

Symposium

PERCEPTION in Architecture. HERE and NOW

27th – 28th June, 2014 at ANCB The Metropolitan Laboratory

**Convened and organised by
Claudia Perren (University of Sydney) and Miriam Mlecek (ANCB)**

Through an Open Call ANCB in collaboration with Dr. Claudia Perren invited comprehensive investigations by academics, artists, architects, designers and curators to reflect upon new spatial concepts and thus access 'new spaces' of definitions and perspectives, strategies and processes of perception in architecture. We received 46 abstracts from 24 countries. All proposed abstracts were assessed by a double blind peer review process. It is with great pleasure that we announce the shortlist of speakers and themes covered.

Anna Papadopoulou

Beyond Dualities: Gender and the Possibilities of 'Other' Spaces

Through investigating some of the most prominent perceptions of dualities that relate to the built environment, this essay aims to identify alternative systems of negotiating urban space through a temporal understanding of 'other' spaces. While binary opposites (social and built) are examined in order to uncover paradoxes and encourage the possibilities of other distributions, the consequent dismantling of the spatial binaries is key in enabling awareness to their intersecting boundaries, which then allows for the recognition of diversity. The essay establishes spatial relationships of gender in the home, transferring them to the urban setting of the twentieth-century post-industrial metropolis, where enabling conditions of urban equality has been an illusive target by cross-disciplinary theoreticians and practitioners alike. Thus locating gender through this process of inquiry can be pivotal to the pursuit of creating egalitarian cities. Research focuses on contemporary urban discourse of the complex layers and connections between spatial and social dualities, and mediates between theoretical space and practical applications.

The underpinning of the essay is the exploration of 'other' spaces beyond the permanency of binary relationships, using gender as a means of reading three-dimensional space. Operating under the widely accepted assumption that gender is a social construct and by identifying how the permanency of this construct can be traced in the built environment, 'other' spaces can then be assumed to acquire a temporal character, thus establishing a relationship between the permanency of the binary manifested in constructed space and the temporality of 'other' spaces. The dualities examined focus on the public and the private sphere, and the production and consumption of architecture. 'Other' spaces are then considered as temporal entities that are expressed through complex social engagement poised to have a dynamic and unpredictable interaction with the built environment. Perceptions of 'other' spaces are considered through the work of scholars of gendered space, such as Mary McLeod, Clara Greed and Edward Soja, but ultimately, the evaluation of 'other' spaces within the scope of this essay is related to the temporal component. As dualities are evaluated for their exclusionary consequences, the possibility of 'other' spaces can act as an advocate of spatial democracy.

Anna Papadopoulou. As adjunct faculty at the Department of Architecture at the University of Nicosia and the University of Cyprus, Anna Papadopoulou instructs advanced architectural design studios with focus on regional design, sustainable urbanism and ecological systems, and teaches courses on theory of sustainable design and landscape architecture. She also lectures extensively on research and writing for design students, a subject on which she has co-authored a book. She is currently pursuing a doctorate at the Welsh School of Architecture and her thesis focuses on gendered spaces and the influence of participatory design and planning in reconfiguring urban form.

Annett Zinsmeister

Spatial turn between disciplines

What is the relation between built space and human perception, between real space and the representation and imagination of space? The understanding and perception of space can be seen as a pure individual process based on cultural techniques. I would like to introduce interdisciplinary investigations about space and the perception of space by different methodologies, practices in art and science, based on artistic practice and cultural science knowledge.

Our history of science is a history of stepping beyond our biological limits of perception, which are existent due to the physical abilities of our five senses. But for ages scientific apparatuses had been developed to extend those limited abilities, like telescopes, acoustic amplifiers, and many more. In and with creative practice, I fathom historical and contemporary developments of the perception of space, especially in connection with new technologies. The pieces mostly deal with different ways of perception as abilities but also as conditioned human habits. Tracing the diversity of urban and spatial structures on architectural, artistic, and theoretical levels is an attempt to understand them in terms of their significance for social and political developments. My research about urban transformations and cultural techniques lead myself to get on the track of the particular, the specific, the identity of space and architecture in a globalized world. Installations such as *Outside_In*, *Virtual Interior*, and the *Container Project* serve as machines of perception by turning exteriors inward virtually, as they trigger a strong impact on our way of seeing and understanding space. The installations oscillate between authenticity and illusion. They reveal unexpected intersections and parallels, in the perception, depiction, and experience of space, thus raising questions and opening up new perspectives. Surreal spatial impressions arise, as well as spatial irritations that no longer make it possible to clearly distinguish the boundary between private and public, between street space and interior space.

Annett Zinsmeister focuses on the intersection of art, architecture, and media studies. She creates large-scale installations, conceptual and built spaces, photography, drawings, films and collages dealing with architecture.

Recurring fundamentals in her oeuvre are the analysis of perception and the creation of modular principles, structures of space, and themes referring to the search for identity and utopian ideas, as well as social interaction, communication, and the transformation of urban space.

Her installations are realized to challenge human perception, unexceptional habits, the antagonism of utopian ideas and the social and built reality. Her work opens new perspectives on unrevealed potentials of disputatious and abandoned spaces and initiate processes of urban interventions and transformations.

Arnaud Hendrickx

Enabling Encounters. Design Tactics for an Architecture of Intensities

Especially in research, architecture and its materiality are all too often approached by means of their extensive properties, implicitly placing an accent on knowledge gained from an absolute Cartesian measuring of what the architectural artefact is. The interest of my spatial artistic practice and the research projects it propels, is *substantiating an architecture of intensities*. It approaches architecture and its materiality by means of their intensive properties, placing an accent on knowledge gained from a relative poetic measuring - a process which is part and parcel of the actual embodied experience *here and now* - of what the architectural artefact actually does. Through the lens of a series of concrete installations this paper will explore some design tactics for how these spatial structures, through their materialisation, might afford an encounter that beckons our sensibility to grasp intensity. This exploration departs from a reflection on *perception* and the *sense making* process this might entail.

What an encounter with an environment affords us are capacities to affect this environment coupled to capacities to be affected by it. This pre-personal, real but virtual potential is often addressed as '*affect*' in Deleuzian philosophy or '*affordance*' in Gibson's psychology of perception. Perception can be interpreted as a process of actualisation of this pre-personal potential. Paradoxically our senses simultaneously *reduce and expand* perception: our senses reduce the virtual potential of intensities by actualising them a specific way, while, at the same time, they expand perception by inscribing the experienced into our conceptual framework, allowing the occurrence of new perceptions.

An encounter affords a process of *sense making* that affects different aspects of our mind: it affects what we think (cognitive), what we feel (affective) and how we act (conative). Sense making is a central strategic operation in the context of encounter. It involves *both* the making of sense as the attribution of significance and the activating of the senses. It enables an observer to appropriate his physical environment by constructing a Winnicottian transitional space that eliminates the Cartesian gap between mind and matter.

Arnaud Hendrickx is an Architect and has a teaching and post-doc research position at KU Leuven, Faculty of Architecture, campus Sint-Lucas, Belgium. Since 2013, he is involved in a research project funded by OPAK with a focus on the spatial affect in architecture.

