher for the REAP research and teaching group in the HafenCity Universität (HCU) Hamburg, represented by Yanna Badet, LEED AP Silvestrum Climate Associates, and Guillaume Thibault, Senior Researcher at EDF R&D (Saclay) as our keynotes. We would like to thank them for their presence and contribution.

We would also like to thank our partners for their institutional, organisational and financial support, and everyone who participated in making EAEA14 a reality!

We hope that you will find this fourteenth conference captivating and motivating.

Laurent Lescop & Anetta Kepczyńska-Walczak EAEA14 Conference Chairs

General chairs

Anetta Kępczyńska-Walczak - Lodz University of Technology, Poland Laurent Lescop AAU-CRENAU Laboratory, ENSA Nantes, France

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Organizing committee AAU-CRENAU

Anne Bossé, researcher, director of AAU-CRENAU Marine Bouquet, administrator Véronique Dom, communication and organisation Nicolas Houel, Phd student Thomas Leduc, researcher Yang Lu, Phd student Sophie Provost, translator Daniel Siret, researcher, director of the AAU laboratory





PROGRAM

Updated program

		03-sept		04-sept
		Day 1		Day 2
08:00 - 09:00		Registration		Registration
09:10 - 09:30		Welcome speech from Christian Dautel Director of the ensa Nantes		"Public Participatory Graphic Communications" Horry A. Eggink
		A few things about ambiance and Nantes Laurent Lescop	lesko	Envisioning Ambiances of the Past Guzden Variniioglu and Suheyla Muge Halici
09:30 - 09:50	0	Psychological, physiological, and phenomenological	as M. I	The atmosphere of a street: experimental fieldwork on
09:50 - 10:10	t Lesco	effects of colored light Jennifer Scott and Judy Theodorson	Thom	urban amblances Andreos Wesener
10:10 - 10:30	hair Lauren	Perceptions of the nocturnal public space and technological innovations – citizen evaluation of a smart public lighting installation in Nantes Nicolas Houei, Dany Joly, Laurent Lescop	Chai	Between ambiance and perception: heritage decoding Anetto Kępczyńsko-Walczak
10:30 - 10:50	0	Discussion	1	Discussion
10:50 - 11:10		Break		Break
11:10 - 11:30	ivier Chamel	Augmenting Psychological Restorativeness towards Immersive Design of Underwater Ambiance Nermin Sena Ozger, Gözde Damia Turhan, and Guzden Varinllogiu Traditional and Digital Representations of Atmosphere in Architecture. A first systematisation	chel Mounayar	Embraced by swirls of ether. Atmospheric imagination and the representation of assimilation and effect. <i>Juan Elvira</i> Branding Space: Deliberate Formations in Beginning Design
1130-1150	Chair O	Post-flänerie: How do mobile devices shape the experience of the city?	chair Mk	Anarganet Anchanus Architecture as Landscape
11:50 - 12:10		Gorsev Argin, Burak Pak, and Handan Turkoglu	Ť	Yasmine Abbas
12:10 - 12:30		Discussion	1	Discussion
12:30 - 14:00		Lunch Break		Lunch Break
14:10 - 14:30 14:30 - 14:50	Piga	Esquis'Sons! Sketching architecture by listening Théo Marchaf and Nicolas Rénny Digital Immersion - case studies in virtual reality Christonber Weitz and Arief Schawan	geer	Keynote Yan Breuleux
14:50 - 15:10	arbara E. A.	Temporal Sections Conceptual Tool: Articulating Space and Time in Representing Urban Ambiances Noho Gamai Said	arrah Jahan	Experiments with visible and invisible materials: designing and building an ambiance Céline Drozd, Virginie Meunier and Antoine Mabire
15:10 - 15:30	Chair B	'Characters in Search of an Author'. Human figures and storytelling in architectural design communication Fablo Colonnese	Chair F	Studio_L28: From a Socially Engaged Sound Art Practice to an Open Training Ground for Sonic Design Experimentation Caroline Claus, and Burak Pak
15:30 - 15:50		Discussion	1	Discussion
15:50 - 16:00		Break		Break
16:00 - 16:20		Exploring territories by documentary: the appropriation of public spaces by collective listening Luciana Roça, Maria J. S. Martins, Marcelo Tramontano	czak	Traversing and sculpting scape through pattern development: blending the natural and the built to promote ambiance in early architectural education Kristin Borry, and Sean Burns
16:20 - 16:40	Elwazani	Building the city as a stage, the example of Nantes Emmanuelie Gangloff	nyńska-Wal	Teaching a thorough, repeatable design process for ambiances in architecture Thomas M. Losko
16:40 - 17:00	Chair Salim I	Urban visions: back from the future Ofivier Chame!	Anetta Kępcz	Envisioning the atmospheric effect through (im)materiality Nilay Ünsal Gülmez, Dürnev Atrigan Yağan, Murat Şahin, Efsun Ekenyazıcı Güney, and Hande Tulum
17:00 - 17:20		The affective notes of represented space as motors of emotional and sensorial response Elisa Morselli	Chair	Discussion
17:20 - 17:40		Discussion		Visit "lle de Nanter Creative District"
				Starts 18:00 "Accueil" ensa Nantes Gala Dinner "O'Deck Restaurant" 19:30

		05-sept		06-sept
		Day 3		Day 4
08:00 - 09:00		Registration		Registration
09:10 - 09:30 09:30 - 09:50 09:50 - 10:10	r Thomas Leduc	Community-based grassroot communication strategies, process and product: The drawings that saved our hospital. <i>Michel Mounoyar</i> Out of "touch"? – An experiential pedagogical approach A network as a source of knowledge for the education of an architect <i>Melis Bologlu Asut, Yüksel Demir</i>	hair Saleh Uddin	Experimenting intermediate lived spaces in residential subdivisions: action, interaction and storytelling <i>Teresa Palmieri and Marion Serre</i> The space-time cube as an effective way of representing A Performative understanding of spatial design, learning from exhibitions <i>Ayman Kassem</i>
10:10 - 10:30 10:30 - 10:50	Chai	Mixed Robotic Interface 1: Searching for a hybrid cyber- physical design/experience interface using virtual/actual robots Ebrahim Poustinchi Discussion	0	Maintaining the ambiance of regenerated post-military complexes – current and emerging possibilities. Marta Malgorzata Rudnicka-Bogusz Discussion
10:50 - 11:10		Break		Break
11:10 - 11:30	alczak	Experiential Simulation and Psychological assessment as a learning process in architectural higher education Barbara E. A. Pigo, Nicola Rainiso, and Marco Boffi Educational Neo-Nicola	inlioglu	Architectural character in conservation design projects Salim Elwazani, Pooja Katara
11-20 - 11-50	2	Educational Arealities	JEA	Peritage Interpretation through an architectural design
11:50 - 12:10	Chair Bartos	360° VR for Qualifying Daylight Design Anette Kreutzberg, Emonuele Naboni	Chair Guzden	Design of new daylight simulators on architectural scale models Thierry Blandet, Levin Erbilgin, Nicolas Vergnes, Nicolas Hoerter, and Olivier Lehmann
12:30 - 14:00		Uscassion Lunch Break		Uscassion Lunch Break
	q	Keynote Anke Jurieit, represented by Yanna Badet		Keynote Guillaume Thibault
14:00 - 14:50	cio.			
14:00 - 14:50 14:50 - 15:10	Danilo Di Mascio	Geometry, Pattern, Kinetics: Beginning Studio Pedagogy from 2D to 3D M. Saleh Uddin A Missing Link: thinking making presenting	air Daniel Siret	Light as an ambient material in transformative urban "night" spaces Meliti D. Dikeos Acoustic comfort in the living environment and its association with noise representation: a systematic
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KEYNOTES

Yan Breuleux



Conference:

Wenesday 4 September 2019 14:10 - 14:50 Amphi 150

Yan Breuleux is a professor at the École des arts numériques, de l'animation et du design à Montréal (NAD), he's also a researcher and practitioner in the field of visual music for immersive display.

