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**END-OF-YEAR  
PRESENTATIONS**

**WEDNESDAY,  
29 JUNE 2022**

Architectural Association – PhD Programme

*End-of-Year Presentations*

Wednesday, 29 June 2022

<https://aaschool.zoom.us/j/88696125973>

36 Bedford Square, Ground Floor, South Jury Room

10.00 George Jepson  
10.40 Shiyu Jin  
11.10 Duong Nguyen  
11.50 Mathilde Redouté

12.30 – 13.40 LUNCH

13.40 Tian Pan  
14.20 Enrica Mannelli  
15.00 Trisha Sarkar  
15.40 – 16 SHORT BREAK  
16.00 Claudia Nitsche  
16.40 Anna Font  
17.20 Lola Lozano Lara

George Jepson

## SHINING STEEL TEMPERED IN THE FIRE

### The Architecture of the Factory, Manchester 1760-1915



*View of a House at Belzie. Jan Siberechts. 1696.*

This thesis seeks to understand the historic precedents – architectural, legal, logistical – that outline a much longer-form history of industrialisation, centered around the most fundamental node of this newly consolidated system of production: the factory itself.

Understanding its roots as already emerging across the 12th century Mediterranean, this thesis seeks to theorise the factory as less an architecture than a system of relationships. In its role as a node at the core of a series of global networks of trade, the factory both facilitated and is evocative of an emergent conception of logistics that allowed the English to become the world's trade superpower. By theorising the factory as a logistical apparatus, its efficacy in the rise of Britain's domestic productive capacity in direct concert with its colonial endeavours of territorial expansion and resource extraction is made apparent. By taking the factory system of Manchester as the eventual object of research, the factory – and fundamentally the labour embedded within it – will be shown to be the essential condition in the transition from mercantilism to capitalism; fomenting the conditions for a logic of capital accumulation the consequences of which lay bare in the 21st century organisation of labour and production and, fundamentally, in the distribution of political power.

#### Thesis Structure

- I. A Genealogy of the Factory: From the Mediterranean to Manchester.
- II. Legislation and Law: The State and Crown as Agents of Industry
- III. Early Mills: 1760-1800
- IV. Cottonopolis: The Rise of an Industrial Powerhouse, 1800-1890
- V. The Second Industrial Revolution: Infrastructure and Decline, 1890-1915

#### Abstract of Chapter II

##### Legislation and Law

##### The State and Crown as Agents of Industry

The second chapter of my research outlines a series of preconditions necessary to the British industrial revolution. Through this I seek to reveal the role of both the state and crown in the active construction of the conditions that allowed for England, through the consolidation of its naval power, its colonial empire and the capital accrued from trade across the Atlantic Triangle, to industrialise first and most widely.

These precedents include theories of medieval agricultural industrial revolutions, which themselves presaged the organisation and distribution of labour integral to the logistical efficacy of the industrial revolutions proper and the emergence of the trades corporation as an agent within the race for global trade monopolisation. Particular focus is paid to the introduction of a body of legislation - including the early Navigation Acts of 17th century, the Factory Acts of the 18th and 19th centuries, and the series of 'Poor Laws' that buttressed them both - that entrenched both the process of land enclosures that had been taking place across Great Britain for centuries as well as the consolidation of a new proletarian class on whom the ruling classes were entirely reliant to spin and weld and weave their way to a level of wealth the world had scarcely seen before.

The intent of this chapter is to outline the political conditions that fomented the transition from a mercantile, monopolistic approach to global trade to a free market liberalism, spearheaded by the Manchester Liberals and Abolitionists, that came to define the conditions of trade for the next two centuries.

Shiyu Jin  
READING LILONG  
A Postcolonial Approach to Typology



Plan of “indigenous” housing in Algeria, François Bienvenu. Source: *Chantiers*, no. 3 (March 1933), 267.

Lilong is a distinctive housing typology in Chinese semi-colonial history with the features of both the Western terraced house and traditional Chinese courtyard house. While postcolonialism attempts to establish a new architectural framework to incorporate architectural discourse of the East, typology and the concept of type seem mainly discussed in the West. Lilong, without a deep investigation of socio-spatial production and typological evolution in the current literature, is typical to explore a new typology by postcolonial approach. The thesis aims to explore how the Lilong block, as the distinctive residence during Shanghai’s semi-colonial period, was generated during the confrontation of China and the West and attempts to reconstruct a new typology based on a new concept of type that captures a commonality in architectures between the West and the East. The research exploits methods in typology to analyse physical forms and spatial structures of Lilong blocks and combines archive research and ethnographical methodology to examine the socio-spatial practice, performance, stories, and narratives in the Lilong neighbourhood. It also uses mapping to bridge the linkage between (im)materiality and socio-spatial practice to establish the socio-spatial production of Lilong. Through the comparative study between different types of Lilong and its precedent domestic architectures in China and the West, the study establishes a typological development process of colonial architecture. In this way, the thesis quests for a new concept of type based on commonality in architectures between the West and the East and explores a corresponding typology that helps clarify the confrontation and acculturation in architectural development embedded in colonial history. Therefore, the research will contribute to the socio-spatial production of Chinese domestic space, inspire a new typology by postcolonial approach, and catalyse an architectural framework accommodating the plurality of existence between the West and the East. and catalyse an architectural framework accommodating the plurality of existence between the West and the East.

