Inter 4 opens a new chapter into its research of unconventional growth within culturally and physically dense conditions. Continuing our synchronised multi-scale investigation from individual experience and the machine city, this year’s agenda aims to further bridge holistic associative design processes with new and historical forms of architecture as urban agents. Thinking of architectural artefacts as parameterized layering of cultural, historical and social considerations over time, the unit’s research will combine spatial and typological opportunities emerging through contextual readings.

Central questions will feed our research and proposals. How to participate in the historical and on-going equilibrium between urban symbiotic and architectural “objectification”? How can we understand and act on cities as machines through experiential and subjective instruments putting the individual as a central figure of multi-layered contexts?

Using the notion of Skyline, the year will be organised through a sequence - What has been, What may be, What shall become - we will investigate how to act, influence or change transient conditions through key notions. Illustrating and designing through Time will be our ambition to tackle architectural and urban neglected constants through today’s technological possibilities. Through the dichotomy of Vision/Immersion we will discuss contradicting forces in the making of cities between sculptural detachment and interiorisation. Debating Context and Isolation through the forced collaborative nature of urban growth we will question today’s object driven strategies and the role of political might.

Specifically, we will investigate the purposefully coined notion of Skyline as a way to question the city’s spatial and behavioural accident through the user’s experience rather than master planning. In face of the abundance and constant motion of urban living, we will question the balance between order and chance in generating development and various eras of the urban space. Where the quantity and variety of information inherently disqualifies planning, we claim a new encompassing and comprehensive design approach.
SKYLINE

When does a skyline become Skyline? Students’ research will look at defining these differences where we will detach the factual evidence of physical cities from our purposely-coined conceptual notion, cutting through their morphology, sociocultural expressions and historic political arrangements. Skyline reads and expresses a compressed idea of an urban setting, illustrating the detachment between uses and built form.

By growth and change the city is dividing its experience, with on one hand an externalized synthesized image zooming evermore out to produce a symbolic figure. While on the other hand experiencing an accelerating interiorization of urban experience. The growth of architectural expanses – as the word building semantically disappears – defies the understanding of the individual object thus challenging the understanding of the city as a perceivable whole.

Looking at blossoming urban conditions through a rich catalogue of urban precedents, Inter 4 will add a new chapter to its unique interest of dialogue between scales. Questioning the realisation of urbanity through time, students will imagine realistic utopias of architectural artefacts linking the imagined image to the perceived.

We will enrich our repertoire of urban studies by continuing the dialogue between various urban conditions. The parallels between the long established metropolis and emerging supra-urban conditions will be informed by our personal understanding - an experiential knowledge from within, beyond top down approaches. Looking at metropolitan conditions through new forms of perception we will challenge the aerial vision of cities to instead look within the ever-changing combinations of their mechanics and individual experiences, whilst Time will be the imperceptible force we will try to capture.

The urban exists through degrees of clustering with varied degrees of control or accident, dissociation or homogeneity, globalism or individuality. If the built form reflects its makers, the skyline becomes its heading.

Scales of skyline. From the vertical urge of New York to the accidental landscape of favelas, Skyline is the notion from which we first understand and synthesize. It contains the disincarnated urban whole but equally for us becomes a medium of exploration into subjective and personal components. Inverting preconception of distance we suggest Skyline as immersion into several scales of differentiated urban intricacies and functioning.

Our associate memory processes brings up immediate images; the Hong Kong bay from Kowloon, crossing the Brooklyn Bridge, a pier ending with an Opera. But stereotypes do not translate the individuality of our subjective impression, a dynamic equilibrium. Cities are not only a detached postcard but also a full experience, a field of personal immersion. As one moves through New York, the towers bend over, cutting a virtual and changing landscape forcing the perception of the whole – the sky’s outline rather than individual buildings. The Skyline is there, immersive and inhabited. It is equally dynamic as the pedestrian changes it through his walk, the driver through his speed, the plane by its perspective. The Skyline is a varied experience. More often associated with detachment, as the perfect view from somewhere, it can equally be immersive, static or dynamic. It talks about our perception of urbanity.

