Archetypes
A Project for the Brazilian City
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PhD by Design
Architectural Association
School of Architecture
London 2022

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To the memory of Stefano,
and the unconditioned love
of Marta, Raquel, Bruno and Oscar.
Many people have contributed to the long journey that shaped this work and it will be difficult to name them all. I feel deeply grateful to Pier Vittorio Aureli for his guidance and support and, above all, for being an example. I have to thank Mark Campbell for his patient supervision and for sharing his incredibly valuable experience as teacher and scholar. I feel equally thankful for previous reviews that have provided crucial feedback from the critics Plato Issaias, Sam Jacoby, Adrian Lahoud, Marina Lathouri, Gabriele Mastriglia, Barbara Campbell-Lange, Thomas Weaver and Elia Zenghelis. A special mention goes to Maria S. Giudici, for being a point of reference and a friend of many discussions. I want to thank my fellow candidates at the Architectural Association for the discussions, the criticism and the support: Brendon Carlin, Jingru Cyan Cheng, Georgios Eftaxiopoulos, Samaneh Moafi, Olivia Neves Marra, Lukas Pauer and Ioanna Piniara.

Along the years I have shared ideas, crucial pints and more with Ross Adams, Pedro Fiori Arantes, Fabrizio Ballabio, Cosimo Campani, Felipe Contier, Francesca Dell’Aglio, Hunter Doyle, Noah Gotlib, Beth Hughes, Silke Kapp, Nicholas Lin, Nicholas Lobo Brennan, João Marco de Almeida Lopes, Valerio Massaro, Forbes Morlock, Anne Munly, Julia OcejoVivanco, Raffaele Patitucci, João Ruivo and Jad Semaan. I am grateful for the opportunity that Abdelkader Damani gave me to curate an exhibition about Arquitetura Nova at the FRAC Centre of Orleans. Immense gratitude goes to Sérgio Ferro for his incredible generosity and to Ediane Ferro for holding everything together. I owe part of who I am today to my teammates: Gianfranco Bombaci, Matteo Costanzo and Luca Galofaro.
In the endless field of urbanisation, where every resource, every person, every thought and relationship is put to work for a single end, for the production and reproduction of capital, can architecture still have a critical and projective role? Can architecture still resist the all-encompassing managerial logic of the masterplan that flattens political conflict to a false dichotomy between bottom-up and top-down approaches?

Responding to this question this thesis proposes the archetype as a conceptual and methodological tool to reclaim the relationship between architecture and the city, between built form and the desires, hopes and ambition of emerging collective subjectivities.

This thesis revisits and challenges the canonical typological discourse, understanding the archetype in opposition to type. If the type is an abstraction that imposes norms and behaviours, the archetype is a paradigmatic built form that, through its material presence, establishes an explicit rule that can be accepted or refused. In other words, the archetype makes the conflicts that constitute the city legible and thus frames the possibility to imagine and practise alternative forms of life. Archetypes emerge in response to specific conjunctures, when the shifting of politico-economic conditions demands the reorganisation of power relationships, opening the possibility for the reappropriation of territories and establishing new modes of dwelling.

The notion of archetype is investigated within the context of Brazil where, due to the specific geographical and historical conditions, colonisation operated by strategically deploying archetypes. Instead of the all-encompassing order of the grid, paradigmatic forms gave organisation and orientation to the conflicting forces constituting the territory.

This research investigates three examples that epitomise crucial historical shifts: the Jesuit reduction, the avenida and the cover.

In the early period of colonisation the Jesuit reduction is the archetype that emerges from the encounter with the radical alterity of the Brazilian territory and its native people. In the reduction architectural form was the fundamental tool in the construction of the common ground where the project of conversion and colonisation took place.

In the shift between the Empire and the Republic of the late 19th century, the avenida is the archetype through which the alliance of the “coffee barons” and the “creole bourgeoisie” conquered the city, establishing urbanisation as the paradigm for the Brazilian megalopolis.

Finally, the archetype of the cover provided an ambiguous response to the strategy of conservative modernisation and the deployment of capitalism within the colonial structure of the territory. On one hand, the cover celebrated Technic as a promise of development, in the attempt to maintain the chasm between man and land that modernisation was threatening to fill. On the other hand, the gesture of suspension put forward ways of gathering, living and building that challenged a universal idea of Technic and progress, instead offering a form of resistance to the endless expansion of urbanisation.

Building on this conceptual and methodological framework this thesis proposes an archetype of a rural settlement at the fringe of São Paulo’s metropolitan area. Considering that rural territory in periurban areas is one of the key places of conflicts and struggles within contemporary Brazil, the project puts forward an archetype for cooperative production, collective ownership and communal living which could preserve the possibility of a rural life as limit to the all-encompassing logic of urbanisation. Using this reading of the archetype, the project reclaims the power of architecture to operate beyond the logic of top-down or bottom-up approaches, and provide a rule of inhabitation for a collective subject.
The demise of the project

Like the exuviae of a cicada left clinging to a tree after moulting, the discipline of architecture has been emptied: its discourse, role and daily practice persists as an intact semblance concealing a lifeless void. Under the pressure of the abstract and globalised forces of late capitalism, the substance of architecture, its ability to stage and give form to the desires, struggles and bonds that constitute the city, has evaporated into the ubiquitous spectacle of economic relationships. The light-speed reproduction of financial capital demands the clumsy and slow process of design and building to acquire maximum flexibility of meaning and ease of circulation. The proliferation of “icons,” “concepts” and “events” in the contemporary production of architecture is nothing but the manifestation of such necessity to sublimate building into pure spectacle.¹ In fact, today the value of architecture is not appraised in relation to the city, to its ability to support human relationships and the dignity of life, but rather lies in the intrinsic economic properties of its image, blown up to the point of separating itself from the harsh substance of material and labour which constitute it.²

The rise of the “starchitect” in the postmodern decades has to be read as the desperate and short-lived attempt to save the corpse of architecture by pumping a fake aura into merely speculative building.

The strive for the uniqueness of the architectural product frantically disguises the increasingly pulverised and precarious reality of architectural labour. Behind the glittering facade of unique signatures parading authorship is a growing multitude of interns, consultants, subcontractors,
Architectural Gesture

When the city as the whole of the relationships is put to work, the process of capitalist accumulation is based on resources that can be used many times by multiple subjects, without losing anything their original potential. However, in the permanent incompleteness of its concrete spatial and temporal existence, architecture can reclaim meaning and value for the life of the city. In the same way in which dance is the pure exhibition of the potential of the body, architectural form can be the exhibition of the potential of the city.

The project as a political act demands a gesture that can open a break in the continuous flow of reality, so that decisions can be taken. It is only in this unmeasurable distance from the continuous flow of reality that the fundamental political act of taking part, in its double connotation of choosing and participating, can take place.
visualizers, curators and social media managers that actually make architecture. The core business of design became precisely the harnessing of such a collective intelligence. The role of the architect today is not about conceiving a project but rather about managing the process through which architecture as a common knowledge is exploited and appropriated. The common field that makes cooperation and thus architecture possible has to be fragmented at the level of labour, enhancing productivity through competition and weakening collective organisation, and at the level of financial valorisation, stressing the individuality of architectural identities through representation. Ultimately, the architect’s art today is to reduce the intrinsically common nature of architectural knowledge and practice to a unitary image and narrative encapsulated in tautological diagrams coated with artistic and social purpose.

The aim of this thesis is to formulate a theory and a method of design that could project architectural thought and practice beyond the mere reproduction of the existing conditions. The urgency of such an ambition lies in the conviction that architecture is still a body of knowledge and a practice that allows us to envision and produce shared worlds, changing the way we conceive and live our reality.

What is at stake is the project as such, understood as the possibility to imagine subjectivities, forms of knowledge and practices alternative to the ones imposed by the dominant forces that shape the present condition. To project means setting a direction and prefiguring a strategy for future possibilities to be produced and become present. However, if the idea of an absolute pre-vision – in the etymological sense of the Latin ab-solutus, i.e. detached from the unpredictable unfolding of reality – conjures the straightjacket of a religious doctrine, the laic acceptance that there is no foundation or orientation for the unfolding of our existence entails equally terrifying consequences. As the philosopher Massimo Cacciari has acutely remarked, “the most powerful forms of prevision are indeed the ones that have most definitely abandoned any deterministic illusion,” as they turn the project into a mere “technical-experimental apparatus whose aim is just the effective pursuit of contingent objectives.”

In the contemporary condition choices do not relate to any shared telos, to sets of values or aspirations recognised and constructed collectively by groups of individuals. Instead actions, or better operations, are continuously deployed to tackle contingent situations, blindly adjusting means and provisions to feedback loops without end. The entirety of human production appears today completely shaped by Technic, the principle of absolute instrumentality for which everything – every object, being, thought or relationship – must be put at work for the sake of expanding the possibilities of Technic itself. To this end, the entirety of existence has to be reduced to discrete linguistic units that are interchangeable, manipulable and recombinable in a process that is endlessly replicable. From the vantage point of Technic the only possible reality is the one that is readily available to be defined, classified and measured for a merely productive employment. Hence, the widespread perception that there is no alternative, there is no possible project.

Within this framework the project indeed dissolves into mere anticipation of chance. Rather than constructing possible worlds and practices, the project is given the task of capturing every possibility of our existence by means of probability calculus, anticipating and incorporating any potential subversion within the endless unfolding of Technic. On the contrary, the project as a political act demands a gap, a break in the continuous flow of reality, so that decisions – from Latin de-caedere, meaning cut away – can be taken. It is only in this unmeasurable distance from the continuous flow of reality that the fundamental political act of taking part, in its double connotation of choosing and participating, can take place.
The endless field of urbanisation

If the demise of the project informs every aspect of our existence, threatening the very possibility of choosing a future, its most terrifying and spectacular manifestation is the rise of urbanisation. This phenomenon, which today has assumed a planetary scale, has to be understood not as an evolution of the idea of the city but rather in opposition to it.

In the Western tradition, the city is the political space par excellence: a representation of human associations and a frame that allows conflicts to be staged and coexistence between different parts to take place. This idea of the city is exemplified by the Greek polis, a city-state ethnically homogeneous and formally defined, characterised by a clear distinction between the oikos – the private space of the house devoted to natural reproduction – and the agora – the public space where different interests are negotiated and decisions taken. The Romans, instead, introduced the idea of civitas – a universal right to citizenship detached from ethnic origins – as complementary to the urbs – the physical infrastructure of the city endlessly expandable through the grid of the castrum, the military camp. This fundamental shift marks the passage from the city as the political expression of a finite community to the city as a template for the expansive space of the empire. Such a universal and limitless idea of the city is at the root of urbanisation, a paradigm that was fully developed with the rise of capitalism, industrialisation and scientific thought.

Theorised for the first time by Ildefonso Cerdà in his Teoría general de la urbanización of 1867, urbanisation identifies the city as an objective matter, substituting the classic primacy of aesthetics with scientific epistemology. Cerdà, a civil engineer, had the ambition to construct a system of territorial management based on modern scientific methods that could eradicate political conflict. According to his vision, every aspect of the city can be analysed, quantified, classified and reduced to the basic elements of a system of knowledge. Factors such as population, typology, plot subdivision and land use operate as scientific instruments in a process of optimisation based on techno-economic logic. Circulation – vialidad – working in a dialectic relationship with the endless expansion of the infrastructure – urbs – becomes the key to a full integration of people, goods and ideas into an all encompassing subjectivity. Within this constant flow, architecture is stripped of any symbolic meaning or role in the construction of the city, becoming a mere tool in the organisation of growth and movement.

Cerdà’s theory and method implied the erasure of any formal relationship between architecture and the city; the unfolding of a totalizing condition that defeats boundaries, erases conflicts and normalises practices. Urbanisation turned the city into a field of limitless growth deployed for the sake of managing social conflicts and ensuring the reproduction of capital and labour. As such urbanisation is not just the material extension of the built environment but an abstract instrument of biopolitical control that assumes mere biological life as the ultimate object of power. The political dimension of the city – which entails the negotiation of conflict between different parts – is subsumed into the economic logic of the house – the administration of life and resources within private relationships. Breaking out of the house, the economic reason floods the political space of the city, in a fluid and compulsive movement that flattens the polis into the oikos, political decision into governance, and ultimately reduces human life itself to a mere instrument of production and reproduction. The endless circulation of people, goods and information responds only to the “managerial paradigm,” of which urbanisation is the ultimate spatial manifestation.

Embodying the absolute instrumentality of Technic, urbanisation presents itself as an all-encompassing order that does not admit an external vantage point from which it would be possible to impose or even conceive an alternative order. The emergence of any subversive elements is denied,
since every innovation is subsumed and exploited by the economic reason: any attempt to link particular instances with universal principles is doomed to be recuperated in the economic cycle or excluded in the realm of utopia, therefore contributing to the naturalisation of the existing condition. Within this deadlocked framework, architecture dissolves into a mere quantitative dimension, as reification of the abstract economic relationships that administer a bare life stripped by any political connotation. Within this condition, a project for the city, intended as a political choice, as the projection by means of architecture of a set of power relationships alternative to the existing condition, seems ultimately impossible.

However, precisely the material and aesthetic dimension of urbanisation offers an exit strategy from the dystopian hamster wheel of the contemporary condition. A possible exodus lies neither in the return to some mythical “good” past nor in the construction of an utopian future but rather in making legible and concrete the real abstractions that inform our present existence. The point is not to withdraw the city from being put to work, but rather to translate the productive potential of the city into both political and aesthetic power.

If urbanisation is the inseparable intersection of the abstract mechanisms that shape our subjectivity and their material manifestation in the built environment, architecture can be the instrument that gives form to this dialectic, making it legible and thus knowable. Architecture is both the material organisation of built matter but also the form of knowledge through which the ungraspable complexity of the city can be understood and collectively recognised. By exposing in a finite and exemplary form the conditions and the modes in which the human productive potential unfolds, architecture can produce a break in the continuous flow of urbanisation that allows a political dimension of life. Within this gap resides the possibility to collectively imagine, construct and represent alternative subjectivities.

Type, history and form
The conceptual device linking architecture to the city is the type.

Understood in its most general meaning, the type is what allows us to think of groups or classes, and therefore to define what is common among a number of entities and how a single entity can be repeated. Constituted in a formal structure, this common denominator allows evaluating sameness and difference. As such the type provides a conceptual framework within which change can be projected in the historical process. Ultimately the type links knowledge and production to form within history, and therefore lies at the core of any discussion concerning the foundations of architectural design.

The notion of type in architecture has been debated and redefined in response to significant historical changes, when the shifting of political and economic conditions demanded the reformulation of a theory and method of design. In modern times the first significant reconsideration of type takes place after the French revolution, when architects had to deal with the development of bourgeois subjectivity. The rise of scientific thought as well as the acceleration of economic and urban expansion, entailed the flourishing of countless new programs. Unfolding at an unprecedented scale, these factors pushed the relationship between the theory and practice of architecture to its limit. Architects on one hand searched for validation in an origin of architecture based on a universal concept of nature, as exemplified by the model of the primitive hut constructed by the Abbé Marc-Antoine Laugier on the basis of Vitruvius’ description. On the other hand they borrowed from the natural sciences the possibility of classifying buildings according to genres. Through their taxonomies the architects aimed at establishing a correspondence between the plethora of urban programs (hospitals, theatres, hotels, markets factories, etc.) and a specific “character” of the buildings, which should allegorically manifest their purpose by imitating the natural order (e.g. masculine for a military building, rustic for garden structure, imposing for a prison,
The Endless Field of Urbanisation

São Paulo is a paramount example of contemporary urbanisation, a totalising spatial condition that defeats boundaries, erases conflicts and normalises practices. Urbanisation turned the city into a field of limitless growth deployed for the sake of managing social conflicts and ensuring the reproduction of capital and labour.

In this endless field where every resource, every person, every thought and relationship is put to work for a single end, can architecture still have a critical and projective role? Can the practice of architecture become an exercise of exodus, of liberation from the all-encompassing logic of the managerial paradigm?

If urbanisation is the inseparable intersection of the abstract mechanisms that shape our subjectivity and their material manifestation in the built environment, architecture can be the instrument that gives form to this dialectic, making it legible and thus knowable.
etc.). However, representing the meaning of architecture through the linguistic and metaphorical expression of function led to bizarre and picturesque solutions or to the mechanistic reproduction of given models.\textsuperscript{25}

Against the crisis of the discipline manifested by these excesses Antoine-Chrysôthome Quatremère de Quincy developed, since the end of the 19\textsuperscript{th} century, the notion of “ideal type” in opposition to the one of model.\textsuperscript{26} For Quatremère the model – which was at the core of the Beaux-Art idea of mimesis as a creative act – presented a precise object to be copied while the type offered an idea, a principle from which an actual form should be deduced. This abstract notion of type – derived from the Platonic theory of forms for which ideas are the permanent, true and absolute essence of things – recognised in the form of each architectural object the “imprint” of the relationship between man and nature understood as universal ideas. The type thus allowed one to gather and organise formal variations around an elementary and permanent principle, perpetually linking current needs to the original reason of architecture.\textsuperscript{27}

While Quatremère’s ideal type attempted to reconcile history, nature and use in a universal and essentialist order, Jean-Nicolas-Louis Durand brought the possibilities of modern Technic to their most extreme consequences, building on the novel developments of geometry and scientific classification.\textsuperscript{28} His method consisted of reducing architecture to a system of basic geometric elements to be recombined through the technique of composition. Singular linguistic units (columns, pillars, foundation, vaults, etc...) were abstracted from existing examples and then ordered into a unitary grammar using the grid and the axis as organising tools.\textsuperscript{29} Replacing the figurative and allegorical notion of character with the abstraction of composition, Durand elaborated a design method of unprecedented flexibility, which potentially allowed to give a coherent form to any program.\textsuperscript{30} The radical abstraction, however unwittingly, contributed to turn architecture into “a knowledge based on history as a quarry of available material,” providing a framework for the eclecticism of the end of the century: any “style” could be easily applied to the building after its organisation was composed in response to the program. At the same time the abstraction and standardisation of the grid laid the basis for the development of the cast iron public building – such as arcades, markets, stations and exhibition halls – that monumentally represented the bourgeois economic and social order.\textsuperscript{31}

However, Durand’s method can be also read as an anticipation of the agenda and the failure of the Modern Movement.\textsuperscript{32} By understanding utility, that is to say the program, as the fundamental criteria in the composition of architecture Durand turned architecture into a matter of functional and economic performance, “dissolving the link between form and history that grounded Quatremère’s theory of the ideal type. Likewise, the Modern Movement sought for an aesthetic completely divorced from the past as a means to fully mobilise Technic towards mass production and a functional organisation of society. The type became a prototype to be infinitely repeated or a list of norms that standardised and organised the totality of space and time for production.\textsuperscript{33}

After the bloodbath of World War II and the defeat of totalitarian regimes, the question of type re-emerged as a means to question the modernist illusion of total planning. A rich debate developed, particularly in Italy,\textsuperscript{34} where the exceptional speed and intensity of development, in contrast with the morphology, the social composition and the urban history of the territory, made capitalism’s contradictions particularly evident. In response to the conflictual unfolding of modernisation, the idea of type was reconsidered as a conceptual tool to engage with the dialectic between crisis and continuity in the historical process.\textsuperscript{35}

In this resurrection of the type the key issue was defining the relationship between design and history. Revisiting Quatremère’s distinction between type and model the historian Giulio Carlo Argan argued that the type is the
outcome of a regressive process which finds a “base-form,” intended as “the internal structure of form or as a principle that implies in itself the possibility of an infinite number of formal variations and even a further structural modification of the type itself.” The “type is never formulated a priori but always deduced from a series of samples,” comparing singularities in order to identify formal and functional analogies. From this perspective the type is indissolubly linked with history, being the result of specific historical and cultural conditions rather than – as Quatremère argued – of a priori ideas. Argan clarified the way in which type neutralises history. While the model implies a value judgement, a choice of a reference work that is perfect and therefore worthy of imitation, the type demands a suspension of the historical judgement, a mere acceptance of the past as an accomplished fact without further development. “In other terms, when a type is established in architectural theory or practice it already exists, in a determined historical condition of culture, as a response to a set of ideological, religious and practical needs.” Deduced from a series of buildings into a diagram, the type empties any formal or artistic value from architecture, reducing it to “the indefinite value of an image or sign.” This liberates the architect from the direct influence of historical forms but at the same time fails to provide any qualitative criteria for the evaluation or production of material forms. Argan identifies two complementary moments in the use of types in the design process: in the first, the type is accepted with a suspension of historical judgement; in the second, the architect is called to an intentional act giving the type a new formal determination by adapting a historical scheme, which has otherwise lost any concrete value, to a present need. So conceived, the design process reduces history to a neutralised field in order to preserve the individuality of the architect, who supposedly is called to give form through “ideation.” This mechanism is not further specified and it manifests a flaw in Argan’s articulation of the process that links the type to the single architecture. This contradiction means that the type can only define a productive relationship between design and history when the logic linking form to its ideological content is defined. The abstract mechanism of the type demands one to take a position on the epistemological dimension of form, on the way in which form relates to knowledge.

The etymology of the term illuminates the nature of the link between type and form. The word “type” comes from the Greek tuptein, “to strike,” or typos, “strike” but also “impression, figure, type, mould.” In its basic meaning the type is the imprint of something into a matter that could be physical, like a sculpture or a coin, but also immaterial as in the case of a memory or the impression produced on the intellect through our senses. This recording implies an action that could be fully intentional, like an artwork, or produced by use and custom, by repetition: one could think of tools as the result of use, or a temple as the result of liturgies, or a road as the result of the passage of people. The recording of an action into form produces a “mould” that is not just a memory or a testament, but contains the principle of its reproduction. This is literal in the example of the coin, or of the typeface, but can be understood also in abstract terms as the knowledge of production and use, and therefore of repeatability, resolved and recorded in the form. Ultimately, the type poses an epistemological question, asking how knowledge can be constructed, recorded, manifested and reproduced through form.

As we have seen, for Quatremère form embodied the universal correspondence of man and nature throughout history, while for Durand form manifested the instrumentality of composition in fulfilling the program. For Argan, the type is independent from function as it responds to “profound needs, which are fundamental and constant within the limits of a certain civilization.” His theory of type attempts to restrict the untenable, universalistic, conception of Quatremère to the specificity of cultural and historical contexts. However,
assuming that “the ideological content of the form has a permanent foundation that, at the same time, can and must assume, in the present, a specific accentuation and character,” Argan’s conception of type clearly falls back into a platonic dialectic between ideas and phenomena.

In this respect, the research of Aldo Rossi on type offers a different perspective on the relationship between form and its ideological content. His investigations were influenced by the work of Saverio Muratori which understood typology as a rigorous analytical method to study the city. For Muratori, buildings were the “manifestation of a collective formal intuition,” which constructed and defined the city as an architectural environment characterised by formal unity and historical continuity. This idea, informed by a defence of tradition, brought the platonic logic of Argan much closer to the life of the city, to which Muratori intended to give a science and Rossi an architectural form.

Building on Muratori’s method, Rossi used typology as a tool to analyse the city as a continuously developing, collective horizon. However, the city could only be understood in relation to the “urban event,” a singularity that makes the evolution of the city legible by disrupting the continuity of its unfolding. This dialectic went beyond the demiurgic idea of modern planning, which attempted to reduce the complexity and the conflicts of the urban territory to a continuous unifying logic. Opposing architecture as a mere infrastructure or representation of capitalist development, Rossi proposed an architecture that held together the monumentality of architectural form with the common experience of the everyday urban landscape. Architecture was to give a finite and therefore legible form to the infinite potentiality of intersubjective relationships constituting the city. On one hand architectural form individuates the type by making the uses and customs, forms of production and dwelling, that constitute its ideological content explicit and therefore able to be analysed through the typology. On the other hand the potentiality of the type is not exhausted in the architectural form, which remains finite, limited, therefore exhibiting the permanent potential of existence in its incompleteness.

This dialectic idea of the relationship between architecture and the city bypasses both the metaphysical foundation of type theorised by Quatremère, and re-elaborated by Argan, as well as the universal instrumentality of composition deployed by Durand, defining a productive relationship between design and history. We are instead presented with a new epistemological framework, which could be called paradigmatic: architecture is the example through which the city becomes knowable and the city is the problematic context in which architecture can be comprehended. Architectures within this logic are archetypes, paradigmatic forms that can exemplify both a theory and a method of design against urbanisation.

Archetype: archeology and analogy.

The term archetype is frequently used in the architectural discourse, generally to refer to the iconic character of certain buildings, to the originality of their spatial, formal or programmatic solutions, or to their commonly accepted relevance in the history of architecture. However, the concept has never been thoroughly explored and defined in relation with architecture and the notion of type.

Carl Jung developed the idea of archetype as one of the key categories of his theory and practice of psychology. Based on Plato’s theory of ideas – where ideas are intended as noumena, founding principles, of the reality of phenomena, objects of the senses – the Jungian theory of the archetypes largely corresponds to Quatremère’s definition of type. For Jung archetypes are “primordial images,” patterns “established long before man developed a reflective consciousness,” and are inherited during biological evolution. They are “empty and purely formal, nothing but a facultas praiformandi, a possibility of representation which is given a priori.” Furthermore, dreaming, the mechanism through which

0.5 - Saverio Muratori, Quartiere di S. Bartolomio, in Studi per una operante storia urbana di Venezia, 1959.

0.6 - Aldo Rossi, Gianugo Polesello and Luca Meda, “Locomotiva 2,” competition entry, Turin, Italy, 1962.
archetypes encounter and mould the material experience of the subject, closely corresponds to the canonical understanding of the typological design process. As we have seen, if type is understood as the base-form induced from a typological series, design is about “bringing elements of a typology - the idea of a formal structure – into the precise state that characterised the single work.” In this sense, the archetype is understood as a universal idea that contains, in itself, all the possible variations of a given set and becomes a particular case through a logic of deduction.

The logic of induction - establishing the type from a number of singularities - and deduction - deriving the singularity from the type - presuppose the possibility of a link between the particular and the universal, between the single element of the set and the principle that governs it. However, the all-encompassing logic of Technic and urbanisation denies the possibility of an external vantage point from which a universal principle could provide a different order. Any movement that links the universal to the particular - abstract types and individual buildings - is doomed to be recuperated and made productive within the existing set relationships.

As a conclusion, both the traditional idea of typology and the notion of archetype as defined by Carl Jung are to be discarded.

Intersecting Rossi’s dialectic, between urban event and typology, and the notion of paradigm elaborated by the Italian philosopher Giorgio Agamben, the thesis proposes a different definition of archetype. The archetype is understood as a singular object, materially and historically determined, that, assumed as example, can analogically represent a set of related forms and therefore an entire context. As such, the archetype operates according to the mechanism of analogy, rather than relying on the deductive or inductive processes of the canonical typological thinking.

In his monumental logico-philosophical study “La linea e il circolo,” Enzo Melandri places the notion of analogy at the heart of what he calls “critical history.” This method of inquiry - that Michel Foucault calls “archeology of knowledge” - has the task to “trace the ‘genealogy’ of the events that it is dealing with,” in order to regress to the division between real history and historiography, which is analogous to the Freudian separation between conscious and unconscious. As such, “critical history aims at retrieving the unconscious intended as a historical ‘repressed.’” The object of this philosophical archeology is an arché which is not a transcendental principle, nor an empirical phenomenon, but rather a paradigmatic relationship that “makes explanation of the phenomenon immanent to its description.” In this sense, archeology refuses any meta-language to use a “paradigmatic matrix, at the same time concrete and transcendental, that has the function to give form, rule and norm to a content.” Following the logic of analogy, the archetype has to be understood neither as an abstract principle nor as an original model but rather as an example that exhibits, in its very material form, the set of relationships that constitutes it. The repressed, so to speak, of architecture is the life of the city itself, that set of forces and subjectivities that architecture contributes to shape and reveal at once. Hence, rather than comparatively studying a series of buildings in order to deduce a diagram of the formal structure, a critical method of architectural inquiry has to archaeologically reconstruct the complex threshold between architecture and the city exhibited in paradigmatic forms. Archetypes are neither the “invention” of an author nor the mere application of predefined principles, but on the contrary, the concrete manifestation of a dialectic between the building as an individual form and architecture as a common knowledge. The method of the archetype understands architecture not as a set of universal principles nor as the mere sum of the individual buildings or practices, but as the totality of design and construction techniques that allow understanding, producing and inhabiting space. In other words each individual
building can be conceived, produced and inhabited because architecture exists as common knowledge, as a pre-individual condition collectively produced. Designs and buildings are the actuality of architecture as potentiality, individuation of architectural knowledge and at the same time a manifestation of the common undifferentiated horizon that constitutes the city. Ultimately the common nature of architectural knowledge and of the city as a, “whole of the relationships,” can only be grasped in the dialectical relation with a finite form which gives it legibility and material substance.

Hence, a theory and method of design based on this idea of archetype can precisely address the potentiality, the pre-individual reality which is at the core of the contemporary modes of production and therefore address the way in which the city is conceived and developed. What capital puts to work today is the *dynamis*, our potential to produce, that consists in our most generic and common faculties of intellect and language that allow us to relate to others and to cooperate.

When the city is put to work and the “virtuoso performance” becomes a key means of production, the use of things radically changes: the process of capitalist accumulation is based on resources that can be used many times by multiple subjects, without losing their original potential. However objects, and even more architecture, have the power to reify this potential and exhibit it in the incompleteness of their concrete spatial and temporal existence. Only through a gesture that exhibits in the finiteness of the object the “mobile image of its infinite complement” – that is to say its necessary incompleteness in relationship to the infinite potential uses – architecture can reclaim meaning and value for the life of the city, which is otherwise reduced to a field of training and exploitation of the productive forces.

The gesture is neither a means nor an end, but an exhibition of pure mediality. While the finality without end – the type as universal idea – maintains the empty form of the end without any determined content, the mediality without end of the archetype shows the means as such – architectural form – in the act of interrupting the relationship with an end. In the same way in which dance is the pure exhibition of the potential of the body, architectural form can be the exhibition of the potential of the city. In this sense the architectural form of the archetype has to be understood, not as an empty abstract form, but as the concrete and paradigmatic manifestation of conflicts and desires that constitute the political dimension of a city in a given specific historical condition. However, the archetype is not just an isolated object, but the example of a set and thus implies repetition. The primary role of repetition is to transform the shock of the unforeseen into custom, to find orientation within the unpredictable flow of experience. In the logic of the example, the “once and for all” and the “one more time” are intersected and neutralised in a field of tension. The archetype is neither a unique object, nor a model to be copied and not even a prototype to be identically repeated. As in the child who takes the same as unique, “every repetition is irreversible, charged with an unbridgeable contingency, and it aims at a form of precarious perfection, that is precisely the *uniqueness without aura.*”

Rather than concealing the, “poverty of experience,” with empty formalisms or social justifications, designing archetypes is about making use of this poverty by putting forward hypotheses of architecture as a common knowledge: knowing nothing ‘inside out,’ but always starting all over again.

**Archetypes of the Brazilian city**

The archetype, as a method of historical enquiry and design, has been constructed, investigated and verified in the context of Brazil. Following the logic of analogy, the thesis uses archetypes as examples that exhibit paradigms rather than demonstrate presupposed principles. Here, the archetype becomes a “true hypothesis.” The method
Since the beginning of the colonial process, the irreducible distance between land and man was addressed through archetypes. While in Spanish and Anglo-Saxon America the territory was organised by the all-encompassing order of the grid, in Brazil a system of finite architectural forms established formal and symbolic relationships that structured the territory. Archetypes emerged in response to the shifting of political and economic conditions, giving direction and an orientation without resolving the constitutive tension between land and man in the prevalence of one term over the other. Hence Brazil, for its specific historical and geographic conditions, provides the ideal ground to construct and verify the notion of archetype as a design method.

Archetype and the Land

accepts that the relationship between the theory and its concrete manifestation is always dialectical, the gaze always informs the object and vice versa. The notion of archetype and the Brazilian context stand side by side, rather than one presupposing the other: the study of the examples has illuminated the definition of the method to the same extent that the method has oriented the way in which the examples have been investigated.

While the theoretical framework largely relies on authors who are foreign to the Brazilian context – mainly coming from the Italian debate on the post-Fordist condition – the alterity of Brazil has played a key role in giving form to the method. The critical distance and the foreign gaze clarify conceptual issues when used as a means of a rigorous dialectic. In the attempt to avoid colonialist distortions and impositions, the thesis provides an extensive study of the examples and their relationships with the material and historical context at the core of the inquiry.

In addition, despite the considerable geographical and cultural differences, structural analogies can be drawn between the development of Italy and Brazil. A crucial similarity – investigated in the 3rd chapter – is the accelerated pace of industrial development within largely rural countries and the consequent massive migration of workers to urban areas – including the direct and longlasting influence of Italian immigration from the late 19th century – which dramatically changed the culture and the territory of both countries. Both in Italy and Brazil, these epochal shifts produced crises that questioned the continuity of political power and economic development. The philosophical thought of key authors for this thesis, such as Giorgio Agamben or Paolo Virno, has been developed precisely in the aftermath of the highly conflictual period of the 1970s, which marked the end of a revolutionary perspective in Italy. This body of reflections, while emerging from a specific context, still provide a rigorous conceptual basis to imagine emancipatory political practices.

However, the choice of Brazil as a context is grounded mostly in the extremely relevant role that archetypes have played in the development of its territory. Due to geographical and historical conditions, colonisation operated less by imposing an all-encompassing order than by strategically deploying architectural forms. Even after the nation’s independence, architecture, more than planning, gave organisation and orientation to the conflicting forces constituting Brazilian modernisation.

Today, Brazil is still a vast land of continental scale with enormous human and natural resources, a space of freedom and fear, intensely libertarian and extremely conservative, highly urbanised but tied to the countryside, a place of differences and contrasts bound by a strong yet malleable national identity. Such a peculiar condition is the result of five hundred years of struggle between the immeasurable and unknown dimension of the land and the ideologies and techniques of modernity. Imported from the Old World to control and exploit natural and human resources, modernity was also called to construct an identity for such a vastness. What for the United States is freedom in the form of the conquest of an ever new frontier, for Brazil is the continuous encounter with alterity; a permanent tension between a wild exploitation and the impossibility of a complete domination.