For twenty years, he has collaborated with musicians and composers to create multi-screen, panoramic, architectural projection and Fulldome pieces. Since 1998, in the PURFORM duo with the composer Alain Thibault, he created strong sensorial AV performances. His most recent contribution in explore the problematics of Immersive Storytelling for FullDome display with the projects *Les Planètes* (2018), *Re-Génération* (2015), *Nuée* I *Swarm* (2015), *VjGraph* (2014) et Engima (2015-18).

The World Building Framework for Immersive Storytelling Projects

This communication explores issues associated with immersive storytelling in order to examine how the field of World Building can constitute a theoretical framework for practice in the context of VR-based and Full Dome artistic projects. With respect to immersion, the intent will be to interpret the concept of storytelling in relation with the recent formulation of the concept of extended reality (XR). The very concept of World Building is transauthor and transmedia by nature. The transauthor dimension of World Building resides in the idea of subcreation, i.e., designing environments and interaction rules that help create a storytelling basis for generating multiple stories. Once the universe has been conceived, stories written by different authors take shape through transmedia processes across multiple distribution media (film, video games, web, etc.). The question then arises: How can the World Building approach shape the construction of immersive experiences? The article sets out to answer this question, and in doing so, to contribute to the research on environmental storytelling.

Yanna Badet



Yanna Badet is an environmental scientist and planner with more than 17 years of experience providing strategic and technical expertise in climate change resilience, community engagement, and environmental and sustainability planning. She has advised governmental agencies, cities and firms in California and Germany on community engagement and managed climate change mitigation, adaptation, and sustainability projects. She has led the community engagement for several large infrastructure and resilience-focused projects in California, reaching millions of people. Ms. Badet also advised outreach staff on the San Francisco Public Utilities Commission (SFPUC) Sewer System Improvement Program (SSIP) and Urban Watershed Assessment (UWA) efforts and has been a project manager for a regional climate action planning program as well as the lead author for the Bay Area's first Sea Level Rise Strategic Program in Solano County, California. She is a U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED).

The City as Organism. Governance planning for adapting to Climate Change in Copenhagen and San Francisco

Cities are organisms. Some are strong and resilient. Others are stressed, which makes fighting existing and future challenges, such as climate change harder. What reduces a city's stress levels? What makes a city resilient and strong? Fit and a place to be, if you will? What makes a city fantastic? Scientific research shows that there are several indicators of fit and strong cities: community cohesion, number of green spaces and trees, flood resilience measures, governance, education, thriving (small) businesses,...

What is it that makes some cities more attractive than others? What is your favorite city? San Francisco? Copenhagen? Wakanda?

Megacities, cities with more than 10 Million inhabitants, are the mega-organisms of the future: More and more of us will be living in cities. How is that going to work? Issues such as equality and socio-economic equity, transportation, water and power infrastructure, housing, crime, and even basic urban food supply need to be figured out - all while major GHG reductions and climate change impacts and adaptations also need to be achieved if we want to keep existing on this planet.

Conference:

Thursday 5 September 2019 14:10 - 14:50 Amphi 150

- It is the understanding of every piece as part of the whole, which makes the organism what it is. What needs to be done, who needs to be involved, and how to design a comprehensive process to achieve a basic level of resilience are key questions to start with.
- Assessing the City of Copenhagen's resilience showed that it was the extreme weather events which made the city organism vulnerable. The need of adapting to the consequences of climate change were formulated in 2015 after yet another extreme rainfall event which resulted in immense damage all over the city.
- From a 'resilience' and city fitness perspective, it quickly became apparent that the goal had to be a holistic approach towards reviving and strengthening the city.
- Starting in 2016, Copenhagen implemented around 16 of its so-called blue- green infrastructure projects throughout the City. The 'cloudburst concretization plan' "incorporates both traditional measures that drain water away through the expansion of the sewer network underground, and-more remarkably-300 surface solutions to be rolled out across the city at a rate of 15 a year.



Guillaume Thibault



Conference:

Friday, 6 September 2019 14:10 - 14:50 Amphi 150

KEYNOTES

Guillaume Thibault is senior researcher at EDF R&D (Saclay) and is pioneering in the fields of laser scanning, virtual and augmented reality, spatial cognition, to help maintenance operations in power stations as well as archaeological studies.

Complex environments and visuomotor perception: first investigations for factories and cave art

How to navigate complex environments? What are the neural and cognitive roots of our ability to find our way? Can digital tools help us?

These questions will be studied under the double perspective of visuo-motor skills and virtual simulations in the case of industrial environments as well as in that of the paleolithic Chauvet-Pont d'Arc Cave.

SELECTED ARTICLES

TUESDAY 3 SEPTEMBER 2019

Envisioning ambiances: representing (past, present and future) atmospheres for architecture and the built environment.

Laurent Lescop¹, Anetta Kepczynska-Walczak²

¹ENSA Nantes - CRENAU/AAU UMR-CNRS1563, France

²Department of Digital Technologies in Architecture and Urban Planning, Institute of Architecture and Urban Planning, Lodz University of Technology, Lodz, Poland

The concept of "ambiance" has been shaped over the years by questioning the interactions between three attractors: architecture and the city, climatic and sound phenomena, uses and perception. Studied in pairs, each of these attractors refers to very different disciplinary fields; architecture and phenomena concern the physics of the city, architecture and uses interest sociology and uses and phenomena are rather turned to comfort. Studies concerning ambiances are therefore highly interdisciplinary and raise many questions: living spaces, urban renewal and heritage, urban prospective and the city as a stage. For this, many conceptual and technical tools are mobilized: digital tools for simulation and immersion, investigation, surveys and storytelling, prototyping, field action. What may be new in the field of academic studies is the awareness of artistic creation as a resource for the use of digital tools, storytelling and the representation of complexity through original means.

Psychological, physiological, and phenomenological effects of colored light

Jennifer Scott¹ and Judy Theodorson¹

¹Washington State University, School of Design and Construction, Pullman, Washington, USA

This research explores colored light from historical, scientific, and technological vantage points. Effects of colored light on the human condition are examined on multiple levels, comparing theories in physiological, psychological, and phenomenological areas of study, addressed across a broad scope of literature. The focus of this research is to gain an understanding of the effects of colored light on the human condition, and how designing with it can provide an engaging phenomenological experience which marries centuries' old design techniques with modern technological innovations. The stages of research include a literature review, followed by a series of creative explorations with light, texture and form through small-scale models. Data gathered is then analyzed, categorized, and used to create a taxonomy for designing with colored light. Research is then explored on a larger scale through a pilot study conducted in a 5' x 9' room designed to create an experience of being bathed in colored light with user-controlled variability. Each research method may then be used to inform the design of interior environments, affecting the participant's physiological, psychological, and phenomenological experiences.