Gradually moving from defining a personal Skyline to the city, our investigation will lead us to question how we can think of the individual’s experience through the definition of artificial horizons.
The unit’s specific representational tools and ability to graphically master complexity will inform a cataloging of scales and times in exemplary urban situations. Novel forms of architectural answers are needed to tackle the scale and interconnectivity of the dual vision, responding to both immersion and detachment simultaneously. The unit’s definition of skyline will be approached through the question of perception and how space is read and represented. Using the individual’s perception as the basic component of an ascending hierarchy of spaces, we accept space as container but equally as the support of social and cultural representation. Our investigation into Skyline will be one into a rich architectonic element.

Skyline is collaborative. Anti-Monument by essence the skyline opposes isolation. The self-referenced architectural object, the monument, exists as differentiated, in opposition or exaggeration. It’s the object outside the norm, which therefore requires a context to create differentiation. Skyline subdues the monument into a greater notion - it is the context itself.

Investigating the urban morphology through its skyline, means placing the architectural expression - be it formal or typological - within a context of time. Our tool will force us to understand the individual artifact as one in many, as part of an ongoing story. Monument refers to being unique, contrasted or else historic. The skyline defies all these notions forcing for either coordination or exaggerated individuality. These opposing developments have fed both past and present dense urban conditions. Our workshop and cataloguing techniques will provide us with a deep understanding of urban built precedents.

Transversal cut through the city, we will envisage both the symbolic, architectural or engineered object as global or local monument. Defining the one within the whole, we will not focus on the grand and overstated but define and research uniqueness within multiple scale contextual readings. Looking how increasingly the scale creates detachment or merges buildings will help us illustrate our current historical parenthesis where the object of architecture is driving every scale.

In parallel to defining context and originalities, the skyline reveals the intangible context of urban regulations. Existing through organic growth or controlled development, it traces the particularities of topographies and climate, as the logics and forces of the invisible public hand. Paris and la Defense as our prime test beds epitomize both ambivalent relationships to monumental and strong regulatory environments.
Skyline is a Political line. Skyline is a trace of socio political arrangements. More than mere visual consideration attached to guide books, it is a key reading of politics and commercial forces alike. Singapore is a dynamic choreographed city balancing political will with commerce whilst Kazakhstan’s new capital Astana is dotted with the ruler’s buildings of choice as the country’s defining objects. Design can be the sign of power and control. Placing monument and designing cities has been the way for leaders to leave their mark, and remains today the tangible factor of development and economical growth.

Versailles is all about the views in and out from the single point. Carefully placing his bedroom at the center, Louis XIV had the town of Versailles designed as a factual extension of his ‘divine power’. Washington DC continues the idea, with a perspectival skyline to incarnate an incumbent country. The horizontally of Paris is revealing of the public centralism and cultural conformism as much as of the societal transformation of early XIX century. Turn of the century New York embodies the competitiveness of a fast growing young nation. Taking into account technological and historical differences, San Geminiano’s towers equally reflect the medieval society structure beyond reasonable safety. Religions hover over cities to dictate restriction and maintain religious buildings above the “mundane” fabric, St Paul’s protected views in London are a clear example of this.

Today whilst public powers may restrict vertical rise – forming a Skyline is the contemporary ultimate expression of power – as the crafted image of Singapore reveals or how Dubai’s Barj is its pride and Mumbai’s Revelon tower expresses individuality to the extreme. In a pre XIX century fashion, the personal monument reappears in private hands. Today’s monumental buildings are less centralized but probably as expressive of political power. As such Skyline reveals degrees of social implications. The “laissez-faire” of Dubai is the ground for expression of economic power within an open terrain. New York as other regulated gridded cities, is as such a further step of definition where the play board is defined but all can happen. In Paris the absolute of the horizontal line is endlessly debated. In London heated reactions occur from the scattered tall buildings emerging in the central area. Skyline is thus also highly public.

Looking at levels of coordination or regulations - be it physically traced or intangible in the built form - implies studying political lines. Skyline is a political line tracing a graph in time of societal and cultural tendencies.