Since the arrival of the Europeans, Brazil has been an enormous field of extraction and production of commodities to export, a characteristic that today still significantly conditions both the economic development and the social composition of the country. And yet, for five centuries, the unprecedented vastness, wilderness, variety and richness of the Brazilian territory has also offered a resistance, a limit to the totalizing forces of modernity.

This particular condition can be traced back, at least in part, to the original character of the Portuguese colonisation.
The Archetype as Method

More than the positivist motto “Ordem e Progresso,” the project of Brasilia epitomises the conflict between the rational control of technique and the necessity to produce a symbolic order that exceeds the economic and functionalist ethos of Modernism. Designing of Brasilia against the vastness of the unknown, Lúcio Costa relied on powerful symbolic forms like the cross or the enclosure in dialectic opposition to the scientific precision of population growth and vehicular traffic. Far from being an exceptional case, the use of paradigmatic forms in the new capital is coherently inscribed in the history of Brazil where, since the beginning of the colonial process, the irreducible distance between land and man was addressed through archetypes.
The Portuguese Crown was mainly interested in the coastline as a convenient leg in the route around Africa, toward the Far East colonies, considered at that time as a strategic priority for their mercantile economy. However the colonists were ill-equipped and too few in number to explore and control the immense vastness of a land that was largely untamed. Distinct from most areas of Spanish America – which were already structured by very stable civilizations through large cities and highly developed agricultural production – Brazil was mostly occupied by nomadic or semi-nomadic populations who relied on very little permanent infrastructure. Hence the Portuguese had to mix with the natives in the attempt to populate the territory, relying on a massive import of slaves from Africa to provide the necessary labour. However the wide majority of the inland remained unmapped, thus uncontrolled, and left to the initiative of the Bandeirantes, the Portuguese adventurers who were originally established as a special unit of the Portuguese army. These mythical figures of Brazilian colonisation explored and penetrated the most inaccessible areas of the continent in search of precious metals and indigenous populations to enslave and trade. The ambiguous position of the Bandeirantes, halfway between the State and private interests, is paradigmatic of the Brazilian constitutional ambivalence between the public and the private sphere; a blurring of distinctions and responsibilities among the political, judiciary and economic power that is still today a key element in the governance of the urban development and the territory at large.

The encounter of the weak Portuguese colonisation with the rich but hostile vastness of the land established a tension from the very beginning that turned out to be the key element in the construction of an identity for the independent Brazilian State - first as an Empire (1822-1889) and then as a Republic (from 1889). Boosted by the abolition of slavery in 1888, the increasing development of industrial production and the urban concentration of the workforce, this century-long process achieved its maturity in the 1930s with the establishment of the authoritarian Estado Novo led by Getulio Vargas. This period coincides precisely with the adoption of modern architecture as the privileged instrument for the development of the country both in economic and ideological terms, which had its apex in the construction of Brasilia under the presidency of Juscelino Kubitschek (1956-61). The new capital was debated internationally as one of the most advanced experiments in architecture and planning of its time. However, rather than an embodiment of the positivist motto, “Ordem e Progresso,” impressed in the national flag, Brasilia epitomised the conflict between the rational control of technique and the necessity to produce a symbolic order that exceeded the economic and functionalist ethos of modernism. Giving form to Brasilia against the vastness of the unknown, Lúcio Costa relied on powerful symbolic forms – like the cross or the enclosure – in dialectic opposition to the scientific precision of population growth and vehicular traffic. Conventionally understood as the symptom of an incurable imperfection, as a chronic lack of development and a fault in the process of modernization, the irreducible tension between Technic and the vastness of the land assumed in Brasilia an architectural form. Paradigmatic forms, more than planning, gave organisation and orientation to the territory while also revealing its constitutive political and economic contradictions.

This thesis maintains that, far from being an exceptional case, the use of paradigmatic forms in the new capital is coherently inscribed in the history of Brazil where, since the beginning of the colonial process, the irreducible distance between land and man was addressed through archetypes. While in Spanish and Anglo-Saxon America the territory was organised by the all-encompassing order of the grid, in Brazil a system of finite architectural forms established formal and symbolic relationships that structured the territory.
Archetypes emerged in response to the shifting of political and economic conditions, giving direction and an orientation without resolving the constitutive tension between land and man in the prevalence of one term over the other. Hence Brazil, for its specific historical and geographic conditions, provides the ideal ground to construct and verify the notion of archetype as a design method.

To define and verify the notion of archetype, the thesis examines three examples that relate to crucial shifts in the political and economic relationships in Brazilian history.

In the early period of colonisation, the Jesuit reduction is the archetype that emerges from the encounter with the radical alterity of the Brazilian territory and its native peoples. In an area characterised by violent conflicts between the Portuguese and Spanish Crowns, the indigenous population and the Bandeirantes militia, the Jesuits were called to provide order: a project that implied the spiritual mission of evangelization as much as the material reduction to a territorial organisation. Repeated in thirty different settlements with minimal variations, the reduction is not just a village but the materialisation of a specific collective form of life. The generic and repetitive character of the architectural elements – the void of the plaza, the wall of the colegio, the rhythm of the portico – organised in a specific urban scheme, defines a set of rules that are made present and explicit through architectural form. The archetypal character of the reduction allowed the Jesuits to establish a common ground where the conversion, with all its personal, social and political implications, could be negotiated. As such the reduction can be considered a truly political space where the normative character of the program is substituted by religious and civic liturgies of coexistence. Such a reading of the Jesuit reduction also casts a light on the idea of modernity elaborated by Lúcio Costa, for whom modern architecture could give a material representation to the national identity within the idea of “conservative modernisation.”

In the shift between Empire and Republic of the late 19th century, the avenida is the archetype that materialises the transition between a rural economy - based on plantations, slavery and an oligarchy of landowners - and an urban economy - based on the private property of the land, industrialization, financial speculation and waged labour. Cities - and in particular São Paulo being the paramount example - became the place where the enormous capital accumulated in the plantations was reproduced, and the territory where new subjects emerged. The landowners, moving from the rural fazendas to manage their business and social relationships, the “creole bourgeoisie” of entrepreneur, bankers and professionals looking for profitable opportunities, and the mass of destitute foreign immigrants substituting the slave labour force in the plantations, in the emerging industry and in the construction of the city itself. Within this condition the avenida becomes the tool for urban improvements based on the example of Haussman’s Paris that, using the rhetoric of hygiene and modernisation, restructured the city according to the new relationships of production and the paradigm of circulation.

Among the different examples, Avenida Paulista emerges as the archetype that addresses this specific conjuncture in the most radical way, staging the dialectic between feudal and capitalist relationships informing the process of “conservative modernisation” in Brazil. Rather than a mere instrument of circulation, Avenida Paulista is a deliberate sign in the landscape that manipulates and takes advantage of the geographical condition in order to materialise the hegemonic ambition of the new ruling elite. The avenida is informed by a dialectic between the grid as an abstract economic organisation of the land and the finite form of the street, which is not a connection but rather a limited void that gives direction and orientation. Giving form to the
empty space, the *avenida* staged and ritualised social and
economic relationships that informed the political and social
development of the city.

If dwelling in Brazil meant dealing with an irreducible gap
with the unknown vastness of the land, the development of
Technic as a universal rational order turned that void into a
space to be filled. The land turned from an insuperable limit
to mere quantity, a commodity within the endless field of
production. The acceleration of development shifted the
question of power from the problem of survival within an
unknowable land to one of managing the contradictions
produced by the rootless unfolding of capital within the
colonial territory. Modern architecture and urbanisation
worked as complementary instruments through which
the ruling class not only accelerated the process of
capital reproduction but, above all, enforced the myth of
development and the project of conservative modernisation
as the pillars of Brazilian modern identity.

Within this framework the cover emerges as the archetype
that could give form to the gap between the ideology and
the reality of modernization in Brazil, celebrating Tecnic
as a promise of development. The cover materialised the
strategy of conservative modernisation, but at the same time
opened the possibility to subvert the dominant ideology.
The architectural form of the cover put forward modes of
gathering, living and building that challenged a universal
idea of Technic and progress. The thesis reconstructs a
genealogy of the cover through a series of examples that from
the Ministry of Education and Health – where an embryonic
version of the cover is designed, precisely in the building that
established Modern Architecture in Brazil – arrives to the
Museum of Art of São Paulo, considered as the most radical
manifestation of the archetype. In the savage monumentality
of the cover Lina Bo Bardi exhibits a popular idea of the
museum and of architecture: a the stage for dignity as an
anthropological category common to all human beings.

Building on this conceptual and methodological framework,
the thesis proposes the design for a rural settlement in Mogi
das Cruzes, at the fringe of the urbanised metropolitan area
of São Paulo. Departing from a critique of the urban policies
deployed in Brazil and in particular of the program Minha Casa
Minha Vida, the project rejects the managerial paradigm of the
masterplan using architectural form to address urbanisation
and the housing question.

Testified to by the rise of social movements that specifically
deal with housing and land reform, the rural territory in
periurban areas is one of the key places where the conflicts
and the struggles of the contemporary Brazilian metropolis are
taking place. Disputes over property and the use of land have
produced forms of collective organisation and resistance that
demand alternative logics of inhabitation, based on solidarity
rather than merely economic value of the land.

Grounded in specific field work and on the observation
of the evolving geographical, legal and social conditions in
the area, the project proposes an archetype for cooperative
production, collective ownership and communal living
which could preserve the possibility of a rural life as limit and
alternative to the all-encompassing logic of urbanisation. The
archetype reinterprets the three case studies investigated in
the thesis in light of these specific contemporary conditions,
using architecture to materialise the latent conflicts of the
area, thus turning them into the object of a political choice. The
project aims to empower cooperative agricultural production,
providing a physical and social infrastructure and at the same
time giving a form of dwelling and a dignified living condition
to the precarious workers of the area. It’s through the explicit
nature of the archetype that the community can negotiate a
collective life, without accepting implicit habits that impose
a lifestyle without choice. The project reclaims the power of
architecture to operate beyond the logics of either top-down
or bottom-up approaches, as an instrument that can provide a
rule of inhabitation for a collective subject.
Chapter 1
The Reduction
Architecture and
Alterity

Ethos: Lúcio Costa and the Jesuit legacy

In 1941 Lúcio Costa published a lengthy essay titled, “A arquitetura dos jesuítas no Brasil,” in the Revista do Serviço do Patrimônio Histórico e Artístico Nacional. The text examined in detail the extensive architectural production of the Society of Jesus in Brazil, with the intent of defining the formal qualities, the role and the legacy of Jesuit architecture for the country.

At the age of thirty-nine Lúcio Costa was already a key figure in the cultural landscape of Brazil and in the rise of modern architecture as the paramount expression of the nation. In 1930 he became the director of the Escola Nacional de Belas Artes of Rio de Janeiro, where he proposed a radical reform of the academic approach based on the new themes and methods of Modern Art. In the following years he designed two seminal buildings that went on to define the canon of Brazilian Modern Architecture and mark the rise of Géulio Vargas’ Estado Novo: the Ministério de Educação e Saúde (MES) (1936-43) and the Brazilian Pavilion at the New International Fair of New York (1939). The former, designed in collaboration with Le Corbusier and a group of young Brazilian architects, definitively established modern architecture as the style of the nation, while the latter, co-authored with the young Oscar Niemeyer, would launch Brazilian architecture on the international scene. During the same period Lúcio Costa was also one of the founders of the Serviço do Patrimônio Histórico e Artístico Nacional (SPHAN) and, starting in 1937, the director of the Divisão de Estudos de Tombamento. Thus, Lúcio Costa rose in the 1930s as both a pivotal figure for Modern architecture and a scholar...
For Lúcio Costa Modernity is not an absolute novelty that demands a tabula rasa, but rather the ability to relate with different forms of culture and appropriate them by absorption. This idea resonates with the ethos of the Society of Jesus, which placed at the center of their mission the process of evangelisation and therefore the possibility to relate with the alterity. Through this conceptual and methodological approach Lúcio Costa could theorise the continuity between the colonial tradition and Modern architecture, which therefore became a fundamental instrument in the construction of a national identity.
promoting the study and preservation of historical buildings in Brazil. The overlapping of seemingly contradictory trajectories in Lúcio Costa’s work has to be understood within the specific circumstances of a country constructing a national identity and its form of representation for the first time. If Portuguese Baroque characterised the colonial period and French Neoclassicism was adopted along with the independence of 1822 and maintained after the shift to the Republic in 1889, then the rise of the Estado Novo in the 1930s demanded the elaboration of a “truly” Brazilian expression. Hence the definition and conceptualization of Brazilian heritage became the crucial ground on which modern architecture could challenge the academic establishment.

In light of these circumstances, Lúcio Costa’s essay on Jesuit architecture appears in all its relevance: far from being just an erudite exercise, the text is part of a broader strategy aimed at positioning modern architecture within the legacy of the colonial past.

As Lúcio Costa states at the beginning of the essay, the value of Jesuit architecture in Brazil transcends the question of style and the fine-grained historical discussions. “The considerable amount of artworks that the fathers of the Society of Jesus left us […] might not be, rigorously speaking, the largest, the richest or the most beautiful contribution among the artistic legacy of our past. However it is certainly one of the most significant.” And more precisely: “the work of the Jesuits, or at least a large part of it, represents the closest to ‘antique’ we have.”

In other words, Lúcio Costa elevates Jesuit architecture to the role of “antiquity” for modern Brazilian architecture: not just by it being the oldest body of architectural work but, analogous to what classical antiquity was for the Renaissance, its founding principle. Thus the extensive and detailed analysis of the Jesuit legacy is an instrument to define, more than the features of an architectural “style,” the very “spirit” that permeates the Jesuits’ work and gives their art a specific and profoundly Brazilian character. For Costa, “the Jesuit ‘spirit’ always comes to the surface, it is the mark – the cachet that identifies all their architectures and differentiates them from the others at first sight. It is precisely this constant, hidden in the overall composition or in one of its details, that persists despite the transformations imposed by experience and fashion; this irreducible presence, beyond all the styles temporarily adopted, is what constitutes the true ‘style’ of the Society’s fathers.”

Lúcio Costa therefore aims to demonstrate that the Jesuit ethos constitutes the necessary conceptual and methodological link between the Brazilian national identity and modern architecture.

The relevance given by Costa to the Jesuits’ spirit has to be understood in light of the peculiarities of this religious order, which allowed them to play a key role in the process of colonisation – of Brazil as well as in the rest of the Americas, Africa and Asia. Founded by Ignatius of Loyola in 1540, the Society of Jesus based the success of its global evangelical vocation on the military character of its organisation. Rigorous discipline and strict hierarchy turned the Society of Jesus into one of the most effective weapons for the Counter-Reformation of the Catholic Church; a sort of operative corps at the service of the Pope. In a world that was radically changing and losing the absolute centrality of God, the Jesuits embraced a pragmatic and efficient approach in response to the Reformation’s attacks and in the conquest of new souls and new lands. However, to effectively transmit the message of Christ in the most diverse territories and conditions the Jesuits followed the principle of accommodatio, which meant engaging and negotiating with the specific contingencies. Rather than the uncompromising defence of traditional customs or the ascetic isolation, the Society of Jesus placed the idea of pedagogy at the centre of their evangelical mission: the colegio always accompanying the temple. The Jesuits’ approach entailed a strong ethos, which could endure a variety of...
Conceived by Ignatius of Loyola as the archetype of the Jesuit temple, the Gesù church in Rome translates the pedagogical approach of the Society of Jesus into specific formal and spatial choices. Strategically located in a central area of the city to bring the message of evangelisation at the heart of urban life, the Jesuit temple is a single nave hall church with lateral chapels. Such a compact organisation provides a general effect of sobriety and aims at facilitating the collective participation to the liturgy. The archetype provides through the mechanism of analogy the dialectic between the material example and its unfolding in different conditions, a method that resonates with the Jesuit evangelical vocation.

The Jesuit Pedagogical Ethos

Conceived by Ignatius of Loyola as the archetype of the Jesuit temple, the Gesù church in Rome translates the pedagogical approach of the Society of Jesus into specific formal and spatial choices. Strategically located in a central area of the city to bring the message of evangelisation at the heart of urban life, the Jesuit temple is a single nave hall church with lateral chapels. Such a compact organisation provides a general effect of sobriety and aims at facilitating the collective participation to the liturgy. The archetype provides through the mechanism of analogy the dialectic between the material example and its unfolding in different conditions, a method that resonates with the Jesuit evangelical vocation.
places and circumstances, and a method to negotiate with the unpredictable and unknown alterity.

Since the beginning of colonisation several religious orders were active in Mexico, Peru, Bolivia, Venezuela and other regions of America, but, as Rudolf Wittkover has underlined, “Franciscans and Dominicans insisted on a total evangelization without any compromise; they didn’t go very far.”

The “sobriety” of Jesuit architecture doesn’t aspire to the Franciscan penitential and ascetic sacrifice, but rather pursues a rigour and a rational functionality that aims at finding a point of equilibrium between the material and the symbolic human dimensions. The “spirit” of the Society of Jesus unfolds in the pedagogy of the example: more than a set of normative principles to which the other should conform, a framework where the relationship between the educator and the scholar, the converter and the converted, the coloniser and the colonised can unfold and be negotiated.

Lúcio Costa underlines how the novelty of the Society of Jesus and its distance from the mediaeval monastic tradition shaped the Jesuits’ ability to “be impregnated by the modern post-renaissance and baroque spirit.” Here the adaptability of the Jesuits, which goes hand in hand with their military pragmatism, is clearly associated with the idea of modernity. For Lúcio Costa, modernity is not an absolute novelty that demands a tabula rasa, but rather the ability to relate with different forms of culture and appropriate them by absorption. This idea of modernity resonates with the position of the art critic Mario Pedrosa, who identified the ability to continuously absorb new imported tendencies – originated in the lack of a strong endogenous culture – the trait that made Brazil “a country condemned to be modern since its birth.”

As Lúcio Costa has noticed, the Jesuit pedagogical approach found its paramount expression in the “irreducible presence” of the Society of Jesus. Differently from most of the other religious orders the Jesuits understood architecture as a fundamental instrument for their evangelical project, where the material organisation of space is intimately connected with the establishment of an order. A canonical example is the Church of the Gesú in Rome, conceived by Ignatius of Loyola as the archetype of the Jesuit temple and built by Jacopo Barozzi da Vignola between 1568 and 1573. Rather than a model of a style to be copied, the Gesú proposed an exemplary form that embodied the Jesuit ethos, translating the specific liturgical needs of their pedagogical approach into architectural choices. First of all, the strategic location in the centre of the city, also typical of Jesuit churches and colleges in the colonies, allowed a break from monastic isolation, bringing the work of evangelisation in the heart of urban life. Secondly, the choice of a single-nave hall-church flanked by chapels allowed a compact formal organisation, placing the altar at the centre of the space, thus facilitating the collective participation in the liturgy. Covered by a flat wooden ceiling the single nave acquired peculiar spatial and acoustic qualities that helped propagate the message of Christ. Finally the preference for functional, economic and sober formal solutions embodied the spirit of the Counter-Reformation and privileged the preaching and the communal ethos over the celebrative and magniloquent representation. Such pragmatism also influenced the functional and orderly organisation of the construction process: with the institution of the consiliarius aedificiorum the Society could directly and strictly control the conformity of each building to their functional, economic and symbolic needs.

Ultimately, Lúcio Costa’s essay has to be understood as an inquiry on the Jesuit pedagogical ethos and the way this approach informed the colonisation of Brazil in its cultural and territorial character. Remarkably, what is at stake in Lúcio Costa’s investigation is not the construction of a mythical origin of the “Brasilianidade” but rather the understanding and deployment of the Jesuit method as the paradigm for a possible national modernity. 

1.5-1.6 - Jacopo Barozzi da Vignola, plan and section of the Gesú Church in Rome, 1568-1573.
the careful use of photographs and the elaboration of a simple but rigorous set of sketches, Lúcio Costa not only documents and establishes the legacy of the Society of Jesus in Brazil, but above all defines the constellation of formal and organisational elements that constitute the Jesuit “spirit”. As Lúcio Costa explicitly states, the photographs and the drawings don’t follow the traditional typological, geographical or chronological classification. On the contrary, the illustrations, and in particular the sketches made by Costa himself, are composed in plates that encompass different scales and a variety of representation techniques to construct analogous relationships among a variety of examples from different periods and locations. Moving across urban, architectural and decorative elements, using plans, sections and elevations with different degrees of detail, Lúcio Costa constructs, with great precision, a grammar of the Jesuit presence in Brazil.

The same method can be recognized in Lúcio Costa’s architectural work, regardless of the more traditional or modernist nuances of its “style”. Coherently with the Jesuit approach, Lúcio Costa adopts a sober and strict rationality that is never flattened into a mechanical functionalism but, on the contrary, maintains a tension between the symbolic and material dimension of the project.

In the projects of the 1940s, like the Residência Saavedra in Petrópolis (1942), the Park Hotel São Clemente in Nova Friburgo (1944) or the residential complex Parque Guinle in Rio de Janeiro (1949), Lúcio Costa experiments directly with the relationship between the modern rational organisation of the space and traditional materials and construction techniques. The geometrical composition of the volumes, the pragmatic configuration and separation of the different functions, the choice of exposing the pilotis and the use of generous glazed surfaces produce an unmistakably modern space. However the use of pitched roofs, wooden pillars or vernacular elements, like lattice blinds, ceramic roof tiles and cobogós (sunshades), works as a counterpoint, “absorbing” local traditions within the modern aesthetic and life. The tension between modernity and tradition is increasingly legible in the specific formal and constructive solutions adopted by Lúcio Costa. While in the Park Hotel São Clemente and in the Residência Saavedra the overall traditional appearance masks the genuinely modern organisation, in the Parque Guinle the use of cobogós is embedded in modern housing block, reminiscent of Le Corbusier’s Unité d’Habitation. Here vernacular elements are used as purely geometric patterns that transcend their technical role of regulating light, heat and ventilation, instead acquiring an abstract aesthetic quality entirely consistent with the exposed grid of the slabs. However, defining the boundary between inside and outside with perforated clay screens rather than glass surfaces, Lúcio Costa produces a peculiar form of inhabitation that reinterprets the archetype of the colonial house within a modern housing slab. The interior is not bluntly exposed to the park through maximum transparency but rather protected to give an intimate domestic dimension to the space between inside and outside, reconstructing a bucolic memory of the Brazilian colonial landscape.

Lúcio Costa concludes the essay on Jesuit Architecture by discussing the legacy of the Jesuit reductions of Rio Grande do Sul, which he visited as Director of the Department of Studies for Listed Buildings in 1937. “The Jesuits have shown themselves as remarkable urban designers, and the organisational spirit, the power and the scale of their work reminds us of the Romans at the edge of the empire. Despite the current state of decay, we can still recognise in the smallest fragments an energy, a vigour, an ‘impulse’ - we could say - that makes them - wherever they are - unmistakable.” In these words we can read Lúcio Costa’s admiration for the Jesuits’ ability to turn their ethos into their work, materialising in a precise architectural and urban form a tension towards order, discipline and monumentality.
Undoubtedly the missions deeply marked Costa’s idea of the relationship between architecture and the city, which found in the Jesuit reduction, more than a historical reference, the archetype that exemplifies a design method.

In 1940, a few years after the publication of the essay, Lúcio Costa’s ambition to reclaim the Jesuit legacy finds an extraordinary opportunity in the project for the Museu das Missões in São Miguel Arcanjo, the most important and better-preserved reduction on the Brazilian territory.26 The project is made of two simple elements placed at a right angle, the museum and the custodian’s house: the latter is an introverted patio house that elaborates on the legacy of the Mediterranean house, while the former is a simple porticoed roof that directly reinterprets the formal organisation of reduction housing. The building plays explicitly with the ambiguity of its historical nature, using elements, construction techniques and even original materials from the Jesuit mission. The museum, originally built as an open-air shelter supported by white walls and wooden columns, was afterwards enclosed by Lúcio Costa himself with large glass walls; a choice that challenges the boundary between modernity and historic heritage. The positioning of the Mission’s Museum in the archaeological complex is a remarkable gesture. Rather than locating the intervention outside of the archaeological site, Lúcio Costa carefully places the new building on the opposite side of the church, precisely on one of the corners of the plaza, thus reconstructing the measure of the original void. As such the Museum is a celebration of the paradigmatic form of the reduction both in its architectural and urban dimension. Such line of inquiry will have its paramount expression in the project for Brasília, where the highly symbolic value of the cross as a foundational gesture will construct a tension with the rational design of vehicular traffic and the functional organisation of the residential wings will be framed by the landscape project of the superquadra.27

Territory: Conflict and Order

In an exceptionally remote region of South America, along the basins of the Uruguay and the Paraná rivers, arose a very peculiar form of organisation and inhabitation of the territory: the Jesuit reduction. Between the 17th and the 18th century thirty settlements were founded with a very precise urban scheme, gathering at their peak an overall population of about 140,000 Guarani under the guidance of just about 60 Jesuit priests.28 Far from the coastline, lacking precious mineral resources and dominated by a wild and hostile environment, this region was characterised by conflicts and instability from the very early period of colonisation.29 The remote character made it difficult to explore, map and control, sparking sovereignty disputes between the Spanish and the Portuguese Crowns. At the same time the region provided refuge for the native Guarani people escaping the incursions of the Bandeirantes from the Atlantic coast.30 Within this turbulent and violent context the Society of Jesus was called to provide order, a project that implied the spiritual mission of evangelization as much as the material reduction to a territorial organisation. The Jesuits missionary enterprise had a manifold character: religious, since the order is first and foremost the manifestation of God; military, as the evangelization is a mission to be accomplished through rigorous discipline and economy of means; political and economic, as the conversion implies the organisation of the territory in a network of discrete and manageable quantities of people with specific productive relationships. Pursuing “the glory of God and the good of souls” - a motto that synthesised the evangelical vocation of the Society of Jesus - and the mandate of the Spanish Crown - which intended to secure those unstable territories - the Jesuits gave life to an extraordinary and controversial experiment where the architectural form of the settlement played a crucial role. However, despite the heated debate between harsh critics and admirers of the Jesuits’ work,31 little has been written about
the relationship between the form of the reduction and its political, economic and social effects.

The issue at stake in the Jesuit evangelical enterprise is the construction of the space of the conversion. Differently from a purely military, technical, cultural or economic domination, the conversion is an induced transformation that involves the spiritual and personal sphere as well as the whole system of symbolic, social and political relationships and practices. The converter and the converted, although from different and unequal positions, are both called to a critical reflection that questions their cultural legacy to gain the trust of the other. Even if the unstable and dangerous situation of the region pushed the Guarani to find a safe refuge in the Jesuit reduction, only a highly sophisticated spatial and cultural mechanism could allow a few dozens of priests to organise a radically different life for tens of thousands of natives. The missionary enterprise demanded the construction of a very precise urban form where both conversion and conflict could materialise within an architectural frame. To establish a common rule for religious and civic rituals entailed a regular and strict subdivision of time as well as a clear and simple articulation of space. Only defining precise boundaries between collective and domestic life, between sacred and productive spaces, or by repeating discrete architectural components in opposition to the prominence of symbolic elements, a new form-of-life could be constituted.

Interestingly enough, the architectural form of the Jesuit reduction did not follow the precise regulations already tested and systematised by the Spanish Crown along the 16th century, but proposed a distinct scheme that relied on half a century of experience founding and administering missions in Brazil. The Jesuits, in fact, began their Latin-American enterprise in Brazil in 1549, just nine years after their official recognition of the order by Pope Paul III. The arrival of the Society of Jesus assumed a particular relevance in Brazil not only in virtue of its peculiar approach to evangelisation, but also in light of the specificity of the Portuguese colonisation, which greatly diverged from the systematic managerial approach of the Spanish Crown. While the Spaniards had already founded hundreds of settlements and established precise norms of urbanisation during the 16th century, the Portuguese occupied a very reduced portion of the territory, pursuing a merely extractive exploitation of the natural resources – in particular of the “pau-brasil” timber that would give the name to the country. Such a pronounced difference is partly due to the disparity of conditions found by the colonisers. The Spanish encountered settled populations and highly organised empires that, once conquered, could be more easily incorporated in a tributary system and provide a trained workforce. The Portuguese instead had to deal mostly with nomadic and semi-nomadic groups dispersed in a wild and hostile territory. More importantly they were only interested in the coastline, as they understood Brazil less as a territory to occupy than a system of stopovers on the route around Africa, towards the highly profitable colonies in the Far East. The Portuguese presence in Brazil was largely limited to a system of harbours protected by military forts. However, the difficulty in defending these outposts from the native population and from other colonising forces – such as the French, Dutch and Spanish armies – pushed the Portuguese Crown to promote a more stable occupation of the land. A more effective deployment of the Crowns’ authority on the territory was achieved first with the 1530 expedition of Martim Alfonso de Souza, then by establishing the system of the Capitanias in 1532 and later centralising the administrative powers in the Capitania Geral do Brasil.

The Jesuits’ strategic role in the project of stabilising the colony is confirmed by the fact that the first Jesuits arrived in Brazil precisely in the same expedition of the first Governador Geral Tomé de Souza. The political-economic goal of giving a viable structure to the vast and hostile
territory largely coincided with the religious mission of evangelisation, as they both materialised in the practice of founding settlements. In fact, both converting the natives to Christianity and turning them into subjects of the Portuguese Crown implied reducing these people to sedentary life: hence the name reduction. In a territory that was sparsely populated, this strategy proved to be essential in gathering the much-needed labour force and appropriating the necessary knowledge needed to colonise the land. The inland advance of the Portuguese civilization required exploiting the routes, followed for centuries by the natives, as much as using their skills in collecting food, identifying therapeutic plants and cultivating tropical species. Hence the emphasis given by the instructions of Tomé de Sousa for both the repression of the hostile indigenous population as well as the simultaneous protection of the natives who would accept Christianity and be subject to the Crown. Selecting strategic outposts in key locations according to their military knowledge, the Jesuits built a network of villages that could control, defend and allow their progressive penetration inland, ultimately giving form to the territory.

In this respect the divergence between the Spanish and the Portuguese approach to the colonisation of Latin America emerges in all its relevance. Codified, since the beginning, through precise norms, the Spanish-American city is the space and the expression of bureaucratic control, of a managerial reason epitomised by the regular grid of the damero. The Spaniards privileged flat locations in the high plateau of the inland, protected by the dangers of the sea and characterised by better and more familiar climatic conditions, where the technocratic and abstract functionality could expand, indifferent to the peculiarities of the land. The Plaza das Armas, more than a formal gesture, is the result of the subtraction of one block from the grid, a negative void immediately re-symbolised by the power of State and Church. In the map of Cordoba the managerial character of the Spanish-American urbanisation is exceptionally evident: the settlement is described only by the abstraction of grid and text. Buildings do not matter, they are just the expression of the linguistic space of the norm.

On the contrary, in Brazil, the buildings construct the territory as paradigmatic forms that give order and orientation to the land. The Fortaleza and the Engenho – the military fort and the sugar cane mill – are the archetypes of the early phase of colonisation; autonomous and introverted architectures with a specific internal life and a marked relationship with the landscape. The fort, mostly associated with the protection of the harbour, is located according to strategic military reasons, often occupying high ground in connection with protected bays or river mouths. The mill, located usually along water streams to provide energy and transportation, is instead a self-sufficient complex that exceeds the specific manufacturing function. The casa grande – the house of the master – and the senzala – the house of the slaves – organised around the open space of the terreiro, shape the crucial master-slave relationship within the complex domestic, administrative and social space of the engenho.

Following the same idea of formal presence in the landscape, the Jesuits clustered the church, the colegio and the square in a unitary complex. Located in a strategic position according to military, functional and religious consideration, the Jesuit complex constituted the material and moral reference point of the settlement. Particularly clear in this respect is the representation of Olinda, a city in the State of Pernambuco, where the colegio appears in a dominant position both formally, being the upper vertex of the triangle that represents the city, and functionally, controlling the crucial route towards the bridge on the Beberibe river. Remarkably in the same representation the Benedictine, Carmelite and Franciscan monasteries appear as detached enclosures outside of the city, making explicit a completely different relationship with the landscape, the city and ultimately to evangelisation.
The archetype of the reduction is defined by three elements: the colegio, the field of housing and the plaza.

The *colegio* is a unitary and finite complex that hosts the house of the father, the church and the collective facilities.

The field of housing is a system of identically repeated building that can flexibly grow according to necessities.

The *plaza* is the void where the tension between this two elements of the reduction, which are also the terms of the conversion, is staged, ritualised and negotiated.

1.16 - Organisation of the reduction

**Elements of the Reduction**

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The *plaza* is the void where the tension between this two element of the reduction, which are also the terms of the conversion, is staged, ritualised and negotiated.
The Jesuit Brazilian experience of the 16th century casts a different light on the peculiar nature of the Trinta Povos Guarani, allowing one to understand the architectural choices that gave form to the reduction less as the outcome of the Spanish managerial approach than as the exemplary manifestation of a design method that relies on the power of form.\textsuperscript{31}

**Reduction: Form and Life**

The archetype of the reduction is defined by a clear and precise organisation of a few architectural elements into an urban form. This scheme was used, with minimal variations, in all the Trinta Povos founded by the Jesuits in the Guarani region between 1609 and 1768.\textsuperscript{51}

The settlement is arranged around the plaza, a clearance of the ground measuring about 150 varas per side - approximately 125 metres.\textsuperscript{51} Crosses or small chapels mark the square on the four corners. A column topped by a cross or by the statue of the patron saint is placed in a median but eccentric position. The entrance to the plaza, emphasised by the more prominent dimensions of the corner buildings often hosting civic functions, occurs from the midpoint of one of its sides.