Perceptions of the nocturnal public space and technological innovations – citizen evaluation of a smart public lighting installation in Nantes.

Nicolas Houel¹, Dany Joly², Laurent Lescop³

¹ AAU Laboratory, CRENAU team, ENSA Nantes 6 quai François Mitterrand 44000 Nantes, France

² EPICE department, Nantes Métropole, 5 rue de Saverne 44000 Nantes,

³AAU Laboratory, CRENAU team, ENSA Nantes 6 quai François Mitterrand 44000 Nantes, France

The recent introduction of digital tools in public lighting represents a milestone in the evolution of street lighting. Simultaneously to this innovation phase, urban lighting is currently being studied in terms of energy and environmental sobriety, to reduce its financial and ecological impact. This study presents the observations and



evaluations carried out by nocturnal urban dwellers of an experimental public lighting system, set up in real conditions. The evaluations question the relevance of sensors integrated to the lighting material in real time via a series of survey managed autonomously by residents of the experimental environment.

Augmenting Psychological Restorativeness towards Immersive Design of Underwater Ambiance

Nermin¹ Sena Ozger¹,*, Gözde Damla Turhan² and Guzden Varinlioglu³

¹Izmir University of Economics, Department of Visual Communication Design, 35330 Izmir, Turkey

^{2,3} Izmir University of Economics, Department of Architecture, 35330 Izmir, Turkey

Discussions of the relationship between humanity and built environment usually focus on the human's relationships with the earth's surface. Less attention has been given to underwater environments, a relatively underexplored research area at the intersection of user experience design and psychology. This paper shows the initial findings of experiments on divers, which can guide the design of augmented reality tools for underwater environment. The comparative evaluation process demonstrates an increase in psychological restorativeness of users in relation to ambiance design, indicating a difference between a specifically designed environment and a naturally vacant area for first time divers. Future studies will explore immersive design of underwater ambiance through augmented reality tools, proposed as a product design and framework, in order to improve psychological restorativeness.

Traditional and Digital Representations of Atmosphere in Architecture. A first systematisation

Danilo Di Mascio¹,* and Yvette Putra²

¹Department of Architecture and 3D Design, School of Art, Design & Architecture, The University of Huddersfield, United Kingdom

²Melbourne School of Design, Faculty of Architecture, Building & Planning, University of Melbourne, Melbourne, Australia

In architecture, atmosphere and its many implications have, in recent years, received increased attention. This paper considers atmosphere in architectural representation, and begins with an exploration of different definitions of these atmospheric representations. This paper then identifies and summarises representations of atmosphere in architecture and their key aspects, and proposes, in the form of a timeline, a preliminary systematisation of these aspects. This paper considers both traditional and digital representations of atmosphere in architecture, and focuses on aesthetic and emotional qualities of atmosphere. Thus, this paper is not limited to realistic and scientific approaches of atmosphere as meteorological conditions, but extends to atmosphere as emotions and mood. This paper also suggests cross-fertilisation, in the representation of atmosphere, between architecture and other fields. Therefore, while this paper explores atmospheric representations in architecture. it establishes its discussions by crossing disciplinary boundaries. It is anticipated that this paper will encourage further research, including recommendations for negotiating the apparent incompatibility of traditional and digital representations, to maintain qualities characterising well-known examples from the past.

Post-flânerie: How do mobile devices shape the experience of the city?

Gorsev Argin^{1,2,*,} Burak Pak^{2,} and Handan Turkoglu^{1*}

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In the last decade, the advances in mobile technologies and location-based applications reshaped our mutual relationship with the urban environment. These technologies, as both a mean and barrier to the engagement between humans and their environment, have transformed the urban experience in profound ways. Urban experience is a relatively new concept introduced with the rise of modern cities in the nineteenth century. Its loss due to the rapid urbanization has been a subject of debate since then. Among the discussions that take place in this debate, the figure of 'flâneur' plays an extensive role. The flâneur is a figure who wanders through and appropriates the metropolitan city in pursuit of urban experience and reaps aesthetic meaning from the spectacle of the teeming crowds, Flânerie, or the act of wandering, and its implications for our understanding of urban life have been profound. Today, mobile technologies create a new kind of urban wanderer which is described as "post-flâneur". In this paper, by examining the altering concept of flânerie, we discuss the effects of mobile technologies on urban experience. Based on an informed study of a wide range of theories, we make reflections on the impact of mobile devices on the mutual relationship between humans and their environment, introduce key concepts for understanding the emergent phenomenon of post-flânerie and elaborate on its interconnections with the phenomena of cyber and hybrid-flânerie.

Esquis'Sons! Sketching architecture by listening.

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The Esquis'Sons! application can be used to envision sound atmospheres and prior to designing spaces. The Esquis'Sons application is a compiled module written in the MAX/MSP musical and visual programming language which generates stereophonic sound tracks in relation to geometric parameters extracted from the CAD software Rhinoceros 3D and its plugin Grasshopper. Rhinoceros and Esquis'Sons communicate and sound is played in real time depending on the listening point chosen by the designer and on the architectural scene created. This paper compiles several training periods during which Esquis'Sons has been used in workshop exercises. It also offers material for an architectural study in the rehabilitation of a district. The paper shows that the Esquis'Sons app is a pedagogical tool for designers of space and brings to light several dimensions that are hidden most of the time in the architectural design process: the distance of creation is discussed through the sound immersion offered by Esquis'Sons app. Scales of the architectural project are jostled by the fuzzy limits of sound phenomena and time brings layers of complexity and sensibility in global design.

Digital Immersion - case studies in virtual reality

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Digital tools have transformed the ways we generate designs, pushing the boundaries in formal explorations, as well as the ways we represent them. In this vein, the impacts of the digital revolution affect both design practice and design education. We would like to investigate these impacts on our teaching of design studios, focusing on the virtual reality. Our premise is that the use of first-person immersion in a virtual environment is a means for experiencing space. We are interested in ways in which the abilities of virtual reality to simulate ranges of sensorial information could inform design processes. This paper will report in our research in our teaching that speculated about the values and application of these techniques. This paper aims to discuss our learning processes and experiences as well as to reflect on possibilities of digital means effective design pedagogy.





Temporal Sections Conceptual Tool: Articulating Space and Time in Representing Urban **Ambiances**

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This article aims to present a new methodological protocol and a representation tool that articulates both space and time in understanding urban ambigances; temporal sections. The elaboration of this conceptual tool is based on a theoretical background dealing with the palimpsest of urban ambiances. The urban palimpsest is a metaphor underlying the dynamic of the formation process of the territory resulting from a temporal, spatial and social stratification that manifests in the lived experience. Combining urban transect, a geographical tool, and stratigraphy, a geological one, temporal sections represent the sensory experience as a palimpsest that integrates the different pasts and projects on the future. This tool provides a very specific way of immersion and opens new realm in constructing a storytelling; it proposes a rereading and writing the ambiance in depth.