Asim Hameed

GAFF: The contemporary living condition

In Pakistan, today, issues of identity, religion, history, culture, politics, authority figures and social status quo are addressed in the presence of new and contemporary manifestations of space. The shift in perception between and within these various spaces is a case for debate as both perception and values wither from one space to another. As the Virtual and Hertzian gradually shape their respective cultures the Physical faces an impending challenge.

Since the past decade, or two, Pakistan has witnessed unprecedented social and cultural change that primarily owes itself to proliferating technology and a diversified developing economy. The country has proved a power house for technology driven investment and witnessed a mammoth increase in the number of phone and internet users in the country.

Today, the contemporary living condition of the Pakistani society is hybrid. The average Pakistani occupies both Virtual and Hertzian space as frequently as he/she occupies the Physical. An astonishing 130 million users today inhabit the *Hertzian Space* in form of cellular phones, DTH TV, etc. Over 12 million users log in to the *Virtual Space* through easily accessible internet. For the common man, the physical space has hybridized without him knowing. The revelation of these '*alternate*' spaces have also introduced their own respective value systems. The contemporary Pakistani society finds pulled by two very different polarities, traditional and Gaff.

This hybridization is largely misunderstood in a country that thrives on a nationalist identity rooted in religion. This disparity frequently becomes visible when fundamental beliefs and predetermined cultural, historical and political forces are challenged by the pluralistic and relativistic values of these new mediums of mediation/being. Regular censorship and deliberate breakdown of electronic media such as the Youtube ban (over two years) by the state machinery and the current curbs on electronic media are examples of such conflicts.

Asim Hameed, attended the National College of Arts in Lahore, Pakistan, where he completed his Bachelor of Architecture (B.Arch) degree in 2008. He received his Master in Advanced Architecture (MAA) degree from the Institute for Advanced Architecture of Catalonia (laaC), Barcelona in 2010. Currently he lectures in architectural theory at the COMSATS Institute of Technology in Islamabad, Pakistan. In addition, he is a practicing architect and a partner in Particles, an interdisciplinary design studio, based in Islamabad.

Chris Smith

An Architecture Below Perception

In his text *The Five Senses: A Philosophy of Mingled Bodies* (1985) the philosopher Michel Serres suggests that the process by which we come to digest the world, what he calls 'softening', is already occurring in and through the organs associated with the senses and the environments in which we circulate. For Serres our ears are a 'labyrinth' for the negotiation of sound and the entire body is implicated in hearing. Serres version of the labyrinth is much like that which Jorge Luis Borges described: a complex architecture that is open and allows access but which, despite its openness, also excludes.

It is to the question of the excluded, to the imperceptible, that this paper turns: to that which we can't perceive because it sits out of sight, and; to that which we don't perceive because of the silence and transparency through which it operates. The key question here is the immensity and intensity of the force of the imperceptible and the manners by which this force might be courted in architecture. This paper charts the movement of the notion of the imperceptible across the philosophy of Michel Serres and the collaborative work of Gilles Deleuze and Félix Guattari. The paper then turns to one architectural moment where we are struck hard by the imperceptible: Georges-Henri Pingusson's 1962 *Mémorial des Martyrs de la Deportation* located deep in one edge of Île de la Cité. Paris.

One of the consequences of Serres notion that we only perceive a fragment of that which might be perceptible is the sense of the intensity of that which we do not, or cannot, perceive. Words that vibrate unheard. Phrases which remain unspoken or unspeakable; silent or indecipherable. Worlds that remain unseen, invisible or unfound. Forms prior to articulation. The forces of the imperceptible drifts through organs, organisms and what Deleuze and Guattari would call the 'inorganic life' of art and the architectural endeavour. For Deleuze and Guattari these forces are our blind-spots and are also the transparent surfaces through which we perceive. They belong to that zone we occupy in acts of love and death; acts of creativity, eroticism and violence. Acts which are equally difficult to classify, contain and organise.

Such a confluence of the intensities of the imperceptible are poignant in the architecture of monuments and memorials. These spaces have powerfully populated architectural sensibilities and journals over the last fifty years. The *Mémorial des Martyrs de la Deportation* by the architect, urban planner, writer and educator, Pingusson, is an early example of this *hardening*. This memorial is an early forceful negotiation of the senses and a courting of the imperceptible. The architecture of the *Mémorial des Martyrs de la Deportation* reminds us of the deep power of what cannot be heard, seen, said and felt. It reminds us of that which lies below perception itself.

Chris Smith is the Associate Professor in Architectural Design and Techné in the Faculty of Architecture at the University of Sydney. His research is concerned with the interdisciplinary nexus of philosophy, biology and architectural theory. He has published on the political philosophy of Gilles Deleuze and Félix Guattari; technologies of the body; and the influence of 'the eclipse of Darwinism' phase on contemporary architectural theory. His recent work, *Architecture in the Space of Flows* was a book co-edited with Professor Andrew Ballantyne (London and New York: Routledge, 2012).

Clara Gonçalves and Maria Soares

Inquiring music: (re)thinking architectural space

A transdisciplinary discussion on architectural space is proposed having music as architecture's interlocutor. In order to complement specialist knowledge on architectural space, an insight having exterior understanding of concepts – mainly space and time – present in architecture is proposed. This different insight should concern both creation and presentation, thought perception.

Architecture and music share not only a great part of inner self understanding – pointing out analogically space and time – as well as a great part of the respective jargon. Edward Lowinsky states that, for instance, our musical spatial experience is a psychological fact illustrated not only by musical notation itself but also by musical terms such as: high, low, ascending, descending, horizontal, vertical, movement, parallel, scale, interval, position, inversion. José Luís González Cobelo states that in what beauty and true in architecture concerns it has been traditionally referred to the musical: rhythm, proportion, balance, consonance. Le Corbusier, emphasized architecture's diachronic existence. Today, Marcos Novak, for instance, states that architecture should seek for new musical propositions for music went further than architecture in its demand for a new future. In "Unfolding Events" Peter Eisenman (while reflecting on Gilles Deleuze's ideas) proposes a look to space and time related and existing under one and the same event.

What can be an architecture in a very close relation to time? Having in mind that both architecture and music live in composed space and/or time and that this composition reflects author's intention towards individual perception, how can we (re)think space?

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Maria João Soares, Degree in Architecture, FA/UTL, Lisbon, 1987 | Practicing architect, since 1988 | PhD in Theory of Architecture, ULL [Universidade Lusíada de Lisboa], Lisbon, 2004 | Teaching Assistant, 1989 to 2004 and currently, Assistant Professor of Architectural Design Project, ULL, Lisbon | Research coordinator of Architecture and Transdisciplinarity Project at CITAD – Design, Architecture and Territory Research Centre, ULL, since 2010 | Member of CITAD's Board of Directors, and coordinator of Architecture and Urban Planning Research Group, since October 2013

Dagmar Reinhardt

Anamorphic Architecture (ANArch)

Anamorphosis may be described as an unusual form of perspective that invites a reflection on new spatial concepts by integration of time and perception. While it strictly obeys laws of perspective, it is a particular expression of reality through the distortion of the image content. In order to be 'read', a special way of 'seeing' is required, a special device like a curved mirror or particular vantage point. In a way, the distortion removes the experience of the spectator/occupant from an immediate, open or public perception, towards a more singular, private view.