*Thesis Structure*

- I. Postcolonialism and Colonial Architecture*
- II. Typology and Type—from the West to China*
- III. Socio-Spatial Production of Shanghai Lilong*
- IV. Reading Lilong: Toward a Typology*

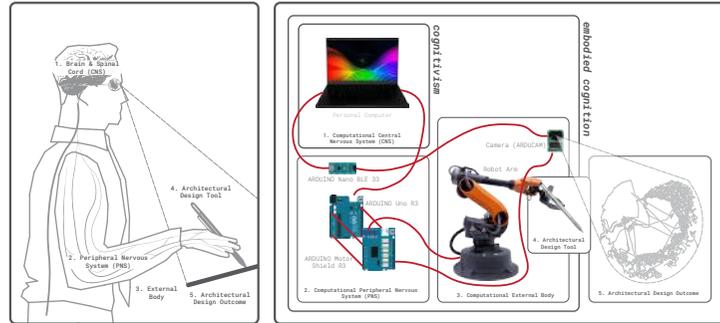
Abstract of Chapter I.

*which will be presented on Wednesday, June 29*

Postcolonialism and Colonial Architecture

From the relationship between the colonizer and colonized, this chapter will review essential concepts and critiques of postcolonial theory. Despite the abundant literature and sometimes mutually conflicting theories in the postcolonialism itself, the chapter will attend to some critical aspects as to how to represent otherness, how to recover the subject of the colonized in the dialectical relationship between dominance and resistance, and how to deal with cultural specificity and capital universality. These aspects will open a broader horizon for reflecting on the theoretical and historical writings in architecture, especially in those previously colonized parts of the globe. Then, postcolonialism in architecture and urban study will get examined. Theoretically, the research will focus on the significant aspects of the postcolonial theories mentioned above and explore architectural writings and urban studies that embody these thoughts and critiques of postcolonial theory to respond to the relevant theoretical issues or reconstruct some architectural frameworks. The research will also explore if any ideas and concepts discussed in the current postcolonial theoretical framework are already introduced or appropriated in architectural frameworks. If so, further examine their validity and reflect on their critiques. Practically, it will give a basic view of the overall built environment including both architecture and urban landscape in the colonial periods. The research will pay more attention to the debate between specificity and universality, the representation of otherness in architecture and colonial settlements during the confrontation with the colonizer.

Duong Nguyen  
MINDS, BRAINS &  
ARCHITECTURAL DESIGNING MACHINES:  
Simulating Human Spatial Thinking when Designing Architecture  
through Computational Modelling



Human-Machine Designer Modelling: A Side-by-side Comparison

The understanding of the *mind* and how it operates has the interest from many knowledge domains, considering its wide-ranging implications. In the context of the *architectural design process*, architectural pedagogy and practice benefits in seeing the relationship between the mind and the design outcome, if not also to satisfy that need, of self-knowledge.

John Searle in *Minds, Brains and Programs* presents the view that ‘the mind can be represented using computers’, formulating the thesis’ underlying research methods. ‘Computational cognitive modelling’ a type of AI, is this computational method; the aim: to simulate the architectural designers spatial information processing procedure, also known as their *spatial cognition*, when they design architecture. By satisfying this aim, two research questions can be answered, they are: “can computational cognitive models...”

- 1) ‘... *precisely predict* architectural designers spatial cognition when designing architecture?’
- 2), “... *analyse and reveal* the relationship between the architectural designers’ spatial cognition and their design outcome?’”

As these computational models are abstractions and simplifications based on theorisation of what the original is and how it operates, the responses to these two research questions hinge on the *art* of appropriate identification and re-representation of elements, with significant contribution to the spatial cognition when architectural designers design. Currently, core abstractions are considered to be the dynamic co-interactions of architectural designers’ *brain, arm and eyes*. A combination of architectural designers’ data capturing and the researcher’s programming forms this dynamic co-interaction, to be held between the computer, robotic arm, cameras, and thus corresponding to each of these components respectively. Moreover, the design process is presently specified with the task of designing a siteless, materialess residential building through *hand drawing* plans and sections using pen and paper. Abstracted general aspects relating to spatial cognition are cross-compared between the human and machine designers for evaluation.