'Characters in Search of an Author'. Human figures and storytelling in architectural design communication

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In a presentation drawing, human figures have a natural attitude to work as an optical reference to measure the design space and to provide a sort of instructions to use it, but over the centuries, their agency has been multifaceted. The practice of photo-collages, which was fed by photography and cinema development, has recently spread thank to the digital techniques and human figures in architecture renderings seem to have become as fundamental as a top-modes for a fashion magazine cover. Besides providing a recognizable mark to the design entry, selecting peculiar figures can visually connect a design to a specific place and time, working as a cultural, situationist and sensorial agent. This seems to be true particularly for the cultural typologies. In renderinas of museums, theatres or libraries, often ordinary people are integrated by figures of artworks and celebrities, like in Alberto Campo Baeza and Raphael Gabrion's design for a Louvre new building in Lievin, France, whose figures are placed in the renderings not only to explain the functions but also to remind the ambiguous threshold between representation and reality.

Exploring territories by documentary: the appropriation of public spaces by collective listenina

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Sound has a relational interplay with space, influencing the arrangement of ephemeral and symbolic territories in public spaces. Within this perspective, this article aims to discuss the influence of collective listening in the appropriation of public spaces, discussing the events conducted spontaneously by the youth in the Coronel Salles Square, São Carlos, Brazil. Weekly on Fridays, this marginalised community builds an ephemeral territory in the square, which is also influenced by collective listening by powerful speakers in cars. As methods, we use documentary procedures to take a closer look at these events. Being an assertion of the historical world, a perspective is taken by a non-neutral part, a documentary performed as practice-as-research offers a useful set of methods to researchers to explore urban issues and matters and, it is a reflexive method which questions the researcher's posture.

Building the city as a stage, the example of Nantes

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At a time when cities try to stand out from one another, the construction of ambiances is brought back to the foreground of urban, social and cultural dynamics in metropolises. With this contribution, we aim at taking the example of Nantes and the Machines of the Isle of Nantes to show the transformations of an industrial territory into a cultural open stage with cultural practices. Indeed, following the shutdown of the shipyards in the 1990s, the city pursued a major cultural policy to make the industrial wastelands attractive. In successive steps, the temporary artistic practices changed urban ones, based on the question of ambiances and their narrative. Favouring the implementation of projects taking place in public spaces, the city became a 360°-urban scene. As opposed to a generic city, Nantes turned urban scenography into a way to single itself out, by accompanying the creation of plots and narratives around its territory. Between artistic experiments and narrative, Nantes thus appears as a stage-city that invites to include user experiences.

Urban visions: back from the future

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The persistent growth of the human civilization, fueled in large part by technological progress has brought upon us a series of very serious challenges. The quality of our overall environment, energy and food supply are subjected to increased pressure, while access to decent employment, housing and medical care remains broadly unequal. According to the current trends most of the world's future population growth will occur in cities, therefore positioning the city as a key component to solving challenges associated with human development. Based on that assumption, it seems crucial to think about what the city of the future should be and look like. If we look for existing and graphically convincing representation of the city of the future, we are inevitably drawn to popular culture media such as movies and graphic novels. For almost a century, movies in particular have proposed realistic constructs of future urban settlements along with the life associated with them. Based on a number of ideas expressed in motion pictures over the years about urban life in the future, one can argue that both past and recent predictions tend to be technologically optimistic but socially and environmentally pessimistic. This paper proposes to identify and discuss a number of challenges as well as opportunities associated with urban development in the next 100 to 200 years and present a series of urban visions to illustrate both positive and negative trends.

The affective notes of represented space as motors of emotional and sensorial response

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The following essay proposes to investigate the perceptual and emotional aspects related to the visualization of architectural images. The field of research is limited to a well-defined category: figurative representations as the photographic and digital images of contemporary architecture. In particular, two types will be analysed: the un-built architecture produced by Studio MIR and Bloomimages compared with the photographed built architecture. Using figurative images as a tool of reading, the aim of this work is to identify and classify three types of affective spaces capable of generating a specific kind of perception, producing a sensorial classification of atmosphere for architecture. The study of the Psychology of Art, as well as Aesthetics and Neuroaesthetics can be a valuable tool in understanding the phenomena of the present, considering the marked pictoriality of these images. The application of the analytic methodology, developed in these disciplines, can suggest a



new way of "looking" at the project, paying attention to the representation of the atmospheres, which characterizes the experience of felt space.

WEDNESDAY 4 SEPTEMBER 2019

"Public Participatory Graphic Communications"

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Ball State University is a public university in the state of Indiana which has a College of Architecture and Planning; its Community Based Program (CBP) was developed and created in 1969, and is now one of the three oldest continuous community education and service programs in the US. The program's main objectives are to provide an educational design service to the public sector, to immerse our students in a public participatory urban design environment, and to educate the public sector to become active in the design and planning process of their communities. After my Urban Design Graduate studies at Harvard, I published two urban design booklets (the Urban Design Primer and the Urban Design Dictionary) for public distribution, to be utilized prior to our small-town charrettes. These illustrated booklets were designed to bridge the language and design process gap between the design professional and the public citizen, and to create a more active immersive participatory urban design engagement. Since the introduction and public use of these booklets, I have been involved with over a hundred CBP charrettes. In this paper, I will introduce and present the urban design public booklets, and demonstrate how the urban design graphics and visual communications were utilized effectively through several small-town charrette case studies. The paper will also blend the transition between the analog graphics and the digital imagery.

Envisioning Ambiances of the Past

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Outdoor museums of archaeological excavations function as sites of both scientific research and public display. Often, long-term archaeological research means postponing the preparation of the site for visitors. This paper focuses on digital tools for the representation of architectural reconstructions, i.e. possibilities for representing a range of hypotheses regarding the past ambiances of the ancient city. It proposes an augmented immersive revisit of the cultural heritage through mobile devices. Based on mobile phones' current technical capacities, which enables rendering of 3D content combined with camera input, we developed the proposed mobile AR application for mobile Android devices. TeosAR offers a real-time, in-situ 3D depiction and visualization of architectural artifacts of the ancient city implementing model-based tracking methods.

The atmosphere of a street: experimental fieldwork on urban ambiances

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The paper discusses phenomenological fieldwork carried out by third- and fourth-year students enrolled in the Bachelor of Landscape Architecture programme at the School of Landscape Architecture at Lincoln University. It focuses on students' sensory experiences while surveying a lively inner-urban street in Wellington, New Zea-

land, and discusses related (objective) circumstances, sensations and interpretations. Students were asked to describe their experiences while moving through the street and to record them in a field book in the form of notes and sketches. The goal of the paper is to capture, analyse and discuss students' individual experiences of different atmospheric facets of an urban streetscape. Preliminary findings are presented and discussed.

Between ambiance and perception: heritage decoding

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The aim of the study is to grasp and analyse the intangible process taking place between ambiance and perception. In this regard, ambiance should be understood as a state or aura, as opposed to perception, assumed as a process. The transition of sensorial immersion from ambiance to perception requires the process of decoding. Decoding might be explained as the process running between ambiance and perception and, furthermore, leading to understanding. Therefore, the outcome of the overall process is of cognitive characteristics. Furthermore, it draws research into a relationship between what is projected and actually experienced, between the tangible and the intangible and reveals the process of decoding ambiances where heritage plays a dominant role. The paper discusses the two concepts in the context of the post-industrial heritage in Lodz, Poland. The set of reflections evokes numerous questions: are we into the heritage as it was, or as it is at present, or rather to its projection, tuned to current socio-cultural standards? Does carefully planned and created ambiance give a clear unambiguous sense of a place? Or, it is not ambiance but the processes of decoding and perception that result in various interpretations of the same experience of atmosphere?