A rethinking of anamorphosis in the context of architectural design allows a different understanding of designing in and through perspectival space; by manipulating, transforming, and enacting the experience of spaces. And while contemporary architectural design privileges manipulations of the architectural object, this paper proposes a method of anamorphosis as a conceptual driver for the manipulation of spatial effects. In order to do this, the paper reviews the production methodology and iterations deployed in the design process of anamorphical imagery, and which can be linked to parametric design processes and morphological variations via a method of coordinates and 'impact points'. One might argue that through the shifts and changes embedded in the grid, and relieved in perception, the notions of spatial truth are challenged: similar to the zoological observations of D'Arcy Thompson, and Greg Lynn's reverse engineered shape shifts, an anamorphic architecture can support a thinking through architecture and architectural urban space by thinking through perspective, perception and experience. Specifically, a common parametric design process enables short-cuts to similar shape deformations. In contrast to parametric design deployed for architectural objects, here, the coordinates and their impact on shape, pattern, form and data can challenge the experience of space. As a perceptual design methodology - between construction of images, and the reconstitution of architectural space by superimposition of parametrically derived image topographies that have to be mirrored to be read - ANArch allows a different understandings of perceiving space, and a way of informing, mapping, trespassing, overlaying visual information in/on/through/between/onto urban space(s).

An overlay of ANArch opens propositions for a multiplicity of experience by overlaying narratives on existing lines in the public realm. In that sense, the paper addresses a temporary mapping of architecture as a spatial practice that reveals and challenges notions of spatial truth, ie of an anticipated or projected perception of architecture. It engages architectural space as an environment of performance, where vantage points are enacted by a public audience. If we don't see what we expect to see. What do we see?

Dagmar Reinhardt is an architect and Lecturer of Computational Design at The University of Sydney, where she currently leads the Master of Digital Architecture Research Studio, and coordinates Architectural Communications. Reinhardt received a postgraduate degree at Städelschule and holds a PhD by the University of Sydney that engaged the technological and affective potentials of a latent, performative, phenomenal architectural design. As a co-director of reinhardtjung architects, Reinhardt develops architecture through buildings, installations and curatorial work, which has been widely published and received a number of awards.

Felipe Vera Benitez

Ephemerality as Urbanism. Varanasi, Kumbh Mela and Lessons from the Sacred River

Ethnography offers to design a relatively unexplored set of tools for perceiving reality and formulating frameworks for intervention. The research below is presented to Perceptions in Architecture as a collection of ethnographic observations and interpretations that invite us to rethink the issue of temporality in contemporary cities.

Varanasi and the erasing Ganga. The second time I got to Varanasi, there were no ghats, no boatmen, no children selling flowers on the border of the riverbank. There were no cremations at Manikarnika terrace; indeed, there was not even a Manikarnika terrace. I saw less than thirty people bathing at Dashashwamedh, a place where I had once seen hundreds submerging in the sacred river. "It is the monsoon" my driver said, "you came to Varanasi in the wrong time". He was right. I did not take the monsoon into account while planning my fieldwork. Actually, I even did not know that what I came to study, the ancient Ghats, completely disappear every year for some months when the river rises. All the buildings, the countless steps, old palaces, widow houses, statues of Ganesh, Shiva Lingam, cremation grounds and even the path that connects different Ghats were completely hidden under the torrential Ganga. Varanasi was a city as any other, on its border there was no incandescent fire, no sitar music, no ringing of bells and no worshipping ritual at Assi Ghat. As expected, with the passing of time, the level of the river started to decrease slowly, uncovering few steps per day and leaving tons of dark grey clay to be cleaned up by children. It was four and a half in the morning when I got to Assi Ghat. Parya and Raju, eight-year-old children, were cleaning the clay from the steps. The river had gone down some more meters the previous night and as every day, I sat beside them as they pumped water on the clay, and asked them questions. That morning, Raju told me that he was happy because after finishing cleaning there was going to be enough space on the steps for performing Puja and he could return to sell flowers, a job he liked more. He was correct. A couple of days later a stage was mounted and Puja, the daily adoration of the river, began to be performed at a large scale on a daily basis. The morning fire, the music, people and floating flowers returned to the border. The unveiling space and the repopulation of the borders, courtesy of the retracting river, were back. It took eight weeks for the connection between Ghats to be completed, and I started seeing saints walking on the streets again. Dressed in orange silk, black cotton or completely naked depending on their Akhara, holy men came back to the border to contemplate from high on the steps the river that had just flooded every sacred space in the city.

Felipe Benitez is a Chilean architect and urbanist. His research and design work focuses on advancing the understanding of urban ecologies and social patterns in emerging landscapes, incorporating interdisciplinary tools with a special interest on mapping temporary and ephemeral processes of urbanization around the globe. Felipe is currently Professor at Universidad Adolfo Ibanez where co-directs the Center for Ecology and Urbanization.

Gabi Schillig

IMMEDIACIES OF EXPERIENCE. Textile Spaces, Spaces of Communication in the Work of Lygia Clark and Lygia Pape

The abstract investigates notions of multisensorial spatiality in the work of Brazilian artists Lygia Clark, Hélio Oiticica and Lygia Pape. They developed a unique multidimensional understanding of spatiality already during the 60s through their works and a continuous search for invention and investigations of sensory experiments. At that time they opened up new grounds – specifically by re-thinking the artistic object and its relation to the viewer who in their works becomes an active participator. Their conceptual works liberated artistic concepts from the hegemony of visual qualities and transformed materials, structures and spaces into environments and situations of communication.

The focus will be on selected works that specifically address textile materiality, its immanent behavioural aspects and sensorial capacities in relations to space, body and surrounding. Alongside those projects by Clark, Oiticica and Pape the potentials of textile and ephemeral spaces will be enfolded in relation to materiality, interaction, experience and another appreciation of spatial perception, moving away from spaces based on the hegemony of sight and an actually existing dominance of the visual. Space is considered as a continuous experience in contrast to space as form. Layering, transparency, pliability, flexibility and changeability of textile structures create some kind of instability, diffusing perceptions of space. The textile acts as medium through which one can relate to the world, a second skin able to mediate realities within relational spaces.

„Architectural space enfolds its full power if it is created within imagination. Within imagination, through movement of the body and the consciousness of inside and outside multidimensional spaces are created (...). Architecture usually creates boundaries, even where shouldn't be boundaries; architecture often unintentionally works against imagination, as its forms and materials are limited and movement can only be pretended.“ (Franz Erhard Walther)

Gabi Schillig studied Architecture in Coburg and completed her postgraduate studies in Conceptual Design at the Städelschule Frankfurt before founding her studio in Berlin. In 2012 she was appointed as Professor for Spatial Design at the Düsseldorf University of Applied Sciences at the Faculty of Design. Before she was teaching at the Institute for Transmedia Design at the UdK Berlin. Gabi Schilling has exhibited internationally and received several fellowships and prizes: Akademie Schloß Solitude Stuttgart / Van Alen Institute New York / Nordic Artists' Centre Dalsåsen / KHOJ International Artists' Association New Delhi. In her artistic practice she investigates contemporary and future questions of spatial design such as issues on relationships between space and body, systems of spatial communication, (textile) materiality and her approach of multi-sensorial, dialogical spaces within cities and landscapes.