Opposite the main access, and always aligned on the central axis of the entire complex, is the church. Together with the bell tower, placed on one side of the temple, the church stands out as the largest, and at times imposing, mass. However the temple is never a freestanding isolated building but instead is inserted in a larger complex. The church constitutes one side of a courtyard around which the collegio is organised. This introverted portico building comprises the house of the fathers and their communal spaces, the kitchen, the dining room, storage rooms and other spaces for the private life of the priests. A second courtyard, adjacent and connected to the first, hosts the collective facilities: workshops for metal, wood or, in some cases, printing; classrooms for music, art and other educational activities; storages for construction materials or food, and additional spaces for the productive life of the mission. On the other side of the church, either adjacent or slightly detached, are the simple enclosed yards of the cemetery and the cotiguazu, the house for the orphans and the widows. The set of collective spaces is completed by other civic buildings, which generally assume the form of closed or semi-closed courtyards: the tambo, a temporary residence for the visitors, the cabildo, the assembly for the government, and at times other communal facilities such as the hospital, prison, slaughterhouse or spaces for manufacturing and food production.\textsuperscript{35} Behind the church the complex ends in a large enclosure, the hortus, a walled field dedicated to gardening and cultivating vegetables, fruit trees and other plants with a few small storage buildings for food and tools.\textsuperscript{35}

On the other three sides of the square are arranged the houses of the natives, organised in identical linear buildings repeated in rows, parallel to the edges of the open space. Such an arrangement allowed the Jesuits to scale settlements up or down through the mere repetition of the units, depending on the population. The houses are isolated building-blocks formed by a sequence of six or seven adjacent rooms measuring about six or seven metres per side, thus constituting a compact element of about 40 to 50 metres in length. Each room has regularly spaced openings and is surrounded by a two and a half metre wide portico without any distinction between front and back. The other two sides of the room are blank walls separating one space from the next without internal connections. These walls support the storage and other simple furniture, such as sleeping hammocks or temporary screens of interwoven foliage, eventually used to partition the space. Each room hosts a family composed of an adult male, his wife and two or three children.\textsuperscript{56}

The population of the reduction was subject to considerable variation, due to war or disease. Overall each settlement hosted between 1500 and 7000 inhabitants organised in 500 to
The political organisation of the reduction followed a similar process of evolution and consolidation. The Guarani tribal organisation, initially predominant, was progressively substituted by a new administrative class, when the previously semi-nomadic population was replaced by the new generation born and educated in the mission. The settlement was governed through the *cabildo*, a sort of municipal council directed by the *corregidor*, and composed by a number of elective roles. Differently from the regular Spanish settlements, the *corregidor*, named by the Spanish governor, was always a Guarani. However, once the Jesuit priests were recognised as spiritual leaders of the community, they exercised a decisive influence on every political and administrative decision, non dissimilarly to the shaman in the Guarani culture. The Jesuits also superintended the military organisation of the reduction, providing training and coordinating the operations among different settlements. In fact, in the Guarani reduction, every inhabitant had to be available for the military service and, thanks to their network of communication, the population of the missions operated as a very mobile and effective army in a contested frontier zone. Through the Jesuits, the Spanish authority could deploy this military force according to the necessities, and in fact the Guarani played a key role in a number of battles against both the Portuguese and the rebellious native populations.

The survival of the reductions in an isolated and turbulent area largely depended on their self-sufficiency, for which obviously food production played a fundamental role. The reductions cultivated vegetables and bred bovine, equine and sheep in the *estancia*, a large plot of farmland assigned to each settlement. The land was partly subdivided among the nuclear families to provide for their own needs, and partly used for collective production, which was necessary to feed the people that worked in the administrative, manufacturing or military activities, and to generate a surplus for trading.
In fact, no currency circulated in the reductions, whose economy was entirely based on self-subsistence and barter. Cotton and wool, for example, were used to produce clothes but also as a means of exchange with other reductions and in the closest markets of the region. In this respect a particular relevance assumed the cultivation of the yerba mate - a kind of tea common in the area - which became the major product for export and a relatively considerable source of wealth. Furthermore, beyond the basic production, each mission specialised in specific agricultural or artisanal activities, so that the reductions as a whole operated as an integrated territorial system coordinated by the Jesuit fathers.

The entire life of the reduction was highly regulated by a collective routine imposed by the Jesuits. The day started early with the military reveille drum at four. The adults began with morning health checks, followed by Mass and then spent most of the day working in the fields, manufacturing workshops or in the construction and maintenance of the buildings. Both women and men cultivated an assigned plot for four days a week and the collective fields for two days. The youth were gathered by the alcaldes and brought to the church where they received the catechesis, trained for the coral and participated in the celebration of Mass. After a collective lunch the young Guarani, separated by gender, both males and females went to the colegio where they were taught manual skills as much as art, music, reading and writing both in Spanish and Guarani language. Over time the Jesuits were also replaced by Guarani teachers, as the younger generations were fully absorbed in the Christian culture. On Sunday and in the festive days work was strictly prohibited. The time was largely dedicated to religious celebrations, but also to games, dance, theatrical representations and to military exercises and parades. Every day concluded with the evening prayers and finally with the return to the family room. At night the guards enforced a curfew and nobody could exit the reduction. The drums played three times, marking the time of reproduction.**

Archetype: Threshold, Field, Void.
The archetype of the reduction frames the complexity of the encounter between the Jesuits and the Guarani with striking clarity. The set of power relationships established within the paradigm of conversion is staged through the organisation of the urban form. On one side is the ruling presence of the Jesuit complex and on the other are the Guarani houses, a field of identically repeated elements. At the centre of this opposition is the Plaza, a measured void where the conflict between the Jesuits and the Guarani is framed and remains open to negotiation.

Reminiscent of the defensive and autonomous archetypes of the fortaleza and the engenho, the character of the Jesuit complex is unitary and introverted. Despite its internal organisation of distinct spaces - church, colegio, workshops and cemetery - the building addresses the square through a long, continuous elevation. A singular architectural element that integrates the bell tower, church portal and other minor openings. In many cases a portico runs along this facade, emphasising the presence and the unitary character of this crucial threshold. Ultimately, the role of this wall is to establish and make legible the border between the Jesuits and the Guarani, between the Christian and the “savage” life. The regulated permeability of this wall, the possibility to cross this threshold and access the house of the fathers to work, cultivate, pray or rest in peace, reveals in its material thickness the nature of the evangelical and colonial ethos. The Jesuit complex is the house of the order: whether religious, for the nurturing of the souls; military, for the control and protection of the population; institutional, shaping behaviours and educating to artistic and manual skills; managerial, organising the labour for the subsistence of the community; the Jesuit complex stands as the space of a political and spiritual order of life.

Within this framework the church obviously plays a crucial role, being the largest and most important building
The reduction is constituted by the opposition between a generic field of housing and the symbolic presence of the Jesuit complex. The residential quarter follows the abstract logic of an infrastructure that can easily adapt to different geographic conditions and absorb variations in population. Organized as identically repeated building-blocks, the residential quarters operate as a system of potentially endless urbanization. The Jesuit complex assumes a defensive role, acting as a medieval fortress that provided refuge in case of attack, thus reinforcing the distinction between the economic dimension of the housing and the political dimension of the Jesuit complex. The colegio stands out in the settlement plan like the solid “head” of a growing body. The square of the Jesuit reduction is a formally defined gesture that, exposing the tension between the domestic and the collective dimensions of life, frames the encounter between the Jesuits and the Guaranis. The wall of the Jesuit complex categorically interrupts the endless fields of reproduction to affirm a material and symbolic limit.
of the reduction. The temple was initially built as a large and simple shelter, supported by wooden columns and covered with woven foliage, and later enriched with more solid materials and decorative elements. Beyond the debate on stylistic aspects, the church performs a specific role through its positioning within the urban scheme. Unlike the Spanish model, the church is never a freestanding building but always sits within the Jesuit complex, orthogonal to the colegio’s wall and marking exactly the midpoint of the square. Thus, the entrance of the temple stands precisely at the intersection between the horizontal axis of the wall and the vertical axis marked by the road connecting the settlement with the territory. The facade of the church is therefore the vanishing point of a precise perspectival axis, which turns the temple’s interior into the conclusive moment of a processional arrival to the reduction. As a result this axis and the wall form the figure of a cross, turning the parvis and the entrance to the temple into the material and symbolic hinge of the entire mission.

The great importance of this threshold is confirmed by the relevance acquired in the life of the mission, where the space immediately in front of the church was used as a stage for assemblies, theatre performances, judicial hearing, disciplinary punishments, religious rituals, civic ceremonies and military parades. Although the parvis always marked the presence of a temple in the public space, in the reduction such a threshold concentrates the highly symbolic meaning of passing from one system of beliefs to another. This transition was the fundamental raison d’être of the Jesuit mission, marked with the sacrament of baptism, a ritual that had a particular importance in the liturgy of the reduction. The significance of this moment had to be visually and spatially materialised in the architectural form and at the same time transmitted and absorbed through the blurring of religious and the civic character of the rituals.

The symbolic dimension of the Jesuit complex is countered by the pragmatic internal organisation of the colegio and of the other civic buildings. The colegio is arranged around two porticoed rectangular courtyards: one for the communal spaces and the private rooms of the fathers, the other for the educational activities, storages and workshops. There is little typological variation even between buildings with significantly different programs, like the residential quarter of the fathers, the workshops, the storages, the tambo or the cotiguazu. Every civic building follows the courtyard scheme with a single entrance from the outside, where the portico articulates the circulation around wings of identical width. The subdivision of rooms varies just on the basis of strictly pragmatic concerns and the configuration and the dimensions of the architecture are mainly dictated by efficiency, both in terms of structure and distribution. The defensive character and the scarcity of means partly explain these choices, however the overall effect is one of a radical formal abstraction deployed simultaneously in two directions: on one hand towards the sublimation of symbolic values and on the other towards the pragmatic satisfaction of productive and reproductive needs.

Such ambivalence of the Jesuit approach was also manifested in the importance of water, not only as a resource but also celebrated in fountains, public toilets and in the sewage system. Water held multiple meanings for the Jesuits. First, as a strong symbolic element connected to the sacrament of baptism and more generally to the idea of purification. At the same time water was also linked to pragmatic reasons related to the hygienic conditions, food preparation and preservation, irrigation of the fields and other productive activity. The fathers insisted on hygiene as a practical concern – given the scarcity of means, the isolation and the growing population – but also as a means to exert disciplinary control on the population and their reproductive activity.

The domestic sphere, in fact, played a crucial role in the
framework of the reduction, as the conversion required not only a symbolic and spiritual work, but above all a precise material organisation of daily life.

Prior to the arrival of the Europeans, the Guarani people had a semi-nomadic life where agriculture was a complementary form of subsistence to hunting and gathering. Hence, a certain territory was exploited for a few years and then left, when the natural resources and the fertility of the soil declined. The tribes were organised in small temporary villages called amundá, constituted by five or six large buildings and surrounded for defensive purposes by an enclosure made of stockades and moats. The architecture of the Guarani was essentially a single communal house, the oca, a masterful spatial synthesis between the available natural resources, common construction techniques, the temporary character of the village and its social organisation. Usually measuring about 50 by 6 metres and made of tree branches and thatch, the building varied in length according to the number of families (generally between 10 and 60) forming the teýy, the basic social, economic and political unit, headed by a teýyrú, the father of the family. The interior was divided in three naves by wooden trunks supporting the roof. The same structure defined a distinction between a single central communal space, where collective activities such as cooking, eating or ritual performances took place, and two lateral sequences of spaces shared by the families. The division in separate spaces was loose, without rigid partitions, thus perfectly corresponding to the social and cultural structure of the Guarani; ignoring the notion of private space and property they considered the whole teýy as an extended family, a space with a high degree of social and economic interdependence beyond kinship.

Sharing and collective work were highly valued in the Jesuit reduction, as Christian principles of communal life but also as a means to organise labour and guarantee the self-subsistence of the mission. However the Jesuits could not accept the blurred boundaries between families and the promiscuous and polygamous relationships that were part of the Guarani social structure; the prerequisite for sharing resources according to a Christian way of life required the definition of clear affective bonds and spatial limits for the family. Thus the construction of solid boundaries became one of the fundamental instruments through which the Jesuits could radically transform the habits and the inhabitation of the natives. At first glance the residential block of the reduction appears very similar to the original indigenous collective houses, both in terms of dimension and social composition, as each building hosted one lineage group (cacicazgo), similar to the native settlement. However a closer reading shows that, beyond technical and environmental considerations, the Guarani housing was the result of a radical spatial inversion. The central part of the building, once open and devoted to collective activities, was now constituted by a sequence of completely separate rooms isolating different family units. While at the same time the communal space was pushed toward the outside in the form of a portico, which mediated the relationship between the public street and the private rooms. The uniformity of the portico, continuously wrapping the buildings, and the regular pace of the openings, identical on both sides of the house, erased hierarchies and distinctions between front and back, emphasising the isotropic nature of the field of housing. Furthermore, the generous space among the buildings can be understood more as a means of separating the private dwellings than as a space for circulation. Ultimately the repetition of identical rooms and buildings, surrounded by the constant rhythm of the porticoes, defined a radically different idea of dwelling, where the rule of cohabitation was explicitly exposed in the architectural form.

Yet the systematic subdivision of families in discrete productive and reproductive units had a profound ambition and long lasting effects beyond the religious and moral.
connotation. Building an interior, a domestic sphere radically distinct from the collective one, instilled in the Guarani people the idea of nuclear family and private property, both functional to the reproduction of a sedentary labour force.79 The Jesuits introduced the distinction between aba-mbaë, land of the indigenous and tupi-mbaë, land of God, which identified the fields that were assigned to each family and the ones that were cultivated collectively for the needs of the mission. However, the notion of property was completely unknown to the Guarani. Their semi-nomadic life implied two characteristics related to property. First, a very limited amount of belongings. Secondly the possession of the land by the cachique, the chief of the clan, was temporary and essentially linked to the regulation of its use and cultivation, which was always collective. Largely relying on hunting and gathering, and minimally on agriculture, the Guarani had little concern for accumulation. They never practised trade of goods or land, nor did they have a system of inheritance: when a cachique died the house of the clan was abandoned or destroyed, including all its belongings. The Guarani used the land and its resources according to their immediate needs, without planning.80 Such a radically different conception of the relationship between man and its environment, which is at the origin of the myths of a genetic laziness and inaptitude to work of the natives, meant that the Guarani struggled to understand the need for working without immediate necessity and outcome.81

The Jesuits understood that the linguistic framework of norms could not be effective in turning the Guarani to Christian life. The conversion implied not only the acceptance of a new religion with new moral principles, but more importantly the transformation of habits that were tightly connected with the modes of dwelling and understanding the territory. From this perspective, form had to be intimately related with use. The organisation of buildings, rooms and plots had to immediately correspond with ritualistic actions within a new form-of-life.82 As such the reduction operated as an archetype, a paradigmatic form that exposed in the material presence of architecture a rule of dwelling.

The fundamental role of architecture in the Jesuit reduction is further emphasised by the importance that building had as collective activity in the everyday life of the settlement and in its development. Establishing a reduction was a difficult process that required several phases of construction and reconstruction before achieving a stable and definitive configuration. Hence in their 150 years of life the missions were essentially always under construction.83 Thus building became one of the fundamental collective rituals through which the Guarani on the one hand appropriated the space of the settlement and on the other hand were disciplined through labour intensive activities.84 Especially in the later periods, when the settlements were consolidated and made use of more solid materials, the construction process entailed a large and varied number of activities - from the fabrication of bricks and tiles, to the quarrying, cutting and transportation of stones, digging foundations, carpentry and the sculpting of decorative elements, etc. - all coordinated by the fathers, sometimes in collaboration with external consultants.85 All these works required repetitive and coordinated actions, which reinforced the bonds and the collective dimension of the reduction through the organisation of time and space. Furthermore, while certainly the Guarani were highly skilled builders of their traditional houses - which was a collective enterprise of the entire clan - in the reduction they had to be educated to completely different construction techniques. This technological shift produced a degree of alienation of the natives from the construction process, and therefore decisively contributed to their subordination to the order of the fathers.86

Religious ceremonies, communal meals, games and theatrical performances, labour in the fields, in construction

1.28 - The Guarani house in the reduction.
Religious ceremonies, communal meals, games and theatrical performances, together with collective labour in the fields on in construction, were crucial ritual activities in the reduction of the natives to sedentary life.

The void of the plaza, an empty space with specific dimensions yet without a specific program, materialized the confrontation between a new symbolic order and the bodies that would give life and substance to it. If the wall was the materialization of the threshold that separates and at the same time unites zoe and bios, the plaza gives form to the tension between these two poles by means of a measured absence: a void that stages liturgies of coexistence and remains open to re-appropriation of life.

1.29 - Survey of the reduction of São Miguel.
or other crafts, were activities that, following a rigid collective schedule, were crucial in reduction of the natives to sedentary life. The intimate correspondence between form and life was, in part, the outcome of the military rationale imposed by the Jesuits to survive within an isolated, unknown and hostile territory. However, beyond the rigorous discipline, the strict economy of means, the functional, climatic or programmatic aspects, the extreme abstraction of the Guarani and Jesuits dwelling can be understood as manifestation of the inescapable biological necessities that are common to all. The field of housing blocks satisfies and at the same time materialises the incessant demands of our body, framing the constant need for reproductive labour within precise spatial conditions and everyday rituals. From this perspective the generic character of the architecture of the reduction is rooted in the need and the will to establish a common ground where the relationship with the alterity could be built.  

Ultimately the Guarani housing is constituted by the opposition between a generic field of housing and the symbolic presence of the Jesuit complex. The residential quarter acquires the abstract logic of an infrastructure that operates at all scales as a machine-à-habiter that can easily adapt to different geographic conditions and absorb variations in population within a unitary organisational principle. In this respect, the absence of a defensive perimeter, typical instead of Guarani settlements, is remarkable and highlights the capacity for the reduction to expand or contract according to needs. The Jesuit complex itself assumed a defensive role, acting as a mediaeval fortress that provided refuge in case of attack, thus reinforcing the distinction between the economic dimension of the housing and the political dimension of the colegio.

Such tension is clearly legible in the opposing relationship between the architectural presence of the Jesuit complex and the expansive field of the Guarani housing. Organised as identically repeated building-blocks, the residential quarters operate as a system of potentially endless urbanisation. However the blocks, which always surround the square on just three sides, never exceed the line marked by the wall that separates them from the Jesuit complex: the colegio stands out in the settlement plan like the solid “head” of a growing body. Differently from the negative void of the Spanish plazas das armas – which were the outcome of a purely managerial logic – the square of the Jesuit reduction is a formally defined gesture that frames the encounter between the Jesuits and the Guarani, exposing the tension between the domestic and the collective dimensions of life. The wall of the Jesuit complex categorically interrupts the endless field of reproduction affirming a material and symbolic limit. Beyond the religious aspects, such a limit acquires an eminently political connotation as it reclaims the possibility of governing reproductive life by establishing a common telos. The relationship between the complex of the colegio and the housing – and analogously between the Jesuits and the Guarani – is asymmetrical but never fully resolved with the hegemony of one side over the other. The void of the plaza, an empty space with specific dimensions yet without a specific program, materialises the confrontation between a new order of symbolic values and the bodies that would give life and substance to it. If the wall is the materialisation of the threshold that separates and at the same time unites zoe and bios – the political and the economic sphere – the plaza gives form to the tension between these two poles by means of a measured absence: a void that stages liturgies of coexistence and remains open to the re-appropriation of lifev.
Chapter 2
The Avenida
Architecture and
Urbanisation

Territory: the triangle and the line
A triangle and a line, these two figures comprise São Paulo at the turn of the 20th century. On the one hand is the triangle, defined by the granitic hill, standing at the confluence between the Anhangabaú and Tamanduateí River, where the city was founded in 1544. On the other hand is the line, marked by the long ridge, facing the historic centre, where Avenida Paulista was traced in 1891. The triangulo and the espigão, as they are informally called in São Paulo, sublimated the peculiar topography of the site into confronting urban forms that became the compass of a city in the midst of its raging urban expansion. If the triangulo defined the form of the city since its foundation, for the first time an equally powerful gesture challenged the hegemony of the historical hill and established a new conception and organisation of the city for the following century: the archetype of the avenida.

Until the mid 19th century São Paulo was just a precarious provincial town, clinging to the hill where the Jesuits established the mission of São Paulo dos Campos de Piratininga as an outpost of colonisation and evangelisation. Isolated in the vast and dangerous inland of the São Vicente Captaincy, but placed on an elevated and prominent position, the settlement could be easily defended and at the same time stood out in the landscape as a symbol of the Christian presence. The Jesuit ethos of evangelization informed the structure of the entire territory as São Paulo, largely contained within the historical hill, was the administrative and commercial centre of a network of villages surrounded by farms for the production of food. Characterised by an irregular and dense street pattern, the town was primarily
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**The Triangle and the Line**

The city of São Paulo at the turn of the 20th century can be represented by the dialectic between the figures of the triangle and the line. If the triangle was the form of the granitic hill where the city was founded, the ridge on the other side of the valley is the place of the new foundation traced in 1891: the line of Avenida Paulista. The triangulo and the espigão, as they are informally called, sublimated the peculiar topography of the site into confronting urban forms that became the compass of a city in the midst of a raging urban expansion. If the triangulo defined the form of the city since its foundation, for the first time an equally powerful gesture challenged the hegemony of the historical hill and established a new conception and organisation of the city for the following century: the archetype of the avenida.
made of two-storey houses, built with rammed earth walls rendered in white plaster, and organised around strategically located civic spaces and religious buildings. The monasteries of São Bento, Carmo and São Francisco occupied the corners of the triangulo, controlling the roads entering the city, while the Cathedral and the Jesuit colegio maintained a privileged position on the access to the Tamanduatei River - the main source of water at that time. Hence the city’s form was the result of the dialectic between the site’s geography, the simplicity of construction techniques and the positioning of archetypal elements giving both a symbolic and functional orientation to the territory.¹

Known by the natives as Caaguassu, meaning “great forest” or “virgin forest” and being still covered with dense native vegetation, the espigão was a difficult climb. The thirteen kilometre long ridge was the highest elevation in the area, defining both a horizon for the city and a counterpoint to the historical hill. Yet, the relatively flat, wide summit of the espigão - between one and three hundred metres wide where Avenida Paulista was to be traced - was also used as a trail by the tropeiros for the movement of carriages and cattle to the slaughterhouse of Vila Mariana. In this way the espigão was historically part of a vast system of routes connecting São Paulo with the Río de la Plata basin. The ancient path of the espigão offered privileged viewpoints towards the Pico do Jaraguá, a landmark that provided a reference point for the entire region, and towards the historic hill of São Paulo, where churches, monasteries and tower bells stood out against the vastness of the landscape and the low white mass of the city.²

While the espigão was an unoccupied ridge, the city was a dense settlement concentrated in the triangulo, then, at least until the 1870s, the population surrounding São Paulo was possibly larger than the one of the town itself.³

Thus, while the settlement of São Paulo was certainly an important pole for the area, it is difficult to trace a clear boundary or hierarchy between city and countryside. The rural hinterland has been described as two concentric belts: the inner “cinturão das chácaras” and the outer “cinturão caipira.”⁴ The outer belt, characterised by large properties and agriculture, produced food and other commodities for the subsistence of the city and regional trade. In this area the property structure was looser and therefore self-subsistence farming common. The inner belt, instead, tightly linked to the city, was instead organised through chácaras, rural properties where the wealthiest families often resided for part of the year. At least until the 1890s, these urban farms ran on slave labour as quasi-self sufficient units that encompassed orchards, pastures and a variety of crops, but also workshops, storage and other productive spaces alongside domestic and religious activities. Although the chácaras were apart from the city centre, they provided a leisurely environment and, more importantly, an abundance of food in a time when, even for the affluent elite, the provision of basic commodities was uncertain.⁵ In fact, as early as the 1860s, the chácaras became places of residence and, even when living in their sobrados, multi-storey houses in the city centre, wealthy families used suburban farms for the provision of their basic supplies and holiday retreats.⁶ The ambiguous character of this semi-rural hinterland was also defined by the presence of civic and religious buildings, such as cemeteries, slaughterhouses, hospitals, monasteries and warehouses, linked to urban life but displaced for their particular functional character.⁷

The structure of São Paulo’s territory and the city’s secondary role in the Brazilian mercantilist economy,¹⁰ remained essentially unchanged until the last quarter of the 19th century, when the coffee economy skyrocketed, turning the Paulista capital into the economic and

2.2 - The Triangle and the Line in the topography of São Paulo
In the last quarter of the 19th century, São Paulo became the capital of fazendeiros, a new hybrid social class with the roots in the countryside and the head in the city. If wealth came from the plantations, the desires and interests of the elite were increasingly related with urban life. The financial and commercial aspects of the coffee business entailed banking and finance, industrial development and land speculation, engineering and legal knowledge, political affairs and social relationships.

As it is clear in the above picture, in this moment of passage the city was a mix of traditional and new housing types. On the one hand the sobrados, based on narrow, introverted and long plots that constructed continuous urban facades. On the other hand the palacetes, rising on larger plots and with setbacks from the street and the other buildings. (see fig. 2.24 to 2.26) These new type of house would accommodate the necessities of the elite moving from the plantations into the city since it provided a hybrid between urban and rural condition and a free canvas for the representation of political and economic power.

**Capital of Fazendeiros**

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The rise of São Paulo was first politically linked to Brazil’s gravitational shift from its North-Eastern to the South-Eastern region. This crucial change began in the previous century, when Rio de Janeiro overcame Salvador as the most important city and harbour, becoming the capital of the colony in 1763. The predominance of the South East was further accelerated in 1808, when the Portuguese Court moved from Lisbon to Rio de Janeiro, which remained the country’s capital even after its independence in 1822 and until the inauguration of Brasilia in 1960.

A change in production also accelerated the economic shift from north to south during this time. While the sugar cane economy of the North East was hit by an unprecedented crisis, the coffee industry in the South East was booming, finding a perfect territory to thrive. Fuelled by the growth of international demand and price, coffee plantations first rushed along the Paraíba Valley – in the region of Rio de Janeiro – and soon after spread to the fertile and still unexplored region of the Oeste Paulista. Strategically placed between the agricultural centres of Campinas and Ribeirão Preto and the shipping harbour of Santos, São Paulo became the fulcrum of the world’s coffee trade and therefore the epicentre of Brazilian economic and political affairs. Coffee, in this way, was now not only the country’s main commodity for export and source of revenue, but, together with the abolition of slavery and the establishment of the real estate market, became a cornerstone of the modern Brazilian State.

Slavery was abolished in 1888. This historical event began with Brazil’s independence of 1822 and was achieved due to increasing international pressure, internal resistance, scattered revolts and progressive adjustments. One of the main reasons for such a lengthy process lied in the difficulty for the plantation owners to find a replacement for slavery, both as capital and labour. Slaves were the means of production and the proxy of all urban and domestic infrastructure, but also a commodity through which capital was measured and accumulated. Hence abolition implied the replacement of the labour force but also the reorganisation of the entire economic structure. The situation of impasse was unlocked in 1850 with the promulgation, in a space of few weeks, of the Lei Eusébio de Queirós and the Lei das Terras: the former abolished slave trade while the latter introduced for the first time in Brazil the private ownership of land. The combination of these two acts allowed land to become a commodity, replacing slaves as the main instrument of capital accumulation. Furthermore, the new legal framework established private large-scale estates as the economic structure of the territory, legalising the widespread irregular appropriations conducted by the great landowners against common land and small scale farms. This process of land grabbing, known in Brazil as grillagem, deprived farmers of their basic means of subsistence, thus resulting in a new surplus of labour which could be used for the plantations as well as for the growing industrial production and urban development.

However, the end of slave trade in the midst of the coffee boom meant the need to find an alternative labour force to keep the plantations running and expanding. Thus, especially in the region of São Paulo, landowners began to promote foreign immigration. The initially modest and unsuccessful attempts to bring European farmers gained momentum in the 1880s, thanks to the legal and economic support of the regional government that, in 1886, established the Sociedade Promotora de Imigração.

The presence of foreigners was not a novelty in São Paulo where, during the 19th century, artisans, merchants, engineers and other professionals of European origin played an important role in shaping the economic and urban development of the city. Yet in the last decades of the century the mass of labourers immigrating from Italy,
At least until the 1870s the population of the immediate surrounding of São Paulo was larger than the one of the town. While the settlement of São Paulo was an important pole for the area, it is difficult to trace a clear boundary or hierarchy between city and countryside. The outer belt, characterised by large properties and a more clearly agricultural vocation, produced food and other commodities for the subsistence of the city and for trade. In this area the property structure was looser and the land cultivated for self-subsistence was common. The inner belt instead, tightly linked to the city, was organised through chácaras, rural properties where the wealthiest families often resided for part of the year.

The subdivision of land in chacaras constituted the base for the subsequent development of the city. Plots were too small for agricultural but very suitable for urban development, giving rise at the turn of the century to a massive wave of land speculation.

A City of Chacaras
Portugal, Spain and the Middle East reached unprecedented numbers. Many of these new immigrants couldn’t stand the hardship of working in the plantations, and therefore fled to take a chance in the city. As a result, the arrivals in São Paulo increased exponentially. By 1900 the city reached 250,000 inhabitants out of which 150,000 were foreigners. The ethos of the frontier city and the “glory” of the Bandeirantes slave trade were revamped as São Paulo turned into a bustling market of day labourers, dramatically upscaled to satisfy the demands of the new economic regime. The massive influx of immigrants radically transformed the ethnic and social composition of the entire region and at the same time stimulated the demand for goods, fostering the growth of industry and urbanisation. However, the coffee boom had already prepared a fertile ground for industrialization, since the trade of the black gold implied a series of complementary industries, among which were the machines for drying and roasting beans, chemicals for pesticides and the textiles for packaging. Thus the large amount of capital accumulated with coffee trade was simultaneously reinvested in several related businesses, allowing the formation of a solid and diversified industrial base in São Paulo. The flourishing of the coffee business also prompted the construction of an extensive railway system connecting the plantations with the trading centres and the shipping harbour. Mostly privately funded and realised in less than 20 years – between 1867 and 1883 – the new infrastructure gave additional impetus to the coffee production, enabling the expansion of the plantations further inland. At the same time the railway became a key factor in the organisation of urban growth, determining the distribution of industries along the northeast side. Hence the working class of immigrants were forced to build their own shelters along the tracks or rent cheap rooms in the areas around the stations.

Under the pressure of economic and population growth, the epicentre of capital accumulation gradually shifted from the plantation to the city, where coffee was traded on the international market and capital reinvested. The concentration of economic power, backed by the oligopoly of land ownership and an advanced banking system, granted the elite full control of the labour and credit market, trade channels and industrial activities. The Paulista oligarchy gathered the capital in anonymous companies that engaged with a wide range of productive activities: from banking to import-export businesses, construction companies, industrial plants, commercial facilities, housing and urban infrastructures. Within this framework the urban became the key instrument for the success of the renewed hegemonic project of the elite. São Paulo became the capital of fazendeiros, a new hybrid social class with roots in the countryside and head in the city. The fazendeiros’ wealth came from the plantations, but their desires and interests were increasingly related with urban life. São Paulo provided a place where the elite could focus on the financial and commercial aspects of the coffee business, which entailed banking and finance, industrial development and land speculation, engineering and legal knowledge, political affairs and social relationships. The development and diversification of business and production therefore also fostered the formation of an urban bourgeoisie in São Paulo. This new multifaceted subject, far from being a homogeneous class, encompassed bankers, wholesalers, rising entrepreneurs, decayed mine owners, and above all lawyers, engineers and army officials, which were the paramount expression of a new mentality linked to the positivist thought of Auguste Comte. Yet, the will of modernization of the rising urban bourgeoisie and the army’s dissatisfaction with the worn-out feudal hierarchies largely coincided with the economic interests of the landowners, resulting in a political alliance embodied by the foundation of the Partido Republicano.
Paulista (PRP). The PRP defended a conservative position on moral and social values – especially resisting to the abolition of slavery – and at the same time supported a change of the political regime, advocating for the replacement of the Empire with a Federal Republic. Yet, their position was driven less by republican ideals than by a will to maintain control over the coffee business, keeping the federal government’s interference at bay. Under this pressure, in just about a decade, the Empire came to an end with the proclamation of the First Republic on the 15th of November 1889.

The success of the Paulista Republicans was rooted not on a contingent overlapping of economic and political interests, but in the peculiar correspondence between the social structure and the organisation of the coffee trade. Following mechanisms already established in the colonial period, the relationships between landowners, intermediaries, farmers and exporters were essentially based on personal affiliations beyond institutional organisation. Using their private relations as leverage, the feudal elite kept tight control over the process of capitalist development, maintaining strict hierarchies and naturalising class distinctions even within the new economic relationship of production. As such, the “coffee complex” played an ambiguous role in the societal transformation of São Paulo and Brazil at large, fostering modernization in terms of economic, industrial and urban development. At the same time the new coffee business also sought to preserve the patriarchal and onlygarchic systems previously established with the sugarcane industry. In essence the relationships of production established by the coffee cycle ensured political continuity during a significant economic shift, avoiding the break of a bourgeois revolution. Ultimately, the alliance between rural landowners and the nascent urban bourgeoisie laid the foundations for the strategy of “conservative modernisation” which informed the political and economic landscape of Brazil throughout the 20th century.

The new hybrid form of rural and urban life demanded a new spatial order. In the late 19th century this demand forced São Paulo into a process of restructuring and expansion, pushing the city beyond the triangulo. Significant urban reforms of the historic centre began under the governorship of João Teodoro Xavier (1872-1875) with the reorganisation of the streets and the beautification of the public realm, including public transport, gas street lights, water and sewage and the provision of leisure areas such as parks. These urban improvements, fostered by the increasingly frequent and stable presence of the elites in the city, were ideologically linked with the technical issues of sanitation and circulation, but also demanded the construction of a new urban aesthetic. Facing rapid growth, increasing population density and vehicular traffic, the city government used health and modernization universal arguments to restructure and adapt the urban fabric to the economic necessities of the upper class. The very idea of “improvement” implied the absence of an all-encompassing and inclusive plan in favour of scattered and ad hoc interventions. These interventions could quickly adapt to the changes in real estate and capital markets. The concentration of private investments on these improvements was obviously driven less by concerns for the public well being than by the possibility of profit offered by the transformations of the urban fabric, which entailed lucrative activities such as financial and land speculation or construction. Private companies, controlled by foreign capital, managed the provision of infrastructure and utilities such as public transportation, energy and telephones, thus acquiring extraordinary power in directing urban development and the real estate market. In short, the urgent need of urban expansion demanded
by the population and economic growth within a system based on personal relationships, favouring the passage of the public land and wealth to the private domain, turning the municipal land into a tool for primitive accumulation. Within this framework, the construction of leisure spaces and public buildings has to be understood as a tool to manipulate public opinion and real estate values, where the State operates less as a regulatory force for the redistribution of resources than as a guarantor of the political and economic power of the oligarchy.  