Embraced by swirls of ether. Atmospheric imagination and the representation of assimilation and effect.

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Atmospheres have a diffuse, ungraspable nature that make them problematic to represent. Diverse artistic manifestations have relentlessly tried to grasp air infused with properties. Ether is the concept chosen to test the way the history of atmospheric representation was initiated; a cultural artefact whose representation permeates our present imaginary. Such substance has been the image of sensual assimilation, of psychological life and complex ambient effects. Before ambient was subject to technical representation, images of air within can be called 'a state of animation' opened up the ways of seeing and producing ambients. Several case studies are analysed as a useful vehicle for atmospheric representation. Two main strategies have been identified. The first one is the representation of chance, ambiguity and openness, the creation of conditions to let atmospheres leave its accidental traces. The second consists in the precise distribution in space of particles or discrete elements whose initial position is irritated by diverse agents. Both are still recognisable in our days.

Branding Space: Deliberate Formations in Beginning Design

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Arguably, ambiance in our culture is created in large by architecture and media. The former consumes us as we inhabit spaces both interior and exterior, allowing physical and material constraints — and the programmatic functions they permit — to create ambiance. The latter, media, inhabits us as we consume it. It creates or perhaps manipulates an ambiance within our minds. Through signage, television, and the internet we have





graphic design flooding our brains via advertising and marketing: emotionally directing our decisions, telling us to buy this or invest in that. Analogous to material and physical choices that create the ambiance of architecture, we can blame branding strategies and the practices thereof for the strength and power that they give media to create ambiance. While students use branding strategies to assist themselves in creating ambiance through architecture, they are becoming grounded in a process that compels them to carry out objectives and promises made. Ultimately, this undertone of the pedagogical approach is what they can take forward as they embark on more complex projects, where timely decisions must coincide with a singular message and clear vision.

Architecture as Landscape

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This study constitutes the latest reflection on pedagogical research and experimental pedagogical projects involving the representation, design, and computation of ambiances. Led by the author at various architecture schools in France, Japan, and the United States, these creative explorations involving drawings and models offer ways to realize, feel, and fabricate architecture. The projects described were conducted in 2018 in courses offered by the Department of Architecture, Stuckeman School, College of Arts and Architecture at the Pennsylvania State University. They show that architectural productions are not static objects, but instead render a dynamic landscape itself nested within a changing milieu. Through these projects, by looking closely at the parameters of spatial effects, students engaged in processes of design taking movement into account in meaningful ways.

Experiments with visible and invisible materials: designing and building an ambiance

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This article relies on a workshop called "materials of ambiances" that is taking place at the Graduate School of Architecture of Nantes. It aims for the students to question the qualities of ambiances within spaces with an approach through the concept of material, making them aware of invisible materials (ambiances) from the manipulation of visible materials (building materials). The experimentation with materials holds a significant place: the students are asked to build an ambiance device to create a sensory experience in order to highlight every sensory quality of a material capable of producing an ambiance. The materials used for this experiment are mostly from fields beyond architecture as to think of potential misappropriations. It is about making sure that the student tests by himself the materials and recreates the connection between data from the experiment, and the physical characteristics given by the manufacturers and industrialists. The pedagogical experience that we present aims at creating within students an interest for the built material, to develop ambiance intentions to qualify projected spaces, which are not always measurable but always noticeable. This article proposes to turn back to the way the qualities of ambiances are felt, the misappropriations of materials are perceived, as well as the perspectives on the evolution of the architectural design process. This contribution is illustrated by an ambiance device whose the name is «Cosmic dream», built in 2018/2019 by Marilou Bach, Hugo Falaise, Carole Lyssandre and Charlotte Say.

Studio_ L28: From a Socially Engaged Sound Art Practice to an Open Training Ground for Sonic Design Experimentation

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This paper reflects the preliminary findings of a PhD research on the spatial politics and potentials of noise and vibration, and the affective or attractive and repulsive power of sonic force. We focus on the public space of a railway area in transformation in Brussels, where sonic conflicts are prevalent. To explore the affordances of a sonic urbanism as critical spatial practice and thus to break free from prevailing modes of urbanism which focus on sonic risk and vibrational nuisance – we constitute a working practice exploiting and nurturing the productive encounters between disciplines such as sound art, urbanism and urban architecture. By setting up an experimental design studio at the KU Leuven Faculty of Architecture, embedded in local auditory culture and in connection to ongoing planning processes, we aimed to facilitate an open learning ground for sonic design experimentation in the development of innovative sonic spatial tools and approaches. The studio was oriented to students of the International Master in Architecture summoned to research the multiple (sonic) vibrations and opportunities. From a critical sonic understanding of urban space, students played and explored a contradictory role compared to the widespread noise control practices, reformulated environments, perimeters and relations of urban phenomena and searched for interactivity with vibrational dynamics that already exist in the territory.

Traversing and sculpting scape through pattern development: blending the natural and the built to promote ambiance in early architectural education

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In the formative years of their education, beginning design students are often equipped with several predetermined biases and stereotypical notions about architecture, with specific design intentions centered around how architecture should look, rather than how it should perform. The intent of this paper is to dispel these preconceptions by addressing the iterative design process through conceptual parameters of pattern and module creation, population, and manipulation in an effort to provide students with an alternative perspective for how architecture can create a dialogue with its environment and facilitate the transition from "thing seeing" to "pattern seeing." In two projects examined in this paper, students were asked to initiate the design process by exploring and testing the inherent strengths and constraints of pattern formations through the lens of a scape and constructed assembly, each of which would focus on principles of ambiance and spatial qualities, rather than relying on traditional architectural typologies. By developing these conceptual projects, students were able to break away from their preconceptions of what architecture is, and instead focus on what architecture could be with a reinvention of the design process.

Teaching a thorough, repeatable design process for ambiances in architecture

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Le Corbusier, it has been said, defined architecture as "the poetry of construction" and as such, the term "ambiances" is reminiscent of those great words. In order to create that special quality, that poetry, that ambiance in architecture, a design concept that is the result of a thorough, repeatable design process must be employed. The purpose of this paper/presentation is to explain the design thinking/design tools we need to





teach our students, i.e. the future Le Corbusiers of the world, how to create those special qualities that make ambiances/poetry in architecture possible.

Envisioning the atmospheric effect through (im)materiality

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In an attempt to bridge the gap between architectural/interior design practice and education, 'atmosphere' as a prolific contemporary architectural debate in practice and theory is covered by the experiment of 'Staging Poe' carried out as a first year Design Studio through the study of Edgar Allen Poe's selected poems. Poe's 1846 text of 'The Philosophy of Composition', unfolding his analytical method of writing and emphasis on "effect" in poetry, provides a ground for experimenting with facets of materiality and structuring the studio. Aiming to cultivate intuitive design experiments of students into informed processes in hybridizing conceptual/ textual and material/sensual aspects, studio is structured in two phases. In the first phase, "materialization", idiosyncratic interpretations of students from words to materials with a focus on tectonic experiments and haptic experiences are sought in between materializing and dematerializing processes. In the second phase, the "atmospheric", emphasis on dematerialization of the perception of materials through tools, such as light, color and sound is exercised to transform the object into a performance stage. Outcomes of the studio on aspects pertaining to material and materialities in creation of the immaterial that is the atmosphere is followed and evaluated through responses of students' weekly reports.