Skyline is Time. By being seemingly both permanent and in constant evolution, skyline is a reflexion on Time. Cities’ morphologies evolve in complex processes from absolute to organic. If Paris represents the apex of a contrived city planning aiming for an absolute image, iconic favelas are on the other extreme expressions of organic growth. For their intrinsic difference, either generative model is only understandable through a staged and iterative understanding of time. Both the additive construction of individual decisions or the interpretation of the overarching regulatory apparatus embed in opposite ways unexpected results beyond expectations.

Through advanced modelling and simulation tools we will represent and simulate both extremes of contrived and organic growth. The unit has the ambition of inventing new tools to represent and generate architecture through time. Our scale of research using key examples will lead us to establish a unit index. Students will participate in the indexing of urban forces, designing passed and future times from organically clustering situations of non-linear growth compared to the regulated absolute and unchangeable settings.
Continuing our quest into growth within matured grounds, we will observe through the specific conditions of the past, current and future evolutions of cities. Our fields of exploration will be the tension between the historical European city and emerging conditions. Enduring metropolises, which display evolving constraints conflicting with physical restrictions, are the testing grounds for the implacable accumulation inherent to urban settings. These are a testament to the enduring generative qualities of density - be it political or physical – maintaining continuous appeal in a manner somewhat absent from current burgeoning conditions. Our lab-cities have long been in self-imposed overload and subsequently mastered a constant need for reinvention.

Individual research will look at particular situations in quest for the definition of a personal Skyline within the urban whole – spaces displaying the unique balance of minute design control and constant, but seemingly arbitrary, usage and evolution. As an evolving notion, Skyline will be a dynamic and personal fabrication, a time based panorama of individualities. Proposals will merge from specific representations and mappings of a mutating element that stems from the instant to historical, the minute to the bigness: The skyline from experience to strategy. Suggesting new animated representations of change, projects will envisage prospectively what can become of the city that wants to remain flat and perpetual: Paris.
Imaged and Imaginary. Paris is both Imagined and Imaginary. Beyond touristic and cinematic romanticisms, the fantasized city has always surpassed itself through new futures - challenging a mist of announced doom. Eluding its makers, its authorities and its inhabitants alike, the deceptive museum-city has multiple and parallel lives.

Paris is an interiorized Skyline one that is inhabited. But this classical unique situation is in dialogue with the quintessential vertical clustering; its twin city, “La Defense”. Built on an artificial platform irrigated by networks – it’s the signature modern vertical skyline balancing the horizontal perennial city. Expanding our views from one to the other we will tackle the two ages of Paris, its two utopias.

The Skyline of Paris is therefore dual. It is the flat museum city constantly reinventing itself in dialogue with a contemporary vertical expression of power that feeds it. Linked by a virtual axis, it’s the Paris expressing the strong authoritarian control versus the one displaying private and commercial prowess. As such, dual Paris also concentrates the Skyline of detachment and one of immersion within its mist.

As emerging global megacities become the laboratories to our urban future we will form parallels between long established metropolis and emerging supra-urban conditions through which we will imagine a future for both through varied determinisms; either political, formal, economical or sociocultural. Extensively using Paris we will counter balance this immersion with a trip to Singapore and cataloguing of international examples. Our dialogue will be held between iconic metropolises and architectural icons, cross learning geometries, cognitive usage, forms of growth, cultural modes of living and architectonics.

The unit will dwell on demanding situations, where contemporary developments are always questioned against multifaceted considerations. Looking at metropolitan conditions through new forms of perception we will challenge the aerial vision of cities to instead look within the ever-changing combinations of their mechanics and individual experiences. Within the culturally rich European conditions we will bring our collected knowledge of emerging metropolitan conditions as mode of proliferation to anticipate urban futures.
METHOD

Creative oppositions. True to our constant ambition, we will stretch scales and times to generate creative oppositions. Through the purposely-created tensions we aim at suggesting impossible combinations and paradoxical modes of thinking. Pursuing our interest in considering the urban through the detail, we look at the city’s spatial and behavioural accident through the user’s experience rather than master planning. Time, as the recording of change will be clashed with the perception of architecture as static. Through our work, antagonisms will become creative tools to propose novel ways of considering our discipline.