The topography of the city came to largely coincide with the map of social segregation. The uprooted masses of workers and immigrants were forced to build precarious settlements along the railway tracks and around the river plains, in areas devoid of basic infrastructure and characterised by precarious hygienic conditions. The elite, instead, occupied the higher grounds, further away from the congested centre but served by transportation and basic urban infrastructure. In these areas the expansion of private urbanisation encountered the peculiar territorial structure of the chacaras, mostly owned by the ruling elite. If from the point of view of agricultural production these farms were quite small parcels, unfit for extensive cultivation beyond leisure and self-subsistence, from an urban perspective they turned into immensely profitable opportunities. Within the new political-economic conditions the chacaras, immersed in a picturesque and healthy environment, were connected to the city by new streets and public transportation, becoming the ideal ground for private speculation. However the needs and the hegemonic ambitions of the “urban fazendeiros” demanded a space that could formally and symbolically link the rural and the urban sphere, a new archetype that could materialise their ambition to rule, giving the city a territorial dimension.

**The avenida: between land and city**

Since the 1870s, the archetype of the avenida has been the protagonist of Latin American urbanisation. Imported from France, this exotic urban form was implanted in the colonial fabric both representing a renewed ruling elite while also restructuring the relationship of production within the newborn nations. A “creole bourgeoisie” emerged in Latin America following the colonies’ independence and a series of civil wars. This new class was a mixture between the old landowning aristocracy and the rising urban class of entrepreneurs, bankers and professionals: a polymorphic subject in which rural and urban, illuminist and romanticist, progressive and conservative tendencies coalesced.

For the young Latin American republics and their mercantilist economies, city development became a primary object of concern. Even if wealth was largely produced in the countryside, cities became the locus for the affirmation of the new national order. Moreover, in the second half of the 19th century political stability aligned with the influx of capital and immigrant labour, the development of industrialization and the arrival of the railway, creating the conditions for a significant acceleration of both urbanisation and population growth in most major Latin American cities. The shift from a rural and diffused territorial structure to the more centralised power of a few urban centres, combined with the pressure of a skyrocketing population growth, simultaneously lead to both a densification of the old colonial centres and to their disorderly expansions. These shifts demanded a new spatial order linking the dominant power of the rural elites, the economic interests of the urban bourgeoisie and the reproductive needs of the growing working class. As a consequence, all major Latin American cities, despite their differences, undertook extensive urban reforms, combining the improvement of basic infrastructures with the construction of a new urban image in pursuit of local and

2.6. - The urban growth of São Paulo (1880-1930).
The experiments of the XVII century French garden lay the foundation of the archetype of the avenue. Due to its intermediate position between the city and the landscape, it will become a quintessential element of urban design, in Brazil and Latin America. The material dimension of the avenue is placed in direct relationship with the abstract quantities of circulation and population, and with the perspectival control of the city as an aesthetic object. Suspended in the limit between the city and the land, between the management of the circulation and the representation of power, the avenue exhibits an ambivalence that captures the transition between the city as form and urbanisation as movement.

The first extensive use of the avenue was made by the Duke of Sully, Grand Voyer de France in the 16th century, to unify the nation State and its territory, establishing the material and symbolic connection between Paris. In the 19th century Haussmann turned the avenue into a key tool of urbanisation, which became the model for the transformation and the expansion of the Brazilian cities. The avenida provided the infrastructural, economic and aesthetic tools to implement the bourgeoisie city at high speed and reasonable costs, privileging tactic over strategy.

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foreign capital to sustain economic development. During this phase of sustained growth, modern planning techniques provided the scientific certainty of theoretical and practical instruments for the construction of a new order.45

In particular, the urban reforms undertaken by Georges-Eugène Haussmann exerted an enormous influence on the transformation and expansion of Latin American cities at the turn of the 20th century.46 First of all, Paris was seen as the epitome of urban modernity, the undisputed model of progress for cities and elites in the making. In fact, after gaining their independence, the new republics rejected the old colonial powers of Spain and Portugal turning instead towards France and Britain as main reference in terms of culture and economics respectively.47 The British Empire became the most important financial partner of Latin American economies, importing cheap raw materials back to the United Kingdom while supplying the new nations with capital and modern technology, thus creating a chronic financial dependence. France, instead, was the undisputed model in terms of culture and social life: philosophers, writers and artists were worshipped as forerunners of civilisation in opposition to what was seen as the inferiority of the natives and the vulgarity of the former colonisers. Within this context Haussmann’s project presented a solid ideological framework but, more importantly, provided the infrastructural, economic and aesthetic tools to implement a new idea of the city built quickly and cost effectively.48

Haussmann undertook a vast program of urban reforms, with the declared aim of elevating Paris to the functional and aesthetic glory demanded by France’s capital.49 However the extensive restructuring of the city was neither the result of limitless power and resources nor that of general consensus. On the contrary the Parisian works took place within the complex political and economic condition of a metropolis, among conflicting interests, strong opposition and harsh criticism.50 In these difficult circumstances, the greatest achievement of Haussmann was of a managerial kind: finding pragmatic instruments to negotiate different interests and positions. As a state servant, Haussmann had to fulfil the ambitions of the Emperor, who saw the city as an instrument for the representation of his authority. Realising such an ambitious urban reform required the ability to mobilise an enormous amount of private resources. Thus, while the network of linear axes connected by star-shaped nodes appears as the triumph of figurative design, Haussmann’s method was actually informed by a radical pragmatism that privileged the feasibility of the intervention over the rigidity of a predefined form.51 Since the beginning, the project discarded the idea of imposing an entirely new system, and instead chose to operate by coordinating fragments of the existing city. Monuments were liberated, linked together and re-signified to assume the value of a spectacular ensemble. Furthermore, Haussmann’s program of works included a number of already existing and publicly debated proposals, making the whole project more familiar and acceptable for the public opinion.52 For example the organisation of the plan in three resaux, or networks, was not based on aesthetic or functional considerations but rather on different forms of financing – state funded, partially state funded or city funded – reflecting Haussmann’s managerial ability rather than an all-encompassing design ambition. Ultimately Haussmann’s plan is the outcome of a tactical rather than a strategic logic,53 pragmatically seizing the opportunities of transformation offered by the given conditions, more than executing a predefined plan. The homogeneous character of Haussmannian Paris is produced less by the overall coherence of the urban design than by the formal and material quality of the architecture of the street.54 The street is the instrument that allows Haussmann to address the transformation of political and economic relationships by restructuring three crucial aspects of the public domain: sewage, parks and circulation. The infrastructure of the street manages waste,
water and light, connects a network of green areas for leisure and allows the unimpeded circulation of people and goods. Carving through the mediaeval fabric of Paris, the street responds to the hygienic concerns and social conflicts of an increasingly dense environment, implementing healthy behaviours and urban conditions aimed at increasing the productive and reproductive potential of the population. Furthermore, gutting the city is a productive act in itself, since redesigning buildings and property lines opens opportunities for financial investments, construction industry and the provision of services. The architecture of the street defines the subjectivity of the bourgeois class, constructing a stage for the spectacle of productive performance. The scale of the space, the precise choreography of the perspectives, the obsessive repetition of trees and standardised facades of the street materialises both the power of the State and the ethos of the bourgeois subject. Ultimately the city is reduced to a productive apparatus devoid of any symbolic meaning or form. The endless movement of people and goods dissolves the city, once a formally defined object, into a limitless field of productive relationships extending to the entire territory. The productive dimension of the territory, where city and nature are not opposed but instead part of a continuous field of potential that architecture can manipulate, is conceptualised in the famous Essai sur l’Architecture written by Marc-Antoine Laugier in 1753. In his text Laugier famously constructs an analogy between the city and the forest, where the forest is not a natural space but rather a raw material that needs to be carved and organised by streets and crossroads to be inhabited, to be used, to become meaningful, beautiful and therefore productive. Laugier refers explicitly to Le Notre, the architect that established the canon of the French formal garden with the great landscape designs of the 16th century. In his projects for the Château de Vaux-le-Vicomte (1556-1660), or for the garden and parks of the Château de Versailles (1663-1687), Le Notre designed a landscape at an unprecedented scale. In these interventions, architecture, surrounded by an entirely designed and seemingly infinite landscape, loses any relationship with nature. Le Notre’s work manifests the gap between the boundless ambition of an absolute power and the limitation of economic and technical means. The illusion of imposing total formal control on reality only stands within the Renaissance perspectival culture, where the limits of the design are still defined by the visual field of an observer placed in a specific point or moving along a predefined path. Furthermore the fantasy of absolute control can only be achieved in the separate environment of the garden, away from the complexity of the city, replacing buildings and people with more affordable choreographies of water and trees. The philosophical and technological developments brought by the industrial revolution will definitely break the link between reality and visual perception, turning towards the abstraction of mental representation. The city cannot be understood anymore as the embodiment of universal principles, of an absolute control of the governing subject over the object, the people and the territory. The order of the modern world is governed by technique, by a rational thought that presents itself with the character of neutrality. This Copernican revolution, for which power is not exerted from a centre but is immanent in the infinite sphere of technique, implies that the city is no longer the materialisation of political decisions. On the contrary urbanisation becomes the paramount tool of capital reproduction through the maximisation of human productive potential. Rather than being the expression of values and choices, the city constructs a subject that is the expression of the neutral episteme of technique; adaptable and useful. As Ildefonso Cerdà clearly put forward in his theory of urbanisation, the modern city is not civitas and form but rather urbe, the material substance, and vialidad, infinite smooth circulation of people and goods ensured by the rational and neutral power of technique. Along the same line of thought, Laugier’s forest has to be read
not as an object of contemplation, or landscape, but rather as a resource. A resource the State has to rationalise through technique, developing and managing the possibilities of its productive potential into a territory. Forest and urbe, territory and population, subject and object will be increasingly intertwined through forms of governance founded on biopolitics and obeying the managerial paradigm.\(^6\)

Seen through the theoretical prism of Laugier and Cerdà, and through the aesthetic and pragmatic toolbox of Hausmann, the avenue emerges as the archetype able to materialise the passage between the French garden experiments of the 17\(^{th}\) century and the urban reforms of the 19\(^{th}\) century. Not by chance in the Essai Laugier discusses the avenue within the chapter dedicated to the “embellissement de ville,” as a means to provide the city with an appropriate entrance.\(^4\) The material dimension of the avenue on the one hand is placed in direct relationship with the abstract quantities of circulation and population and on the other hand with the perspectival control of the city as an aesthetic object. Suspended in the limit between the city and the surrounding land, between the management of circulation and representation of power, the avenue exhibits an ambivalence that captures the moment of transition between the city as a form and urbanisation as a process.\(^6\)

Interestingly enough the same ambiguity can be traced in the etymology of the word avenue, which implies an idea of arrival, of movement towards an object or an event. Coming from the Latin term *ad-venire*, meaning to come to, to arrive, the first use of the term *avenue* in French language dates back to 1160, as a substantivized form derived from the verb *avenir*, meaning to happen, to occur. Instead from the 15\(^{th}\) century the term acquires the meaning of a place through which one arrives, an opening, a door, a passage, setting the destination as a key element of this specific kind of path.\(^4\) It’s just in 1611 that the word *avenue* is recorded with the same meaning of *allée*, a street lined with trees that leads to a mansion or a castle.\(^7\) In this period the use of the terms *avenue* and *allée* is interchangeable, yet through the 17\(^{th}\) century the important semantic difference will become increasingly relevant: *aller* focuses on the action of moving while *advenir* is centred on the on the point of arrival.\(^8\)

The first extensive use of the *avenue*, beyond French garden design, is due to the Duke of Sully, one of the key figures of the kingdom of Henry the IV, being the supervisor of finance, defence, fortification, transportation, public works and cultural matters. Appointed *Grand Voyer de France* in 1599, Sully was responsible for the communication network of the kingdom, including roads and waterways. In this capacity he undertook an unprecedented program of territorial organisation, reforming the whole transportation network of France.\(^6\) In the hands of Sully the *avenue* became one of the instruments in the construction of the nation State and its territory, establishing the material and symbolic connection between Paris – the capital – and France – the vast land that the king had to govern and control. Straight, lined with trees and marked in beginning and end by a monument, a column or a building, avenues were highly legible spaces that marked the territory, bringing together management and representation of power, economic efficiency and political command.\(^6\) In this respect the *avenue* is different from the *boulevard*. The latter, being the outcome of the city walls demolition ordered by Louis XIV in the 1670s, literally materialises the dissolution of the limit between the city and the outer land into the paradigm of circulation without end. The former, instead radiates from the capital to connect and structure the land of the State, acquiring a more ambiguous position between the city and land. The *avenue* is open to two opposed interpretations. On one hand, when the functional character prevailed, the avenue became the epitome of endless urban expansion. For example, in most North and Spanish American cities avenues and *avenidas* were completely subsumed by the abstract economic logic of the grid, becoming

\[\text{2.12 - The avenue and the capture of the infinite: the project for the Tuileries gardens by André Le Nôtre, 1666-1672.}\]

\[\text{2.13 - The avenue as a tactical tool for urban reform: Boulevard Richard-Lenoire, 1867.}\]
just the main elements of a circulatory system. On the other hand, when symbolic considerations predominated, the avenue framed the bursting economic forces of urbanisation through a distinct urban form that staged the emerging subjects and the territorial dimension of the city.

The first avenida in Latin America, the Paseo de la Reforma, opened in Mexico City between 1865 and 1872, is one such case. A straight line running three and half kilometres long by 40 metres wide, physically and visually connecting the city with the Chapultepec castle. Called at that time Paseo de la Imperatriz, this avenue was conceived under the government of Maximilian I of Mexico, the Austrian archduke who reigned in Mexico from 1864 until their execution in 1867 – which put an end to the short-lived Second Mexican Empire. Inspired by the Champs Elysée of Paris, the project was designed by the Austrian engineer Luis Bolland Kohmackl, who imagined a monumental street of 18 metres flanked by two secondary lanes of nine metres, separated by two double lines of trees. The castle where Maximilian established himself together with the Empress Carlota was connected but completely separated, a choice that, more than any practical concern, symbolised the detachment of Austrian rule from the city. The street connected two points with the shortest distance, imposing an alien geometry on the territory, disregarding the circulation and property structure of the countryside as much as the orientation of the colonial grid of the Zocalo – the city centre. As such, Paseo de la Emperatriz had nothing to do with practical concerns of circulation, but rather embodied, in an architectural form, the imposition of an absolute imperium on the territory. This aspect is clearly remarked by the fact that travelling on the avenue was reserved for the Emperor and court. This paradox, given the magnitude and the presence of the work in the landscape, is nevertheless revealing of how the avenue should be understood at the intersection between public street for circulation and a private garden at a territorial scale. Significantly, one of the first manifestations of the avenue, as a term and an architectural project, is the Tuileries Gardens. Imported by Caterina dei Medici in Paris during the 1560s, the Italian Renaissance garden started the tradition of the French garden which will unfold in the next century. Together with the garden, the Medici also imported the Italian custom of the corso, a form of leisure which entailed strolling up and down the avenue by foot or carriage. The garden was completely separated from the space of the city, hence walking had a ritualistic nature, enhancing, through leisure, the social relationship of the aristocracy. However, entering modernity’s infinite space of circulation, the avenue unfolded the legacy of the private garden into the public space of the city as a means to naturalise power relationships and pursue the hegemony of economic interests on the political sphere.

Before Haussmann, the avenue had already landed in North America in the exemplary project for the capital of the United States, commissioned by President George Washington to Major Pierre Charles L’Enfant in 1791. The plan of Washington combined French monumental classicism with the anti-urban democratic utopia of Thomas Jefferson – who was responsible for the project. The capital of the federation embodied a contradiction: on one hand it had to become a symbol of the Union through the monumentality of its form, but on the other hand it had to embody the democratic values associated with the free forces of capitalistic development. The result was the overlap and tension of two systems: the colonial grid and the diagonal avenues. One a logic of abstraction and the other of formal arrangement. The regular grid of orthogonal streets measures, subdivides and appropriates the land of the city, virtually extending to the entire territory, to construct a framework for private appropriation and development. At the same time the avenues visually and symbolically connect the key elements of the democratic order – the Capitol, seat of the Congress and the White House, seat of the president – and form fifteen star-shaped intersections, an allegory of the
States of the Union. Reinterpreting a number of European examples – from Le Notre’s Versailles gardens and Pierre Patte’s hypotheses for Paris to Christopher Wren’s proposal for the reconstruction of London and the plan of Karlsruhe, which Jefferson visited during the planning process – the plan of Washington articulates the archetype of the avenue within the all-encompassing order of the grid, using the architecture of the street to provide a symbolic form that could frame the wild forces of economy. Differently from the irreconcilable dichotomy of the Paseo de la Imperatriz and the damero in Mexico City, the avenue and the grid find a synthesis of their dialectical opposition: the political dimension of the city, coming from the European absolutists models of power, is neutralised by Jeffersonian anti-urban democratic ideology. However, the case of Washington – not by chance the less economically necessary and the most formally defined city at once – is exceptional and in Anglo Saxon and Spanish America the colonial checkerboard gave a flexible support to urbanisation. Embedded in the grid, the role of the avenue is reduced to a matter of street hierarchies, functional articulation of fluxes or manipulation of property values within the flexible process of city making.

In Brazil the archetype of the avenida was introduced in the late 19th century, in a time of rapid political economic transformation and acceleration of urban growth. In these circumstances, the restructuring and planning of cities became a crucial concern for the government and a field of opportunity for private enterprises. Among other European influences such as Camillo Sitte and Ebenezer Howard’s “Garden City”, Haussmann’s Paris, played a prominent role for the first generation of Brazilian urban planners. Differently from architects, who were trained to neoclassical principle in the Escola das Belas Artes, planners were taught in the civil and military engineering schools, highly influenced by the positivist thought of Auguste Comte, and chiefly concerned with the pragmatic problems of circulation and sanitation. Largely following the European or North American models, the South American avenida acquired three different but ultimately connected dimensions. In large cities, like Rio or Recife – but also, for example, Avenida de Mayo in Buenos Aires – the avenida was used tactically, in plain Haussmannian fashion, as an axis cutting through the existing fabric. Large scale urban demolitions implied the restructuring of property divisions, the generation of economic opportunities for financial investors and construction companies, and at the same time defined the paradigm of a modern, healthy and utterly visible life.

In this respect the plan for Rio de Janeiro devised by the engineer and mayor Francisco Pereira Passos between 1902 and 1906 is exemplary. Based on the synergy of political power at the federal and local level – the mayor of the capital being not elected but nominated by the President of the Republic – and on the complementary funding of public and private capital, the large-scale project of reforms was realised in a very short period of time. The plan orchestrated a number of considerable interventions, including levelling hills, the restructuring of the harbour and its connection to the centre and the upper class southern neighbours. Similar to Haussmann’s Paris, the overall project was not envisaged by an architect. The avenida deployed a piecemeal of tactical interventions, largely based on previously conceived projects and managerial capacity, as well as the restructuring of the administrative system. Together this intervention increased the ability to attract and coordinate private investments.

The key element of the entire project is Avenida Central – today Avenida Rio Branco – a straight cut almost two kilometres long and 33 metres wide which connects the harbour with the Gloria bay, becoming the spine for the transformation of the entire centre. The opening of the avenida implied expropriation and the demolition of the precarious lower class houses of the area and the displacement of the workers, in the name of sanitation and modernisation which
In Brazil the avenida assumed three different forms. In large cities like Rio de Janeiro or Recife the avenida followed the Haussmannian example cutting through the existing fabric to restructure property, economy and life. In new-founded cities the avenida was used on the example of L’Enfant Washington, the paramount case being Arão Reis plan of for Belo Horizonte of 1897. A third form was a reinterpretation of the avenida as irradiating structure of power and circulation from the centre towards the land. The most relevant example being the car-based Plano de Avenidas of São Paulo proposed by the Francisco Prestes Maia in 1930 as a response to the crisis of 1929.
also implied a new aesthetic dimension. The regular street fronts and paved ground staged the new imported customs and circulation behaviour and framed the landscape as a postcard background: a combination which gained the city the nickname of “Cidade Maravilhosa.”

The Washington model, mediated by the experience of Argentina’s capital, La Plata, in 1886, was applied in the project of Belo Horizonte, capital of Minas Gerais designed by Aarão Reis in 1897. The plan was based on a 120 metre grid of urban blocks, overlapping a grid of avenidas rotated 45 degrees and enclosed by a circular boulevard defining the end of the designed area and the limit between city and countryside. Even more than in L’Enfant’s Washington, in the plan of Belo Horizonte, the avenidas are completely embedded in the order of the grid and used to create a dimensional distinction with the regular streets. The ring of the Avenida Contorno, far from constituting a physical limit, was the embodiment of a merely administrative distinction, for which the very regulated system inside the plan had its counterpart in the flexible and wild speculation outside of the plan. Illustrating this, the city continued to develop in a disorderly fashion beyond its limit while at the same time struggling to complete the construction of the original plan during the first 30 years.

A comprehensive plan was put forward by the engineer Francisco Prestes Maia in 1930 for the city of São Paulo and realised when Maia became mayor between 1938 and 1945. Known as Plano de Avenidas, Maias’ plan was inspired by the work and theory of the French urbanist Eugène Hénard and by the project for a parkway ring designed by the English architect Barry Parker for São Paulo. The project was a territorial scheme based on a concentric and radial system of avenidas which became the structure for urban expansion of São Paulo in the following decades. Based on the idea of circulation, three boulevards defined a specific operation for each area of the city: liberating the historical centre, structuring the urbanised intermediate areas and defining a limit to the expansion with the last ring of parkways. As such the plan deployed all the main articulations of the avenida, applying the tactical approach of Hausmann in the central and intermediate areas within a strategic vision for the expansion of the city.

Despite the significant differences, in all these cases the relationship with the landscape plays a crucial role. The avenida is a device that can structure the expansion of the city into the land, defining lines of development, property boundaries and deploying circulation while also framing the landscape. The regular geometry of the avenida and the repetition of its facades visually and symbolically incorporates the geography of the place into the city. This is evident in the examples of Avenida Central in Rio de Janeiro or Avenida Afonso Pena in Belo Horizonte which explicitly frame the view of the surrounding mountains. What was once a vast unknown outside, was now internalised and integrated into the incessant movement of urbanisation.

The Avenida Paulista is the most remarkable Brazilian example of the avenida’s political, economic and aesthetic features. Compared to the many other Brazilian examples at the turn of the 20th century the Avenida Paulista was uniquely generic. But the precision with which its form embodied a specific relationship with the landscape and with the politico-economic conjuncture in which it emerged, constitutes its archetypical value. Different from the type, which is an abstraction of what a set of things have in common, the archetype defines a set of elements by example, by making materially legible the relationships that gave it form. Hence architecture is archetypical as much as its form explicitly exposes such relationships, making them understandable and thus open to debate. It’s from this perspective that the peculiarity of Avenida Paulista, acquiring a finite form, assumes the character of a generic repeatability that, other than regulating the possibility of producing new avenidas, reveals the historical conditions in which it took place.
Leaving behind the curvy crowded provincial town, and combining the wealth of the plantations with the imported dream of a Parisian life, Avenida Paulista defined a new spatial and political order of metropolitan dimension. Occupying a prominent and strategic geographical location on the summit of a ridge, the avenida establishes a new set of relationships with the city and with the territory at large. Separated from the historical hill, the avenida acted as an acropolis confronting the chaotic and unpredictable life of the old town.

By measuring and subdividing with regular grid, the project turns the land into a commodity. The unprecedentedly large and straight space of the avenida, rhythmically accompanied by the trees and the tramline, is purposely placed in a dialectic relationship with the abstraction of the grid. While the economic logic informs all speculative urban developments, Avenida Paulista introduces the street itself an instrument to represent the power of the ruling class. The name Paulista itself expresses a monumental ambition: represent the new ethos emerging at the turn of the century and bestow it upon the entire city and its inhabitants.

The New Acropolis of Avenida Paulista

The inauguration of Avenida Paulista.
Avenida Paulista: the form of the urban horizon

Avenida Paulista was inaugurated on the 8th of December 1891. A pastel painting of the same year by the French artist and entrepreneur Jules Martin celebrates the opening day and offers a telling portrait of the *avenida*.

A straight, flat strip runs uninterrupted towards the horizon. In the distance we recognise the Pico do Jaraguá, the highest mountain of São Paulo, giving a sense of place and orientation in an otherwise abstract perspectival representation. The terrain has been mostly cleared. Large plots of barren land enclosed by fences flank the wide line of the street, subdivided by secondary perpendicular paths. At the margins of the painting the otherwise flat terrain descends on both sides, suggesting that we are on the top of a ridge. On the left are a few sparse plants and, further away, a brush of surviving forest. Paved with fine gravel, the surface is divided in three lanes by four rows of perfectly aligned magnolias and plane trees, which fade away towards the horizon line. Each lane is dedicated to a different mode of circulation: on the right the pedestrians, on the left the horse powered tramway and in the middle the coaches.

On the right side of the painting an enormous Jacarandá tree is sheltering the inaugural lunch. Around a laid table, the banqueting authorities and prestigious guests appear like swarming ants under a tree that is blatantly out of scale. Given the precision of the representation one cannot help but wonder about the meaning of such a deliberate move. Did Jules Martin feel the urge to mitigate the overwhelming geometrical emptiness of the extensive checkerboard or does the oversized tree celebrate the monumental ambition and effort required for the construction of the *avenida*? Whether intentional or not, the leap in scale seems to analogously represent the change of scale that occurred at the end of the century in the relationship between city and territory. If the vastness of the land was once a physical and symbolic limit to the expansion of the colonial settlements and civilization, now the modern economic rationale understood the same land as an endless resource to be appropriated and controlled. Turned into the key measure and tool of capital reproduction, the control of the land became the instrument to maintain the existing power relationships within new modes of production. As such, Avenida Paulista was not just another street or simply a means of circulation, but rather the manifestation of the political-economic regime of the Republic. Avenida Paulista is the archetype that gave form to the delicate transition between the rural and urban horizon in Brazil.

The project of the Avenida Paulista was conceived by Joaquim Eugênio de Lima, a descendent of a Uruguayan noble family who had studied agronomy in Germany and travelled in Europe before establishing his business in São Paulo. Lima quickly became an active and influential figure in São Paulo. He owned the newspapers *Omnibus* and *Cidade de São Paulo*, and financed several projects and real estate operations, including the Viaduto do Chá – a project that, connecting the historical hill with the Morro do Cha, opened the expansion of the city westwards. In partnership with the Paulista businessmen, José Borges de Figueiredo and José Augusto Garcia, Lima began to purchase properties around the espigão at a cheap price. Starting in 1890, the three entrepreneurs managed to acquire the entire area of the ridge in less than a year. Together they appointed the land surveyor Tarquinio Antonio Tarant to draw the project and in December 1891 Avenida Paulista was inaugurated.

The plan of the *avenida* was monumental. A 30 metre wide street that stretched on the espigão for 2,800 metres, with two parallel *alamedas* on each side connected by transversal streets every 250 metres. The project comprised the tracing, paving and tree lining of the entire road network, the fencing of all the plots, and above all the levelling of the ground which required a massive earthwork. Around the midpoint of the *avenida* the ridge descended roughly 50 metres into
the Saracura valley, today occupied by Avenida 9 de Julho, before climbing up towards the Consolação area. The ground was completely cleared of the dense vegetation, with the exception of a large area in this midpoint where the French landscape designer Paul Villon, purposely brought from Rio de Janeiro, designed a public park. The chronicles of the time celebrate the impressive transformation, speaking of an unprecedented open space which allowed one to dominate the landscape, enjoying the fresh air and admiring the bucolic views of the countryside. In fact, the perfectly straight streets, fenced and lined with trees, formed an extensive checkerboard in stark contrast with the curvy paths and the dense vegetation that, until then, characterised the ridge.

The arrangement of the streets around the avenida defined large regular blocks, subdivided in just four plots each measuring roughly 90 by 60 metres, and in certain cases up to 120 or 200 metres long. Such plot dimensions contrasted with the urban fabric of the triângulo that, despite the modernization occurring in the 1870s and 1880s, was still characterised by the continuous facades of adjacent sobrados - the typical multi-storey townhouses.

The checkerboard of Avenida Paulista also proposed a radical shift in relation to the expansions of the city at that time. The new developments in the areas of Liberdade, Santa Cecília or Campos Elíseos, responded to the needs of the emerging ruling class, who were moving from the rural areas to São Paulo following their increasingly city based business and social lifestyle. Due to the population’s rapid growth the old city centre had become a heavily congested space. Despite the urban reforms of the 1870s and 1880s, this increase in density resulted in environmental concerns over hygiene and salubrity amongst the ruling elite. At the same time, newly imported European tendencies in taste and lifestyle demanded a different mode of dwelling. Together these resulted in typological transformations of the house.

These necessities were supported by advancements in urban infrastructure, the refinement of construction techniques and the availability of skilled European builders, particularly from Italy.

These new developments used the grid as a means to organise urbanisation and subdivide land. However the urban fabric was still characterised by a variety of land uses and parcel dimensions. The grid was never an all-encompassing system but rather generated a patchwork of islands. The new districts offered large plots for urban villas or palacetes destined for the wealthy families moving to the city, but also smaller, narrow and elongated plots for traditional housing typologies, commercial and industrial buildings. Technical and typological novelties could satisfy the new market demands but the new developments were completely governed by a speculative logic and operated like a mere quantitative enlargement of the urban settlement. On the contrary Avenida Paulista proposed a completely new conception and dimension of the city.

Different from previous developments, the fundamental character of Avenida Paulista was its separateness, which corresponded to the material and the symbolic dimension of the project. The new districts were located in the plains between the historical centre and the train station, where the flatness of the ground facilitated the urbanisation works and the proximity of the railway provided access to the inland coffee plantations. The logic of these expansions was quantitative and tied to economic concerns, leaving any symbolic and representational aspects to the private architectural expression. Avenida Paulista, instead, occupied a prominent and strategic geographical location on the summit of the espigão, establishing a new set of relationships with the city and the territory at large. Decidedly separate from the historical hill, Avenida Paulista acted as an acropolis confronting the chaotic and unpredictable life of the old town. Leaving behind the curvy, crowded, provincial town,
and combining the wealth of the plantations with the imported dream of a Parisian life, Avenida Paulista defined a new spatial and political order, opening São Paulo for the first time to a true metropolitan dimension.

Remarkably, the project which became the symbol of the city of São Paulo for the following century didn’t spring out of the genius of architects, artists or engineers but rather from the intuition of a businessman with a background in agronomy and through the practical drawings of an unknown land surveyor. Avenida Paulista is not the creative design act of an author finding a unique solution to a problem, but rather the pragmatic reinterpretation of an archetype that allows a common knowledge to surface in response to a specific conjuncture.

The character of Avenida Paulista emerges from a close reading of its form. The flat, straight and wide profile of the street exhibits the deliberate choice of imposing a manmade sign on the land. The massive earthworks undertaken to level the ridge and fill the Saracura valley speak to the will to exercise the technical and formal precision of modernity beyond a mere economic calculus. Avenida Paulista is not a street in the sense of a functional connection within a network of circulation, but rather an architectural form with precisely defined limits and dimensions. At the time of its conception, the site of the avenida was still perceived as a difficult mule track in the hinterland of São Paulo, surrounded by chacaras and separated from the urbanised areas of the city. The choice of the site was guided by speculation and the opportunity to make profit by acquiring a large amount of cheap land. However its prominent geographical position played a key role, allowing one to recognise the settlement less as an expansion of the city than as a completely new way of dwelling. Rather than connecting the espigão with the existing urban fabric, the project follows and reinforces the natural direction of the ridge, tangential to the city, refusing any practical role as a radial connection or logical expansion. Avenida Paulista doesn’t connect anything. The street did not play a role in São Paulo’s system of circulation until the implementation of Plano de Avenidas in the 1940s. As a popular motto suggests, “Avenida Paulista links an Indian to a lamp,” which is to say, it doesn’t have a clear monumental beginning or end. Despite the repeated attempts to provide the two extremities with some kind of meaningful point of arrival, the geographical form of the street seems to reject it in its indifferent self-sufficiency.

Avenida Paulista begins and ends in the landscape. Framing the Pico do Jaraguá, the long perspective of the avenida symbolically reconnects with a geographical and anthropological idea of orientation in the territory, going beyond a picturesque pastoralism. Staring at the vast dimension of the land, the ruling elite of São Paulo contemplates the coexistence of the surrounding region, the mythical source of wealth and power, and ultimately the true raison d'être of the city. To the close and rigid geometry of the triangulo, anchored to the old presence of the convents and impermeable to the economic rationale of modernity, the espigão opposes the abstraction infinity of distance and the concrete presence of a sign. Differently from the French and North American precedents, Avenida Paulista is not just a means to articulate the street hierarchy of the urban fabric, nor a vector of power from the urban centre toward the limits of its domain. Avenida Paulista constructs a spatial and ideological field of tension between the abstract economic motive of the project and the geographical but finite scale of its form, governing the complex and contradictory unfolding of capital in the colonial territory.

The dry technical simplicity of the drawings explicitly exposes the tension between economic and political instances. The avenida is a wider sign in the middle of otherwise equally dimensioned streets arranged in a grid. A double line of trees on both sides, the thicker mark of the horsecar line and the presence of sidewalks reinforce

2.27 - Between rural and urban life: the typology of the palacete - Villa Fortunata by Augusto Fried, 1903.

2.28 - Private street improved with public funds: workers installing the new tramline and paving on Avenida Paulista, 1900.
the prominence of the avenida within the scheme. The hierarchy is further reinforced by the disappearance of the line representing the sidewalks that, as soon as it turns the corner of the avenida, fades into the pure abstraction of plot boundaries. The only other indications, besides a few small existing rural buildings and the north side, are the names of the streets and the numbers that define to which of the three partners each plot would be assigned. Avenida Paulista appears in the plans exactly for what it does: a project of land surveying, measuring and subdividing the land in order to turn it into a commodity, into an instrument of capital reproduction. However, while this mere economic logic informs all speculative urban developments based on the regular efficiency of the grid, the Paulista deploys the avenida itself as an instrument to represent the political power of the ruling class. The unprecedentedly large and straight space of the avenida, rhythmically accompanied by the trees and the tramline, is purposely placed in a dialectic relationship with the abstraction of the grid. Even linguistically, the avenida is distinguished from the alamedas that form the rest of the checkerboard, and the name Paulista expresses a monumental ambition: represent the new ethos emerging at the turn of the century and bestow it upon the entire city and its inhabitants.