Gabriele Fowler

SHIFTING SENSATIONS: re-thinking sensory relationships in spatial design

The discussion in this paper evolves around issues of human perception and sensation in relation to the built environment, with the objective of enabling new approaches to a multi-sensory design of architectural space. It seeks to inspire discourse across the symposium areas of “the multiplicity of experience” and “Wahrnehmungsapparate / perceiver equipment” within the context of spatial design.

As its theoretical framework, the paper firstly establishes a difference between the terms “perception” and “sensation”, by drawing on Brian Massumi’s and Gilles Deleuze’s philosophical writings. Beyond traditional phenomenological notions of the five human senses, the paper furthermore examines a synaesthetic interconnection of the human senses through the lens of these philosophical concepts as well as through examples from neurological and psychological research conducted by Oliver Sacks, Richard E. Cytowic and Rainer Guski. In this context, one of my own research projects consisting of interviews with a focus group of blind and visually impaired individuals is used to further illustrate specific interdependencies between the human sense faculties and sensory qualities of architectural space when eyesight is not a primary means for encountering the world. In these interviews, the participants gave detailed accounts of their daily encounters of the built environment and multi-sensory techniques used to manage these encounters. Insights from these interviews then inform a discussion of a visual supremacy within architectural design that has been famously argued by Le Corbusier and Juhani Pallasmaa, in order to position alternate approaches to spatial design based on particular multi-sensory parameters.

As a way of relating the theoretical argument to spatial design practice, a selection of installation art and architecture projects by Rafael Lozano-Hemmer, Susan Hiller and NOX/Lars Spuybroek, as well as projects from my own experimental spatial practice as an interior architect and design researcher, serve to investigate and illustrate concepts for potential future design approaches. Together with the theoretical positioning outlined above, this sets up the key question of this paper: How does a shift in understanding human sensory faculties open up new ways of thinking about architectural space and inspire innovative approaches to designing them?

In conclusion, I endeavour to identify specific traits of non-visual sensory qualities that are particularly relevant to the design of architectural spaces, such as sound, tactility and movement, while revealing interrelations between these qualities and their interplay with visual characteristics, in order to inspire new design processes that lead to innovative ideas towards a multi-sensory design aesthetic.

Gabriele Fowler is an interior architect and design researcher, whose research interests focus on multi-sensory relationships within spatial environments, non-visual design qualities, issues of sensation and perception and questions of a visual hegemony in architectural design. Gabriele completed her PhD in the School of Architecture and Design at RMIT University, Melbourne, Australia, in 2010, which was supported by the German Academic Exchange Service (DAAD). Gabriele taught in the RMIT Interior Design program from 2005 until 2008, and has worked in design and architecture practices in Germany as well as in Australia.

Holger Schurk

Manipulations in Imagined Space

Within his examinations concerning a science of architecture French theoretician Philippe Boudon distinguishes between the „real space of architecture“ and the „imagined space of the architect“. Whereas the first of these spaces refers to structured and physical space, the second one points to the space of imagination, where a designing architect confronts a future architecture by virtue of his mind and his drawings before it exists in a concrete form, even before it is fully known to himself.

In imagined space the future architecture is explored and at the same time structured in continuous interplay between thinking and doing – or between theory and form. Thereby architects cannot work directly on their target object, the building, they must at first confine their activity to an intermediate sphere, geometry. Here the architectural forms are developed by means of graphic representations, as projections of the real form, before they are transposed into concrete reality, as buildings. It is also characteristic for the work taking place in the imagined space of the architect that the involved fields of knowledge – theory – as well as the projected forms – the drawing – are basically variable. In uncountable variations and manipulations of the involved figures in space and thought, the graphic representations are gradually yet in all stages just intermediately defined.

Employing a graphic study these processes are to be examined in detail and exemplified. Design drawings by architecture office OMA/Rem Koolhaas are manipulated in such a manner that they alternately can be interpreted as the notation of a thought and as a formal projection of a building. In their sum the series of drawings reflect the design space as a space of unlimited possibilities, opening with the first thought and closing with the realisation of a built structure. In this sense the "imagined space of the architect" is an epistemic space, in which the architect – and others – can gain further knowledge by applying analytical and creative means.

Holger Schurk, 1997 Diploma in Architecture at the University of Stuttgart, Germany; 1998-2001 Collaboration with several architecture firms in Stuttgart, Rotterdam und Amsterdam; since 2001 Partner in dform, Zurich, Switzerland; 2001-2004 Junior faculty member at the ETH Zurich, Switzerland; 2005-2008 Senior lecturer at the Berne University of Applied Sciences, Switzerland; since 2008 Senior lecturer at the Zurich University of Applied Sciences, Switzerland; since 2012 PhD candidate at the Academy of Fine Arts Vienna; EAAE Prize 2011-12 for Writings in architectural education for the essay "Design Or Research in Doing".

Isun Kazerani

(Re)presenting an embodied perception of contemporary designed public space

This paper explores perception of contemporary designed public space through embodied inhabitation spatial experience. This exploratory interpretation will be (re)presented according to individual multisensory and bodily experience as well as sociocultural and political inhabitation of space. The proposed textual and visual (re)presentation challenges the perception of space in conventional architectural technical representations, for its inability to evoke atmosphere (Böhme's 2013) and reinterprets a dynamic perception of contemporary space. This understanding draws on Lefebvre's (1974) critique of the reductive perception of architectural space as purely visual and his emphasis on the role of the user and the impact of sociocultural and political context in production of space.

Considering the impact of sensorial spatial interaction on the overall perception of space and its geometry (Böhme's 2013), here a range of creative auto-ethnographic methods are developed. During a seven-day site visit I documented my own inhabitation experience using embodied photography, in-situ drawing and creative architecture writing. In order to avoid sheer subjectivity and explore cultural and political inhabitation of other users, semi-structured interviews are also conducted, which inquire about public inhabitation memories and narratives. Furthermore, design documentation and representations are also studied to investigate the designer's intention and their strategy in relation to socio-cultural and political context of the space.

As a contemporary designed public space, Copenhagen Superkilen (2012), by BIG, Topotek1 and Superflex team, is selected. The rationale behind selection of this case study is two folded; the significance of perception in relation to strong cultural and political sensitivity of the site as well as the implemented participatory design strategy. The site is located in Copenhagen's most multicultural urban district with majority of the residents from the immigrant generation and history of local clashes. In response to the brief for a public space that would promote social integration, the designers took on a participatory design process, inquiring the locals about their favourite urban furniture from their home countries. As a result the design approach relies heavily on the inclusion of objects and mainly pure visual and functional user-space interaction.

The collected material will be implemented to (re)interpret and visually (re)present an embodied inhabitation perception of the selected public space juxtaposed with the original design strategy and representations.