We will start by thinking of spatial perception through the reverse engineering method commencing by the abstraction of urban space as an expression of the multitude perceived by the individual – a personal skyline. The exercise will aim to extract in two sequences experience and grammar, to highlight the layering of information and decompose the physical attributes. Error and misreading will help us define the balance between order and chance in representational techniques and design processes.

Taxonomy. In parallel, we will build a unit large catalogue of urban situations with notable skylines. With an aim to categorize these into typologies to extract inherent patterns, we will acquire an understanding of control versus emergence, as generative of form. At this stage, the unit will be introduced to parametric tools to translate these observations into systems.

Immersion. As epitomical example of “outdoor” fabric, Paris and its fraternal twin ‘La Défense’ will be our preliminary setting. Introduced within an initial discussion on perception, the city will inform our move from pictorial representation to semiotic architectonics. We will study the play of scale and time. Along the way we will learn from spatial, compositional and pictorial mastery displayed throughout.

We will also immerse ourselves in Time (with a capital T), challenging the view that the uniform ‘museum-like’ city remains unchanged. We will study a piece of architecture and its evolution, in an attempt to depict Time. And look into other disciplines to learn from and get inspired to develop our own novel tools to draw the indefinite, the continued progress of existence. Cinema, graphic design, animation, sculpture, painting will be our resources. Proposals, stemming from individual agenda merging grammars and systems, will suggest strategies for new typological hybrids simultaneously static and dynamic.

Jumping in scale for our final proposal but reinvesting individual perception within the large scale, we will propose to define techniques for considering the 4th dimension. Layering contemporary performative and parametric paradigms with an invested consideration for cultural reading and phenomenological experience, we will draw and model Time as a projection of the Skyline to be. We will question where, within the harsh narrative of reality, can the designer situate himself by iteratively thinking of the present through the past and the future? Between the generic vision of urban forms and individual perception, the proposals will emerge in intersecting sequences, from objective to subjective, urban scale to detail – we will invent new types of drawings embedding time as a component of design.
Design process. Can process engender meaning? The Unit’s attitude towards the use of parameterised methodological and design approaches enables the branching of architectural design into multiple terrains and therefore heightens the proposal’s richness. It offers the potential to define layers, from narrative to environmental optimisation, without affecting its ability to respond and generate shifts in existing conditions. Pursuing our particular interest in architectural representation, our process-based research will be our advanced tool to fulfil this year’s ambitions.

Inherent to our design process and methodology will be the development of individual modes of representation of form and data. For this year’s research we will use time to engage the unit’s appetite for codified drawings and diagrammatic models. Proposals will embed links between graphic notation and spatial conditions as a way to propose a generative form of information. Looking at the careful assimilation of environmental factors and a fluid adjustment to the discontinuous city condition, we will aim to record design as the mediation of accumulated local constraints; a negotiation of contextual information resolved by hierarchic exploitations of scale through time. Rather than a top-down compositional approach, we will harness the sum of punctual or iterative adjustments balancing constraints and functional needs.

We will endeavour mixing the performative with experience and transform technological potential into accessible and augmented environments through cognitive recognition.

This iterative and rigorous knowledge building process will accompany the development of tools in relation to individual and unit wide researches. We will differentiate between skills and knowledge, and as such acquiring techniques will take place within a broader comprehension of their use and conceptual ramifications. Individual research and unit conversations will be recorded and compiled as both part of the personal portfolio and unit database, and editing will be encouraged along the year to articulate these records.

Throughout the year, workshops and collaborative design phases will be enriched by unit conversations to advance collective examination and cultural analysis. Additionally, we will organise an array of external interventions for lectures and workshops related to the topics discussed. This will be supplemented by specialized and technical expertise in accordance to developing projects’ interests throughout the year.
Notion of Time define this year’s sequence of research. From understanding the evolutionary natural of generative procedure to the inclusion of change in design processes, time will be our lead to understand expressions of political and societal power, contextual mapping and historical precedents. What has been occupies the first part of the year to establish a theoretical and instrumental basis for an in-depth study of context in the next sequence: What may be. The last part of the year is dedicated to prospective research on What shall become. The unit’s highly structured methodology promotes individual proposals emerging from collaborative approaches, using the unit as a medium to refine and exchange through design. A sequence of tasks will be closely associated with dedicated specialised workshops and unit discussions. The seminars and workshops are scheduled to improve the students’ knowledge of contemporary techniques of modelling, fabrication and representation whilst the discussions will help refine a broader theoretical and historical agenda.