THURSDAY 5 SEPTEMBER 2019

Community-based grassroot communication strategies, process and product: The drawings that saved our hospital.

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A case-study analysis of an urban design communication strategy employed by our university-based design team entrusted with re-envisioning the uncertain future of a local small-town community hospital in Indiana. The design process is carefully constructed from structured public input, and community participation, whereby students, faculty, physicians, nurses, as well as ordinary citizens combine their efforts to strategically develop their 'plan for planning'. Finding a strategy to define the scope of their future needs and the definition of important priorities to organize the project scope prior to engaging professional consultants. In this scenario, the design team is only the guide and translator, working closely with stakeholders to help them visualize and clarify the aspirations of their town. This paper will present our community-based design methods and most importantly our graphic communication techniques, specifically formulated to envision and facilitate consensus for a new unified public health system in a small Midwestern American city.

Out of "touch"? - An experiential pedagogical approach to daylighting in architecture and interior design education

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A new challenge is emerging. Contemporary built environment pedagogy demands engagement with both analogue and digital tools for simulation and verification of lit architectural environments. The use of analogue tools within architectural design education grasps onto the historically valued craftsmanship of drawing and physical models to measure, represent and understand our lit environment ambiance. Digital tools can provide efficient, simultaneous and precise verification of lit architectural interior space through 3D computer modelling and calculation software. However, the understanding and representation of daylit scenarios is becoming more numerically complex as lighting metrics and software gain in accuracy and dynamic range. With the majority of easily accessible software tools focussing on numerical verification, the ephemeral ambience that daylight in particular creates in interior architectural spaces is becoming ever more difficult to grasp for the architectural design student and practitioner. This paper seeks to challenge the exclusive use of digital tools for the understanding and representation of lit interiors by proposing that this methodology cultivates design epistemologies that are out of "touch". Questionnaire findings and workshop studies are presented as pedagogical constructs are proposed inviting physical, experiential learning of lighting principles in collaboration with numerical and digital modes of learning to provide connections and translations to develop through 'touch'ing light.

A network as a source of knowledge for the education of an architect

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In a learning space, whether it is surrounded by digital tools or not, the way a tutor represents the information is usually in a linear fashion. However, e-learning platforms have already started to support the learner and a new paradigm for learning. In light of these thoughts and concerns, this paper is focused on the education of an architect and examines potential e-learning platforms including BlackBoard, Facebook in the case of an architectural course, EdX, and Khan Academy Knowledge Map based on the types of visual narrative, the aim of the platform, the information visualization quality, and data types. As an output, this study creates a comparative visualization to see and discuss the potentials of the tools for the education of an architect. After the analysis of e-learning platforms, this study concludes that (1) an education model based on a network can help architects to see the big picture, however it also causes data reduction and loss, (2) an education model based on a network allows architects to create their own learning paths and share it with their colleagues, (3) an education model based on a network may be a sustainable platform for architects from different experience levels and enhance the communication between them to support the youngers' education, 4) an education model based on network decentralizes the process of learning and enriches it through the interaction between other learners, concepts, thoughts, and objects, (5) an education model based on network bridges the gap between what one already knows and what one needs to know to understand the whole picture, (6) an education model based on network gives the opportunity to compare previous years' feedbacks, concepts, and thought in one medium.

Mixed Robotic Interface **[**: Searching for a hybrid cyber-physical design/experience interface using virtual/actual robots

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Mixed Robotic Interface is a project-based design-research investigation, studying new ways of creating hybridized cyber-physical design and experience interfaces, at the intersection of robotics—as its core component, and augmented reality, game design, projection mapping, and digital fabrication. Mixed Robotic Interface Γ—as part of Mixed Robotic Interface series of research projects, focuses on using "actual" and "virtual" robot arms as a possible creative medium and extensions of design/gaming environment creating immersive atmospheres for "experiencing" design. This research questions the possibilities of creating an architectural/spatial atmosphere through digitally enhanced experiences. Different from some of the current experiments with augmented reality (AR), virtual reality (VR) and projection-mapping in architecture, Mixed Robotic Interface Γ is not looking into "immersive" experience as a way to "blur" the boundaries of digital and physical-similar to virtual reality experience with headsets. Instead, Mixed Robotic Interface Γ creates a recognizable gap between real and virtual to open up a creative space for the user/audience to be involved between these two mediums. Mixed Robotic Interface F uses para-fictional storytelling as a way to engage the audience with the experience and to create continues atmospheric qualities.

Experiential Simulation and Psychological assessment as a learning process in architectural higher education

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This paper presents the advancements of an applied methodology developed by the authors, namely an architect and two environmental psychologists, based on Virtual Reality coupled with psychological surveys developed ad hoc by the authors - for urban design; in particular, the paper discusses its application in the field of architectural higher education. The proposed method is based on the pre-evaluation of people's urban experience for testing the effectiveness of design solutions, discovering the unforeseen, and reducing the risk of failure. The method connects architectural to psychological approaches and investigations. The procedure can be schematized as follows: (1) final users navigate the simulation of the design scheme and feedback is collected; (2) the analysis of these collected data is run by professionals and discussed with the designers that then develop the final design solution. In this contribution, we illustrate the application to the urban design development carried out by 100 students of the last year of the Master of Science in Architecture and Urban Planning working in groups. The paper will firstly synthetically present the overall research; secondly, it will argue about its application for higher education; finally, it will conclude by describing the pros and cons of the experimentation, especially in relation to the whole learning and maieutic process and its impact on the design solutions adopted by students, with a focus on the experiential multisensory design.

Educational XRealities

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XRealities is a recently approved pedagogic fellowship project that will run for two years, during 2019 and 2020. This paper will introduce the project plan, some early experiments and expectations. XRealities relates to the many real and digital situations that we encounter in our digitally expanded life experiences. In contemporary education, we notice a problematic situation with abundant screens. People sit next to each other and stare at screens, looking for contact and content. We describe the current dichotomy between latent online learning materials and potential real-world experiences in campus education. The XRealities project is focused on finding alternative approaches for educational settings in which both real-world social interactions and virtual content provide new forms of intertwined learning experiences. We assume there is huge educational potential in the right juxtaposition of visual digital and real-world experiences and the embodied interaction within this augmented reality.

360° VR for Qualifying Daylight Design

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This paper describes the initial findings in an ongoing project aimed at bridging the gap between quantitative daylight simulations and visually perceived daylight quality, using 360° rendered panoramas and animations displayed in virtual reality. A daylight studio equipped with a simple facade pattern for a simultaneous Thermal Delight study was used as case study and test room. The test room was recorded with a 360° camera in sequential image series on days with different weather conditions. The resulting 360° VR time-lapse recordings were proposed for visual diurnal daylight analysis as supplement to thermal measurements used for calibrating and varying the façade pattern on site and in a corresponding thermal simulation model. A comparative experiment was set up to calibrate the perceived visual qualities and ambiance of daylight in 360° photographic panoramas viewed in VR, compared to the perceived visual qualities and ambiance of the real world site. Subjective visual evaluations of the virtual as well as the real space were recorded based on 15 people answering to a questionnaire. Results from the comparative experiment indicate a variety in perception of daylight quality and ambiance but a rather uniform perception of daylight brightness in 360° photographs that can be transferred to 360° rendered panoramas.