Isun Kazerani is a PhD candidate and sessional staff at the faculty of Architecture, Building and Planning, University of Melbourne, Australia. She has a multi-disciplinary background in Architecture, Fine arts and Engineering. Her PhD research involves exploring modes of (re)presentational techniques to create links between the embodied socio-cultural inhabitation experience of contemporary public spaces with the designer's intentions and the design process. She is the author of multiple refereed conference and journal articles and also involved in running and guest lecturing design studios at undergraduate and masters levels.

Izabela Wieczorek

From Perceptual Apparatus to Immersive Field of Experience. Notes on Atmospheric Perception

Peter Sloterdijk ascribes to architecture the “the design of immersions” and hence the “production of embedding situations” or *atmosphere* (2011 (2006): 108-109), which as devised by Gernot Böhme becomes a fundamental concept of a new aesthetics (1993). Atmosphere implies affective immersion and activates a set of traits related to *character* and *impression*, calling for a re-evaluation of what perception entails. It requires one to overcome the subject-object dichotomy, being perceived not as an object placed in front of the beholder, but as the “common reality of the perceiver and the perceived” (Böhme 1993: 122). Following these assumptions, engaging the notion of atmosphere in a discussion about space and perception seems necessary.

Jonathan Crary explored the vast field in which perception and its understanding were transformed, tracing a particular taxonomy of visual apparatuses, where the immersive experiences relocate the vision within a “carnal density” (1992: 150), regaining all sensory modalities. Diverse perceptual apparatuses also defined a larger disciplinary expansion in the field of architecture and design. Conceived as sensorial activators, intensifiers of phenomena, or orchestrators of emotions, many of these apparatuses were meant to be vehicles for regaining the consciousness of the body and the environment. Apparatuses that expand into space complete this particular genealogy – space itself becoming a mediating and conductive device capable of engendering these embedding situations, Sloterdijk remarks.

Situated within the field of trans-disciplinary collaborations, the oeuvre of Werner Ruhnau comes to the fore as paradigmatic for illustrating these aspects. The joint projects with philosopher, artist and educator Hugo Kükelhaus, or artists such as Yves Klein and Adolf Luther, will constitute a framework for a re-invention of perceptual worlds, providing a basis for tracing the conceptual contours of atmospheric perception, as well as for discerning the means of the production of space understood as an immersive field of experience.

Izabela Wieczorek is an architect, and a co-founder of *gálvez + wieczorek arquitectura*. She has taught and lectured at several universities in Spain and collaborated in PlanetaBETA, a weekly radio show conceived as a space for debate and dissemination of architecture in the Radio Círculo in Madrid. Currently she is a PhD candidate at the ETSAM/Spain and holds an associate professorship at the Aarhus School of Architecture/Denmark. Through collective and individual research, practice and teaching and by oscillating between theoretical investigation and work development, she aims at building and communicating knowledge of such key areas of connectivity as architecture and atmosphere.

Katharina Rohde and Thiresen Govender

PublicActs

PublicActs investigates the spatial consequence of post-apartheid Johannesburg focusing on the public realm as a space of collective expression.

Johannesburg has undergone phenomenal changes in accommodating the social and political shifts within South Africa. It is a city which shows the 'becoming' of 'something else', as it attempts to re-calibrate itself to new pressures of urban change. These are reflected in physical space and vary from being catastrophic, unjust, innovative or simply sublime. The majority of these new imaginaries play themselves out in the public realm-which subsequently plays an important role in this 're-calibration'. It is the site where the collective drama is acted out and that is constructed through the state, and its political agenda of the time.

South Africa's divisive history has resulted in a segregated society today which manifests in a fractured city. There is no singular public, but a diverse and complex set of publics which act out spatially in equally diverse and complex patterns. Its configuration would need to strategically engage with these fractures, differences and diversities in a manner which is creative and innovative.

PublicActs produces a survey of urban public conditions which emerge from the contemporary reality of Johannesburg. Through the project, two emergent spatial types become relevant for city-making; The Everyday and New Imaginaries. To move between research and engagement, creative provocateurs engage with various existing emergent spatial conditions with site-specific interactions, installations and performances. This is curated into a discussion around the future imaginary of public spaces in this city. The intention is to find ways to translate these innovative experiments with emergent public spaces into something tangible in city-making – whereby democracy, innovation and the emergent intersect.

Katharina Rohde designs and realizes projects about structures, phenomena and processes of urban spaces and its associated narratives. With a Master in architecture and city development, she works as a Curator, Social Designer and Urbanist and describes herself as an Urban Street-worker. Her field of work ranges from Berlin to Africa and includes small scale local happenings as well as international major events.

Thiresen Govender is an architect and urban designer and founder of urbanworks Johannesburg, South Africa. His deep curiosity in emergent spatial patterns, particularly in new democracies informs the nature of projects he undertakes.

Kim Connerton

Arakawa & Gins, Activated Spaces, Staying Alive

“Throwing the body off balance forces it to show itself for who or what it is. It is desirable to keep the body in a state of imbalance for as long as possible. The actions, range of actions, possible to the body for righting itself and regaining its balance will both define and reveal the body’s essential nature.” (Architectural Body, Madeline Gins & Arakawa)

In my essay, *Arakawa & Gins, Activated Spaces, Staying Alive*, Arakawa and Gin’s philosophy, *Reversible Destiny*, is revealed as the foundation for their architecture. Of utmost importance is the level of artistry in Arakawa & Gin’s philosophy. They proclaimed, “We Have Decided Not to Die”, and in doing so made death a choice in architecture and life. This kind of poetic sensibility is evident throughout their philosophy and architecture. Arakawa’s art and Madeline Gin’s writing backgrounds are crucial to the production and evolution of their architecture. Their interdisciplinary approach to architecture, and the essential function their philosophy played in their architecture, and how their philosophy extends the concept of building skins in contemporary architecture engage with the conference theme, *PERCEPTION in Architecture. HERE and NOW*, by linking art and architecture, philosophy and perception in space, and the contemporary architectural concerns of building skins and activated surfaces.

In contemporary architecture building skins can breath - some can even swallow pollution and as a result are innovative and ecological. *Reversible Destiny*, provides the poetic and philosophical building skin by using the surface of the mind as a space for change and by altering the standard design of floor space in the built environment. Arakawa & Gin’s architectural projects: *Reversible Destiny Site at Yoro Park* in Gifu, Japan, 1995, *Reversible Destiny Lofts*, Tokyo, Japan, 2005 and *Bioscleave House*, East Hampton, NY, 2008 are environments that fight death. Each site is comprised of uneven, sand-filled terrains that replace the standard flooring expected in a house, apartment or a park causing the body and mind to experience an imbalance and shift through a different concept and construction of floor space. In this essay Arakawa and Gin’s philosophy will be analyzed by a closer reading of Jean-Jacques Lecercle and Françoise Kral’s book, *Architecture and Philosophy: New Perspectives on the Work of Arakawa & Madeline Gins*.

Kim Connerton is an installation artist, academic and researcher. Kim Connerton produces video and photographic installations and public art. She has exhibited her art in New York, London, Sydney, Melbourne, Spain and Ontario. She lectures in architecture, art and design. Her research focuses on raising the profile of art in general and in architecture in particular, change generated by artists, museum design, identity through reflective surfaces and otherness. Kim Connerton has lived in New York, Sydney and currently resides in San Francisco.