What has been. From time immemorial to the instant, the first part of the year will explore urban and personal Skylines through regulatory combinatorial mechanics and measure of subjectivities. Exploring representational tools, we will first illustrate a systemic understanding of the political, societal and formal variables of both organic and planned urban growth to form the unit’s catalogue of precedents. In view of translating and manipulating urban morphologies, we’ll decompose regulatory and accidental forces in light of their long-term generative nature through a parametric modelling workshop. In association with the Parisian exhibition centre, we will subsequently venture into the Parisian urbanity through its imagined and imaginary present. Studied situations will lead to the understanding of its fabric as a trace of planning in time and a constant reinvention. Looking at evolving typologies we will endeavour to generate hybrid readings linking distant times from the planned past to the vibrant present. Along with our unit-large catalogue, a series of seminars will accompany the term. We will study the emergence of XIX’s century Parisian urbanity and its bursting post World War II reinvention to provide us with tools to question perception versus reality. We will also take an in-depth look at Cinema, learning from its abundant tools and narratives dealing with the depiction of time. Tracing relation between form and social organisation, the term will culminate with individual time machines. Architectural artefacts combining morphology, determinism and nonlinear behaviours will condense times and inform the technical study.
What may be. The second term will be centred on individual proposals extending our understanding of contextual urban reading in a dialogue between measured physical space and experiential moments - The personal moment within the mechanic whole. Expanding our mapping of time, we will tackle the two ages of Paris - the two utopias of the city museum and the active platform – La Defense through the reading of Skyline. Mapping of environmental input and geometries will be informed by workshops dedicated to animated representation of experience in time. Moving from static representation of socio-morphologies through time, the new sequence will consider dynamic reading in the travelling guide of architecture’s grand perspective. Students will build their proposition as adaptive responses to a specific and finite site while forming their personal vocabulary of forms, types and texture, through the abstraction of their chosen physical context. In this dual exercise of research and design, we will be looking at context combined with architectonic detail and sculptural form for their ability to generate differentiations of public or private Skyline.

Within their chosen site, questioning the insertion of new urbanity, students will reinterpret the notion of Skyline, as a three-dimensional field with differentiated usages of geometry, material, proportions etc. which will respond to both a static and dynamic context.

What shall become. The third term will focus on the elaboration of representational tools that evoke time as an inherent element of architectural thinking. Our endeavor of tracing architectural and urban time will generate proposals for the tracing of a Skyline as societal evolution, understanding of the past, reflecting upon the present and hinting at the future. Challenging the static nature of our representational media we will find ways to illustrate mutations, shifts and transformation as time based associations and synthesize time into multi-layered representations. We will develop drawings and models that collapse the 3rd and 4th dimensions into 2d, and thus depict the dynamic, the evolutive nature of the urban fabric in an attempt to offer a renewed perception of the city.

Outcomes will take the form of novel strategies thinking simultaneously about detachment and immersion – the whole characterised through experiential filters. Time based scripts for a new Parisian age will think the evolution of its skyline as actively metropolitan and personal. Questioning notions of controlled unpredictability, individual arguments and design proposals will be re-evaluated for their potential to enrich the urban system with a new temporal input. A study trip to Singapore will offer a contrasted situation to this year’s Parisian adventures.

Throughout the year individual work will be enriched by unit conversations, matured through the year’s work, and a series of encounters with graphic designers and editors to prepare a refined portfolio and sophisticated presentation.
KEY DATES

Key dates T1:
Week 2 – Brief 1.1
Week 4 – Pin-up - Brief 1.2
Week 5 – Workshop – Time in Cinematography
Week 6 – Unit trip to Paris 1- Brief 1.3
Week 8 - Pin-up- Brief 1.4
Week 10 – Workshop – the parameterised skyline
Week 12 – Final term Jury – 17th of December

Key dates T2:
Week 1 – Brief 2.1
Week 3 – Pin-up - Brief 2.2
Week 4 – Seminar  – Paris from Haussmann to today
Week 5 – Unit trip to Paris 2- Brief 2.3
Week 8 - Pin-up
Week 9 – TS3 Interim Jury
Week 11 – Intermediate Previews & End of term Jury

The unit trip to Singapore will take place during the Easter break.