The lanes of the street capture the everyday life of the avenida and organise the movement of businessmen, lawyers, traders and workers in a precise choreography. Coming and going from the palacetes each group had a unique path: the road for the private cars of the elite, the tram for the bourgeoisie and the sidewalk for the workers. As such Avenida Paulista has to be understood less as a mere place of residence and more as a theatre for power representation, where the luxury of immense plots was combined with the monumentality of an urban gesture that de facto founded a new São Paulo.

The avenida and the grid inextricably linked the private and public sphere, forming a dialectic whole in the plan. It is remarkable that a project of such capital importance for the future of the city was completely conceived, decided and funded by private initiative. Joaquim Eugênio de Lima and his partners traced the avenida in their privately owned land, outside the area regulated by the Código de Postura of 1886 - the building code in force at that time. In May 1891, six months before the official opening of Avenida Paulista, the governor of the State of São Paulo and a few selected journalists, were invited to visit the construction site. The aim of the visit was to publicise the project in the press and to convince the public authority to fund urbanisation improvements, such as light and sewage. Avenida Paulista was presented to the public as a gift from a group of forward thinking benefactors, in turn placing the city in their private debt and within their idea of progress. The subordination of the public sphere to the private interests reflects a structural condition of Brazil where the transition between Empire and Republic, between the slave based and the capitalist economy, took place without a proper bourgeois revolution but rather through an agreement between the old rural oligarchy and the emerging bourgeoisie.

Within this framework the State exercised its power to maintain the interests of the ruling elite rather than a democratisation and redistribution of wealth. In Avenida Paulista the elite Paulistana maintained the old feudal power based on private relationships while embracing a new rampant capitalist development.

The project found the political and economic support of the municipality, which directly implemented a series of improvements and modified the legal framework to favour the enterprise. In 1900 the mayor Antonio Prado funded the substitution of the horse-drawn tram with the first electric tram and in 1908 the same municipal government funded a number of improvements, including the enlargement of the sidewalks, which reduced the lanes from four to two, the replacement of the trees and the substitution of the gravel with asphalt for the street surface. These interventions

2.29 - The void of Avenida Paulista: survey of the avenue in 1930.
boosted the value of the property and accelerated the success of the real estate development, which until then remained only partly occupied, with most of the houses being used just as weekend chacaras.101

Early on Avenida Paulista profited from new specific laws, strongly promoted by a press campaign - led by Lima’s newspaper.102 The law n.111 of 1894, for example, imposed, for every building along the Avenida Paulista, a minimum distance of 2 metres from the adjacent plot and a minimum set back of 10 metres from the street line, leaving an area to be used for gardens or trees. To attract fazendeiros moving from the countryside and rich entrepreneurs of the coffee business, the avenida had to produce a completely new kind of space, combining the representative monumentality of the fazenda with the higher density and speed of urban life. Hence the plots had to be big enough to host large scale mansions but small enough to maximise the profits of such extensive real estate enterprise.103 The buildings moved far from the street and were isolated in the middle of the plot, breaking from the tradition of aligning buildings to the street to maximise the buildable area. If the repetition of relatively generic architecture constructed the compact streetscape of the old city, then the large plots and mandatory setbacks of the Avenida Paulista promoted an individualistic mode of urbanisation that was exclusive in terms of social class and purchasing power. The architecture of the street therefore addressed the city’s emerging subjectivities and their relationships to one another.104

The strong formal gesture of the avenida corresponds to the fragility of the architecture, exemplified by the emergence of the Palacete Paulistano.105 Behind the tree lines of the avenida, framed by lush gardens and impeccable lawns, the stroller could admire a parade of eclectic urban villas giving an extravagant but clear measure of the fortune and power of the dominant elite. Designed for the elite coffee barons and for the parvenu creole bourgeois the palacetes mediated between the countryside lifestyle, synonymous with the status and wealth coming from coffee, and the bourgeois urban trends imported from Europe - chiefly from Paris. Beyond the bizarre eclectic facades, generally associating the style with ethnic background of the owners, the interior of the palacetes would feature a hodgepodge of highly expensive imported furniture, and rural fetishes, in the attempt to reconcile the pretence of refined urban taste and the myth of the countryside as a source of wealth and power. Overall the palacete worked similarly to the rural casa grande, combining multiple private and public functions, areas for the business and areas for the family, obviously hosting specific quarters for the domestic labourers. However, typologically, the palacete was the opposite of the undifferentiated and multifunctional spaces of the colonial buildings, being instead subdivided into rooms with specific programs, distributed by pompous halls and corridors.106

In the relationship between interior and the street the omnipresent element of the porch played an important role as a theatre’s dais from which one could admire and be admired along the Avenida.

The laws n.100 of 1894 and n.197 of 1896 helped to define a framework in which circulation and leisure became key aspects of the avenida: the former prohibited cattle on the street and the weekly vehicle race on Sundays – both popular customs at that time.107 The latter authorised the planting of a line of trees in the middle of the avenida, emphasising the ritualistic dimension of circulation – with the street becoming a popular attraction in the blooming season.108

These norms aimed to establish a new order on the espigão, where the presence of rural and popular culture had to be eradicated in favour of a full appropriation of the new urban elite. However, the occurrence of permitted collective activities testifies to how important leisure was in building behavioural norms. Military parades took place for the celebration of the anniversaries of the Republic. Funerals,
Avenida Paulista is an infrastructure that organises the expansion of the city into the land, defining line of developments, property boundaries, and modes of circulation. However, framing the landscape the perspective of the avenida links the city with its new territorial dimension. São Paulo symbolically extends to the coffee plantation of the surrounding region, mythical source of wealth and power, and true raison d'être of the city. The regular geometry of the avenida contrasts with the eclectism of its facades, which visually represents the new social and ethnic geography of the city. Collective rituals such as military parades, funerals, weekend strolls, car racing, and carnival made of the avenida a leisure destination. The belvedere offered the best view towards the historical centre and at the same time was raised above the level of the street becoming a viewing platform to enjoy the spectacle of the avenida. The movement and the desires of the common citizen were captured in a choreography that staged private relationships and collective exhibitions. Turned into a spectacular machine, Avenida Pulista shaped a specific subjectivity based on an oligarchic authority beyond the State.

An Infrastructure for Collective Rituals

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officially prohibited but *de facto* allowed for the members of the elite, featured luxurious processions towards the high-end cemetery of Consolção. The automobile - introduced in Brazil precisely in 1891 - quickly became the undisputed protagonist of the weekend: rare, expensive and desirable, the car exhibited the link between the elite's wealth and industrial modernity. Following this custom, a Carnival with cars was established, far from the messy working class celebrations traditionally taking place in the industrial district of Bras.

The spectacular and leisurely character of the *avenida* was further exalted in 1911 when, under the administration of Baron de Duprat, the municipality purchased from Francisco Matarazzo the area on either side of the central point of the *avenida*. These plots, corresponding to the earthwork in the Saracura valley and the terrain on the opposite side of the *avenida*, were until then privately owned but publicly accessible. On one side of the *avenida* Parque Villon was established and on the other side the administration commissioned Ramos de Azevedo - who ran the city's most important architectural firm - to design the Belvedere Trianon. Inaugurated in 1916, the Trianon was a concrete platform on two levels, with pergolas and pavilions hosting a restaurant and a dining hall with kitchen and services. Decorated in *Art Nouveau* style and formed by two rectangular rooms and an oval salon, the interiors of the Trianon featured the most luxurious materials available and furniture imported from Europe. Located at the midpoint of the *avenida*, in front of the park, the Trianon became the rendezvous of the elite Paulista, the place where commercial and political relationships were constructed and maintained and important political decisions taken. The belvedere offered the best view towards the *triângulo* of the historical centre but at the same time was raised about a metre over the level of the street, turning the viewing platform into a tribune to enjoy the moving spectacle of the *avenida* itself.

The complex of Parque Villon and the Belvedere Trianon became a crucial element of the *avenida*. On the one hand the park and the belvedere performed a technical role as retaining elements for the steep inclination of the ridge. Most probably, in fact, these plots remained initially public precisely due to the instability of the artificial ground, which arguably made it difficult and risky to build in the area. On the other hand they both performed an ideological role, turning the hegemony of the economic reason on the land into leisure. The virgin forest in miniature, organised with meandering paths but framed within the geometry of the blocks, naturalised the process of appropriation of the land in the aesthetic contemplation of “wilderness.” Similarly, the Trianon became the stage and the stand at once for the public visibility of the ruling elite, materially and symbolically dominating the view of the city and of the *avenida* itself. The movement and the desires of the common citizen, captured in this choreography of private relationships and collective exhibitions, were turned into a spectacular machine for the construction of an authority beyond the State.

Precisely in this same site in 1968, Lina Bo Bardi built her liberating gesture against the patronising authority of the ruling class, in a brave desperate attempt to construct a truly popular architecture.
Chapter 3
The Cover
Architecture and the Void

Modern Brasil: urbanisation fills the void.
In the film *Aguirre, Wrath of God*, an epic historical drama directed by Werner Herzog in 1972, a group of Spanish adventurers led by Gonzalo Pizarro attempts to penetrate the Amazon forest in search of the mythical El Dorado.\(^1\)

Fully dressed, with armour and swords, the Spanish convoy advances through a hostile environment with domestic animals, enslaved natives, religious icons, and all sorts of supplies and equipment, including a hefty cannon and a velvet-lined litter. The clumsiness of the movements, the inadequacy of the gear, the futility of conventions and the absurd suddenness of death offer a precise picture of the unbridgeable gap between the millenary European culture and the irreducible alterity of the land.

For the historian Sérgio Buarque de Holanda the attempt to implant European culture within a foreign condition “is the dominant fact at the origin of Brazilian society and the richest in consequences.” The effort to bring and maintain, in an alien and hostile territory, “the forms of living together, the institutions and the ideas” originated in faraway conditions produced the main trait of being Brazilians: to be “exiles in our own land.”\(^2\)

While the relationship between man and land in the Old World was shaped by centuries of inhabitation and in North America had the progressive character of a shifting frontier, dwelling in Brazil meant to deal with a land that was neither a familiar place nor a space for conquest but rather an internalised void defining ‘Brazilianness’ from within.\(^3\)

As we have seen in the previous chapters, this peculiar trait of Brazilian culture found the archetype to be the
The idea of a large cover that frames the unfolding of daily life linking it with the scale of the landscape has deep roots in the colonial and pre-colonial architecture. Both the indigenous Oca and the Casa Grande, despite countless typological variations, are characterised by an overscaled roof which gives unity to the multiplicity of activities hosted in the interior space.

Despite the radical shifts in technology, production processes and the rise of urbanisation as a new context of building, the act of covering the ground became an obsession also for Brazilian modern architecture.

Archeology of the Cover

The idea of a large cover that frames the unfolding of daily life linking it with the scale of the landscape has deep roots in the colonial and pre-colonial architecture. Both the indigenous Oca and the Casa Grande, despite countless typological variations, are characterised by an overscaled roof which gives unity to the multiplicity of activities hosted in the interior space.

Despite the radical shifts in technology, production processes and the rise of urbanisation as a new context of building, the act of covering the ground became an obsession also for Brazilian modern architecture.
crucial instrument for organising the territory. Different from the all-encompassing order of the grid, archetypes provided orientation through their material presence, as a system of finite objects that established formal and symbolic relationships with the territory. As such archetypes exposed the chasm between man and land without resolving this tension in the predominance of one pole over the other. Both in the plaza of the reduction and in the trace of the avenida the void played a crucial role in restructuring power relationships vis-a-vis the emergence of new political-economic conjunctures. The clear and finite form of the empty space materially and symbolically manifested the unbridgeable distance between man and land and, at the same time, informed everyday life by staging and ritualizing social and economic relationships. Hence, to manipulate and reproduce the void meant to determine political and cultural transformations, controlling and regulating both the mode and the very possibility of dwelling – thus exercising sovereignty as power over life and death.

During the 20th century, industrialization, rapid growth and increasingly dominant role of cities, acceleration of life and the emergence of new social and productive relationships, drastically changed the way in which mankind related to the land. In short, the development of modernity implied the unfolding of technique as a universal rational order. From now on everything could be potentially known and assumed as an asset to be classified, exploited and exchanged for its economic value. As technique filled the chasm between man and land, nature turned from an insuperable limit to mere quantity, a commodity within the endless field of production. The abstract continuity demanded by the expansive nature of capital found the ideal spatial, political and economic framework in the Spanish and North American grid. In Brazil, instead, the imposition of a universal order had to confront the discontinuous territorial organisation produced through archetypes against the radical “otherness” of the land. As the art critic Mario Pedrosa has noticed, the Portuguese colony was formed as a series of “isolated nucleuses of population immersed in the ‘technical’ desert of distances and forests.” Therefore Brazil developed less as a “culture” that “organically” relates to the land than as a “civilization” that transplants foreign elements into a space assumed as new and empty. While Spanish America had to deal with the presence of the pre-Columbian past and in North America the colonisers enforced a tabula rasa, the Portuguese established a “mediocre modus vivendi” that “neither dominates nor surrenders to nature.” For Pedrosa the absence of a significant past and the lack of continuity in the territorial structure generated the peculiar capability to adopt alien forms of culture, to appropriate them by absorption, making Brazil “a country condemned to be modern since its birth.”

Hence the condition of ‘exiles at home’ described by Sérgio Buarque de Holanda informed the fragmented territory of the colony but at the same time implanted the seed of modernity in Brazil. Cycles of imported novelties continuously enforced new beginnings, a mechanism that allowed the ruling oligarchy to maintain its dominant position as a hinge between the advanced Western economies and the abundance of natural resources and labour. The acceleration of development shifted the question of power from the problem of survival within an unknowable land to the one of managing the contradictions produced by the rootless unfolding of capital within the colonial territory. The rural elites and the emerging capitalist bourgeoisie joined forces in the pursuit of a “conservative modernisation,” aimed at introducing industrial modes of production without a revolution of the colonial order. Such a strategy entailed the representation of a desirable rational future vis-à-vis the exploitation and alienation of the present, but also required a form of economic management that
As the economic reason turned distances and forests from limits to commodities, from an unknown exterior to an endless interior, archetypes continued to play a key role within the all-encompassing dimension of the urban rather than against the outer domain of nature. While conducive to the conservation of the colonial power structures, the enduring use of archetypes also preserved a vital link between architectural form and the project of the city. As elucidated by Lúcio Costa’s project for Brasília, architectural forms continued to be the fundamental tools of modern Brazilian planning, fostering a relationship between architecture and the city antithetical to the logic of economy epitomised by the universal order of the grid.

Within this framework the archetype of the cover gave material form to the contradictions between the reality and the ideology of development, sublimating the ambivalence between the unlimited possibilities of modernisation and the preservation of the gap between man and land which Technic was threatening to fill.

Architecture and Modernisation

3.3 The archetype of the cross for the “Marco Zero” of Brasília, 1956.
3.4 The archetype of the cover framing the landscape. MASP, 1959-1968.
could absorb the imbalances of this problematic transition, making them productive. While modern architecture was key in constructing the image of Brazil as the “country of the future”\textsuperscript{15} - a paradise constantly promised but never fulfilled - cities quickly turned into urbanisation, a process of endless expansion and cyclical reconstruction.\textsuperscript{16} Hence, modern architecture and urbanisation worked as complementary instruments through which the ruling class could enforce “the myth of development”\textsuperscript{17} with a combination of authoritarian power and laissez-faire policies. In fact, the centralisation of State power and public investments in productive infrastructure - following the market crash of 1929 and every subsequent crisis of Brazilian capitalism - rather than catering towards the planning of urban expansion, established urbanisation as the platform for the reproduction of domestic and foreign capital. As industrialisation generated a massive migration from the rural areas,\textsuperscript{18} urbanisation proliferated in a disorderly patchwork of middle and upper-class high-rise condominiums and single-family houses immersed in an ocean of illegal development. Allowing extensive construction of self-built shelters - often occurring on public land along the infrastructure or within “protected” areas - the state de facto compensated for the lack of working class housing provisions.\textsuperscript{19} As a result, illegal development determined precarious living conditions that reduced the cost of labour and weakened collective organisation. Moreover the labour-intensive manufacturing process of building, resistant to standardisation and upsizing, provided a flexible and efficient tool in the management of the relationship between capital and labour. The widespread diffusion of small and highly hierarchical productive units like the construction sites, fragmented the labour force while granting the extraction of enormous quantities of surplus to be reinvested in more advanced forms of production.\textsuperscript{20} Finally the introduction and spread of reinforced concrete techniques allowed the employment of large numbers of unskilled workers with modest fixed capital investments, while linking the cloud of construction companies to the capital-intensive platforms of mining and materials industries.\textsuperscript{21} Ultimately urbanisation thrived not due to an endemic lack of planning, as is commonly argued, but rather because it provided the ruling class with an extremely effective instrument to reproduce capital and exploit an increasing mass of destitute and uprooted people. It is largely through urbanisation that the country addressed the cultural and physical discontinuity of the colonial territory described by Mario Pedrosa and the lack of a full development of the productive forces.\textsuperscript{22} For modern Brazil urbanisation has always been the plan.\textsuperscript{23}

In this political and economic framework, modern architecture in Brazil played an ambiguous role, representing at times the “order and progress” of the nation, and other times the power of industrialisation, more rarely a form of resistance to the deluge of urbanisation. Caught between the absence of the plan and the economic efficiency of urbanisation, architecture was, to a certain extent, liberated from immediate economic duties and left operating on the ground of ideology, or, more precisely, in the gap between ideology and the reality of development.

Within the strategy of conservative modernisation architecture became a crucial tool for the construction of a national identity, assuming the historical task of establishing modernity as a ‘natural’ expression of Brazilian culture. While in most countries modern architecture, giving expression to completely new modes of life and production, represented a clear break with the past, in Brazil modern aesthetics and techniques were promoted as a truthful and logical evolution of the colonial tradition.\textsuperscript{24}

As the economic reason turned “distances and forests”\textsuperscript{25} from limits to commodities, from an unknown exterior to an endless interior, archetypes continued to play a key role within the all-encompassing dimension of the urban rather than against the outer domain of nature. While conducive

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\textsuperscript{15} 1980 - 1990 - 2010

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3.5 - The urban growth of São Paulo (1880-2010).
to the conservation of the colonial power structures, the enduring use of archetypes also preserved a vital link between architectural form and the project of the city. As masterfully elucidated by Niemeyer’s seminal work at Pampulha and by Lúcio Costa’s project for Brasilia, architectural forms continued to be the fundamental tools of modern Brazilian planning, fostering a relationship between architecture and the city antithetical to the logic of economy epitomised by the universal order of the grid.

The exemplary forms of Brazilian modern architecture sublimated the contradictions generated by the unfolding of capital within the colonial order by celebrating technique as a promise of development. Through the abstraction of curved surfaces or the muscular expression of construction, architects experimented with the most advanced building techniques of the time, exhibiting exceptional control on the rational calculus required to dominate matter. However these daring forms, constructed with primitive means and an enormous amount of human labour, were less an expression than a simulation of advanced modes of production and life. Embracing the most progressive aesthetics, the ruling elite and the State represented the image of an advanced society while perpetuating the structures of the colony within a new political-economic framework largely driven by the wild expansion of urbanisation. While the hostile alterity of the land progressively faded with the modernisation of the Brazilian territory, architects were called to reproduce in vitro the conflict between technique and nature as universal ideas. The fluid forms, the exaggerated cantilevers or the stretched surfaces of glass and louvres – celebrated in Brazil as the evolution of a mythical tradition and abroad as a sign of renewal for modernism’s universal ambition – constructed the fictitious image of a total aesthetic and technical control over the environment.

To such a crucial historical task, architecture provided a variety of responses in relation to the extraordinarily diverse geographical, cultural and historical conditions that informed the Brazilian continent for about five decades. Nevertheless, within this rich and complex history, a paradigmatic form clearly emerged as the object and instrument of design for many architects: the archetype of the cover. Through the gesture of covering the ground with a suspended horizontal plane, architecture defined a portion of the land without enclosing it, framing a specific space without interrupting the continuity of the territory.

Floating above the surface of the land the horizontal plane defines a limit between what is covered and what is not, establishing a distinction between an inside and an outside that is comparable to the one set by an enclosure. However while the enclosure generally uses a material element to decidedly separate interior and exterior, the cover, instead, establishes such difference through the intensity of a suspended presence. Hovering above the ground, the cover gives form to a space without univocally determining its boundaries: albeit clearly stated, the limit is permeable, and thus the portion of ground is separated but still part of a whole. From this perspective the cover as such is not reducible to the economic logic of the grid, for which the part is separated from the whole to become a parcel, a quantifiable unit that can be appropriated, exchanged and reproduced within an infinite totality. The cover, instead, giving form to a single finite void, operates as an archetype, where the part analogously represents the whole – understood both as the territory and as the set of objects of which the archetype is an example.

This character of the cover can be further articulated in relation to the idea of the roof that, commonly used as synonym, indicates instead a different, if not opposite, semantic and conceptual domain. Etymologically the roof comes from the Old English hrof or from the Dutch roef. The first denotes the summit of the building and by extension the highest point of something, while the latter means cabin or shelter and thus figuratively indicates the home. If the cover
defines the building as a full gesture, on the contrary the roof indicates just a portion of the building that protects it from the elements, to mediate between man and the environment and provide physical and psychological comfort. The roof is thus one of the tools through which technique produces an interior, operating as a medium for the domestication of the environment. As such, the interior of the roof is a condition that can be endlessly repeated as a combination of quantifiable factors such as temperature, humidity, pressure, etc. On the contrary the archetype of the cover shifts materially and conceptually the idea of building from shelter to dwelling, giving to the act of covering a monumental dimension. Through its finite form the cover establishes a dialectical relationship with the ground and with the territory at large, defining a form of the void that analogously relates the very material presence of the building with the political and economic forces that constitute the territory.

As such, the cover gave material form – rather than a solution – to the contradictions posed by the chasm between the reality and the ideology of development. The archetype of the cover sublimated the ambivalence between the celebration of the unlimited possibilities promised by modern technique and the preservation of the gap between man and land – that constitutive trait of Brazilian culture which technique itself was threatening to fill. This approach resonated with the strategy of conservative modernisation, but the prominent role given to architectural form also offered the possibility to subvert the dominant ideology of development and urbanisation. The archetype of the cover could also be used to seize the gap between the existing and the imagined reality. By suspending a horizontal plane the cover constructed a frame that carved holes in the continuous surface of capital. As such the archetype put forward modes of gathering, living and building that challenged a universal idea of technique and progress, offering a form of resistance to the endless expansion of urbanisation.

Monumental void. From pilotis to the horizontal plane.
The emergence of the archetype of the cover is tied to the unfolding of modernity in Brazil, to the series of abrupt political and economic changes as much as to the progressive erosion of that distance between mankind and land characteristic of Brazilian civilization. In response to these historical developments, exceptional architectural examples marked specific moments and conditions as well as individual research trajectories. However, the archetype of the cover constituted a common line of inquiry across this complex field of distinct positions.

In architectural terms the unfolding of modernity meant first embracing and experimenting with advanced construction techniques, following in particular the compositional and aesthetic principles defined by Le Corbusier. However, starting from the 1940s – a moment generally regarded as the beginning of the mature phase of Brazilian modern architecture – the predominance of the structural framework began to be challenged. In some of the most exemplary modern Brazilian architecture emerged a different logic, one that emphasised not just free forms – as it is commonly argued – but the presence of the suspended horizontal plane. This principle regulated experimental structural solutions as much as extraordinary aesthetic outcomes and, more importantly, the explicit use of form as a means to relate architecture with the city and the territory at large.

The opposition between the structural framework and the horizontal plane, which gave rise to the archetype of the cover, can be traced back to the building that established the aesthetic, technical and professional canon of modern architecture in Brazil: the Ministério da Educação e Saúde (MES) in Rio de Janeiro (1936-1943). Considered to be the first large scale application of Le Corbusier’s five points for the new architecture, the MES featured prominently in the MoMA’s book and exhibition “Brazil Builds” of 1943.
The opposition between the structural framework and the horizontal plane, which gives rise to the archetype of the cover, can be traced back to the building that established the aesthetic, technical and professional canon of modern architecture in Brazil: the Ministério da Educação e Saúde.

In the architecture of Le Corbusier the pilotis floor is the outcome of a subtraction, the element of disjunction that allows to articulate the endless and universal reproduction of aesthetic and organisational principles on any ground. Instead the pillars designed for the MES, exaggerated in their dimensions and cladded in granite, assume the monumentality of ancient columns, more like objects confronting the pedestrian circulation under the horizontal plane of the cover. This void materialises the passage from the abstraction of the structure to the one of the horizontal plane. At the MES the space of the vestibule prefigures the archetype of the cover, understood not as the technical preoccupation with shelter but as a means to frame the landscape.
and was internationally acclaimed as an example of the Modern Movement’s renewal. In a country still culturally and economically dependent from foreign influence, the widespread success of the building was key in establishing modern architecture as the dominant style and practice in Brazil. Furthermore, the direct participation of Le Corbusier, invited by Lúcio Costa to collaborate with a group of young and talented Brazilian architects, validated the authority of the project as forerunner of modernity. Until the 1940s modern architects struggled to prevail against the Neo-Classical and Neo-Colonial architects, but the MES provided the ultimate demonstration that modern architecture was better suited to represent a truly national identity and to restructure the relationship of production towards urban life and industrial economy.

Facing the dramatic consequences of the 1929 crisis, which ended the ciclo do café of the Brazilian economy, Getúlio Vargas came to power in 1930 to enforce the economic and social possibilities offered by nationalist modernization: the centralization of state power, the restructuring of the labour market and the investments in the public infrastructure, accompanied by widespread use of media for populist propaganda. These policies enlarged the base of producers and consumers without a real democratisation and redistribution of resources. As such the new politico-economic asset ensured the continuity of both foreign dependence and internal oligarchic hegemony within more advanced conditions of production.

However the definitive scheme, produced by the Brazilian team after the departure of the Swiss master, features substantial modifications that emphasise the monumental presence of the building in the city and in the landscape at large. The final project consists of a tall 14-story slab standing in the middle of the plot, and a low linear element running underneath it and defining the eastern edge of the site, to form a “T” shape composition. The entire ensemble has an extremely abstract character. The slab rises as a monolithic volume with two blind granite cladded façades on the shorter sides, a continuous glass curtain wall on the South façade and a geometric pattern of movable brises-soleils towards the North. The lower volume is instead a portico, enclosed in the first floor, which terminates in the plastic volume of the auditorium.

The arrangement of the two volumes and their abstract architectural expression produce the monumental effect. While the buildings in the surroundings occupy the entire plot, the MES breaks the alignment of the street grid, allowing the tall slab to stand out as a monolith in a free

3.10 - The void produced by the cover within the compact urban fabric of the plan Agache.

3.11 - The void produced by the horizontal plane in the building massdouble height horizontal plane
Horizontal Planes

At the MAM of Rio de Janeiro the tension produced by the structural effort and by the position of the building in the landscape is resolved in a paradigmatic formal gesture. While still operating within the spatial logic of the structural frame, characterised by the repetition of individual elements, Reidy's project clearly indicates the articulation of horizontal planes and the act of covering the ground as the instruments through which architecture could construct a material and symbolic relationship with the city and the territory at large.
space. In a complementary movement the lower volume, with its rhythm of slim columns and the trapezoidal shape of the auditorium, guides the gaze and the flow of people from the street to a void in the middle of the site, which becomes the focal point of the entire composition. This central space is a ten-metre-high covered vestibule occupied by three lines of five granite cladded columns, which connects the two open squares divided by the tall slab and leads to the entrance of the building. The position and the form of the void produces a strong visual and symbolic effect that exceeds any functional concern: if the composition of the volumes in the site opens a large space in contrast to the dense grid of urban blocks, such a tension is condensed and intensified in the covered emptiness of the vestibule. While such peculiar space is generally interpreted as a mere application of Le Corbusier’s pilotis space, a closer reading of its formal genesis identifies it as the embryonic version of the archetype of the cover.

The Brazilian team, in fact, working on the schemes designed by Le Corbusier, gives to the pilotis a monumental scale, raising the height of the space from four to ten metres and increasing the dimensions of the columns – proportionally to the scale of the space and to the equally increased height of the slab. With this simple but crucial move the space of the pilotis loses the character of a universal frame to acquire the autonomous dimension of a finite form. In the architecture of Le Corbusier the pilotis floor is the outcome of a subtraction that reveals how the structural framework is a means to articulate the relationship between the abstraction of geometry and the specificity of the landscape: the pilotis are the element of disjunction that articulates the endless and universal reproduction of aesthetic and organisational principles on any ground. Instead the pillars designed for the MES, exaggerated in their dimensions and cladded in granite, assume the monumentality of ancient columns: more than revealing the structure they appear as autonomous objects confronting the pedestrian circulation under the horizontal plane of the cover. Due to the overall arrangement, the void of the ground emerges less as the result of a subtraction than as one of the formally and programmatically distinct elements that compose the ensemble: the office slab, the auditorium volume, and the gallery space. This void at the heart of Rio de Janeiro materialises the passage from the abstraction of the structure to the one of the horizontal plane. At the MES the space of the vestibule prefigures the archetype of the cover, understood not as the technical preoccupation with shelter but as a means to frame the landscape: a gesture that proposes an epistemological shift in the way we understand, occupy and inhabit the territory.

**Horizontal planes. Repetition of the structure and the articulation of the void.**

The shift from the Corbusian pilotis to the archetype of the cover was further developed by Eduardo Affonso Reidy, one of the young Brazilian architects that worked at the MES. Appointed head architect of the Municipality of Rio de Janeiro in 1932, Reidy was one of the few designers of his generation to work in the field of social housing and urban planning. From this peculiar position, he conceived and designed projects that always explicitly relate the material dimension of building with the larger social and economic context: infrastructure that mediates between the landscape and the city, acting strategically as pedagogical examples in the public realm. Reidy’s buildings thus often acquire a monumental character, which is not necessarily obtained through symmetrical compositions or exaggerated dimensions, but rather by sublimating formal, functional and constructive considerations in archetypal gestures.

The most relevant and accomplished example of Reidy’s production is undoubtedly the Museu de Arte Moderna (MAM) of Rio de Janeiro, designed and built between 1953 and 1968. The building occupies a strategic location as an end of
the Aterro do Flamengo, the 120 hectare linear park designed by Reidy himself together with the landscape designer Roberto Burle Marx, that completely redefined the waterfront of the city through an unprecedented infrastructural and land reclamation project. Envisioned as a pedagogical device for the participation of the citizen to the study and production of art, the program of the MAM included the museum, the school, the theatre and a number of additional facilities such as cinema, library, restaurant and workshops for restoration and conservation of art. The organisation of this complex set of activities follows the compositional logic experimented with at the MES, where the programs correspond to distinct architectural forms: the school is an introverted patio block, the theatre a trapezoidal volume intersected by the cylindrical volume of the fly tower, and the museum a glazed box suspended underneath giant portals. However, differently from the MES, at the MAM the void acquires a more clearly independent form, where the open-air public atrium and the main space of the museum are joined in the single monumental central piece of the whole composition.

Given the exceptional position on Guanabara Bay, the relationship with the landscape is a central concern of Reidy’s project: on one hand the architecture gives order and orientation to the newly reclaimed territory and on the other it celebrates the exceptional natural landscape of Rio de Janeiro. Reidy chooses to enhance this tension by liberating the floor plans from load bearing walls or columns, bringing the structure outside of the building: 14 giant portals define a virtual volume of the building through repetition.

From Le Corbusier’s free plan of pilotis, Reidy moves towards the clear-span structural experiments of Mies van der Rohe, who was designing the Chicago Crown Hall (1950-1956) and the Mannheim National Theatre (1947-53) during the same time. However, while the German master was working towards increasingly refined solutions for the connection between pillar and beam, on the contrary Reidy pursued the conflation of columns and architraves, combining structural and formal aspects of the building, into a single decisive element. In fact, the project is entirely conceived and developed through the section, pursuing in the structure’s design a synthesis of both the project’s aesthetic and technical preoccupations. Not only the shape of the portals follows the forces generated by the loads, aesthetically celebrating the new technical possibilities of reinforced concrete, but the skeleton also integrates elements that work simultaneously as structural bracing and brise-soleils, while visually defining the volume of the building.

However the preeminent role of the structure is not an end in itself but rather a means to articulate the void as a system of horizontal planes. The two floor slabs of the gallery spaces are sustained by the secondary arms of the portals or suspended from their main horizontal beam through steel cables. As such both the ground floor and the internal spaces of the museum are completely freed from load bearing elements, allowing the public to flow from the city to the ocean waterfront through the generous and flexible spaces of the building. Furthermore, the entirely glazed façades allow the spectacle of the Guanabara Bay to enter the museum and the rhythm of the portals to frame the view. The tensions produced by the structural effort and by the position of the building in the landscape are resolved in a single gesture, in a paradigmatic architectural form. While still operating within the spatial logic of the structural frame, characterised by the repetition of individual elements, Reidy clearly indicates the articulation of horizontal planes and the act of covering the ground as the instruments through which architecture could construct a material and symbolic relationship with the city and the territory at large. As such Reidy’s project plays a key role in the shift from the Corbusian compositional freedom based on the structural frame, to the freedom of the void, achieved through the archetype of the cover.

In spite of the canonical opposition between the Escola
Carioca and Escola Paulista, the architecture of Eduardo Affonso Reidy exerted a profound influence on key figures working in São Paulo like João Batista Vilanova Artigas, Paulo Mendes da Rocha and Lina Bo Bardi. In fact, Reidy’s project for the MAM anticipated the more mature versions of the archetypal cover proposed by João Batista Vilanova Artigas and Lina Bo Bardi, which both overcame the contradiction between the single gesture and the repetition of elements: the former by using a folding surface directly placed on the ground, and the latter spanning the structure on the long side of the building as a single didactic sign.

**Infrastructural form. Circulation, presence and use.**

The dialectic between the structural framework and the horizontal plane finds one of the most striking expressions in the marquise of the Ibirapuera Park in São Paulo, the key element of a larger complex of buildings designed by Oscar Niemeyer.