Lindsay Webb

Sensory Modulation: “Snoezelen” in Architecture

It is not the task of architecture to make an ocular image of itself. Constructed spaces should authentically contain, serve and stimulate “all senses and all bodies” (Lefebvre, 1974).

The aim of this paper is to propose a potentially broader use of Snoezelen perceptual principles in architectural design and space-making strategies, based on the author's experience designing buildings, immersive auditive environments and, recently, a Snoezelen/MSE (multi-sensory or 'sensory modulation' environment) as part of a new mental health facility in Canberra, Australia.

The history of Snoezelen spaces and a survey of typical implementations are cross-referenced to the innovative Canberra case study. An extensive pre-design process attempted to rethink traditional Health Department statutory design guidelines, while the implementation of the facility's “Snoezelen” was limited by the strictures of conventional practice. The intent to refocus and leverage the 'missing' senses of smell, touch and hearing into a functionally kinaesthetic interface did, however, follow through into the design concept for the entire facility. This article seeks to carry the research forward.

The author presents examples from the architectural canon (e.g. UN Studio; Peter Zumthor) that might be interpreted or post-positioned as Snoezelen strategies. These are viewed as phenomenological techniques of distraction—a suite of perceptual tools for breaking the impasse of stylistic postmodernism.

The demonstrated benefits of Snoezelen spaces flow from their delivery of an immediate sensory 'overload', multiplicity or unexpected modality, productively displacing a user from a habituated compulsive state; the event (Debord, 1967) is akin to a radical break in addictive/automatic behaviour. The paper develops this facility as a metaphorical shift in approach to spatial design. The application of Snoezelen principles to larger buildings and urban environments may work both to create more pleasant spaces and to counter the overwhelming dominance of the visual and representational in current architectural discourse, an institutionalised orientation that arguably subsumes the entire field.

Lindsay Webb is a director of Lull Studios <lull.tv> focusing on environmental and graphic design, experimental scenography, and sound based works including soundtracks for live performance and screen. With a special interest in aural phenomena in the built environment, Lindsay works in Sydney and Berlin.

Malte Wagenfeld

Perceiving Atmospheres

Air envelopes us in sensual effect. It can warm or chill us, it carries smell and sound; breezes stimulate the skin, and wind can literally move us; sometimes we can even taste the air.

Perceiving Atmospheres describes a six-year investigation into atmospheric phenomena and perceptual atmospheric encounters, and our relationship to air - social, cultural, philosophical and physiological - with the intent of proposing a new design typology of air with which to shape interior atmospheres.

English design theorist Helen Mallinson raises the question, “Do we forget air when we think about architecture as ‘space’, and if so, what are the ethical consequences of this forgetting?” The paper will begin by exploring this notion of forgetting, how it eventuated and the cultural, social and economic forces that came to frame it; with the emergence of the practice of controlling and standardizing interior climates as the dominant design approach, driven by the prevailing paradigm of ‘comfort’. The consequence has been hermetically sealed interior spaces; spaces separated from their atmospheric geography and related phenomena, and largely neutralized in terms of any complex perceptual experiences.

I then propose a reimagining of interior atmosphere that moves beyond the notion of comfort where dynamic perceptual encounters are sought out rather than designed away; to envision an ‘aesthetics of atmosphere’. The philosopher Gernot Böhme explains that,

the concept of an ‘aesthetics of atmosphere’ shifts attention from the ‘what’ something represents, to the ‘how’ something is present. In this way, sensory perception as opposed to judgment is rehabilitated in aesthetics and the term ‘aesthetic’ is restored to its original meaning, namely the theory of perception.

Attention to ‘how something is present’ raises a dilemma for the designer of *aesthetic atmospheres*, namely how is such an atmosphere – consisting of emergent, intangible, invisible and a virtually immaterial materiality – grasped and manipulated? How can air be explored and modulated as a design medium? How is it even conceived of ‘in the mind’s eye’?

Malte Wagenfeld is a practicing industrial designer, academic and researcher whose explorative designs (furniture, objects, interiors and appliances) and writings have been internationally exhibited and published. Recent projects have seen a shift away from the design of the material towards a phenomenological investigation of atmosphere and experiential environments. Malte Wagenfeld is senior lecturer of Industrial Design at the School of Architecture and Design and is a member of the ‘Urban Interior’ research group at the DRI (Design Research Institute), RMIT.

Marian Macken

The Space of the Book

Architectural drawings, that is, orthographic projections such as plan, section and elevation, have interiority embedded within them, due to their subject matter. The plan locates planes that form an interior. Our eyes travel over the surface of the drawing, conjuring up the interior that it represents. We infer our inhabitation of the space through two-dimensional means. The artist's book – that is, a book made as an original work of art, with an artist or architect as author – offers a different mode of presenting interior space, due to its objecthood, structure and component pages. The page itself has a dimensionality to it, beyond that of a two-dimensional surface for an image, and the form of the book creates an interior. The 'inside' of the book refers to both the literal space of the pages, and its content, which refers to that which is 'outside' the book. By binding the artist's book with the content of architectural documentation, a space of representation is created, different from three-dimensional models, and with it, new strategies of representing architectural interiority and new territories for architectural practice.

This paper examines the way in which the book's interiority, or the space of the book, may be aligned with the space of architecture, through works by the author and others employing volumetric devices. Hence, the book brings into tension and coincidence its own interiority and the imagined or represented interiority of the drawn architecture. Through an examination of the relationship between the drawing, the building and the book, the potential of the book as an alternative representation of interiority is examined and the implications for the perception of interiority.

Marian Macken is a practising artist, designer and educator, currently Associate Professor of Architecture at Xi'an Jiaotong-Liverpool University, Suzhou, China. Marian's research examines the role of artists' books as a documentation of architecture, with particular interest in the implications and possibilities for architectural drawing and exhibition as design outcome. Marian was awarded a PhD, by thesis and creative work, from Sydney College of the Arts, University of Sydney in 2012.

Matthias Ballestrem

Unnoticed – the impact of spatial languages through implicit visual perception

Recent findings on the nature of implicit visual perception shed light on a level of interaction between the human nervous system and architecture that goes largely unnoticed, and at the same time has a considerable influence on us. Much of our perceptual knowledge and abilities that help us understand the world and interact with it depend on low-level, implicit individual experience that is modulated by the form and structure of the spaces we are surrounded by. This paper will try to carve out the significance of these 'spatial languages' for the individual visual appropriation of spaces by introducing the concepts of indicated spaces, transient volumes, fluid objects in examples of architectural spaces and buildings.

The argumentation of this assessment is based on the transfer of research from psychology and neuroscience to the field of architecture. This methodology has its precedents in the period around the turn from the 19th to the 20th century, when the new discipline of psychology reached its highest influence on the creative disciplines, e.g. in the theory of 'Einfühlung' or the Berlin school of Gestalt-psychology. With only a few exceptions like Rudolf Arnheim, the common interest of the two disciplines in the involuntary and automated basic mechanisms of perception and their effects has been marginalized over the course of the 20th century. To build on the Gestalt-based psychology of art and architecture of Arnheim today, the relevant research in this area is found in various fields of research of current psychology and neuroscience such as attention, selection, change blindness, two stream hypothesis, expertise or implicit learning. Thus, this paper is an attempt to revive a forgotten interdisciplinary approach as a strategy to a non-reductionist understanding of the processes of signification through the perception of architecture.