*Thesis Structure*

*I. Introduction*

The Mind in the Architectural Design Process

*Literature Review*

*II. Design Studies: between Process, Cognition, Thinking & Modelling*

Non-Computational Theories, Models & Methods for Design Cognition and Thinking

*III. Computational Cognitive Modelling in the Architectural Design Process*

Theories, Models and Precedents of Architectural Designing AI & Computational Modelling

*IV. Spatial Cognition Modelling in the Architectural Design Process*

Computational & Non-Computational Theorisation, Frameworks  
& Design Precedents of Spatial Cognition in the Architectural Design Process

*Methodology*

*V. Design Experiments Stage 1: PhD Researcher as Test Subject*

Initial Data Collection and Proof of Concept Computational Cognitive Modelling  
of Architectural Designing Spatial Cognition

*VI. Design Experiments Stage 2: Small Pool of Test Subjects*

Developing General Principles of Spatial Cognition when Designing Architecture

*VII. Design Experiments Stage 3: Larger Pool of Test Subjects*

Finalisation of Spatial Cognition General Principles, Computational Models’  
Predictability Testing & Relationship with the Design Outcome

*VIII. Discussion & Conclusion*

An overview of the whole thesis  
will be presented on Wednesday, June 29

Mathilde Redouté  
ESTOVOIR

## Understanding the idea of *polis* through commoning



Bruegel the Elder, Pieter. *The Harvesters*. 1565. Oil on wood. 116.5 x 159.5 cm

The thesis seeks to understand the meaning of “Commoning”, as a term being overused over time, and thus, emptied of its meaning. In October 2009 Elinor Ostrom received the Nobel Prize in economic science for her work on the “Analysis of economic governance, especially the commons”, and by doing so became the first woman to win this honor. The choice is not trivial as it occurred one year after the 2008 housing crisis confronting the flaws and the finiteness of our ways of living. The question of cohabitation through the right to access its resources has changed the geography of the world. In that sense, architecture, as an organizational apparatus, participates in a history of techniques and means by which the concrete shaping of our societies has taken place.

Originated from the Greek *oikonomia* meaning “household management”, the field of economy contemporary defines the management of scarce resources or all the human behaviors related to the production, distribution, and consumption of goods and services. By turning these last into commodities through the processes of enclosures, market relation has become the norm by slowly dismantling and eliminating the manifolds of commoning. But these actions also ironically revealed its existence, as well as commoners that represent an entire class structure deeply dependent on the products of these natural resources. The fight for subsistence revealed the direct link spatial and social system plays in the (re)production of a large part of the population.

“How to live together” is thus one of the oldest but most relevant and pressing questions humans have asked themselves. Having defined Commoning as an active debate, the thesis will investigate the historical role it plays in the three spheres of existence: territory, work, and labor.

## *Thesis Structure*

- I. Commons, Common, Commoning: From a noun to a verb*
- II. Commoning the land: From being to owning*
- III. Commoning the production: From commodification to cooperation*
- IV. Commoning the reproduction: From invisible to valuable*

## Abstract of Chapter II.

*which will be presented on Wednesday, June 29*

## COMMONING THE LAND

### From caring to owning

Enclosure is the historical nemesis of the commons in its destructive way leading to expropriation and privatization becoming the norm in Europe. Even though the French contest was the most striking one in the absolute course of its actions, the logic of enclosure could historically be traced back to England where the market-based system tackled feudal society first. But it is far from being a single absolute autonomous process. On the contrary, by separating the worker from the means of production, evicting labourers from their homes and removing the grass from the herd, enclosure movement forced the landless population out to the city, opening a breach to urban industrialization. What lay in the background are dominant historical trends suggesting a change in perception led by utilitarian and liberal beliefs to keep the working-class under surveillance. Even though leading political figures emerged to protest, their voices and actions were powerless against the immense state machinery triggered by fear of demographic development and the growth of trade. The notion of capitalist value slowly replaced the one of used value embodied by customary rights and deeply rooted in local culture. The manifolds of commoning (right of way, gleaning, grazing area...) was slowly dismantled and eliminated to establish an efficient and rational exploitative system, supported by the ratification of legislation and tax applications. Through enclosure, commons became visible, as well as commoners that represents an entire class structure deeply dependent on the products of these natural resources. The fight for subsistence revealed the direct link spatial and social system plays in the (re)production of a large part of the population. By comparing the causes and effects of this phenomena in England and France, I will trace the spatial and social history of enclosure, accompanied by agrarian experiences of which we must understand both the hesitations and a growing radicalism that has reshaped Europe to establish private property as the norm.