Inaugurated in 1954, the Ibirapuera Park was designed as the main stage for the celebration of the fourth centenary of São Paulo. Assuming the character of an international fair, the park needed to provide the setting for leisure, events and cultural activities that could promote the image of the city internationally. The construction of mythological tradition, and the celebration of a bright modern prosperous future, was part of a larger project aimed at the formation of a consumer middle class that could sustain the extraordinary economic and population growth. This ambition was perfectly embodied by the promoter of the initiative, the entrepreneur Francisco Matarazzo Sobrinho, known as Ciccillo: a descendent of Italian immigrants who became the head of the largest industrial group of Latin America and a key player in the political and economic relationships between Brazil and USA.

The choice of Oscar Niemeyer, a *carioca*, for such a key project in São Paulo is to be understood within these programmatic intentions of the project. Niemeyer was the most internationally recognised Brazilian architect and had demonstrated an unrivalled capacity to produce an uncompromisingly modern, yet “typically” Brazilian, aesthetic. The abstract forms designed by the *carioca* master could overcome both local traditions and imported models, perfectly capturing the ambition of São Paulo to become the leading example for the entire country’s modernisation. As such, the project of Ibirapuera assumes the significance of a third foundation of the city: after the colonial town of the **Triangulo** and the coffee metropolis of the **Espigão**, the Ibirapuera Park provided the image of a modern cosmopolitan centre that could be part of an international network of cities. The idea of a new foundation is further reinforced by the specific choice of the site: comparable in size to the historical hill, the Park is symmetrically placed on the other side of Avenida Paulista in respect to the old centre, occupying a strategic position within the recent southwest expansion of wealthy suburbs.

The project articulates the program of the celebrations in a composition of several buildings, rigorously organised, on an orthogonal grid. Together these buildings form a virtual rectangle roughly 730 by 400 metres within the park’s larger perimeter. The main entrance is marked by three buildings, whose abstract geometrical forms sublimate their functions: the platform offers an elevated panoramic view of the whole complex from the entrance; the semi sunken white dome evokes the celestial vault of the planetarium; and a balancing inclined trapezoid follows the slant of the theatre’s stands. On the contrary the volumes that define the virtual limits of the composition, the Palace of Industry, Palace of States and Palace of Nations, are regular prisms of Corbusian style: suspended on pilotis and protected by brise-soleils they are mainly characterised by their generous dimensions and the flexibility of their free plan.

However the element that holds the tension between the geometric rigour of the composition, the abstract expression

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3.16 - The horizontal planes are floating above the ground, supported by a sequence of portals that resolve structure and shading in one gesture.
Defined by a masterful combination of straight and curved lines, the marquise is constructed with a relatively simple array of concrete beams supported by columns largely following an orthogonal grid. However a number of sophisticated design choices allow to dissimulate the presence of the columns and perceive the marquise as an horizontal plane hovering above the ground. Following these choices, the marquise goes beyond Le Corbusier structural framework and the Cartesian rationale of modern space, to produce an architecture that turns the infrastructural character into a monumental gesture. Monumentality is obtained less through the mere exaggeration of dimensions than by a carefully staged material presence, which defines a clear-cut but open relationship between interior and exterior, between circulation and use.

Circulation and Presence

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of the forms and the fluid space of the park together is the marquise, a freeform slab connecting the various buildings. Hovering over the ground for a length of about 600 metres, a variable width of 18 to 115 metres, and an overall surface of roughly 3,000 square metres, the marquise acquires a monumental dimension that defines the park’s movement, use and the aesthetic perception.

Oscar Niemeyer had already experimented with the potential of the marquise in several projects. Using it as an element to articulate the accessibility and relationship of the building with the surrounding landscape. In the complex of Pampulha, or in the Duchen factory, for example, the independence of the marquise from the main structure tested the expressive potential of reinforced concrete. However in the Ibirapuera Park the relationship between building and marquise is inverted, as the marquise, rather than a complement of the building, acts as the *cardo* and *decumanus* of the project, a foundational gesture producing a spatial and symbolic order. Significantly, it is the architecture of the cover that gives meaning and orientation to the entire project, establishing an exemplary relationship between the built form and unbuilt landscape opposed to the paradigm of circulation of the modern street.

Similarly to the projects of the MES and the MAM in Rio de Janeiro, the marquise is meant to articulate the relationship between different programs and between the landscape and the city in a single form. However, while at the MES the void of the pilotis space acquired a monumental dimension and at the MAM the pillars gave way to the articulation of horizontal planes within a volume defined by a giant structural order, in the marquise of Ibirapuera the archetype of the cover operates at the scale of the city. In its architectural form the cover organises and gives orientation to the territory, capturing the movement of circulation and exposing the tension between the distribution of flows and the presence of the void.

Defined by a masterful combination of straight and curved lines, the marquise is constructed with a relatively simple array of concrete beams supported by columns largely following an orthogonal grid. However a number of sophisticated design choices dissimulates the presence of the columns. One perceives the marquise as an horizontal plane hovering above the ground: the space underneath the cover is compressed due to the low height and considerable width; the beams are concealed within the white-painted ceiling; the profile of the section is tapered to reduce the visible thickness of the slab; and the shape of the cover is doubled on the ground with a light concrete pavement, constructing a sinuous version of the Miesian horizon.

These material choices allow the marquise to supersede Le Corbusier’s structural framework and the Cartesian rationale of modern space, to produce an architecture that turns the infrastructural character into a monumental gesture. Monumentality is obtained less through the mere exaggeration of dimensions than by a carefully staged material presence, which defines a clear-cut but open relationship between interior and exterior, between circulation and use. The serpentine profile of the building articulates the limit between the space of the marquise and the landscape of the park, at times enclosing the open space, other times offering a wider panorama. The variations in the perception of the architectural limit are countered by the constant white abstraction of columns, floor and ceiling, so that the cinematic movement of the scenario is constantly accompanied by the architectural presence. As such the marquise is a gesture that produces aesthetic and symbolic connotations that exceed the economic rationale of infrastructure and circulation. At Ibirapuera Park the archetype of the cover turns the continuous flow of people and goods, which characterises the urban, into a present but useless void opening a gap in the continuity of the link: a space without program that demands forms of appropriation through the invention of meaning and use.

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3.19 - The marquise is deployed at the scale of the city, exposing in its form the tension between circulatory movement and the presence of the void.

3.20 - The cover is mirrored in the ground producing an abstract empty space within the lush tropical landscape that is open to unpredictable uses.
Against the hierarchical composition of rooms with specific functions, which choreographed bourgeois urban life, Artigas proposes a rough concrete surface that folds to incorporate the vertical supports and sits directly on the ground. The space is liberated by supporting structures and functional hierarchies, so that the split levels, organised around a central patio, are fluidly connected by generous ramps.

The formal choices of Artigas’ houses embody a pedagogical project that intended to establish a new ethic for the national bourgeoisie. The ambitious large-span structures, the introverted volumes, the uninterrupted surfaces of exposed concrete, the fluidity of the interiors, flooded with abstract overhead light, constitute an architecture completely indifferent to the program. Whether used for family houses, schools, sport clubs or bus stations, the archetype of the cover is first and foremost the expression of a technical gesture that constructs an interior void to be collectively inhabited.
**Folded plane. Giving form to a collective subject.**

The marquise of the Ibirapuera Park is a radical example of how the horizontal plane operates as an architectural form that establishes a tension between presence and flow, between the clarity of the limit, the fluidity of movement and the openness of use. However, during the same time period, the archetype of the cover also became the predominant object of experimentation for other architects in São Paulo, who were searching for an alternative path to the type of national modernism coming from Rio de Janeiro. While the internationally celebrated *arquitetura carioca* – begun with the blessing of Le Corbusier in the 1930s and culminating in the inauguration of Brasilia in 1960 – embodied the construction of a Brazilian national identity within the modernist movement, the architects from São Paulo reclaimed a different political agenda for architecture, based on the tension between economic development and the local conditions of production. If the rhetoric of the *Escola Carioca* emphasised an abstract relationship with history, nature and people – referring to the curves of the colonial Baroque, to the exuberance of the landscape and the sensuality of the inhabitants – the *Escola Paulista* had the ambition to materially confront the reality of the Brazilian political-economic conditions. Rooted in the polytechnic education, rather than in the French Beaux Arts tradition of Rio de Janeiro, the central concern of the *Escola Paulista* was the coherence between architectural form and construction technique. The truthful expression of the relationships of production in the architecture was therefore charged with ethical and political values.

In this respect João Batista Vilanova Artigas played a crucial role in defining the relationships between political theory and architectural practice, animating the debate through writing, teaching and designing exemplary projects. A prominent and active member of the Brazilian Communist Party, Artigas understood architecture as political practice and the building as an index of the political and economic contradictions. Hence, architecture should clearly and courageously expose conflicts, rather than resolve them in a harmonious synthesis. For Artigas, designing architecture in Brazil meant first and foremost supporting the industrial development of the country, which implied the formation of a working class as the subject of historical progress. Thereby the collective effort of building was to be recorded in the marks of labour on the exposed concrete and celebrated in the didactic exaggeration of technical solutions. From this perspective the term “brutalism,” often associated with the architecture of São Paulo produced between 1950 and 1980, is to be understood less as a style than as an expression of historical materialism, exposing the contradictions between the universal order of capitalism and the local conditions of production.

This position has to be understood against the unprecedented economic and urban growth of São Paulo, which exposed the dramatic contradictions of the process of modernisation in the southern periphery of the global capitalist system. The violent burst of urbanisation was quickly erasing the limit between city and land. The gap between these domains, a constituent character of Brazil since colonial times, was dissolving into the endless field of economic reason. Rather than retreating from modernisation or meekly accepting the marauding logic of the “plot,” Artigas, and other protagonists of the São Paulo scene put forward an alternative project for the city. They used the archetype of the cover to analogously reconstruct the limits of the city from within.

Vilanova Artigas, who had previously built numerous eclectic houses and before turning to modernism while working with Gregori Warchavchik, began experimenting with the archetype of the cover in the design of single-family houses for middle and upper class clients. Since the 1940s he worked on increasingly refined versions of the same project, proposing a radical break from the typological character of the *Paulista* house which was still largely based on the eclectic *palacetes* of the late 19th century. Against the hierarchical
The articulation of horizontal planes, seen in Reidy project of the MAM, acquires an unprecedented clarity: the building almost literally reproduces the idea of a parking garage as a multiplication of the ground. The bold articulation of volumes is read against the abstract grid of the ceiling, reproducing the conflict between the infinite character of the Cartesian space and the symbolic power of architectural form. As such, the archetype of the cover appears in its deliberate monumental dimension, as a form that transcends the problem of shelter and the technical exercise to carve a space of collective life through the sheer presence of architecture. Ultimately the FAU is a sublime synthesis of technique and form, where architecture itself embodies the pedagogical ethos of the school and more in general the struggle for the construction of a popular collective subject in Brazil.

Monumental shelter

The articulation of horizontal planes, seen in Reidy project of the MAM, acquires an unprecedented clarity: the building almost literally reproduces the idea of a parking garage as a multiplication of the ground. The bold articulation of volumes is read against the abstract grid of the ceiling, reproducing the conflict between the infinite character of the Cartesian space and the symbolic power of architectural form. As such, the archetype of the cover appears in its deliberate monumental dimension, as a form that transcends the problem of shelter and the technical exercise to carve a space of collective life through the sheer presence of architecture. Ultimately the FAU is a sublime synthesis of technique and form, where architecture itself embodies the pedagogical ethos of the school and more in general the struggle for the construction of a popular collective subject in Brazil.
composition of rooms with specific functions, which choreographed bourgeois urban life, Artigas proposed the cover as a unifying gesture: a rough concrete surface that folds to incorporate the vertical supports and sits directly on the ground.

Through the cover the space is liberated by supporting structures and functional hierarchies, so that the split levels, organised around a central patio, are fluidly connected by generous ramps. The representative character of the façade is negated through the abstraction of modern technique and the blunt use of industrial materials: the front of the house is reduced to blind surfaces of exposed concrete or to continuous surfaces of glass and steel, often set back in the shadow of the hanging horizontal planes and thus made more transparent than reflective. The cover extends to the limits of the parcel, blurring the boundary between the interior and exterior, and challenging the idea of the building as an isolated object within the plot. The presence of the building is defined less by the enclosure than by the hovering of the cover above the ground, a condition that, analogously, opposes the intensive plot subdivisions produced by the forces of urbanisation. Ultimately, the formal choices of Artigas’ houses embody a pedagogical project that intended to establish a new ethic for the national bourgeoisie, a group understood as the only possible subject of the transformation of the country.

In the words of Lina Bo Bardi, “a house by Artigas doesn’t follow the laws dictated by the everyday routine of man, but imposes to life a vital law, a morality that is always severe, almost puritan [...]. Each house of Artigas breaks the mirrors of the bourgeois salon”.

The ambitious large-span structures, the introverted volumes, the uninterrupted surfaces of exposed concrete, the fluidity of the interiors, flooded with abstract overhead light, constitute an architecture completely indifferent to the program. Whether used for family houses, schools, sport clubs or bus stations, the archetype of the cover is first and foremost the expression of a technical gesture that constructs an interior void to be collectively inhabited.

In this respect, the project for the Faculty of Architecture and Urbanism at the University of São Paulo (FAUUSP) is certainly the most accomplished example of Artigas’ interpretation of the cover. Designed between 1960 and 1969 in collaboration with Carlos Cascaldi, pupil and life-long associate of Artigas, the FAU is “a temple where all activities are possible.” This definition, given by Artigas himself, well expresses the tension between the need of representation of a public institution and the idea of a school - and by extension of a society - as a radically open collectivity. The building assumes the monumental form of a temple, with a peristyle of giant columns elevated on a stylobate and supporting an enormous concrete pediment. At the same time the volume is suspended over the ground and left completely open to access, without enclosures between inside and outside. The internal patio, previously experimented with in the houses, acquires the physical and symbolic dimension of the courtyard in a Renaissance Palazzo: an exterior that has been interiorised to represent an order antithetical to the ungovernable forces of the city. The internal facades are defined on three sides by staggered volumes and on the fourth side by garage-sized ramps that connect the split-levels. Here the articulation of horizontal planes, seen in Reidy project of the MAM, acquires an unprecedented clarity: the building almost literally reproduces the idea of a parking garage as a multiplication of the ground. The bold articulation of volumes is read against the abstract grid of the ceiling, reproducing the conflict between the infinite character of the Cartesian space and the symbolic power of architectural form. This contrast is further emphasised by the encounter between the homogeneous zenithal light of the grid and the rough concrete vertical surfaces. Interestingly, the grid is almost entirely supported by a smaller order of circular columns, whose presence and regular pace is undermined by the movement of the internal volumes. This crucial technical detail reveals how the giant blind sides of the monolithic cover, and their expressive...
The power of the vault-house lies in its savage monumentality, in the autonomy of its form, chosen not in relationship to function or context but in spite of them. Lightly resting on the ground, the cover fulfils the problem of shelter and thus liberates the interior from functional preoccupations. As such the archetype is radically anti-typological: a means of dwelling without end.

The form of the vault is chosen for its structural efficiency and simplicity of construction, minimising the need of steel and concrete, and drastically reducing the amount of labour and the cost of materials. Furthermore the project aims for each phase of the work to remain separate, legible and didactically exposed in the materiality of the building, so that the workers’ labour can be celebrated in its technical and aesthetic autonomy. Electrical and plumbing installations are exposed and the elements that organise inhabitation are separated from the vault. The unusual arrangement of materials, and the overlaying of autonomous elements against the absolute clarity of the vault, produces an effect of estrangement that echoes the montage technique devised by Brecht.
supports, are less of a structural need than a precise formal and aesthetic choice. As such, the archetype of the cover appears in its deliberate monumental dimension, as a form that transcends the problem of shelter and the technical exercise to carve a space of collective life through the sheer presence of architecture. Ultimately the FAU is a sublime synthesis of technique and form, where architecture itself embodies the pedagogical ethos of the school and more in general the struggle for the construction of a popular collective subject in Brazil.

**Vaults and voids. Towards a collective domesticity.**

The pedagogical project of João Batista Vilanova Artigas, who intended to educate the Paulista bourgeoisie with the austere morality of his houses, was radicalised by Flávio Império, Rodrigo Lefèvre and Sérgio Ferro, who collaborated as a group later known as Arquitetura Nova. Favourite pupils of Artigas at the FAU-USP, the three challenged the conventional understanding of architectural practice with a multitude of experiments in painting, scenography, pedagogy, building techniques and political theory; a permanent exercise in free and collective labour as a means of radical political change. Indeed, the adjective Nova had nothing to do with the search for novelty and originality that pervades contemporary architecture. Nova identified an ethos, an attitude towards work and life for which architectural practice was understood as a technique of critical thinking and political action.

Having experienced first-hand the brutal working conditions demanded by Niemeyer’s abstract white curves of Brasilia, the group realised that the historical task of the architect within capitalist relations of production enforced the separation of the builder from his own knowledge. Through the desenho – both design and drawing – the architect reduces the act of building to a mere execution of orders and at the same time enforces a strict division of labour. Ultimately design weakens the workers’ collective relationships with the aim of assuring efficiency and control of the production process. In short, the architect’s “art” is to mediate between capital and labour, ensuring that construction remains the largest and most effective source of capital accumulation and labour exploitation.

Against the false hope of development and the deception of a free, open and democratic aesthetic promised by national Modernism, the group proposed the rationalisation of popular construction techniques as a means to liberate workers from alienation and exploitation. Arquitetura Nova pursued a “poetic of economy,” an architecture of reduced means where scarcity is not accepted as limitation nor aestheticized as a moral value, but rather assumed as the rationale that informs the structure, the production and the aesthetic of the work. From this perspective the role of the architect becomes one of organising the collective labour of building, of designing new relationships of production that minimise labour intensity and reclaim the value of the workers’ knowledge: from desenho for the construction site to the desenho of the construction site.

Articulating the building activities in separate phases and parts, the design recognises the autonomy of each team of workers – masons, carpenters, plumbers, electricians, etc. - fostering their thinking and making according to each technical sensibility. Following an “aesthetic of separation,” every phase and component of the construction process is left exposed in the building, so that the marks of labour on matter become an index of the workers’ presence. Rather than representing the power imposed on the workers through the drawing, the building becomes a didactic device that exposes the potential of cooperation and collective will. Thus the construction site is reimagined, from a space of oppression and exploitation to an arena of political experience, a stage where differences and conflicts between workers are negotiated through the self-determination of production rather than repressed through the hierarchies.

3.31 - Rodrigo Lefèvre, Casa Dino Zammataro, 1971. The void of the vault allows a complete penetration of the space, challenging the subdivision of the land in urban plots.

3.32 - Rodrigo Lefèvre, Casa Dino Zammataro, 1971. The vault rests on the ground as a stable form that, absorbing the tensions, reduces the need of concrete and steal.
of labour divisions. Assuming the building process as the preeminent theatre of the conflict between capital and labour, Arquitetura Nova shifted the core of architectural labour from design to production. The construction site, often seen as an obstacle between the perfection of the idea and its realised, is embraced as the locus where the working class could build its emancipation. Architecture should not only stop enforcing the alienation and exploitation of labour through drawing, but must also refuse to provide for the working class according to the paternalistic logic of developmentalism imposed by the State. On the contrary, building itself became the horizon where the workers could come together and realise William Morris’ motto: “art is man’s expression of joy in labour.”

Arquitetura Nova proposed a practice of architecture rooted in the existing relationships of production, directly engaging with oppressed subjects, and their demands, through collective action. Such a radical approach was developed within the hopeful spirit of the early 1960s, when the basic reforms proposed by President João Goulart and the rise of popular organisations, such as the Ligas Camponesas and the Comunidades Eclesiais de Base, promised a profound transformation of the Brazilian social and political landscape: before the military coup of 1964 revolution seemed possible, if not imminent. More importantly, the 1960s also marked the acceleration of the dramatic rural exodus that turned Brazilian cities into largely self-built megalopolis in only a few decades: millions of people migrated from the country’s impoverished interior to the margins of major urban areas where they were forced to sell their labour power and build their own shelter. While industrial capitalism professed the rhetoric of development as a remedy to this permanent crisis – a solution embraced by both the Brazilian State and the Brazilian Communist Party – Arquitetura Nova claimed the possibility and the need to organise a cooperative practice exceeding capitalist modes of production. Mass migration and self-construction provided a reservoir of labour and a mechanism to reduce the workers’ salary, while also constituting the material condition and the base of production for a large part of the Brazilian people. Therefore, the subject of a truly popular architectural and political project was to be found less in the organised industrial proletariat, than in the rural migrant now turned into a worker, builder and dweller of the Brazilian city. On the construction site, the encounter of the rural and the urban, of migrant with technician and popular with erudite culture, generated an emancipatory synthesis based on the available means of production rather than on the false promise of a future development.

The work of Flávio Imperio for the 1960 play, Morte e Vida Severina, is the first powerful manifestation of this emancipatory potential. Based on a poem by João Cabral de Mello Neto, the piece celebrates the rural popular culture following the journey of a peasant walking from the inland to the big city. The abstraction of the costumes, realised with poor and bare materials such as jute fabric and cardboard, contrasted with the realism of the migrants arriving in the station of São Paulo, brought on the scene by projecting photographs – a device borrowed by Berthold Brecht. As Sérgio Ferro recalls, “simple materials [...] transfigured through the lucid invention were definitely more suitable to our time than the falsification of metropolitan models.” Producing sets and costumes offered a more direct path to action than architecture and, to a certain extent, the backstage represented a simplified version of the construction site the group was imagining: a space organised collectively, where teams with different craftsmanship worked together to realise the various elements of the scenographic project.

However, if in theory Arquitetura Nova clearly defined the subject of their architectural and political project, in practice a self-managed construction site where workers could freely build their home was less a reality than a metaphor of a possible free and democratic Brazil. As Sérgio Ferro recalled
years later, empowering the workers’ creative freedom was a dream relentlessly chased and almost realised in many experiments. Yet, after the army’s seizure of power in 1964, such an ambition became impossible as the dictatorship made large-scale development, urban growth and violent repression the cornerstones of the Brazilian State.

The legacy of Arquitetura Nova has been studied and further developed by scholars and practitioners largely from the point of view of their radical and rigorous analysis of the material relations of production. These analyses place the building process at the centre of the construction of subjectivity. Yet from this angle the position of Arquitetura Nova easily slips into a utopian horizon, where the power of the construction site rests on the idea that the technician and the migrant would design, build and inhabit together. This perspective flattens the relationship between architecture and the construction of subjectivity into a single plane where designing, building and dwelling ultimately coincide. As Roberto Schwarz has noticed, tackling the housing question through the practice of self-building runs the risk of translating the conflict between labour and capital in the distance between the housing movement and the contemporary means of production. Rodrigo Lefèvre himself had poignantly remarked that “only there, in the epoch of transition, where some of the political and economic relationships will be modified, I can accept to participate in a self-building process of large scale.” However, if Arquitetura Nova’s theory gives the building process the role of shaping the subject, on the contrary, in their built work, it is the architectural form which is the primary means to construct a new subjectivity, to bridge the gap between the existing and the imagined forms of production and life.

Between 1961 and 1977 Flávio Imperio, Rodrigo Lefèvre and Sérgio Ferro produced a wide range of over 60 architectural projects including houses, schools, multi-storey buildings, competitions and renovations. Within this body of work, the experimentations on the single family house, and in particular the elaboration of the archetype of the vault-house, undoubtedly constitute the most consistent manifestation of their ethos. The clients for these residential projects were friends and relatives, a group of bourgeois intellectuals keen on experimenting with a different way of living in their own house. Yet, working with the single-family house meant to go to the political economic root of the production of space, as the home is the locus of the institutionalisation and naturalisation of property, and family is the productive core of a capitalist society. The interior is the place of reproduction and comfort associated with women, which provides a relief from the busy and dirty space of production of the city, associated with men. Such opposition enforced gender hierarchies and the myth of ownership of both the house and the commodities needed to make the interior a personal and protective space opposed to the repetitive character of the urban. This aspect is particularly emphasised in the Americas’ suburban single-family house, where the house as the negative of the city acquires the territorial dimension of the plot. Furthermore, in Brazil the home is the place where extreme inequality rooted in racial and class segregation – a legacy of slavery from which the country was never truly liberated from – is managed through the ambivalence of personal relationships between master and domestic labourers.

Facing these contradictions Arquitetura Nova used the archetype of the cover as a means to seize the gap between the existing and the imagined subject and turn it into the substance of the project. As such Arquitetura Nova’s ruthless critique of the architect’s role exceeds both the recognition of the construction site as the battleground for the liberation of the working class and the call for collective self-building actions, to propose a critical horizon for architectural practice.

The ethos of Arquitetura Nova primarily takes the form of the cover, a gesture of powerful aesthetic intensity that manifests the theoretical and technical issues posed by the

3.35 - Rodrigo Lefèvre and Nestor Goulart Reis, Casa Pery Campos, 1972. The construction site shows the reinterpretation of popular building techniques and the use of wooden moulds in the making of the vault.

3.36-3.37 - Rodrigo Lefèvre and Nestor Goulart Reis, Casa Pery Campos, 1972. The vault under construction and then inhabited through mezzanine structures permanent furnitures.
political position of the group into an precise architectural form: a single large vault defines the space of the house; two glass and wood walls on the short sides regulate the threshold between interior and exterior; the ground is manipulated to accommodate the topography and define different spatial qualities through fixed furniture; a number of secondary elements are overlaid on the vault and articulate the organisation of the space. These four simple operations constitute the archetype that Arquitetura Nova produced and refined through a dozen variations, from the Casa Bernardo Issler in 1961 to the Casa Paulo Vampré in 1977.105

The single vault is chosen for its structural efficiency and simplicity of construction: its geometry, based on the catenary curve, allows the structure to work almost exclusively in compression, therefore minimising the need of steel and concrete, and drastically reducing the amount of labour and cost of materials.106 Furthermore the project aims for each phase of the work to remain separate, legible and didactically exposed in the materiality of the building, so that the workers’ labour can be celebrated in its technical and aesthetic autonomy. This tactic is particularly visible in the exposed electrical and plumbing installations and in the intentional separation of the vault from the elements that organise its inhabitation, such as the mezzanines, the “wet rooms,” the openings of windows and skylights, and the fixed furniture. While the geometry of the cover allows for the use of the most common and familiar materials of the Brazilian city, their arrangement in an unusual form and the overlaying of autonomous elements against the absolute clarity of the vault, produce an effect of estrangement that echoes the montage technique devised by Berthold Brecht in his “epic theatre.”107 In the same way, Arquitetura Nova’s “epic details” counter the naturalisation of hierarchies and relationships of production – that is the core of the bourgeois ideological project of the interior.108 By disrupting the conventional understanding of domesticity the vault allows a new form of life to be invented through inhabitation. The mezzanine floors hosting the resting areas, for example, are bare concrete structures built inside the house, suggesting a penetration of the very generic fabric of the city within the intimacy of the interior. Suspended at the very centre of the vault they at once materialise and dissolve the idea of privacy through the continuity of the three-dimensional space. The openings in the vault defamiliarise the notion of window by piercing the surface with concrete boxes or slices of fibro-cement pipes, or by subtraction generating unusual arched porticoes that reveal the pace of the structure. The “wet rooms” are autonomous concrete and brick structures containing kitchens, toilets or the maid’s rooms: topped with water tanks and decorated with the geometrical arrangement of exposed coloured pipes, these volumes stand like iconic and enigmatic totems. If the presence of domestic labourers in the Brazilian house couldn’t be eradicated, at least it was not half-sunken or hidden in the backyard but bluntly placed at the entrance of the house, in a volume that could be eventually demolished when “abolition” would be finally achieved.109 The concrete fixed furniture dissimulate the problematic moment when the cover touches the ground and reduces the inhabitable height,110 and at the same time they are permanent objects removed from the endless cycle of commodification and open to appropriation through use. Finally every element, seen as produced, analogously represents the entire manufacturing cycle and thus counters the ideological separation between the domestic interior and the city as space of production. Even enclosed within the individual plot and bound to private property, the archetype of the cover strives to expose the conflict between capital and labour and to produce a political awareness beyond the collective moment of the construction site. In this respect the gap between the imagined and the real subjects inhabiting the house is not understood as a limit or a contradiction, but rather as an opportunity to imagine another way of dwelling
and therefore new relationships of production against and within capital: the vault-house is striking inasmuch as its form is able to question the bourgeois canon of domesticity and put forward an alternative paradigm of living.

Although never explicitly claimed by the group, the refusal of a domesticity based on property and privacy finds a crucial precedent in the indigenous *oca*, the collective-domestic space of many Brazilian native peoples. The parallel goes far beyond a superficial formal resemblance or the fetishism of a national cultural identity, hinting instead to the idea that the formulation of an alternative form of life is inextricably linked with the valorisation of the native culture. Not only is the *oca* a vaulted space, but it is also built and lived in collectively as a space of the clan rather than as a stronghold of the nuclear family. In this respect the words of Sérgio Ferro, describing the unbuilt project of the Casa Império-Hamburger, seem to claim an idea of domesticity analogous to the indigenous one: “the gentle curve protecting first the construction site and then the family Império-Hamburger with its maternal, uterine connotation. Inside, total freedom, to escape the rigidity of the bourgeois house. On the mezzanine, completely open to the community of the numerous children, bed, wardrobes, benches and tables compose a festive promenade architecturale. Below, the promenade continues, fluid with few closed spaces.”

Going beyond the opposition – still internal to the bourgeois tradition – between the subdivision of the apartment and the fluidity of the modernist open space, the metaphor of the uterus claims a much deeper sense of belonging to the land beyond the social construct of the family. Furthermore the *detournement* of the Corbusian promenade architecturale into a carnival of furniture suggests an idea of living based more on the communal use of space and objects than on privacy and property – a conception very close to the one of the native peoples. The form of the vault itself, blending the vertical and the horizontal plane into a continuous surface, challenges the conventional Cartesian dimension of the space, constituted at once of separation and repetition *ad infinitum*. On the contrary the space is fluid but constantly framed by the curvature of the ceiling-wall surface that, even when subdivided, always offers a way for the subject to analogously reconstruct the whole from the singular part. As such the form of the cover produces an understanding of space that is not of a mathematical kind but rather, as the indigenous one, symbolic and cosmological.

The power of the vault-house lies in its savage monumentality, in the autonomy of its form, chosen not in relationship to function or context but in spite of them. Lightly resting on the ground, the cover fulfils the problem of shelter and thus liberates the interior from functional preoccupations. As such the archetype is radically antitypological: a means of dwelling without end. The vault-house seems to anticipate the unfolding of post-Fordist production in the imagination of a self-managed construction site that opposes autonomy, cooperation and creativity to the hierarchical organisation of the factory. Furthermore it stages a living condition that blurs the boundaries between work and leisure, public and private, productive and reproductive labour. Rather than liberating the worker, the dissolution of the modern boundaries of human activities implies an increasingly pervasive control and exploitation of the very potential of human labour, of our common capability of thinking and relating: the utopia of the plan overcome by the endless reproduction of urbanisation. However, the archetype of the cover uses the ability of form to expose architecture as a common anthropological condition in opposition to the ideology of isolated individuals and unique architectures. The vault-house stands as an archetype, a paradigmatic form that produces a tension between the subject, the house and the city, and thus challenges prescribed norms and behaviours while opening to collective use and appropriation of space.

3.38 - The wet block stands as a totem, exposing the marks of labour and infrastructure in the facade of the house.

3.39 - The pipes are fixed to the wall with a lump of mortar, a gesture that emphasises architecture as the a collective and creative practice.

3.40 - The openings in the vault defamiliarise the notion of window by piercing the surface with concrete boxes or slices of fibro-cement pipes.
The MASP had to be a monument, a landmark that could establish with its material presence a new symbolic reference for the city. However, rather than a rhetorical device to impose the order of the dominant class, monumentality is understood as a necessary means to stage dignity as an anthropological category, as a trait common to all human beings. In the archetype of the cover Lina Bo Bardi finds the material and symbolic organisation of a monumental simplicity, where the ‘monumental’ of architectural form is countered by the ‘simplicity’ of means; a dialectic that is key in turning the institution of the museum into an everyday place that the people could understand, access and identify with.

Monumental Simplicity

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Monumental simplicity. A prophecy of fundamental changes.

The MAM, marquise of the Ibirapuera Park, the FAU and vaulted houses proposed different interpretations of the archetype of the cover, pushing further the initial movement from the Corbusian pilotis to the architecture of the void first tested at the MES. However, different from the ministry, these examples were all isolated from the city’s fabric: built within public enclaves - campuses or parks - each was physically detached from the raging urbanisation of Rio de Janeiro and São Paulo. While isolation limited the direct impact of the archetype on the city, it also produced an in vitro condition where architecture could assume an exemplary attitude and analogously propose a project for the city: the MAM presented a sober but generous idea of the public sphere through the articulation of the suspended planes and the exhibition of exposed concrete structure on an unprecedented scale; the marquise of Ibirapuera magnified an ancillary architectural element to invent a monumental infrastructure open to the landscape and the re-appropriation of use; the FAU used reinforced concrete to address the relationship between form, technique and labour in the pedagogical proposal of a radical commonality; the vaults of Arquitetura Nova questioned the boundaries between private and public space, identifying the construction site as the place of political action, reinventing a collective idea of domesticity.

However, the most extreme example of the archetype of the cover, radically exposing the contradictions of Brazilian development and reclaiming the possibility of a different form of collective life, is the Museu de Arte de São Paulo (MASP).

A 70-metre-long case floats eight metres above the ground of Avenida Paulista. The box extends beyond the building line to protect part of the sidewalk while the pavement penetrates under the 30-metre-deep cover, opening into a belvedere overlooking a valley of anonymous towers. The volume appears in its astonishing simplicity as two parallel concrete horizontal planes, enclosed by a continuous glass curtain wall and held by two red portals spanning each long side. An ordinary concrete stair pierces through the underbelly of the suspended volume, while the massive structural pillars disappear into water pools, hiding the certainty of gravity. Underneath the level of the avenida the ground is multiplied in a series of horizontal planes that plunge into the steep topography with the generic bluntness of a parking garage. Grass grows in between the stone tiles of the pavement while a few homeless people wake up after a rough night under the cover.