Geometry, Pattern, Kinetics: Beginning Studio Pedagogy from 2D to 3D

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Architecture has the strongest educational ties to geometric organization because of the necessity for order and efficiency in construction, three-dimensional space composition, and the desire to create aesthetically pleasing structures. Kimberly Elam, the author of "Geometry of Design" mentions, "Too often as a design professional and educator I have seen excellent conceptual ideas suffer during the process of realization, in large part because of the designer did not understand the visual principles of geometric composition. These principles include an understanding of classic proportioning systems such as the golden section and root rectangles, as well as ratios and proportion, interrelationships of form, and regulating lines." With the primary objective of linking art and architecture through observation, analysis, and composition, this paper demonstrates beginning studio projects where geometry, pattern and kinetics are exercised to enhance understanding of two-dimensional pattern and three-dimensional construction. The objective is to enhance three-dimensional design thinking that has become a challenge in recent trends of questionable dependency on computer modeling applications for design decisions.

A Missing Link: thinking | making | presenting

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Keywords: Studio Teaching, Architectural Representation, Drawing, Design Thinking Let whoever may have attained to so much as to have the power of drawing know that he holds a great

treasure ... Michelangelo

The tradition of architectural drawings and making as a means of design thinking in a constant feedback





SELECTED ARTICI FS

loop results in discoveries that facilitate creative thinking in an iterative process. In the digital age, notion of drawing and making by hand as a cognitive process of thinking is fading. This trend is increasingly evident in upper-level architecture students who depend strictly on digital tools for design thinking, missing many critical decision-making steps. Concepts of scale, diagramming, composition, materiality are missing - part of the challenge is the computer screen and the lack of tactical autonomy with physical materials - pen, pencil, brush, architectural scale, materiality, construction, assemblage. How can we as educators assert that drawings are not just architectural representations, but a means to architectural inquiry? Why is it critical for our students to use hand drawings, sketching and diagramming when exploring ideas? Can small gestural models provide notions of scale, materiality, and construction? Teaching pedagogy has always engaged new modes of design thinking and communications as a way of design inquiry – a trait essential to architects. Historically, since the Renaissance, drawings have been the catalyst to advance architectural discourse. In the 20th century, different movements such as De Stijl, Constructivism and Bauhaus used a multi-disciplinary approach combining art and technology through the lens of drawing and making that led to a new wave of design pedagogy to push their imaginations into new territories which the digital augmented as technology advanced. We believe that today's students need to continue to develop both hand and digital skills in tandem to optimize design thinking, making and presentation techniques. In doing so, they can advance architectural pedagogy to new heights as those before did; critically in a material and physical sense: as an embodied spatial experience.

Ambiance of slowness. Brussels commercial gallery of the latter half of the 20th century

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In this paper, I study the sensory-motor effects of Brussels commercial galleries' ambiance in the latter half of the 20th century. The analysis of two case studies ("Deux Portes" networked galleries and Agora Gallery) reveals the different logics of slow mobility acceleration and immobilisation at stake in the emerging modernist grammar of slow mobility. This grammar - in arrangement with the grammar of fast automobility - structures and stabilises the design of spaces for slowness next to the roadscape in spatial segregation of transport modes. There are accelerating and decelerating sensory dispositifs that define galleries both as punctual destination spaces that capture passers-by and as alternative paths for pedestrians: logics of multifunctionality, fast mobility accessibility and setting of an ambiance on the one hand, and logics of securement, spatial and gualitative continuities, on the other hand. Accelerating and decelerating dispositifs and logics facilitate movement to better keep the consumer captive. Then, I discuss the possible contribution of iconographic archives in research about past ambiances. They effectively acknowledge sensory-motor effects of ambiance but do not constitute an autonomous corpus to grasp sensitivity and reshape past ambiances.

Ambiance through Spatial Organization in Vernacular architecture of hot and dry regions of India - The case of Ahmedabad and Jodhpur

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Most notable vernacular settlements of the past had a potential of generating stimulating ambiance because of their "organicness". The understanding of the "Nature of order" in this informality can identify the factors or parameters generating the definite spatial character appropriate for the time and place. The spatial character generates the spirit of the place, what we call the genius loci. This paper analyses the relationship of spatial organization and ambiance of the old city settlements in hot and dry climatic regions of two selected cities of India - Ahmedabad and Jodhpur at various levels. Both the selected cities are informal in nature and rich with its ambiance. Space syntax and digital simulations are used to decode the parameters of the spatial organization. The spatial morphology is analysed using tools such as justified graph analysis, visibility graph analysis, isovists analysis, agent movement analysis and sunlight study. The result of the study is summarised in tabular format and presented in a graphical manner for better understanding. This analysis is valuable in the derivation of the constants and variables to define the learning from the vernacular spatial organization.

AMBIANTAL ARCHITECTURE - Defining the role of water in the aesthetic experience of sensitive architectural ambiances.

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As part of an aesthetic approach, this design-driven research crosses two methodologies to determine what is common in the perception of atmospheres. Firstly, a case study of the Vals' thermal baths led to the selection of five different atmospheres, which were then analyzed through Gaston Bachelard's lens, using his book L'Eau et les rêves. Bachelard's literary symbols echo in the water contained in the massive stone walls of Vals to identify common generators of sensitive atmospheres. Secondly, the construction of this dialogue between Bachelard and Zumthor leads to the elaboration of a conceptual architecture project which is voluntarily emotional. This project introduces the elements that generate five ambiances identified in the case study. This design-driven research is therefore based on Grégoire Chelkoff's theory of formants as vectors of transmission of atmosphere, pre-existing to the experience of a place, of an ambiance, which itself is understood as a sensitive result of the perception of the space. The present work therefore questions the role of water as a sensitive vector, from the architecture to its visitor. The goal is to determine how water, in varying manifestations, can be used by architects to create a "mise en scène" for a voluntarily emotional architecture.

FRIDAY 6 SEPTEMBER 2019

Experimenting intermediate lived spaces in residential subdivisions: action, interaction and storytelling

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Suburbanization and more precisely the development of residential subdivisions in Europe are at the core of many current debates. Over the years, they have been strongly criticized for the waste of land, increased infrastructure and network costs, car-dependency and the lack of urbanity. In this context, two processes are politically-driven in Europe: the densification of residential areas and the revitalization of the city centers. These political guidelines interrogate the transformation - and possible deterioration - of living environments and ambiances of residential subdivisions. Indeed, beyond the negative perspectives, other investigations have revealed the potentials of residential subdivisions from different points of view: ecology, social, architectural and urban. In order to contribute to these studies, this paper proposes to investigate the intermediate lived spaces in the specific context of residential subdivisions.





The space-time cube as an effective way of representing and analysing the streetscape along a pedestrian route in an urban environment

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The graphical representation of a complex polygonal object, such as an isovist field (i.e. a 2D isovist in its evolution over time along a pedestrian path in an urban environment) is a hard research issue that was stated in the late 1970s by Benedikt [1]. The generalized space-time cube from Bach and al. [2] is a conceptual framework allowing to propose innovative implementations for the analysis and the display of this complex object. The purpose of this article is to situate, within this formal framework, all the graphical representation solutions that have already been developed for isovist fields. It also aims to identify the problems raised by each of these solutions (spatial anchoring, arbitrary sampling, etc.) and to propose related solutions.