Matthias Ballestrem is an architect living and working in Berlin. He currently holds the position of a guest professor for architectural design at the institute of architecture of the TU Berlin. He has held teaching positions at several institutions including Cornell University, and the CIEE GAD Berlin Program and the TU Berlin. He was a scholar at the German Academy Villa Massimo in Rome in 2011. Recent research activities include the contribution to the AA research cluster "concrete geometries" and the co-founding of the research group "processes of signification in architecture". In 2013, he finished his PhD on implicit visual space perception.

Oliver Sachse and Guido Neubeck

SPATIAL PERCEPTION IN ARCHITECTURAL EDUCATION

Even though architecture is a discipline that is mostly negotiated through the visual, it is through the whole body that space is perceived and that our relation to built environment is formed. This focus on vision overlooks a complex range of perceptions – often unconscious processes – related to the characteristics of a build space that in the end define our (well)-being in space.

The same emphasis on vision can also be traced in education (addressing e.g. form making, materiality or structure) and shows in the way ideas intended as abstractions of physical spaces are represented. It often mirrors the students' focus on the object as building representation, rather than on spatial qualities. The representation is a necessary abstraction that nevertheless opens a gap, that needs to be bridged, between working tools for ideas and the represented spaces.

Perception is an individual subjective act. Still we share a common or similar evaluation of spatial conditions. With the notion of *atmospheres* as “tuned spaces” Gernot Böhme addresses this similarity of perceptions and their inter-subjectivity. Perception thus requires involvement and reflection cultivated through the dialogues with others.

This presentation describes the frame of the seminar on spatial perception (3rd year BA, TU Berlin) that attempted to bridge this 'representation gap' and tackle the distinction between subjective and inter-subjective perceptions.

The students were asked to experience and compare different, but related spaces individually and then confront their „point of perception“ with others. They could use different media, language as well as representations in order to distinguish between the perception itself ('what do I perceive') and within an architectural context ('how is the perception provoked').

Beside the object of study the presentation will also include the range of criteria examined and the methodological procedure, and reflect the observations made by the lecturers and students in order to discuss the possibilities, difficulties and limits of the approach.

Oliver Sachse is lecturer for architectural design at TU Berlin. After his studies of Architecture and Urban Design at TU Darmstadt and ITESM Querétaro, México, he worked as project architect for Coop Himmelb(l)au Vienna. Since 2009 he was Assistant Professor at the Chair of Building Technology and Architectural Design at TU Berlin and Guest Lecturer at UPC Barcelona and UPV Valencia.

Guido Neubeck is assistant professor at the Chair for Building Technology and Architectural Design at TU Berlin. He studied architecture at the University for Applied Sciences in Würzburg and Weißensee School of Art, Berlin. He has been teaching at TU Kaiserslautern and TU Munich since 2008.

Rena Tavernaraki

Squatted space. From the Other to the Subject of uttered Speech

Squatted space constitutes a body that acts declaratively in the urban web. The facade of the squatted house is transformed through the intervention of its users, as a chaotic synthesis of images, positions and actions, underlying the place of fermentations, of intensive fields. It carries loads -ideological, political, aesthetic- that the occupants deposited on its surface, converting it to a transmitter of speech. Considering occupied space as spatial derivative stemming from a collectivity, we explore an aspect of the squat as the *Other* and by extension a possible Subjectivity.

We refer to squatted space as a derivative of the relationship space-user under the condition of occupation, facing the body of the occupation through the allegorical mode and the function of occupied space as a mask, a system of strengthening the declaration as written on the surface of the facade. Squatted space is presented as a potential subjectivity, being an organism that is named, called to cope with what its proper name represents. The reference to it is a reference to a cohesive organism. An organism that is generated aiming to declaration, to differentiation. Occupied space functions as a transmitter seeking for receivers.

Squats are defined, perceived, as "subjects of uttered speech", in the multifaceted complex of urban landscape, focussing on the statement. A statement addressed and composed to and from the *Other*; the passer-by, the viewer, the political power, the urban continuum itself. A declaration that is targeted and recognizable, identifying the existence of the occupation and distinguishing it from the whole, placing it as a unit called to communicate with the environment in order to support the purpose of its constitution. For the squat, the environment -anthropogenic or not- consists of "subjects" that it is addressed to, being the field of speech utterance, a meeting place.

Tavernaraki Rena studied architecture at the National Technical University of Athens [N.T.U.A.]. She holds a Master degree from the Postgraduate Course "Space, Culture, Design" at the N.T.U.A, where she taught as an assistant professor for the period 2011-2013. She has worked on research projects of the Technical University of Crete and collaborated with architectural offices in Athens and Crete. She has participated in national and international architectural competitions and in several architectural and artistic exhibitions. Her main research interests evolve around squatted space. She is currently living and working in Athens.

Suzie Attiwill

inflection

Perception and the implication of a centred knowing subject has been the focus of a series of research projects involving exhibition design, curation and teaching. Situated in a practice of interior design, the problematic posed with each of these projects has been '?interior'. Posing '?interior and placing the question mark beforehand produces a stumbling that interrupts the flow of assumptions of interior not only as enclosed pre-existing space but also as the governing image of the subject that pervades interior design practice – the phenomenological subject. '?interior intervenes in the present, to produce a pause and an opening for thinking otherwise.

This paper introduces '?interior into the discussion of perception and 'here and now' to produce a pause and question the centrality of the subject as perceiver and producer of meaning and experience, and to consider different relations and encounters from those of 'to' which invoke subject and object relations, the knower and the known. Shifting to relations of 'in' and emphasising processes of interiorization, spatial-temporal conditions of in-ness such as moods, atmospheres, haecceities and event become foregrounded; subjectivity and objectivity become relational, dynamic, provisional and ecological. And the centred subject becomes a product of interiorization as distinct from the chief interiorizer.

The philosophy of Gilles Deleuze is used as a box of tools for this interior design practice, which has included exhibition design and interior design projects, research, writing and teaching. The title 'inflection' reiterates a sense of 'in-ness' as distinct from a relation of reflection; an attempt to stay open to an outside, to contingency and chance as distinct from a desire for certainty. The aim of these projects is not to arrive at an answer to interior? but to celebrate the potential for infinite connections through practise and the value of posing '?interior each time anew.

Suzie Attiwill is Associate Professor, Interior Design and Deputy Dean, Learning & Teaching, in the School of Architecture & Design, RMIT University; and executive editor, *IDEA Journal*. Since 1991, she has had an independent practice that involves the design of exhibitions, curatorial work, writing and working on a range of interdisciplinary projects in Australia and overseas. Her research has been published nationally and internationally. Her practice currently engages projects and research with Deleuzian pedagogy, trauma, residential care houses, exhibitions and writing. She holds a PhD (Interior Design, RMIT), MA (Design, RMIT), BA Hons (Interior Design, RMIT), BA Hons (Art History / Indian Studies, Uni Melb) and a Certificate in Applied Arts (Textiles).