A horizontal break within the vertical multitude of predios, frantically rising in place of the onetime fashionable palacetes. The MASP was designed by Lina Bo Bardi in collaboration with the structural engineer José Carlos de Figueiredo Ferraz between 1957 and 1968. The blunt and stunning building stands at the very midpoint of Avenida Paulista, the central business district of the country, on the site of the Belvedere Trianon, the classy rendez-vous of the early 20th century elite paulista later “degenerated” into a popular ballroom. Grafted at the epicentre of Brazilian economic space, in a prominent geographical and symbolic position, the site offered maximum visibility but also the opportunity to directly confront the raging development of urbanisation in São Paulo: an extraordinary chance to design architecture as a project for the city.

Founded in 1947 after the encounter of Lina and Pietro Maria Bardi with the tycoon Assis Chateaubriand, the project of the MASP has to be framed within the battle for hegemony in São Paulo, a city rapidly shifting from a provincial town to the most important metropolis in Latin America. In the unpredictable scenario of an extraordinarily intense economic and urban growth, the control over the circulation of ideas was key in determining the destinies of traditional oligarchies and emerging groups of interest. Within the Good Neighbor Policy implemented by Franklin D. Roosevelt, national and international power alliances were
formed through cultural initiatives that could gather capitals and consensus. The building of representative headquarters for the MASP was Chateaubriand’s response to the successful projects promoted by his long-standing rival Francisco Matarazzo Sobrinho for the celebration of the 4th centenary of the city. Thanks to the support of Nelson A. Rockefeller and the MoMA of New York, Matarazzo had consolidated the position of the Museu de Arte Moderna de São Paulo he founded in 1948, instituted the Bienal Internacional de Arte de São Paulo in 1951 and inaugurated in 1954 the Ibirapuera Park complex – a project designed by the internationally acclaimed Oscar Niemeyer that had launched São Paulo on the global scene as the tropical cosmopolitan city of the future.

In the struggle for the control of cultural production, traditional and new mass media played a key role, making Chateaubriand and his communication network the ideal partners for a couple of European intellectuals that had just landed in an unknown context with ambitious cultural projects. The institution of the MASP was a unique chance for Pietro Bardi to experiment with curatorial ideas and a rare opportunity for Lina Bo Bardi to prominently position her architectural practice in São Paulo. Thanks to Chateaubriand’s network, and an economically depressed post-war Europe, the museum gathered a considerable number of exceptional artworks at bargain prices in just a few years, becoming the “most important art collection of South America.” However, since the beginning, the MASP was conceived not as a traditional museum but rather as an articulated cultural project that could take advantage of Diarios Associados’ dominant position in the media network. Through a number of editorial, curatorial and pedagogical activities, Lina and Pietro Bardi aimed at gathering different groups of intellectuals, breaking through the conservative tendencies of the city and at the same time engaging with a popular audience. Especially after her direct experience with Bahian culture and people, Lina Bo Bardi envisioned the museum as an instrument to challenge the institutional power of the ruling class and widen people’s participation in the construction of the city. In conclusion, the new Trianon complex was called on the one hand to represent the ambitions of the elite in shaping the new cosmopolitan São Paulo, and on the other hand to give form to Lina and Pietro Bardi’s visionary cultural and political project. Notwithstanding, these conflicting positions and motivations shared a common aspiration: the building had to be a landmark for São Paulo and establish with its material presence a new symbolic reference for the city.

From these premises, the notion of monumentality arises as the crux of the project: which form should a memorable building give to the emerging metropolitan dimension of São Paulo? And which subjectivity would the architecture address, shape and represent in the public sphere?

Rather than resolving these fundamental questions with design solutions inscribed in conventional types, Lina Bo Bardi chooses to exhibit the contradictions that constitute the museum in its relationship to the city using the paradigmatic form of the cover. While the architect never used this term, it is undoubtedly the act of suspending a horizontal plane above the ground of Avenida Paulista that turns the MASP into a “landmark in the city, a ‘form’ recognisable a priori, which could arise in the collectivity the respect inspired by those ‘monuments’ that are property of all.” In the architectural form Lina Bo Bardi seeks a means to “immediately communicate that which in the past was known as ‘monumental’, that is in the sense of the ‘collective’, of ‘Civic Dignity.’” Rather than a rhetorical device to impose the order of the dominant class, monumentality is understood as a necessary means to stage dignity as an anthropological category, as a trait common to all human beings. In the archetype of the cover Lina Bo Bardi finds the material and symbolic organisation of a “monumental simplicity,” where the ‘monumental’ of architectural

3.45 - Level -2. The podium of the MASP is a two-story semi-sunken volume made of rough concrete planes, which takes advantage of the slope of the plot.

3.46 - Level -1. The podium hosts the Theatre and the double-height space of the Civic Hall with a mezzanine for temporary exhibition.
form is countered by the ‘simplicity’ of means; a dialectic that is key in turning the institution of the museum into an everyday place that the people could understand, access and identify with. To this end, the project stages monumentality using the canonical tools of composition and “symmetry,”139 but at the same time chooses “direct and raw solutions”140 that dismantle the conventional spatial hierarchies dictated by established power relationships.141

From one point of view, the project is linked to classical precedents such as the temple and the palace, which had been commonly used in the Beaux Arts tradition to construct the monumental order of institutional buildings. The architectural form is arranged not only through a rigorous use of symmetry but also in a canonical tripartite composition, radically reinterpreted as podium, void and suspended case.

The podium is a two-story semi-sunken volume made of rough concrete planes, which takes advantage of the height difference between Avenida Paulista and the tunnel of Avenida 9 de Julho that runs underneath the espigão.142 This element hosts the Theatre and the service spaces, in the darker areas close to the retaining wall, and the double-height space of the Civic Hall. This central main room is surrounded by galleries for temporary exhibitions, connected through two red crossing stair-ramps and wrapped by a continuous strip of recessed windows.

At the level of Avenida Paulista the void space is an extension of the public ground, penetrating under the suspended case and opening into a belvedere overlooking the Saracura valley and the historical hill of São Paulo. This plaza, partly covered and completely free of columns, can host a variety of activities and events, including concerts, performances, temporary markets, open air exhibitions and political gatherings. From the ground floor a blunt concrete staircase and a glass-and-steel goods lift pierces the underbelly of the hovering volume, elevated 8 metres above street level.

The suspended case appears as an abstract box made of two concrete horizontal slabs wrapped in a full-height glass curtain wall and hung above the ground by a couple of giant red portals spanning the long side. Internally, the case is subdivided in two floors: on the lower level the space is partitioned to host offices on the long sides, services and the technical archive on the short sides, and a space for temporary exhibitions in the depths of the central area; on the upper level the collection of the Pinacoteca is displayed in a single uninterrupted 6-metre-high exhibition hall measuring over 2000 square metres.

The canonical logic of the composition is further emphasised by the symmetrical arrangement of the building in respect to the median axis of the plot perpendicular to Avenida Paulista. The symmetry is rigorously pursued not only in the suspended case and in the portals – where it is mainly dictated by structural concerns – but also in the form and the space of the podium, where it is theatrically emphasised by the red double stair-ramp of the Civic Hall and reinforced by the axial position of the back entrance staircase.

However, the formalism and the grandeur borne by monumentality in the Beaux Arts rhetoric are hijacked not only by opting for simple and raw materials but also through strategic design choices that construct unexpected choreographies of use. The magniloquence of the entrance is replaced by an anonymous concrete staircase and a glass-and-steel goods lift, asymmetrically placed in the regular composition. The ennobling character of the podium is turned into the vulgarity of a parking garage, a volume made by the sheer multiplication of identical horizontal slabs, emphasised by the alternation of exposed concrete planters and continuous strips of recessed windows. The case offers the Pinacoteca to the city as a treasure chest. The completely glazed facades allow the chaotic urban environment to profane the sacrality of the museum, flooding with light the “miraculous sea of painting”144 exposed without hierarchy on transparent easels.

3.47 - Level +1. On the lower level of the suspended case the space is partitioned to host offices, archives, services and a space for exhibitions.

3.48 - Level +2. On the upper level the collection of the Pinacoteca is displayed in a single uninterrupted 6-metre-high exhibition hall.
The bewildering presence of architecture floating above Avenida Paulista is meant to open a violent break in the continuous and distracted experience of the urban. The building stands as an empty stage that presents to the absent-minded passer-by the terrifying spectacle of urbanization. For a fleeting yet permanent instant, the incessant urban circulation is captured, made legible and offered to the gaze of the people as the latent potential of collective life. The structure celebrates technique but pursues less a truthful expression of the structure and of the construction technique than a refined control over the image of the building. The audacity of the structural scheme is neither the result of constraints nor an idle technical virtuosity but rather the instrument that allows the aesthetic and symbolic reasons to subdue the economic rationale.

The empty ground of the MASP is at the same time a space delimited by the possibilities of the structure and freed for the action of people, opened to unpredictable uses. As such the architecture assumes the role of liberating the space from the program, returning the common ground of the city to a use ruled just by formal and material qualities.

Circulation and Presence

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The design of the permanent exhibition, which Lina Bo Bardi considered “an important contribution to international museography,”\(^{144}\) exposes with stunning clarity how the political position of the architect informs the idea and the space of the museum. In the unobstructed void that hosts the collection, each painting stands on a transparent easel upheld by rough concrete blocks. The works are presented as individual objects in a one to one relationship with the visitors, re-enacting the moment in which the paintings were produced.\(^{145}\) However the individuality of each piece is simultaneously challenged by the collective character of the display, where the artworks can be seen all together at a glance within the empty volume of the Pinacoteca. Each artwork is a singularity that exposes its relationship with the set – the whole of the collection – constructing an order that exceeds stylistic classifications, historical periodization and authorship.\(^{146}\) Lina Bo Bardi’s design strategy intends to “remove from the paintings the ‘aura’ to present the work of art as ‘labour’, highly qualified, but labour; present it in a way that it could be understood by the non-initiated, by the people of Guarulhos so different from the elegant visitors of the great traditional museums, whose ‘auras’ are always preserved even in the modern arrangements.”\(^{147}\) The artworks are liberated from the walls, returned to their mode of production and thus elevated to the plane of art as human need and labour, where the boundaries between artists, intellectuals and common people are erased. As Lina Bo Bardi claims, “seeing thousands of people walking between the paintings, in an almost familiar and non-aulic atmosphere (for Mr Julio Tavares is transformed into an ‘apartment’), is frightening like a prophecy of fundamental changes.”\(^{148}\) The finite interior void of the case, completely freed from columns or walls and visually open to the surroundings, finds its analogy in the gesture of suspending a horizontal plane above the ground of the city. Completely subverting the logic of the tripartite composition, the shaft, traditionally forming the body of the building or of the column, is replaced by its opposite, the void, which makes the MASP “an amazing feat, for the building is indeed both there and not there, giving back to the city as much space as it took from it.”\(^{152}\) Van Eyck seems to imply that, by lifting the volume and liberating the ground, Lina Bo Bardi uses architecture to multiply the available surface, trading the enclosed space of the museum for an equal amount of open public space. On the contrary, by giving form to the void, the project pursues a true epistemological shift for the role of architecture: building is not conceived of as an economic activity for the appropriation and exploitation of the city, but rather as political action, framing and exposing the contradictions of capitalist development in order to open the possibility of “fundamental changes.”\(^{153}\) If the shaft is the

**Suspended void. An act of violence, an act of Faith**

As Aldo van Eyck noticed, the exhibition design of the Pinacoteca and its suspension above the avenida are “outstanding gestures” that “are interdependent, belong together, tuned as they are to the same mental key: Lina Bo Bardi’s uncompromising – simultaneous – solidarity with people, art and architecture.”\(^{151}\)

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Lina Bo Bardi’s design strategy intends to remove from the paintings the 'aura' to present the work of art as 'labour'. As such the museum is not anymore an institution where a supposedly universal knowledge is preserved, displayed and passed down from the elite to the people, but rather a place of unpredictable encounters that has to become familiar like a common everyday language.

The Work of Art as Labour

In the Pinacoteca the works are presented as individual objects in a one to one relationship with the visitors, re-enacting the moment in which the paintings were produced. The individuality of each piece is simultaneously challenged by the collective character of the display, where the artworks can be seen all together at a glance within the empty volume of the Pinacoteca. Each artwork is a singularity that exposes its relationship with the whole of the collection, constructing an order that exceeds stylistic classifications, historical periodization and authorship. Lina Bo Bardi’s design strategy intends to remove from the paintings the ‘aura’ to present the work of art as ‘labour’. As such the museum is not anymore an institution where a supposedly universal knowledge is preserved, displayed and passed down from the elite to the people, but rather a place of unpredictable encounters that has to become familiar like a common everyday language.
res extensa of architecture, the universal and undetermined matter shaped by the architect to give function and value to building, conversely the void under the cover is a frame that resists endless extension and efficiency of program. Counter to a formless emptiness to be filled – which epitomises the relationship between modern technique and nature – the void under the cover is a finite architectural form that captures and makes legible the endless flow of people and goods of the urban. Giving form to the void Lina Bo Bardi constructs a political stage where the relationship between architecture and the city, between the individual and the collective, can be questioned and rearticulated in the construction of the public sphere.

Nevertheless, Lina Bo Bardi is well aware that the relationship between the built form and the political dimension of architecture is not a straightforward affair and that the radicality of deliberate choices can be mistaken for a “frescura arquitetonica,” as the egotistic and extravagant gesture of an artist. To bolster her fundamental design decision against the objections of public opinion and, perhaps more importantly, to justify the considerable public expenses demanded by the daring scheme, Lina and Pietro Bardi resorted to a smart ploy. Through a number of texts, endlessly reported in the mainstream and specialised press, they constructed the myth – recently debunked by a well-documented study – of a legal constraint that, prescribing the preservation of a public belvedere, would have impeded any construction on the site and thus forced the adoption of a columnless solution.

Conversely, in an unpublished text titled “O novo Trianon,” probably written during the construction of the building, Lina Bo Bardi clarifies that her architectural choices, more than the outcome of external constraints, are informed by the precise will to achieve a coherence between the aesthetic and the ontological nature of the project. As the museum intends to address and mobilise a popular subject by architectural means, it has to reach the immediacy of Brazilian popular art, where “each object scratches the limit of the ‘nothing,’ of misery” but, pushed by the “persistent presence of the ‘useful’ and the ‘necessary,’” achieves “a poetics of human things that are not gratuitous or created out of mere fantasy.” The “monumental simplicity” implies an architecture that, like an everyday object, is directly understood and recognised as a constitutive part of a specific form of life. From this perspective, the synthetic rationality of popular culture corresponds to the logic of the archetype, which is not the creation of an author but rather the exemplary manifestation of architectural common knowledge in response to a specific conjuncture. Like a common utensil, the archetype exhibits in its very material form the rules that govern the aesthetic and technical aspect of the building in relation to its use. Yet, the recognition and appropriation of this form demands the action of a collective subject. As such the archetype exceeds the modernist logic for which form has to follow a predefined function, assuming instead the gap between form and use as that field of tensions where the political dimension of architecture can take place.

Interestingly enough, a hint to the political nature of the cover can be found in one of the key texts published on the MASP – also titled “O Novo Trianon.” After having rehearsed the story of the legal clause and underlined the responsibility of the architect towards a public work, Lina Bo Bard refers to the building as an “act of violence” and “an act of Faith.” Such bold and somewhat surprising terms remain without further explanation, but they hint at the political dimension of the project. The bewildering presence of architecture floating above Avenida Paulista is meant to open a violent break in the continuous and distracted experience of the urban. The building stands as an empty stage that presents to the absent-minded passers-by the terrifying spectacle of urbanisation. For a fleeting yet permanent instant, the incessant circulation of people, goods and capital – the very essence of the urban – is captured, made legible and offered to the gaze of the people as the latent potential of

3.53 - The MASP captures the endless circulation of Avenida Paulista through the act of covering the ground.

3.54 - The MASP under construction reveals the beam holding most of the structural weight, hidden within the suspended case.
collective life. However, the building can only frame life without fully determining the unfolding of its common dimension: architecture stands in its savage monumentality to open a political horizon for the city, exposing through its paradigmatic form the tension between the preservation and the transformation of the existing conditions, between the power of territorial organisation and the possibility of collective re-appropriation. Yet, in analogy to the performance of a ritual, which always entails a moment of undecidability between the repeated gesture and its effect, the gap between architecture and political action can only be bridged through a collective leap of faith.

In the archetype of the cover this dialectic between violence and faith acquires a material dimension that directly relates architectural form and modern technique. Being the key problematic factor for Brazilian development, technique is not refused but rather pushed to the extreme, uncovering contradictions and latent potentials. As Lina Bo Bardi claims, the structure is “the key main act that places human endeavour before formalistic lucubrations [...] as a pedagogical rather than propagandistic gesture.” This idea, also pursued at the FAU by Vilanova Artigas, is brought to extreme consequences in the project of the MASP, where the structural scheme acquires an unprecedented dimension and relevance. The suspension of the Pinacoteca, initially imagined with a series of six portals spanning the shorter side, in the final solution is realised through giant beams stretching over the long side of the building. This choice clearly values the legibility of the gesture over structural efficiency, following the idea that the building has to be immediately understood as the outcome of an elementary but monumental effort. A close examination of the design reveals that the direct and breathtaking appearance of the building is in truth the outcome of a sophisticated manipulation of the building image in relationship with the structural scheme. The transversal section, in fact, shows how the beams emphatically shown in the extrados are holding only the weight of the roof, while the majority of the load is carried by two larger beams hidden in the middle the volume. The sense of suspension is further emphasised by the fact that the four giant pillars supporting the entire structure disappear into water pools, hiding the point in which the weight of gravity is countered by the resistance of the ground. In this sense the project pursues less a truthful expression of the structure and of the construction technique than a refined control over the image of the building. The audacity of the structural scheme is neither the result of constraints nor an idle technical virtuosity but rather the instrument that allows aesthetic and symbolic reasons to subdue economic rationale.

The very name “vão livre,” which is famously used to address the space under the Pinacoteca, semantically indicates the correspondence between the structural choices and the political stance of the project. The term “vão” means “room,” and in the common technical language “vão livre” indicates the span, the empty space between supports that a structure can cover. On the other hand “vão” means “vain” or “useless,” thus indicating the lack of predefined function as the key of freedom. The empty ground of the MASP is thus at the same time a space delimited by the possibilities of the structure and freed for the action of people, opened to unpredictable uses. As such the architecture assumes the role of liberating the space from the program, returning the common ground of the city to a use ruled just by formal and material qualities.

The vão livre opposes the emptiness demanded by the smooth circulation of the free market but also exceeds the Miesian negative abstraction, where absence itself is the work to be exhibited. At the MASP the void is free inasmuch as it captures the incessant flows of Avenida Paulista, staging the potential of collective rituals.

In this respect, the location and the specific formal relationship of the building with the city are crucial aspects that establish a territorial dimension for the project. The building
stands along the avenida as an enigmatic piece of infrastructure that bridges no gap but, instead, gives form to a void framing the urban landscape. This gesture produces an effect of estrangement that restores legibility to the Vale do Saracura, now completely submerged by a carpet of urbanisation.

Furthermore, the project of the MASP sublimates the inherent tendency of the archetype of the cover to challenge the conventional relationship between gravity and structure. If the resistance to weight is generally based either on the mass of load bearing walls or on the repetition of a structural framework, on the contrary the cover tends towards the elimination of the supporting elements in order to transpose the forces from the structure to the void between the horizontal plane and the ground. If the modern techniques of steel and concrete released the walls from structural duties, liberating both the horizontal surfaces of the plan and the vertical plane of the façade, then the cover pursues the paradoxical task of defying gravity without support. Precisely the ultimate impossibility of this challenge produces the tension between the celebration and the questioning of technique: the cover turns the repetition of the *pilótis* into the gesture of the horizontal plane. As such the cover celebrates the formal unity of the gesture as opposed to the repetition of the structural elements, the exemplarity of the void over the universality of the structural framework, the conflict of the *polis* over the efficiency of the *oikos.*

Forms of appropriation: urbanisation and agribusiness

The Brazilian condition, in the first decade of the century, has been characterised by its extraordinary economic and urban growth, the unprecedented stability of the democratic regime as well as by the nation’s new global economic and political role. Between 1990 and 2020, despite a decline in the yearly population growth rate – from 1.8 to 0.75% – Brazil’s population increased by 60 million people – going from about 150 to 210 million. Even more impressive is the population’s concentration in relation to the country’s landmass, 80% of Brazilians live in just 0.65% of the territory with the urban population now reaching nearly 85%.

The country’s considerable economic growth and its redistribution policies deployed by a progressive government, led by the Partido dos Trabalhadores (PT), for fifteen years allowed a large portion of the population to exit poverty. This group constitutes a new wider and more diverse middle-class which is now threatened by the impact of the economic and political crisis. However, while the country has advanced significantly in terms of reducing poverty and granting accessibility to both education and health services to a wider part of the population, structural aspects of the country’s economic and institutional architecture have prevented a more radical change. Despite acquiring a more important international position, Brazil remains an economy largely dependent on the export of natural resources and agricultural products, and therefore highly susceptible to foreign influence. The particularly favourable international commodities market in the 2000s allowed the financing of redistribution policies and enlarging internal demand with
direct incentives for consumption. Social programs, such as “Bolsa Família,” provided essential support to destitute families, reducing poverty and empowering marginalised sectors of the population. However, these mechanisms of financial aid also produced a class of consumers, dependent on the state and burdened with debt, whose ability to self-organise was often weakened.

The depreciation of key export materials, caused by the financial crisis of 2008, pushed the Federal Government to rely on higher taxes, inflation as well as public and foreign debt in order to maintain the country’s high levels of domestic consumption. More importantly, the crisis accelerated the processes of primitive accumulation with the aim of sustaining capital expansion despite global contraction. In the last decades, Brazil has seen both the brutal conquest of new land for agribusiness and extractive economies and also a massive expansion of urbanisation. On one hand the country is expanding in search of virgin land. This expansion is being driven by the hyper-extensive production of food, such as soy and cattle, which continuously require new land for a chemically intensive production needed to satisfy the increasing international demand. On the other hand the city is spreading in rural areas without control. Urbanisation is an instrument of capital accumulation and reproduction, which implies the continuous consumption of new land to fulfil financial and economic interests. This framework places Brazil in a paradoxical condition, being one of the countries with the largest amount of available arable area per inhabitant while simultaneously families and small producers face a scarcity of land.

While the need for profound agrarian reform is evident, the percentage of rural areas owned by large landowners has steadily increased in the last fifty years. According to the survey of the Instituto Nacional de Colonização e Reforma Agrária (INCRA), this percentage grew from 49% in 1967 to 52% in 1998, reaching a staggering 62.8% in 2010, an unprecedented rise during the democratic era of Brazil.

While the power of global agribusiness companies has continuously increased, family agriculture is still very diffused with a strong economic, cultural and political relevance despite the reduction of public funding since 2015. The substantial failure of the agrarian reform – a right established by the democratic Constitution of 1988 – produced a number of struggles and organised movements that reclaimed land for self-subsistence and small-scale production. Among them the Movimento Sem Terra (MST), born in the early 1980s, acquired particular importance on a national scale, organising the occupation of unproductive land, mass assemblies, marches and placing the agrarian question on the table of the current political agenda.

The complex issue of agrarian reform in Brazil is interlinked to the expansion of urbanisation. On one hand urbanisation is consuming arable land while on the other hand the process turns land into a precious commodity, one which underpins financial capital. Also in the case of urban growth, the state has played a key role, using public funding to link the population’s chronic housing needs with the economic interests of the local and foreign enterprises. In 2008 the Federal Government launched “Minha Casa Minha Vida,” a program that promised and achieved the construction of one million new houses in two years, to be furthermore expanded with an additional two million houses to be built by 2015, for a total of three million houses in six years. Being the largest state funded program of its kind ever attempted, MCMV is configured as a purely financial instrument. Families are classified according to their level of income and can access either a nearly fully subsidised house or a long-term mortgage with favourable conditions. The loans are given by private banks but guaranteed by a
state backed fund, leaving the purchase of land purchase and construction entrusted to private companies. This mechanism clearly tends to encourage the largest possible complexes with the lower construction quality in the cheapest available land, since scale, quality and land price are the three leverages construction companies can manoeuvre to achieve profit in the face of increasing property and construction costs. Ultimately the housing question is reduced to abstract numbers, a financial instrument through which the state attempts to stimulate the economy, boosting the building industry and the real estate market, while saving the greatly indebted, large scale, construction companies.

The result of the MCMV program is thus threefold. First, it uses public subsidies to artificially inflate the housing market and construction industry, favouring financial and land speculation. Secondly, it aggravates the pattern of social segregation, already dominant in Brazilian cities, dislocating large portions of the poorest population in the remote and disconnected periphery who are lacking basic public infrastructure. Third, it turns the working classes into landowners, beholding them to the ruling class through debt, distorting the democratic process through pork barrelling practices and above all neutralising the subversive potential inherent in the construction of a collective subject. Within this politico-economic framework the process of urbanisation emerges as a key element of governance. Not only does it become an instrument of financial and land speculation for the reproduction of capital, but the extensive growth deteriorates the already dramatic levels of violence and segregation, exacerbating problems with transportation, healthcare and education. Furthermore, urbanisation shapes a specific subjectivity where money and property mediate any form of relationship and collective life. The control over life is exchanged for the ownership over the house.

Within the program MCMV a specific section of the federal fund called MCMV Entidades (Entities) is dedicated to non-profit collective organised subjects, such as housing cooperatives or housing associations. These organisations mediate between the funding and the families who are involved in the construction and management of the project. In the city of São Paulo, in particular, organised movements that fight for the right to the house, with experiences of mutual help and self-construction, constitute a very strong tradition, at least for three decades. However, aside from the relative impact in quantitative terms of this section of the program - less than 10% of the buildings - there is a fundamental ambivalence in the effects that it produces. On one side, the participation of families in social movements fosters awareness, self-education, and the valorisation of work. Mutual aid helps develop a collective ethos and allows the productive encounter between different social classes (architects, professionals and low income families). On the other side, the cooperatives, struggling with an intricate bureaucracy and scarcity of funds, always tend to conceive of the housing question as a matter of quantity and management of resources and never as an issue of form and life. Such a perspective fundamentally undermines the political agency of architecture and dissolves the potential to construct a collective subject that could address a radical transformation of the urban condition. The city, rather than housing any possible social transformation, became the instrument to capture and tame potential conflicts by means of the unlimited growth of urbanisation, largely constituted by private urban speculation and illegal construction.

Whether acquiring the form of luxurious closed condominiums, vast gated communities or chaotic favelas, the Brazilian city is today, more than ever, privatised. The public realm is either a space for the mere circulation of private goods and vehicles or a space of fear, where the incalculable social divide can unpredictably explode in wild
The Chacara Santo Ângelo is an area in the Jundiaípeba district in Mogi das Cruzes, a municipality at the very edge of São Paulo’s metropolitan area. Founded by the Jesuits in the 16th century, the city always had an agricultural vocation, being part of the so-called cinturão caipira of São Paulo. The Japanese migration strongly contributed to the diversification of cultivated species, commercialisation of products and to the expansion of agricultural activity into formerly less productive areas. The proximity of Mogi das Cruzes to the vast consumers’ market of São Paulo allowed the agricultural activities to quickly expand. Today the municipality is the main producer of vegetables in the metropolitan area. At the same time, the enormous economic and urban growth of the entire region affected the conurbation of Mogi das Cruzes, which has seen a rapid expansion in the last 30 years, reaching a considerable population of 400,000 inhabitants.

Chacara Santo Ângelo constitutes a particularly interesting case as it displays, in a relatively small space, the conflicts that characterise the areas at the frontline of urbanisation.

The frontline of Urbanisation

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violence. The endlessly unresolved urban crisis turned into an instrument of governance. Street safety, mass temporary events, quality of housing and life as well as ultimately public space, became the instruments through which political and economic decisions are legitimised while any link between city and citizenship is ultimately dissolved. Today the city is the playground of financial movements, where continuous cycles of crises and correspondent emergency measures dispossess the citizens of any instrument or space of decision in order to liberate the wildest forces of capitalism.

The contemporary articulation of the agrarian question, in relationship with the globalised interplaying of finance, agribusiness and urbanisation, turns the limit between the urban and the rural into the frontline of political conflict. On one hand the distinction between rural and urban is increasingly blurred within the all-encompassing managerial logic of urbanisation, where everything is in an economic relationship with everything else and thus demands an absolute continuity. On the other hand, the conflicts over property and the use of land have produced forms of collective organisation and resistance that demand alternative logics of inhabitation. Logics based on solidarity and on the symbolic, rather than merely economic, value of land.

**Chacara Santo Ângelo: a struggle for the land**

The thesis investigates an area at the edge of Mogi das Cruzes, a municipality on the eastern end of São Paulo’s metropolitan area. Given the history, the geography and the complex forces acting on the territory, this place offers a relevant testing ground for the archetype as a design method. Founded by the Jesuits in the 16th century, the area always had an agricultural vocation, being part of the so-called cinturão caipira of São Paulo. Agricultural production followed the general historical development of the country, passing from cotton and sugar cane to coffee and a certain process of industrialization, beginning in the 19th century. Since the 1910s the area has received a large number of Japanese immigrants, attracted by the availability and low price of land. Like in most of the rural areas around São Paulo, the Japanese migration strongly contributed to the diversification of cultivated species, commercialisation of products and to the expansion of agricultural activity into formerly less productive areas.

The proximity of Mogi das Cruzes to the vast consumers’ market of São Paulo allowed the agricultural activities to quickly expand. Today the municipality is the main producer of vegetables in the metropolitan area. At the same time, the enormous economic and urban growth of the entire region affected the conurbation of Mogi das Cruzes, which has seen a rapid expansion in the last 30 years, reaching a considerable population of 400,000 inhabitants.

Within this context the area of the Chacara Santo Ângelo, in the district of Jundiapeba, constitutes a particularly interesting case. This area displays, in a relatively small space, the conflicts that characterise the frontline of urbanisation.

Today the area of the Chacara Santo Ângelo, approximately 1,200 ha, is characterised by two different environments. First, the plain stretching towards the waterway on the north side, which is intensively cultivated and subdivided by the Japanese immigrants according to a regular small scale grid. This area is accessible through five main parallel roads along which the farmers’ houses are located.

The Southern part of the area, instead, is dominated by the hill on top of which the former sanatorium was built. Around this higher plateau the landscape slopes down towards the waterway on the north and towards Rodovia Engenheiro Cândido de Rego Chaves and Avenida Japão, the main roads connecting the region with Mogi das Cruzes.

The Northern limit of the area is abruptly marked by the working class neighbourhood of Jundiapeba, a recent development characterised by a mix of self-built dwellings and large-scale housing funded by the MCMV program. On
The irregular occupations of Chacara Santo Ângelo have increased substantially in recent years, extending in the area south of the hospital and largely losing the agricultural character. The proximity of the urbanised area made the land desirable and available for many workers lacking a house and looking for a job in the city. Currently the area is characterised by a conflict between the landowners and the producers, but also between regularised and still irregular inhabitants, who have recently been organising as an association.

These two groups have different modes of dwelling, determined by their access to the land. The more stable and organised community of regularised producers have built houses for themselves directly in the fields, alongside the access roads. Over the years, as their economic conditions improve, many have chosen to live in the neighbouring urbanised areas that offer more public facilities. The more precarious workers, not having access to property or use of land, live in more concentrated temporary settlements. Located in neglected and unproductive areas, these little villages are made of very precarious self-built shacks, lacking any basic service such as electricity or sewage.
the eastern side of the waterway the terrain quickly rises in
a plateau, on top of which are the middle-class suburbs of
Jardims. On the west, between the main road and the water
reservoir of Taiaçupeba, are the mining grounds of Itaquareia
LTD and the Club Med Lake Paradise, a luxury enclave for São
Paulo’s rich tourists.

Until 1918 Chacara Santo Ângelo was owned by the
Fluminense Carmelites Order. It was then donated to the
Associação Protectora dos Mórfofeitos with the aim of
building, together with the Santa Casa da Misericórdia de
São Paulo, the Hospital Asylo Santo Ângelo, a sanatorium for
the cure of leprosy. The hospital, inaugurated in 1928 and
designed by the architect Adelardo Soares Caiubý as a model
to be repeated, was placed on top of the hill and surrounded
by a large buffer zone for sanitary reasons. Part of the
available area around the sanatorium was soon rented to
agricultural producers, providing food and income for the
maintenance of the hospitalised population. However, as
leprosy was permanently eradicated, the sanatorium turned
into a hospital for long term diseases and the mandatory
isolation of those with leprosy was abolished in 1962. In
this moment, coinciding with a phase of strong Japanese
migration in Mogi das Cruzes, the area turned into an
attractive land for cultivation. The occupation of this area
thus increased – mostly in an irregular way - until the Santa
Casa in the mid-1990 intervened demanding the payment
of rent and the regularisation of a situation that had gone
out of control. The actions of the Santa Casa were triggered
by the growth of occupations, caused by a strong wave of
migration from the North-East to the area of São Paulo.

Many of the original Japanese producers of the area had left
and illegally sold their portion of the area, having reached
enough wealth to find better and more regular conditions. However at this point families were living and cultivating
in Santo Ângelo for three decades, having built their own
houses but, more importantly, having organised a very
efficient system of production, especially in the more fertile
flat area between the foot of the hill and the Jundiaí river.

Reacting to the threats of the Santa Casa da Misericordia,
the producers – especially the ones who had recently arrived
who did not have any means to stabilise their situation –egun to associate and create cooperatives, like the APROJUR
- Associação Produtores Jundiapeba e Região - founded in
1997. In 2006 the associated producers started a negotiation
with the Santa Casa for the purchasing of the land. However,
the deal was never agreed and just a year later the entire
land, with the exception of only the hospital, was sold to
Itaquareira LTD - a mining company that was renting the
area from the Santa Casa to extract sand for concrete. With
the land Itaquareira LTD inherited all the conflicts associated
with three decades of irregular occupation, but they also
envisioned a commercial opportunity, since the city had
expanded towards Santo Ângelo and the area was becoming
economically valuable for further urbanisation. The company
started an aggressive action against the farmers who, in turn,
drawing on years of cooperative organisation, responded
with legal and physical actions, including blockages of the
main roads and distribution of free food in the city. The aim
of the collective struggle was to defend the right to stay in
the land but, above all, to be recognised as an economically
important and reliable subject for the area. After some years
of conflict, the associations managed, through the mediation
of the municipality and of the rural producers trade union,
to involve the INCRA – Instituto Nacional de Colonização
e Reforma Agrária – which produced a first census of
the productive areas in 2008 and sealed a deal for the
expropriation and redistribution to 284 families of 532 ha of
the land in 2014. At the same time the irregular occupations
continued and increased substantially, extending in the
area south of the hospital and largely losing the agricultural
character. The proximity of the urbanised area and the
increase of migratory fluxes toward this region made the land
The area of the Chacara Santo Ângelo, approximately 1,200 ha, is characterised by two different environments. The plain towards the water stream to the north side, which is intensively cultivated and subdivided by the Japanese immigrants according to a regular small scale grid. This area is accessible through five main parallel roads along which the farmers’ houses are located.