Tian Pan  
Self Identity and Collective Unconscious  
The Construction of Chinese-ness in the Pagoda



Pagoda Fountain at Alton Towers Resort

How can one assume China, or architecture of China, or China as architecture, as a 'subject', which can be characterized? What is the alternative play between the subjective and objective conditions of 'constructed Chineseness'? This thesis suggests a hypothesis that 'Chineseness' is both a characterization and a subjectification, which have been instrumentalized through architectural process, and become part of the construction of social realities and cultural systems in national and transnational contexts.

This thesis traces the process of construction of Chinese-ness in several interrelated pagodas: The Porcelain Tower of Nanjing, The Pagoda Fountain at Alton Towers Resort, The Chinese Pavilion at Wrest Park, and The Great Pagoda at Kew Garden psychoanalytically and argues that the construction of Chineseness in these pagodas ultimately fulfills the void of modernity both in Europe and China. In Europe, the void is the repressed sensory experience and the separation from nature and god caused by rationality in the Enlightenment. In China, the void is the conflict of transplanting the Western experience of modernization onto the local conditions. The form, material, and motifs of the pagoda are the symptoms of these voids.

*Thesis Structure*

*I.A Delicate Pineapple*

European Encounter with Porcelain Tower at Nanjing

*II. Eating, Digesting and Splitting*

British Introjection of Chinese Pagoda

*III. "Cooking" Modernisation*

The Reconstruction of Porcelain Tower at Nanjing

**An overview of the whole thesis**

*will be presented on Wednesday, June 29*

Enrica Mannelli

## The Social Factory: architecture and social movements from autonomy to precarity. Italy 1899-2020



NEW MUSEUM neon by "Kings" at MACAO, Milan 2012

This research examines the evolution of the city as a *social factory* and the social movements' protests related to this evolution, focusing on the Italian case study. The city as a social factory is understood as a system driven by capital and profit in which *production* is not limited to the workplace but is instead extended to the whole society. This extension occurs through the commodification of the spaces in which urban life takes place in order to fulfil the main goal of reproducing the labour force – that is, of making people productive.

This thesis argues that, in order to understand the social factory, it is important to focus on the passage from Fordism - when the city was produced according to the factory - to Post-Fordism, when that city became the space of production, resulting in the social factory. Within this shift, creativity played a pivotal role: it was the way in which workers reclaimed their autonomy, their own space of action during the 1970s. Later it was co-opted by the system that happily dismissed Fordism and embraced all those values that were put forward by the creative workers resulting in spaces dedicated to its production having a key role in urban planning as well as in the related exploitation of freelance workers.

Within this framework, Italy represents a fast-paced laboratory while the Italian movement of Autonomy produced extensive theoretical and political contributions on this topic. Over the decades, the pursuit of autonomy, both by capitalism and by political organizations, took many forms: the mass-worker strikes in the 1960s; the refusal to work and the project of self-valorization of the 1970s; and, in the 1980s, the act of squatting in abandoned buildings and the establishment of the *Centri Sociali* - the self-managed occupied spaces - where culture, politics and creativity could be supported.

Ultimately, this thesis investigates the role of urban policies within the Roman area in enabling a system of social factory workshops. The latter imagined as a critique of the *Centri Sociali* and an opportunity to challenge the relentless nature of capitalism.

*Thesis Structure*

- I. The factory and the city: Fiat in Turin and the rise of the mass-worker
- II. Working Slowly: the rise of the socialised worker in late 1970s Bologna
- III. From the benches to the *Centri Sociali*: the autonomous subjects and their *islands* of desire
- IV. Freelance jobs and the commodification of creativity. *Deregulation* in Milan 1990s-2012
- V. The social factory: a project for Rome

### Abstract of Chapter IV

*which will be presented on Wednesday, June 29*

### Freelance jobs and the commodification of creativity.

#### *Deregulation* in Milan 1990s-2012

After a long process of public consultations, on the 5th of May 2012, the *Art Workers* occupied the Torre Galfa in Milan - a 31 storeys point block tower built in the late 1950s that lay abandoned for 15 years - to establish MACAO, the New Centre of Visual Arts. After 10 days of occupation, MACAO moved to a former slaughterhouse not so far from the centre of the city where it operated until 2021 as "an independent centre for art, culture and research, avoiding the creative industry paradigm and trying to innovate the old idea of cultural institutions."