Thea Brejzek and Lawrence Wallen

Derealisation, Perception and Site: Some Notes on 'the Doppelganger Space'

In their *German Dictionary* from 1838, the brothers Grimm gave an intriguing definition of the term *Doppelganger* as someone who 'is thought to be able to show himself at the same time in two different places'. Rather than focus on the physiognomic aspects of the *Doppelganger*, they proposed a shift toward a topological definition that speaks of a person who is present and is seen in two different sites simultaneously. This paper considers the *Doppelganger* phenomenon from the perspective of site, thus discussing such *buildings that show themselves in two different places*. A reading of such architectural *Doppelganger* space through Freud's concept of 'derealisation' or 'autoscopy' where the subject splits into 'self' and 'other' and observes itself in the act of observation reveals complex perceptual relationships between site and sight. The perception of the architectural double, with perception understood here as an active and cognitive process of our *sense-making* of the world, merges, this paper argues, into a pronounced autoscopic experience when the *Doppelganger* is not identical or complete, but rather defined by difference and constructed across several sites and temporalities. Not dissimilar to the most basic definition of theatre and performative practice – the act of looking renders any action a performance to the viewer – *Doppelganger* buildings come to perform themselves. While the Grimm brothers set the scene for the dual-site architectural double, Freud's self-analysis of the sensation of derealisation encountered on the iconic site of the Acropolis, opens up the scene toward an understanding of the architectural *Doppelganger* as responsible for the perceptual establishment of a performative site of difference.

Thea Brejzek is Professor of Spatial Theory at the Faculty for Design, Architecture and Building, University of Technology (UTS), Sydney. A 2013 Visiting Professor at Bartlett School of Architecture and former Professor of Scenography at Zurich University of the Arts (-2012), Thea Brejzek's research focuses on performative space in all areas of spatial practice.

Lawrence Wallen is Professor and Head of the School of Design at the University of Technology Sydney, Australia. From 2001 – 2012 he was professor at the Zurich University of the Arts. As a visual artist and architect, Lawrence Wallen's research and media installation practice is concerned with spatial simulation, symmetry, memory, composition and duplication.

Collaborative current research projects are concerned with *Site and Perception* and *The Model as Performance*.

Tim Ireland

Naturalising Space

Space is a consequence of social cohesion, effected through constraints and processes of enaction which are (fundamentally) semiotic. Deemed to be a primitive condition created through interaction, space emerges and fluctuates as a result of a perceiving entity's interpretation (which is conditional on the entity's state) of its surroundings and the effect of this impression on the environment: a cyclical process of feedback between internal and external factors which coalesce to effect action. As a morphological process characterised by 'intentionality' space is organisational, in the sense that it orients and affects future actions: a form of *telos*. This argument is predicated on the theoretical biology of Jacob von Uexküll, the bio-cybernetic thinking of Gregory Bateson, the semiotic logic of Charles Peirce and Henri Lefebvre's notion of the social production of space. A biological definition of space and organisation is presented on the basis that the spatiality of an organism is generated through its capacity to sense, and that this offers a new definition for 'architectural-space' tying people, society and environment together on the basis that 'biological-space' underpins architectural-space.

Taking the basic unit of existence to be the organism-in-its-environment, which is coupled to the world through its capacity to sense, and thus interpret its surroundings, this paper argues (from an evolutionary perspective) that 'human-space' may be comprehended by extending the issue downwards to the pattern recognition and control processes of simpler organisms; on the premise that the mechanisms we see at play in single celled organisms lead to higher and higher degrees of sign processing in humans. The spatiality of an organism is affected through its capacity to sense, which underpins perception and capacity to engage with the world. This ability (stemming from our cells) is ambient and distributed, and from this perspective space is 'lived'. Effected through the ability to feel or perceive and affect the environment, space is a (habitual) state of fluidity and perpetual readjustment articulated through an organism's activity and interaction. A living-cell is, fundamentally, a semiotic-niche; meaning it must master a set of signs by which it can control – or maintain – itself, and like all living things acts according to physiological and social needs. Having the capacity to distinguish self-from *nonsel*f a cell is, thus, a model of the ontology of 'self'. The spatiality of an organism and its engagement with its surroundings may thus be extrapolated on the basis of cell/niche (inter)action – after all an organism is, at base, an ecosystem of cohabitating cell formations.

Tim Ireland. A UK registered architect, with several years experience working as a senior and project architect in small-scale private and large-scale international practices. Tim left commercial practice in 2008 to concentrate on his PhD. In 2011 he became a Senior Lecturer at the Leicester School of Architecture where he teaches design studio at undergraduate and post-graduate level. Awarded an EPSRC research grant in 2008 he completed his PhD in Architecture and Computational Design at the Bartlett School of Graduate Studies, University College London. His research is a synthesis of algorithmic and biological design thinking applied to the conception of architectural space.

William Feuerman

Constructed Experiences: An Architecture of Performance

The paper investigates a series of related case studies in art and architecture that alter one's perception of space, blurring the boundaries between disciplines. Projects explored concentrate on spatial environments that provide insight into both the seen and unseen world. Precedents will focus on the interrelation between the physical body, its environment, and the mind and how these relationships are explored, measured and ultimately produced using architectural methodologies and tools.

In its most basic function, a building operates as a sheltering device, insulating, enclosing and sealing a space from the exterior environment. But more than just a static structure to contain, a building "performs" in varying ways. Louis Kahn stated, "Architecture appears for the first time when the sunlight hits a wall. The sunlight did not know what it was before it hit a wall." A building performs to maximise its relationship to identity, climate, people, culture, context and experience.

At Louis Kahn's Salk Institute (1959-1966), the Pacific Ocean appears to be at the plaza's edge, however in actuality by strategically stepping the plaza down at one end, Kahn creates a distortion of place. The expanse of land between the building and water slowly disappears, transforming the building-context relationship into a defined perceptual effect.

In his work Skyscapes (2007-present), artist James Turrell similarly uses an architectural detail to create a spatial illusion. By tapering the edges of a skylight, the thickness of the ceiling is not read. The image presented through the void flattens to become part of the ceiling- that is, until the clouds begin to move or a bird flies overhead.

A range of case studies, from Andreas Pozzo's anamorphic ceiling frescoes to more contemporary examples such as m3 architecture's moire façade at Brisbane Girls Grammar in Australia, are examined not only in terms of their illusionary techniques but their capacity to demonstrate spatial invention and new sensory experiences, challenging conventional architectural techniques.

William Feuerman is the founder and principal of Office Feuerman. William has previously worked at several leading international architecture firms including Bernard Tschumi Architects in New York and Cee/Pfau Collaborative in San Francisco. Feuerman has taught in graduate architecture programs at Columbia University and University of Pennsylvania and has coordinated and taught interior design at Pratt Institute. Since 2012, he has been the Course Director for the Bachelor of Design in Architecture Program and Senior Lecturer at the University of Technology, Sydney (UTS).

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