Key dates T3:
Week 1 – TS3 final submission - Brief 3.1
Week 2 – Optional trip to Paris 3
Week 3 – Pin-up
Week 4 – Workshop  – Graphic design and portfolio editing
Week 6 – End of year Jury
Week 7 – 2nd years End of Year Reviews
Week 8 – 3rd years Final Tables
Week 9 – 3rd years External Examiners
TECHNICAL STUDIES

The technical studies are inherent to Inter 4 work and proposed design processes. Our carefully acquired understanding of geometries, materiality, phenomenon and techniques uniquely provide each student with a specific and personal interest to develop from early stages up to the completion of the proposal. TS are embedded within the refined development expected by the unit. The gaining of knowledge is helped by the unit’s rule based approach and the clear settings of variables.

This year’s consideration of Time offers an array of potential TS interests ranging from the study of a physical element through time, to the historical development of an architectural component or the technicalities of a phenomenological experience. Students will be given the choice to drive their TS into one of these directions supported by the unit’s three-dimensional diagraming technique. The combinatorial qualities of your interest will be the basis to develop further studies with a strong support by the TS academic team.

From Term 1, a catalogue of Time-based research will be available to students either through its historical components or cinematic considerations. We will require students to develop an initial written brief by the end of Term 1 in light of the studies carried through the analysis of the Parisian fabric and the manipulation of Time. Both technique and effect will be understood within the argument of your precedent researches and prospective interests.

Students will extract the links between material, form and performance – be it structural or perceptive. Encouraging the use of digital manufacturing techniques, your research will move from the abstraction to the physical modelling of a chosen detail/conditions.

This chosen interest will be the basis for your following exercises and proposition on your chosen site, with initial research and planning of studies laid out at the beginning of Term 2. Both general research and physical testing should be part of the investigation leading to a large-scale model accompanied by a well structured study.

Your TS should promote physical modelling and explore the use of digital fabrication in line with the unit’s systematic approach and design parameterisation. As such, the inherently iterative development should display variations – successful or not - to suggest detailed ways of achieving a translation of conceptual adaptability.
Self-contained city communities
Singapore’s city planning is inspired from gardens city by Sir Ernest Howard, which is initially proposed for working class’s habitation, combining house and garden.
TUTORS

Nathalie Rozencwajg studied and has been teaching at the AA since 2004 as well as being the coordinator of the AA Visiting Workshop in Singapore. She is cofounder of RARE architects, based in Paris and London. The office emphasises work at different scales integrating research, design and experiment. Working on public and commercial project in Europe and Asia, RARE embeds prospective works and writing such as the recent contributions to Routledge, Braun and Birkhauser publications. Lecturing worldwide, Nathalie has been commended as leading emerging women in architecture by the AJ award.

Michel da Costa Gonçalves studied in Spain and France, and later graduated from the AA Emergent Technologies & Design programme. Cofounder of award winning office RARE architects, RIBA award and RICS Project of the year recipient. Michel is a former project architect for Shigeru Ban, notably on the new Pompidou museum in France, and AS in Paris working on various prestigious international projects. Director and author of ‘City’ series for Autrement publishers and contributor to The Art of Artificial Evolution / Springer Natural Computing Series, he has previously taught at the ENSAPL and is coordinator of the AA Singapore Workshop since 2006.

Recipient of a RIBA award, RARE has been commended amongst the leading emerging practices worldwide. The office was awarded the RICS Project of the Year Award and ArchDaily 2011 Project of the Year for the Refurbishment for Town Hotel in London. RARE is working on large-scale projects exploring advanced fabrication methods notably in the artic circle and South-East Asia. The office’s work are been exhibited at the Royal Academy of Arts and is broadly published internationally notably featuring in the latest Taschen’s Architecture Now! 8 and the recent volume Façade published by Braun.

www.r-are.net
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ADDITIONAL

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