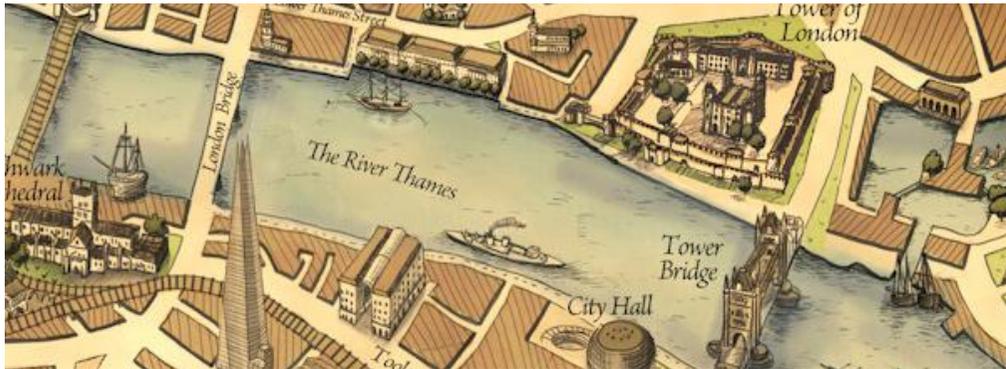
The chapter focuses on the experience of MACAO as a big leap in the Italian history of occupations. In order to do so, it looks at the three issues on which the *Art Workers'* protest focused. Firstly, the precarious living condition of the knowledge worker as a freelance worker that, claiming autonomy, is exploited for his *flexibility* - a pivotal skill in the Neoliberal economy. Secondly, the speculation of city territory resulted from the process of *deregulation* that characterised the urban transformations of Milan's former industrial areas into new luxury estates financed by private capital or into creative districts through territorial marketing operations that exploited freelance workers' independent and creative activities. Thirdly, the reading of the *city as a commons* that resulted in citizens' claim for use and self-management of abandoned buildings to keep them off the real estate market.

Within the Italian context in the beginning of the 21st century, MACAO has been the most resounding among many acts of appropriation of abandoned buildings to give room to self-managed cultural centres - known as *Nuovi Centri Culturali*. The chapter looks at this phenomenon on the one hand, as a project of resistance to private real estate exploitation of urban areas, and on the other hand, as an act of coalition knowledge workers that sees the opportunity of *new cultural welfare* in self-managing *islands* within the city territory.

Trisha Sarkar

## CULTURAL HYBRIDS

### Collaborative Landscapes of Governance, Heritage and the Historic Urban Environment



A. Butler, T. Zhang *The Grand Map of London*, 2012.

The advent of modernity has been characterized by ephemerality and transience that opposes the notion of sedentary or settled systems and configurations. This is reflected in the territories and boundaries that are formed, deformed, and reformed as a perpetual process of continuity and growth. Liquidity in power relations, of territories and border conditions, in custodianship and jurisdiction, has emerged out of a “*melting of solids*” - a disintegration of finiteness that was perceived to limit individual freedom, agency and collective action. The state of solids contested in the era of modernity are bonds that weave individual choices and freedom in collective projects, and the reconfiguration of patterns of communication and co-ordination between individual policies and collective political action. “*Configurations, constellations, patterns of dependency and interaction*” have undergone a transformation renewing boundary relations, limits, responsibilities, and agency to create new matrices that redefine professional spheres.

This research proposal underlines the need to create and employ comprehensive frameworks that discern the functioning of governmental and non-governmental bodies in the protection and care of historic environments. It will study the ensemble formed by public and private institutions, procedures, analyses, and the tools of design governance that allow the exercise of this very specific albeit complex form of power in the care and protection of London’s heritage and historic environment. Through selective case examples, the study will assess the impact of institutional structures on the implementation of conservation strategy and analyze past legislation and policy that has influenced practice in the heritage sector. It will address contemporary issues that ail the industry influenced by the current political climate. To conclude it will develop a model for the analysis of future legislation and policies in the field.