A Performative understanding of spatial design, learning from exhibitions

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The terms 'Performative' and 'Performance' are more and more emerging in the spatial design discourses, from exhibition, to interior, arriving to urban design. These notions are not clearly defined yet. They are characterized by a semantic width and multiple applicative possibilities. Between the different interpretations and uses of 'performance' and 'performative' in architectural discourses, this paper will focus on two main dimensions of a particular importance: The first refers to the concepts of the scenic, the narrative, and the theatrical qualities in architecture. The second relates to the 'event-character' of spatial interventions, and the relation between event, and soft intervention, which tackles the concept of the 'transformative power of the performative', which indicates to the capacity of architecture to activate spaces and processes.

Maintaining the ambiance of regenerated post-military complexes - current and emerging possibilities.

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Ambiance provides scholarly value to historic architectural precincts and complexes. Through it, the built environment - a corpus of buildings - becomes an environment with its own unique narrative. It grants us the possibility of interacting with the atmosphere of the place as it was in the epoch. However, due to the nature of modern development, living historic cities are changing dynamically. To stay in use, and thus continue their scholastic mission, historic urban areas need to be integrated into local development through either within-use adaptation or conversion to new functions. For historic barrack complexes, this usually means extensive redevelopment. The difficulty comes from accommodating quotidian use while maintaining its historiographic values, especially with historically sensitive sites. This means the designers should take the legibility of the original complex into consideration in their designs and provide suitable aids to visitors. As it turns out there is not a universal approach, instead different approaches allow preservation of various degrees of the original ambiance.

Architectural character in conservation design projects

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Embracing "character" as a form of spatial ambiance, this study has examined architectural character and the character's relationship with the cultural values, building configurations, and building integrity. Considered sequentially, cultural values, building configurations, and building integrity are the three conservation cognitive agents that need to be satisfied before and during the intervention process in the first place, and in a post-intervention sense if to keep the heritage quality of the preserved property intact. Therefore, the study deciphered the character interface with each of the three agents and reflected on these interfaces in completed conservation projects. The study culminated with that the building character plays the central role in moderating the workings of the three agents towards successful conservation projects. The study further pointed out to the challenges that conservation professionals and historic architects face in accommodating character, and by extension, cultural values, building configurations, and building integrity in conservation projects. There is a need for defining and "operationalizing" character - and each of the three agents- to move the conservation process forward.

Heritage interpretation through an architectural design

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The paper presents results of a heritage conservation studio at the Institute of Architecture and Urban Planning, Lodz University of Technology. Students were challenged to propose an architectural intervention aiming at storytelling of the palimpsestic past, as well as upkeeping the unique ambiance of the place. Furthermore, students were encouraged to play with the use of the building and perception of the site. Submitted projects allowed to make a number of interesting observations.

Design of new daylight simulators on architectural scale models

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To enable students to evaluate the impact of light on the scale models of their architectural projects, two physical simulation systems have been built; a mirror box and a sun and sky simulator. Both devices integrate LED-based light sources. We have integrated several models for the computation of the sky image: luminance models and colour appearance models. The integration of the recent and evolving LED technologies explains how our simulators are innovative.



Light as an ambient material in transformative urban "night" spaces

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This study explores the subject of design and community engagement with regard to light as a transformative material in urban "night" spaces. Four unique case studies, each of which originated under the auspices of meeting specific site purposes or needs, nevertheless all represent the successful coming together of design, local suitability and ultimately, community support and participation.

Acoustic comfort in the living environment and its association with noise representation: a systematic review

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Noise is commonly known to have adverse health effects on residents in urban living environment. In the past, great focus has been placed on the impact of external traffic noise on residents' health and the development of urban noise mapping. On the other hand, neighbourhood noise – a combination of noise generated from outside residences and noise generated from within residences – are also considered to be as detrimental as external traffic noise and are yet to be widely investigated. This paper focuses on the systematic review of studies assessing neighbourhood noise with the intention of determining the presence of architectural variables and methods of noise representation for micro-scale areas. 153 articles are retrieved from specific research databases and out of which 12 were considered to be relevant to the study. The results indicate that architectural variables present in the studies were mostly related to the analysis of external traffic noise and that representation of noise in analyses were rarely devised which highlights the need for further investigation in this area.

Issues of wind mode visualization and pedestrian comfort assessment when designing residential buildings on sloping territories in the Arctic zone

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Subject of research: visualization of the wind regime of residential buildings on the slope area in the Arctic. Goals: the purpose of the study is to identify the problems of visualization of the wind regime on the slopes and the analysis of patterns of airflow around the sloping territories, affecting the comfort of pedestrians. Materials and methods: airflow patterns of slope areas with different characteristics and comfort assessment for humans are analyzed in the course of work. Geotechnical methods are presented in solving the problems of wind erosion and the stability of hillsides and complex terrain within the city limits. Results: The importance and novelty of the research in studying the relationship of slope geometry and environmental quality, as a decrease in comfort inevitably leads to a decrease in the development of nearby urban areas in settlements on the coast of the Arctic Ocean, problems with climate and local climate, as well as a decrease in the quality of life of people. The article considers the relationship of plastic relief with the aeration regime of the territory, the dependence of aerodynamic roughness on their height, features of aeration of the slope and hilly terrain, factors affecting the direction and speed of the wind and methods for studying the aeration regime of slope areas. Findings: The possibilities of applying existing approaches to research and visualization for slope areas are demonstrated. The direction of development of the technique for visualization of slope areas has been determined. 28

Visual effects of colors on façades during rain

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In this study, rain would be regarded as an important factor in landscape colour planning, and the visual effects and impressions of colours on façades during rainfall were focused. Verification experiments in which the author produced a rain simulation device that can control rainfall and illuminance were conducted. Experiments were conducted based on an experimental design with four factors of hue (5R / 5Y / 5G / 5PB), chroma, lightness, and rainfall. In the rainfall simulation experiment, the visual effects of the colour based on visual colorimetry were evaluated, and impression evaluations were extracted. As results, this study presented our findings about the relationship between rainfall and the visual effects and impressions of colour, and determined that there are differences in the evaluation.

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VISIT

Visit on Wednesday, September 4th – 5.45 pm-7.30 pm

The Creation neighborhood of the Isle of Nantes: its history, its ambition, the major urban projects

A 337-hectare territory in motion for more than 15 years, the Isle of Nantes represents a real in vivo laboratory!



at the reception desk



GALA DINNER

Wednesday, September 4th Meeting point at the venue at 7.30pm! The O'DECK restaurant, right by the Loire River, offers a panoramic view on the historical city of Nantes.

The restaurant can be found 600 meters by foot from ENSA Nantes (6 quai François Mitterrand), close to the Machines de l'Île, at the bottom of the «Carrousel des Mondes Marins». O'Deck is on the second deck of the Nantilus, floating building over the Loire.





Adress: 30 quai Fernand Crouan - Nantes Phone number: 33 2 40 71 71 00

GPS Coordinates: 47°12'23.43"N 1°34"6.61"W



NOTES NOTES



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