*Thesis Structure*

- I. Toward a World Heritage: A Transnational and Crosscultural Phenomenon*
- II. Contested Heritage: Cultural Narratives and Collective Agency in the City of London*
- III. The Second Nucleus: Conservation Strategies in the City of Westminster*
- IV. Institution and the State: A Manifesto for Design Governance*

### Abstract of Chapter I

*which will be presented on Wednesday, June 29*

## TOWARD A WORLD HERITAGE

### A Transnational and Cross-cultural Phenomenon

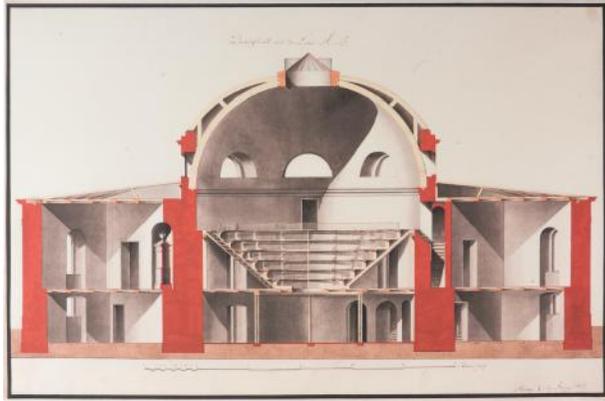
Heritage, a global phenomenon has influenced design and construction with a powerful cultural influence on contemporary global societies. With origins in Euro-American ways of articulation through priority and precedence, a late modern perspective has morphed the understanding and application of heritage values since its conception. The globalization of heritage seeks to identify, articulate and respond to developing narratives that frame the discussion around interpretation, use and associations between colonial heritage and a post-colonial public. In contemporary society, globalisation remains contested as a process crafted through cultural narratives and collective memory, dissonance and decay, in order to discover opportunities for exchange, and encourage sustainable economic progress.

This research explores the globalization of heritage as a socio-cultural, political, and architectural movement that inspired the creation of societies dedicated to the administration of historic buildings and landscapes across nations. It analyzes the origins and intention encapsulated in this endeavour and the effects of state intervention on the perception of national inheritance and cultural legacy. The generation of a global consciousness towards the concept and practice of heritage has encompassed material culture and tradition. The analysis spans across varied contexts to include contrasting narratives, interpretations, models, and socio-political realms that have influenced the course of heritage through history. In addition, the research discusses the disparities and correlations between cultures and narratives through chronological and relational sequencing. It filters, praises and seeks to salvage national image, sensitivities and relations to instill renewed interest and coherency between cultures. The study aims to investigate custodian interests and their influence over inherited cultural property, a process that entails the evaluation of individual and collective roles in the construction of cultural lineage and national historicity.

Claudia Nitsche

## THE GERMAN FOREST AS A CONTESTED TERRITORY.

### The Idea of Wooden Form



“Tieranatomisches Theater”, Carl Gotthard Langhans, 1789/1790.

Seen architecture as part of an ecological and holistic system, this thesis investigates the relationship between resource management and built environment, examining the specific case of the historical relationship between the German forest and timber architecture. Within this process, the thesis seeks to unfold on the one hand a historical understanding for the cultural and economical usage of timber and on the other hand it seeks to construct a holistic perspective for the complexity of the current climatic crisis.

This thesis begins with the exploration of the existential dependency on the resource timber for the German culture. Here, it unfolds its theory on spatial conditions as the result of economic and social practices that are based on the use of energy resources. Before the fossil fuel era, the primary energy resource was wood and its relevance as fuel and building material led to the condition of “wooden form”. Analyzing this condition, the thesis includes the cultural and ideological narration of the German forest as the typical entity of the German territory. Therefore the thesis aims to considerate the historical relationship between the territorial conditions, the materiality of the built environment and its cultural narration.

Additionally, in taking different paintings from the Renaissance, Romanticism, German Expressionism and National Socialism up to contemporary depictions in various interludes, the history of the German forest can be analyzed and traced visually.

After describing the different parameters, the thesis chronologically shows specific cases that bring together the territorial conditions, the use of the material and its ideological narration, from the early ages up to the present situation, although the main section of the thesis is the enclosure of the forest and its shift from a common to a private property and within the shift from feudalism to capitalism. Interestingly, this enclosure was argued with the need for sustainable forestry to prevent the threat of the wood scarcity in the 18<sup>th</sup> century.

### *Thesis Structure*

I. The Idea of Wooden Form

II. The German Forest as a Contested Territory

III. Designing Heimat

IV. *Umweltblätter*

V. Timber Matters

### Abstract of Chapter II.

*which will be presented on Wednesday, June 29*

## THE GERMAN FOREST AS A CONTESTED TERRITORY

### On the Prussian Building Department and New Methods of Construction

In the 18<sup>th</sup> century, different manuals for rural architecture were published. They focused on materials, construction methods and on structural details, thereby the most influential one turned out to be the “Handbook about the Arts in Buildings on the Countryside” by David Gilly. These publications underline on the one hand the precarious condition in which the rural areas got during that time, on the other hand they imply the process of the rationalization of the entire countryside: its spaces of production and its spaces of reproduction.

In 1800, Gilly published also several writings about “Plank Binder Construction Methods” to propagate rationalized building methods against the backdrop of the wood scarcity. Gilly’s tectonic ideas were meant to save the material and to enable new spans for hall structures. The architect was part of the building department in Berlin and had a wide range of international contacts. He took some ideas from the French court architect Philibert de l’Orme from the 16<sup>th</sup> century, especially from his plank binder system of the Halle au Blé in Paris from 1782-83. More relevant than that was the institution itself. Founded in 1770, the Prussian building department set new standards for the protection of the forests and for the proliferation of cheap solid timber construction methods.

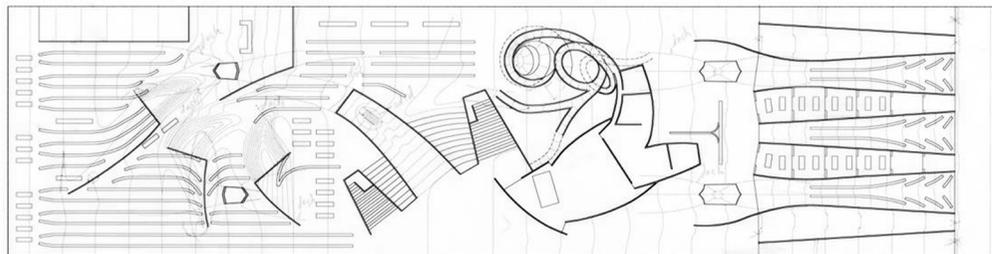
Within his commitment to wood-saving construction, Gilly was also in contact with the French architect and teacher of agricultural architecture François Cointereaux, who had founded a school of rural architecture *L’école D’Architecture Rurale* in Paris in 1790. As Gilly, Cointereaux investigated new material-saving constructions, and in 1796 he published detailed descriptions of plank binder construction systems.

These manifold endeavors from that time show, how architecture was institutionalized and instrumentalized during the 18<sup>th</sup> century, to rationalize timber architecture in the urban, but also in the rural realm against the background of the emergence of capitalist modes of production.

Anna Font

## TOWARD A GENEALOGIC ARCHITECTURE

### A machinic taxonomy



Sketch of second floor surface and programs of the Kansai Library competition project. RUR 1996. Source: CCA

The relationship between architectural production and discourse has a history of ever-changing reciprocities, from parallel streams and convergent events to periods of estrangement. In this field the analytical and reflective forces interact with the projective and speculative futures. This thesis has the ambition to integrate these disparate distinctions, both conceptually and methodologically, by proposing a genealogic classification system as the medium to re-think the relations between the architectural artefacts in the history of the discipline, and to project new architectures from it.

The first assumption of the thesis, in regard to the history of the discipline, is the recognition of the incompleteness of any possible record of it. It would be difficult to assert that it is possible to approach any abstract pool of materials as complete archive. It is also recognised that in the evolutionary sciences, the search for an idea of origin in species opened a rich field of investigation that was nonetheless full of gaps, and that a constant revelation of associations continues to this day. This will be the place of work of the thesis: far from the search of any essentiality, the intention is to set in motion a process that will generate novelty from the in-between of architectural knowledge.

The second assumption, in regard to existing objects of study, is that it is necessary to decouple them from belonging to any fixed referentiality, be it conceptual or chronological. Genealogical construction provides an opportunity to evaluate familiar objects from a new point of view without seeking to validate or perpetuate any particular dialogue of continuity, although it will in time generate new ones. In order to do so, the thesis will explore the means of description, by drawing and computational modelling, of the characteristics of the case studies and explore the notion of trait.

*Thesis Structure*

*I. Double-Sidedness: Conceptual Affiliations and its Architectural Genealogy*

*II. Classification Systems: Taxonomy and Phylum*

*III. Evolutionary Theories of Projection: Punctuated Equilibrium and Theoretical Morphology*

*IV. Trait vs Type: Cultures of Description*

*V. Machinic Taxonomy: The Alloy Model*

### Abstract of Chapter IV.

*which will be presented on Wednesday, June 29*

## TRAITS ON THE SURFACE

### Cultures of Description

In the advent of computation in architecture in the late 80s and during the 90s, the discussions about the transformative potentials of the digital as medium for new ways of thinking and production developed along paperless studios and experimental projects at the foreground of architecture discourse. Even if being a short history, the quantity of waves and turns from that moment to today has made for a noticeable metamorphosis of the shared concerns and interests within the realm of digital practice, tending to the expansion and high instrumentalization of techniques while naturalizing the evolution of its architectonic principles as a conscious project.

In this chapter the thesis acknowledges the forces that have defined the field of computation in the last four decades via the study and selection of a set of texts and events that are representative of its theorization. As a result of this reading, a critique will take the form of an alternative historization of the ideas that were suffocated by the discourses of rapid customization and formal fetishization, searching to unearth an approximation to architecture as spatial organization based on the notion of trait (alternatively to type). From within this framework, the research inserts itself in the middle of the discussion on the continuous surface as paradigmatic architectural trope, significative of the incorporation of complexity theory and computational thinking in architecture practice, to propose an extended lineage of the topological surface across chronological accounts. A series of drawings will present the organizational characteristics of the architectural traits embedded in the case studies, presenting again for evaluation the problematizations and agendas embedded in the search for surface (ground) continuity.

Lola Lozano Lara  
VECINDAD

## Redistribution of Domestic Space in Mexico City 1519-2021



Diego Valadés, 'the Monastery of San Francisco', from *Rhetorica christiana*, 1579

Playing on the ambivalence of the term *vecindad*, the thesis argues that the study of a domestic architectural typology can become a framework through which to read the history and make-up of the city. *Vecindad* translates to *neighbourhood*, stemming from (Spanish) *vecino* which means both, neighbour and close, alluding to proximity, a relationship of close distance. Furthermore, a *vecindad* in Mexico is a building typology that groups households through a central street or courtyard. As such, the thesis investigates domestic space and its redistribution in the metropolitan city, through a popular, yet disappearing residential typology, characterised by groups sharing a common domesticity. The notion of vicinity is central to the thesis's argument, as observed within the historic and legislative context of housing in Mexico City since the pre-colonial period into the present. Using typology as a study framework, the thesis acknowledges an indigenous Mexican tradition of household collectivity and city-making that endured and actively informed centuries of Spanish colonialism and later independent political reform.

The investigation traces the history of Mexico City through three distinct urban and architectural categories explored through time: the grid, the urban block, and the house. Each category finds a dialectic counterpart within indigenous Mesoamerican ideologies embodied in Nahuatl cultures; the *altepetl*, *tlaxilacalli* and *calli*. Their study within post-colonial Mexico City offers an alternative reading of how the city was inhabited from the outset, the ensuing housing legislation and the instrumental reforms that followed. The thesis also follows the city's inhabitants changing and varying identities, paying close attention to how these inform the redistribution of their space for housing and services as a result of necessity rather than design. The proposal responds to the need for studying and constructing alternative forms of housing that can respond to current needs that are not satisfied by existing industrial models.

*Thesis Structure*

- I. *Introduction: Spatial, State and Family Relations*
- II. *Dividing and Representing Land: The Grid in Pre-Hispanic and Colonial Mexico*
- III. *Unity Makes Strength: The Urban Block through Independence and Revolution*
- IV. *Divide and Conquer: The House from Welfare to Neoliberalism*
- V. *A project of Vecindad*

### Abstract of Chapter III

*which will be presented on Wednesday, June 29*

### UNITY MAKES STRENGTH

#### The Urban Block through Independence and Revolution

The consolidated urban grid that subdivided Mexico City in the 18C is rooted in a pre-Hispanic Mesoamerican attitude to land possession, rights and tenure. The same is true of the urban block and the form of housing it contained - the *vecindad* - an ever-resilient typology characteristic of the city for centuries to come. The block that articulates a *casa de vecindad* can be traced through an Hispanic lineage to Extremadura, Castilla and Andalucía, assimilating earlier Roman and Arabic traditions within their own colonisation periods. However, the popular Mexican *Vecindad* and the urban block that contains it, may find a most dominant ancestor in the Mexican *tlaxilacalli* - a residential base constituted through political function, kinship, and locality. This form of neighbourhood - itself rooted in the residential compounds of Teotihuacan ca. 1000 years earlier - would turn instrumental in the management, containment and administration of a changing, yet continuous, indigenous population throughout the colonial period and beyond the era of independence.

Indigenous political agency was at the heart of the colonial rule, a necessary contradiction allowing a distant power to exert control through opportunism. To the official record, an imposed Indian-Spanish dichotomy served to characterise the rights, privileges and obligations that each class was provided. However, this was underpinned by a more fluid and fragile caste system that, in time, allowed the shifting of a subject's identity to suit individual or corporate interests. The city territorial divide would also become deliberately blurred, whilst old-established indigenous sociopolitical practices incorporated into the early colonial government entered in conflict with liberal ideals to abolish caste subdivision and territorial marginalisation. Far from an upgrade in social status, the indigenous subject was negated by the Mexican independent state, in favour of an emerging bourgeois class. Yet, an indigenous presence and form of life endured, driving resilience from an engrained domestic tradition assimilated into an emerging *mestizo* residential typology, ubiquitously informing the urban city block.