In the Southern part the area is dominated by the hill on top of which the former sanatorium was built. Around this higher plateau the landscape slopes down towards the water stream on the north and towards Rodovia Engenheiro Cândido de Rego Chaves and Avenida Japão, the main roads connecting the region with Mogi das Cruzes.

The Northern limit of the area is abruptly marked by the working class neighbourhood of Jundaipeba, a recent development characterised by a mix of self-built dwellings and large-scale housing funded by the MCMV program. On the eastern side of the water stream the terrain quickly rises in a plateau, on top of which are the middle-class suburbs of Jardins. On the west, between the main road and the water reservoir of Taiaçupeba are the mining grounds of Itaquareia LTD and the Club Med Lake Paradise, a luxury enclave for São Paulo’s rich tourists.

Territorial Condition

5.4 - Existing conditions in the territory around the Chacara Santo Ângelo.
desirable and available for many workers lacking a house and looking for a job in the city. As a new census is undergoing, recent estimates are of about 1,800 families living in the 1,200 ha formerly owned by the Santa Casa, of which only about 350 are recognised agricultural producers, of which less than 300 have been recognised as having a right to the land. Hence, the current condition sees a conflict between the landowners and the producers, but also between regularised and still irregular inhabitants, who have recently been organising as an association.

These two groups have different modes of dwelling, determined by their access to the land. The more stable and organised community of regularised producers have built houses for themselves directly in the fields, alongside the access roads. Over the years, as their economic conditions improve, many have chosen to live in the neighbouring urbanised areas that offer more public facilities. The more precarious workers, not having access to property or use of land, live in more concentrated temporary settlements. Located in neglected and unproductive areas, these little villages are made of very precarious self-built shacks, lacking any basic service such as electricity or sewage.

Given this condition the municipality of Mogi das Cruzes is working on a deal with the Itaquareia LTD, which would regularise the large majority of the houses, reducing their plot of land to a maximum of 250 m², in exchange for the permission to urbanise the remaining area for commercial purposes.26

Such a strategy, dictated by purely economic concerns, will have an immediate stabilising effect on the area, but running the risk, in the long run, of seriously endangering the rural condition. The most probable scenario is that piecemeal urbanisation will soon prevail, rapidly increasing the land values and pushing the farmers out, with a process similar to urban gentrification.

This proposal intends to test the archetype as a design method within this specific condition, which offers a remarkable example of the issues at stake on the frontline between urbanisation and the rural. The project defines an archetype for a rural settlement in periurban areas, with the aim of establishing a form of life that relies on cooperative production and collective ownership of the land. As the case of the Chacara Santo Angelo has shown, the organisation of a collective struggle is a primary tool to preserve the possibility of a rural life as a limit and an alternative to the all-encompassing logic of urbanisation. However, social movements and spontaneous forms of organisation need to crystallise into a specific architectural form in order to become an order of life that is durable and productive throughout time. Thus, the project proposes to insert the archetype of the rural settlement precisely on the line of conflict between the two collective subjects involved, the association of producers and the association of inhabitants. The aim is to expose the latent conflict and turn it into a productive force by empowering the capacity of agricultural production in the area. The project, in fact, intends to provide a better infrastructure and include a larger number of people in the agricultural activities, while at same time giving a form of dwelling and a dignified living condition to the precarious workers of the area. It’s through the explicit nature of the archetype that the community can negotiate a collective life, without accepting implicit habits that impose a lifestyle without choice. From this perspective the project reclaims the power of architecture to operate beyond the logics of top-down or bottom-up approaches, and instead as an instrument that can provide a rule of inhabitation for a collective subject.
The project proposes an archetype for a rural settlement as a reinterpretation of the three case studies investigated in the thesis. The avenida is a three kilometre long street that defines the territorial dimension of the project and its relationship with the landscape. It is placed at the base of the hill topped by the old leprosarium, connecting the two main roads of the area. As such the avenida plays a strategic role in redefining, with a single gesture, the entire infrastructure of the area on multiple levels.

The cover is a 20 metre wide element which follows the avenida for an extension of three kilometres. Built as a single pitch roof built with a prefabricated metal structure of identical sections, the cover formal is the technical spine of the entire settlement, articulating productive activities and basic services.

The third element of the project is the reduction, which provides the space of communal living. The archetype is organised around three main elements: two porticoed wings, a communal house that connects them, and the open space of the terreiro. The project allows great flexibility within a precise formal framework: there is no typological variation of units but a precise material organisation of space which suggests a certain individual or collective use of space.

Territorial Structure

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The archetype for a rural settlement

The project proposes an archetype for a rural settlement, reinterpreting the three case studies investigated in the thesis: the reduction, the avenida and the cover. Rather than producing a typological variation of the studied examples, the project uses the formal strategies identified in the historical investigation in the attempt to produce an archetype for a rural settlement in periurban areas. The design proposal reinterprets the link between form and its ideological content, identified in the historical investigation, in light of the present condition and territorial structure. In the context of the project, the names “reduction,” “avenida,” and “cover,” more than precisely indicating new archetypes, are used didactically, linking the project to the findings of the previous chapters. In the development of the thesis the process of elaborating a design proposal has not come in response to the historical premise but has substantially contributed to defining the historical inquiry. Designing archetypes always implies a dialectic relationship between history and design.

The organisation of the settlement is articulated following the relationship between the formal structure and the ideological content that are particular to the studied examples.

The avenida is a three kilometre long street that defines the territorial dimension of the project and its relationship with the landscape. Similar to what has been studied in the example of Avenida Paulista, the form of the street is defined in relation to the existing geographical condition more than to functional requirements.

In the case of the Chacara Santo Ângelo, the avenida is placed at the base of the hill topped by the old leprosarium, connecting the two main roads of the area, Avenida Japão with the Rodovia Engenheiro Candido de Rego Chaves. As such the avenida plays a strategic role in redefining, with a single gesture, the entire infrastructure of the area on multiple levels. Running on the bottom of the hill, the street becomes the spine that collects all the vital systems supporting the settlement: sewage, drainage and rainwater collection, distribution of electricity and water for irrigation, production facilities and collective activities. On the other hand, the new street has an impact on the circulation network by connecting the main arteries of the area, turning the Chacara Santo Ângelo from an inaccessible and invisible zone into a prominent element in the territory.

The form of an arch has been chosen as a unifying geometrical sign that sublimes the geographical, infrastructural and architectural aspects. As such, while responding to the geographical condition, the avenida maintains a clear formal character: a dialectic presence in the territory. The curve articulates the existing condition by turning the isometric lines of the hill into a precise geometrical sign that remarks its own artificiality against the surface of the land.

The cover is a 20 metre wide element which follows the avenida for an extension of three kilometres. The long roof reinforces the sign of the avenue in the territory and accentuates its role as a formal and technical spine for the entire settlement. The structure separates, and at the same time connects, the space of the street and the space of the fields, which extend until the river and the development of Jundiapeba.

The cover is a single pitch roof built with a prefabricated metal structure of identical sections, repeated at a pace of four metres. Three columns of rectangular sections support each bay, dividing the space asymmetrically in two parts. On the higher side of the cover a 4 metre wide portico runs next to the avenida, identifying an intermediate space between the street and the interior of the building. The other portion of the bay is a 16 metre wide hall, a column-free space supported by metal trusses. The difference in structure and proportion, reinforced by the inclination of the roof, gives a completely different spatial connotation to the portico and the hall.
5.6 - Articulation of voids and built spaces in the rural settlement.

**Archetype for a Rural Settlement**

The rural settlement is structured by the rhythmic curve of avenida and cover, and the sequence of blocks of the reductions. The street and the portico, that characterise the spine of the project, host productive activities under a roof of solar panels, which provide electricity for the settlement. The reduction are discrete blocks organised around a double open courtyard and separated by the space of the horti. The dimension of the archetype is defined by the repetition of an identical structural pace of four metres throughout the entire building. The communal house occupies between four and eight bays and is always placed in a central position. The wings are more flexible elements in length, ranging from a minimum of six to the maximum of 18 bays.
The portico – reaching 7 metres at the highest point and the dense repetition of slim columns – assumes a monumental character that captures and celebrates the circulatory space of the *avenida*. The hall, on the contrary, with its elongated rectangular section of 16 by 3 metres, assumes the directly functional character of a warehouse. However, the two elements, divided just by the rhythm of columns and by the difference in structure, are not rigidly separated and can bleed one into the other while maintaining a distinct formal character. The ambivalence between the hall and the portico produces a tension that articulates the relationship between programmatic and formal aspects of the cover. While their material characteristics produce a completely different sense of space and use, the overall planimetric geometry of the arc, the single inclined roof and the repetition of identical bays are the elements that hold together the architecture as a unitary presence in the territory.

The curvature of the geometry adds a further character, both to the *avenida* and to the cover, as the space does not offer a vanishing point but instead always a self-reflexive gaze. This peculiar character produces a tension between a space that never opens into an infinite perspective but is always visually limited, and the territorial scale of the sign that cannot be perceived in its entirety but is mentally reconstructed from the logic of the piece. As such the part and the whole are recomposed in a coherent unity that is never fully resolved or unveiled but rather demands a process of abstraction. The architecture acquires a pedagogical ambition, where its very formal structure suggests the participation of the inhabitant in the effort of analogously reconstructing the whole from the part and therefore reconciling the individual with the collective, the single actions with a communal destiny.

In the organisation of the settlement the cover assumes a central role as the spine that articulates the productive activities and provides a space for the basic services. The large uninterrupted space of the hall allows maximum flexibility to host virtually any kind of program. However, the space primarily hosts two kinds of uses: support for agricultural production and collective facilities.

On one hand, the cover provides spaces and facilities that can improve the collective organisation of labour, adding value to the cultivation of the land that is then collectively shared.

The range of activities can vary from the simple storage of products and tools, to workshops and laboratories where the products are tested, washed, packaged and processed for commercialisation. The cover provides maintenance workshops for agricultural machines that can be stored alongside soil fertilisers, seed and all the necessary elements for the cycle of production, including the collection, disposal and recycling of waste.

However, the cover can also directly host spaces for the trade of products, such as fairs and farmer’s markets. The possibility to directly sell the product of the land allows farmers to skip the intermediate steps of commercialization and distribution, allowing them to increase their margin of profit and reduce the price for the final consumer by escaping the dependence on wholesale distribution. Furthermore, these kinds of spaces, which already exist in Mogi das Cruzes, can become the centre of other social activities, turning the Chacara Santo Ângelo from a neglected area into a space with a significant role for the larger community of the municipality.

A third category of activities is related to the knowledge support for agricultural production, which includes the legal, commercial and technical aid and potentially become a school of agriculture with the participation of the numerous institutions that already operate in this area of study. The cover could thus become both the structure that supports and improves the existing local production and a catalyst space for a variety of players in the municipality and beyond.
Adaptability of the Archetype

The archetype can adapt to different conditions, finding an appropriate proportion between the available space and the architectural elements, and hosting a number of people that varies between 40 and 160. Below and above these limits, the archetype starts to lose its formal qualities and, with that, the rule that architecture can give to the space. In the case of the Chacara Santo Ângelo, the reductions occupy the irregular space formed by the arc of the avenida and the existing street, which runs roughly parallel in the same direction. The buildings rhythmically follow the curve of the avenida and extend their wings until the secondary street in the back. As such every reduction is slightly different within the coherence of the formal architectural arrangement. The scheme at Santo Ângelo comprises 30 reductions for a total capacity of about 2,400 people.
The cover can also provide the range of services that are necessary for the everyday life of the community such as a primary school and kindergarten, health clinic, postal services, local shops, areas for recreation, leisure and sports, as well as the assembly hall and the spaces that are needed for the government of the settlement.

Finally, the infrastructural character of the *avenida* is further reinforced in the cover, as the roof is finished with solar photovoltaic panels. The overall surface of about 60,000 m² allows a considerable production of energy, which exceeds the monthly production of 1 MW/hour, giving the settlement energetic independence.

The third element of the project is the reduction, which articulates the space of communal living. The archetype is organised around three main elements: two porticoed wings, a communal house that connects them in a central position, and the *terreiro* – an open air space enclosed within these architectural elements. The reduction assumes the form of an “H,” a double courtyard that is open to the landscape in both directions. However, the central pitched roof of the communal house allows visual and functional continuity: rather than clearly dividing open spaces in two parts, the cover produces a point of intensity through the act of covering the ground. The same gesture, but with a reduced depth, signs the entrance to the reduction, filtering the space of the *terreiro* from the street and symbolically marking the access to a different regime of use and property.

Similarly to the portico and the market hall, the structure of the reduction is made of a slim prefabricated metal structure covered by undulated metal sheets, with the pitched roof of the porticoed wings that simply continues into the communal house, increasing in height and making use of trusses that allow a large column span for the communal spaces.

The wings are organised into equal naves that acquire different height and proportion due to the inclination of the roof. The lower side is rhythmically subdivided by transversal beams, which help brace the structure. These elements help to easily cover the space with an insulated roof, subdividing it with standard concrete block partitions. The higher side is a portico, characterised by a slimmer proportion of the structure, which runs uninterrupted for the whole length of the wing and frames the space of the *terreiro*. The formal difference of the nave corresponds to a difference in use, with the portico hosting the communal living areas and the lower nave hosting a series of rooms for private domestic functions and services. The project allows great flexibility within a precise formal framework: there is no typological variation of units but a precise material organisation of space which suggests a certain individual or collective use of space. Further, the idea of the family as the inescapable measurement unit of dwelling is challenged, as the rooms can be grouped in different numbers and sequences to accommodate the necessities of very different social units. The same ambivalence applies to the portico, which can accommodate different uses and allow a different level of screening and partial subdivisions. Such a configuration of the living quarters is partly a reinterpretation of the archetype of the reduction, especially for what concerns the overall logic of the elements, but also an elaboration on the existing self-built houses in rural areas. Often constructed with precarious means, these houses feature a subdivision in almost equal two parts: the house and the front porch, which is used as space for storage of tools as much as an open air living room. However, while these houses are generally isolated and detached, the project of the reduction adds to this generic housing a collective dimension which is key in the struggle to organise, preserve and develop a form of life based on a sustainable use of the land as a common resource.

In this respect the common house in the middle of the reduction and the *terreiro* play a crucial role, as a space where bonds of kinship are created, maintained, discussed
The Reduction

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The central hall is supported by a number of collective services, including management office, communal kitchen, laundries and storage spaces. Additional spaces under the roof can cater towards specific needs of each community; such as play areas for children, workshops, study areas, etc. The idea of the family as the inescapable measurement unit of dwelling is challenged, as the rooms can be grouped in different numbers and sequences to accommodate the necessities of very different social units.
The wings are organised into equal naves that acquire different height and proportion due to the inclination of the roof. The higher side is a portico, characterised by a slimmer proportion of the structure, which runs uninterrupted for the whole length of the wing and frames the space of the terreiro. The portico is a flexible open-air covered living area which can accommodate different uses and allow a different level of screening and partial subdivisions. The terreiro play a crucial role, as a space where bonds of kinship are created, maintained, discussed and continuously reaffirmed. Under the large pitched roof a central hall acts as a space for gatherings and assemblies, where the collective decisions regarding the life of the reduction are taken. The same space can be used for collective meals, celebrations and events, as much as for small productive activities.

The Portico and the Terreiro
5.10 - The plaza as a theatre of collective rituals.
The construction technique of the entire settlement is designed as a combination of prefabricated and self-built elements, which will allow efficiency of construction and adaptability to necessities throughout time. Prefabrication and collective self building also correspond to different responsibilities in terms of funding and maintenance of the settlement between the state and the inhabitants cooperative.

The basic module is constituted by a platform raised from the ground that hosts the basic infrastructure of electricity, water and sewage. On top of the platform a system of prefabricated metal elements can be easily assembled and dismantled. The structure can be partitioned with common concrete blocks or other materials. The doors are designed to provide a mix of privacy and openness between the individual units and the common area of the portico.

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5.12 – The phasing of the construction allow to separate technically and financially separate prefabricated and self-built elements.
The implementation of the project involves both the association of inhabitants, the association of producers and the public authority at the federal and municipal level. The idea is that the federal government through the INCRA should own the land and give it in concession for a number of years to the association of inhabitants. The public authority, a combination between the federation, the State of São Paulo and the Municipality of Mogi das Cruzes, should fund the construction of the infrastructure, including the avenida, the cover and the reductions, leaving to the association of inhabitants the construction of all the internal elements for both the houses and the productive spaces. A form of funding could include an agreement for selling part of the food production to state or municipal institutions such as schools, hospitals or public offices. This would have the effect of stabilising and increasing the production while allowing the public treasury to use the construction of the rural settlement as an investment.

The autonomy of the reduction involves the energetic aspect, with 60,000 m² of photovoltaic panels. This surface allows to exceeds the monthly energy production of 1 MW/hour, giving the settlement energetic independence.

**Autonomy Participation and Funding**

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The same set of activities can happen and expand in the terreiro, the 24 metre wide open space around which the architecture and the life of the settlement is organised. Reinterpreting the plaza of the reduction, but also the space of the urban cortiços or of the yards of the rural casa grande of the 18th and 19th century, the terreiro is a dirt-paved space that is left open to re-appropriation. The yard is enclosed on three sides by porticoes that are raised on a concrete platform, with a few steps connecting the dirt floor with the elevated ground of the buildings. As such, the architecture defines both a scene and a stand, giving to the terreiro the form of a stage where everyday collective rituals can be performed, exposing and negotiating the values of the community through the use of the space.

The dimension of the archetype is defined by the repetition of an identical structural pace of four metres throughout the entire building. The communal house occupies between four and eight bays and is always placed in a central position. The wings are more flexible elements in length, ranging from a minimum of six to the maximum of 18 bays. As such, the archetype can adapt to different conditions, finding an appropriate proportion between the available space and the architectural elements, and hosting a number of people that varies between 40 and 160. Below and above these limits, the archetype starts to lose its formal qualities and, with that, the rule that architecture can give to the space.

In the case of the Chacara Santo Ângelo, the reductions occupy the irregular space formed by the arc of the avenida and the existing street, which runs roughly parallel in the same direction. The buildings rhythmically follow the curve of the avenida and extend their wings until the secondary street in the back. As such every reduction is slightly different within the coherence of the formal architectural arrangement. The reductions are separated by the space of the horti, communal kitchen gardens that extend for about 25 metres from the back of each wing. These spaces can be used for the cultivation of basic food that integrate the provision of the reduction, including vegetables, fruits, domestic animals, herbs and medicinal plants. In particular, the larger space in the back of the communal house can host shared facilities, such as small green houses, storage barns and animal sheds that can increase the level of self-sufficiency of the reduction. The scheme at Santo Ângelo comprises 30 reductions for a total capacity of about 2,400 people.

For the implementation of the project, the proposal intends to involve both the association of inhabitants, the association of producers and the public authority at the federal and municipal level. The idea is that the federal government through the INCRA should own the land and give it in concession for a number of years to the association of inhabitants. The public authority, a combination between the federation, the State of São Paulo and the Municipality of Mogi das Cruzes, should fund the construction of the infrastructure, including the avenida, the cover and the reductions, leaving to the association of inhabitants the construction of all the internal elements for both the houses and the productive spaces. A form of funding could include an agreement for selling part of the food production to state or municipal institutions such as schools, hospitals or public offices. This would have the effect of stabilising
The Avenida and the Wharehouse

The avenida and the cover define a productive threshold between the rural settlement and the fields. The large uninterrupted space of the hall allows maximum flexibility to host virtually any kind of program. However, the space primarily hosts two kinds of uses: support for agricultural production and collective facilities. Collective spaces and facilities that can improve the organisation of labour, adding value to the cultivation of the land that is then collectively shared. The range of activities can vary from the simple storage of products and tools, to workshops and laboratories where the products are tested, washed, packaged and processed for commercialisation. The cover provides maintenance workshops for agricultural machines that can be stored alongside soil fertilisers, seed and all the necessary elements for the cycle of production, including the collection, disposal and recycling of waste. At the same time the cover also provides the range of services that are necessary for the everyday life of the community such as a primary school and kindergarten, health clinic, postal services, local shops, areas for recreation, leisure and sports, as well as the assembly hall and the spaces that are needed for the government of the settlement.
The cover hosts spaces for the trade of products, such as fairs and farmer’s markets. The possibility to directly sell the product of the land allows farmers to skip the intermediate steps of commercialization and distribution, allowing them to increase their margin of profit and reduce the price for the final consumer by escaping the dependence on wholesale distribution. Furthermore, these kinds of spaces, which already exist in Mogi das Cruzes, can become the centre of other social activities, turning the Chacara Santo Ângelo from a neglected area into a space with a significant role for the larger community of the municipality. A third category of activities is related to the knowledge support for agricultural production, which includes the legal, commercial and technical aid and potentially become a school of agriculture with the participation of the numerous institutions that already operate in this area of study. The cover could thus become both the structure that supports and improves the existing local production and a catalyst space for a variety of players in the municipality and beyond.

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5.16. The curvature of the building emphasises the presence of the structure as a frame for the logistic, trade and collective activities.
and increasing the production while allowing the public treasury to use the construction of the rural settlement as an investment.

The construction should happen in phases, starting with the opening of the avenida with the basic sewage, water and electricity infrastructure and then developing the cover and reductions in multiple stages. The municipality should be responsible for the maintenance of the infrastructure in close cooperation with the association of inhabitants. The scheme could imply a progressive contribution of the inhabitants to the maintenance of the project, following the increase in revenue coming from the agricultural production and other connected activities.

The dialectic method of the archetype

The archetype has been theorised and deployed in the thesis as a method of both historical enquiry and design. As discussed in the introduction, the typological discourse allows one to construct a link between architecture and the city because type establishes a relationship between form and the historical conditions: the historical process produces types and in turn form makes visible their ideological content. Treating architectures as archetypes means to understand them as paradigmatic examples of a specific shift in the political and economic conjuncture. As such, architectural form materialises the set of power relationships that are at play in a specific territory and historical moment. These relationships determine both the modes of production, the use and the aesthetic quality of architectural form.

However, the resolution of the relationship between form and power relationships increases proportionally to the historical distance. The thesis maintains that the reduction, the avenida and the cover are key archetypes – although not the only ones – in the development of the Brazilian city. However it must be recognised that the three examples have offered increasing resistance in disentangling the relationship between architectural form and the historical context of its production. This aspect is partly determined by the growing complexity of the Brazilian social milieu but also by the proximity of the historical events analysed and the influence that they exert on our own position.

This issue appears even more relevant when we consider the archetype as a design method, since by definition the project has to deal with the present condition and describes a trajectory towards the future. To overcome this apparent paradox the distinction between historical inquiry and design has to be rethought. The investigation of the historical conditions in which architecture takes place is not a phase that precedes the design. On the contrary these two moments are in a dialectical relationship, so that putting forward a project is in itself the means of historical investigation. As such the project is not a solution to problems identified through the analysis of the existing condition, nor the representation of needs, desires and aspirations of the present subjects. The project is at once a mode of investigation of the historical condition and an instrument for the production of a new subjectivity. In the same way in which a collective subject is formed through the struggle against the hegemonic historical forces, the prefigurative component inherent to the project has to be placed in dialectical relation with the subject. Architecture crystallises desires, needs and aspirations not in order to solve them once and for all, but rather to allow the subject to discover them in an open negotiation with the legibility of the formal structure. Architectural form acquires the paradigmatic relevance of an archetype when it is able to exhibit the mechanisms that shape subjectivity, opening the possibility to accept, refuse or change them.

In the specific case of Chacara Santo Ângelo, the project departs from an existing collective subject that has been formed through the struggle for the land, against the hegemonic forces of urbanisation. While analysing as
accurately as possible this process and the specificity of the existing condition, the project puts forward a proposal that goes beyond the immediate horizon of the present to inscribe it within a wider historical framework. The archetype for a rural settlement has to be understood neither as an utopian proposal nor as a pragmatic solution, but as a tool to give form and test a new set of power relationships. Architectural form presenting a collective horizon of possible changes.

It is within this approach and ambition that the hypothesis of a radically communal life and collective property has to be framed. More than a solution to specific desires already belonging to the workers of Chacara Santo Ângelo, the proposal intends to give legibility and resist to the forces of urbanisation and agribusiness that are strangling small scale rural production and its mode of life. By challenging the consolidated habit of property and family not on the territory of legislation but on the one of architectural form, the project constructs a different cosmology: another possible way of knowing and understanding the relationship between human settlements and the territory. While aware of the distance between the project and the subjectivity it addresses, the thesis maintains that only in this gap a conscious choice of a form of life can take place. However the project can only construct this field of tension between form and life, while it is the everyday struggle and political action that can turn a formal hypothesis into the hard substantial presence of a new world.

Here is where the difference between type and archetype becomes apparent. If the type emerges as a product of habits and customs, turning ideological and practical needs into norms, the archetype manifests a shift in the existing condition through a paradigmatic form. In the archetype the architectural form is the expression of a rule that can be accepted or refused and therefore implies a political decision.

The proposed archetype for a rural settlement is not the mere infrastructure or representation of the existing relationship of production. The dialectic relationship between architectural form and the common experience of everyday life produces a field of tension where a new form of life can potentially take place. The extremely simplified architecture, characterised by monotonous repetition of generic structures constructs a frame for possible re-appropriations. Such a logic is coherently unfolded in the different aspects of the project. Productive and living spaces are organised according to a structural rhythm dependent on constructive and tectonic considerations. However the curve of the topography for the avenida and the double open court for the cover capture endless reproduction within the gesture of a finite form. The repetition of identical bays produces a generic framework that invites the imagination of multiple uses. The constructive system follows the same dialectic by combining prefabricated and self-built elements. Finally the drawings of the project, especially in the detailed plans and elevations, analogously represents the same relationship between a scene that is identically repeated and a life that is continuously changing. While effectively providing an infrastructure to inhabit and make the territory productive, at the same time the project captures the instrumentality of Technic within the collective dimension of a shared rule made explicit in the form. The architecture of the rural settlement lives in the tension between allowing production and making explicit the common potential to produce.
5.17 (over 10 pages) - Detailed plan of the form of life of the settlement.
S.18 (over 10 pages) - Detailed elevation of the form of life of the settlement.
The reductions are separated by the space of the horti, communal kitchen gardens that extend for about 25 metres from the back of each wing. These spaces can be used for the cultivation of basic food that integrate the provision of the reduction, including vegetables, fruits, domestic animals, herbs and medicinal plants. In particular, the larger space in the back of the communal house can host shared facilities, such as small greenhouses, storage barns and animal sheds that can increase the level of self-sufficiency of the reduction.

Towards Self-Subsistence

The reductions are separated by the space of the horti, communal kitchen gardens that extend for about 25 metres from the back of each wing. These spaces can be used for the cultivation of basic food that integrate the provision of the reduction, including vegetables, fruits, domestic animals, herbs and medicinal plants. In particular, the larger space in the back of the communal house can host shared facilities, such as small greenhouses, storage barns and animal sheds that can increase the level of self-sufficiency of the reduction.
5.20 - The *terreiro* as a space of celebration and representation of the settlement.
Notes


5 For a thorough discussion on the notion of project see Massimo Cacciari, “Progetto,” *Laboratorio Politico*, n. 2, year 1, (March-April 1981), 88-119; “Nihilismo e progetto,” *Casabella* 483 (September 1982), 50-51.

6 Massimo Cacciari, “Progetto,” 94.

7 The Italian philosopher Emanuele Severino argued that Tecnic is a “planetary apparatus” that “aims not to a specific and exclusive goal, but to the limitless increase in the ability to pursue goals, which is also the limitless ability to satisfy needs.” Emanuele Severino, *Il Destino della Tecnica* (Milano: BUR, 1998), 43-44. For an articulated discussion and critique of the notion of Technic see Federico Campagna, *Technic and Magic* (London: Bloomsbury, 2018).


11 On the distinction between *polis* and *civitas* see Massimo Cacciari, “Polis e Civitas: la radice etnica e la concezione mobile della città” in *La città* (Rimini: Pazzini, 2004),7-19.

Ildefonso Cerda, Teoria general de la urbanización (Madrid: Imprenta Española, 1867).


For a thorough reading of Cerdà’s theory and project see Maria Shéhérazade Giudici, “The Street as a Project: The Space of the City and the Construction of the Modern Subject” (PhD diss., Delft University of Technology, 2014), 243-259.

For a thorough discussion on the notion of circulation see Ross Eko Adams, Circulation and Urbanization (Los Angeles: Sage, 2019).


The fundamental difference between zoé – reproductive life - and bios – political life – first put forward in Politics by Aristotle and then articulated by Hannah Arendt in The Human Condition, is developed by Giorgio Agamben in relation to the notion of biopower put forward by Michel Foucault. Agamben argues that the political paradigm of the contemporary condition is the camp, a space where the state of exception has become the rule, as the object of power has become the sheer administration of zoé, a life stripped of any political dignity. See Giorgio Agamben, Homo Sacer. Il potere sovrano e la nuda vita (Torino: Einaudi, 1995); Quel che resta di Auschwitz, L’archivio e il testimone (Torino: Bollati Boringhieri, 1998); Stato di eccezione (Torino: Bollati Boringhieri, 2003). For a reading of the distinction between zoé and bios in the context or architectural theory see Pier Vittorio Aureli, "Toward the archipelago," in The Possibility of an Absolute Architecture (Cambridge: MIT Press, 2011), 3-4.

Andrea Cavalletti, La città biopolitica (Milano: Bruno Mondadori, 2005), 31.


In the opening statement of his famous essay on typology Rafael Moneo makes clear the relevance of type stating that “to raise the question of typology in architecture is to raise a question of the nature of the architectural work itself. To answer it means, for each generation, a redefinition of the essence of architecture and an explanation of all its attendant problems” Rafael Moneo, “On Typology,” Oppositions 13 (1979): 22-48.

On the formation of the idea of type between the 18th and 19th century see Anthony Vidler, The Idea of Type. The Transformation of the Academic Ideal 1750-1830 (Oppositions 8 (Spring 1977): 437-60.


A classic example is the program of teaching in six volumes developed by Jacques François Blondel for the first independent school of architecture in Paris. Jacques François Blondel, Cours d’architecture (Paris, 1711-1777).

Anthony Vidler refers in particular to the work of Étienne-Louis Boullée, Claude Nicolas Ledoux and Léon Vaudoyer - pupils of Blondel - as the last attempt to hold together "the amalgam of type as origins, type as characteristic form of a classified species, and type as a symbolic mark." Vidler, “The Idea of Type,” 102.

"The word type presents less the image of the thing to copy or imitate completely, than the idea of an element which must itself serve as a rule for the model. The model, understood in the sense of practical execution, is an object that should be repeated as it is; contrariwise, the type is an object after which each artist can conceive works that bear no resemblance to each other. All is precise and given when it comes to the model, while all is more or less vague when it comes to the type.” Type, in The True, The Fictive and The Real: The Historical Dictionary of Architecture of Quatremère De Quincy (originally in Encyclopédie méthodique: Architecture, vol 3, 1825) (London: Andreas Papadakis Publishers, 2000), 254.

For Quatremère, type is “like a sort of nucleus around which everything assembled, and with which are consequently coordinated, all the developments and the variations of form to which the object was susceptible.” Type, 255.

Anthony Vidler underlines the key role played in Durand’s approach by the descriptive geometry elaborated by Gaspard Monge in the 1750s and by the anatomical classification of Baron Georges Cuvier, which was based on type of anatomical structure rather than on appearances. Vidler, “The Idea of Type,” 106-107.

Durand’s method was made of two parts which corresponded to his main books: in the Recueil et parallèle des édifices de tout genre, anciens et modernes he collected models of existing buildings represented in orthogonal projections, while in the Précis des leçons d’architecture données à l’École royale polytechnique he articulated the method of composition. For a detailed reading of Durand’s method see Christopher C.M. Lee, “The Deep Structure of Type. The Construction of Common Knowledge in Durand’s Method” in Pier Vittorio Aureli ed., The City as a Project (Berlin: Ruby Press, 2016): 170-212.

Durand clearly states in the Précis that the ambition of his method is to provide a, “safe and rapid way to compose and execute buildings of all kinds, in all places, and at all times.” Jean-Nicolas-Louis Durand, Précis des leçons d’architecture avec Graphic Portion of the Lecture on Architecture, trans. David Britt (Los Angeles: The Getty Research Institute, 2000), 77.


Vidler, The Idea of Type, 108.


The rational nature of modern architecture excluded the possibility of relying on classical antiquity as the principle of unity of architecture. As put forward by John Summerson, “the source of unity in Modern Architecture” is in “the social sphere, in other words in the architect’s programme,” understood as “a description of spatial dimensions, spatial relationships and other physical conditions required for the convenient performance of a specific function.” For Summerson modernity in architecture consists of the “swing from the antique (a word of form) to the programme (a local fragment of social pattern),” from a “static visual order” to a “biological or organic unity, because it is a unity in a process.” See John Summerson, “The Case for a Theory of Modern Architecture” Royal Institute of British Architects Journal (June 1957): 307-10.


A detailed reconstruction of the postwar Italian debate is in Giovanni Durbiano, I Nuovi Maestri. Architetti tra politica e cultura nel dopoguerra (Venezia: Marsilio, 2000).

The question of crisis and continuity has characterised Italian culture at least since World War II, and has been engaged with in all fields, from literature to cinema, producing an immense body of work that cannot be summarised. The thesis discusses the positions of Giulio Carlo Argan and Aldo Rossi, which are the most relevant for the typological discourse. However it must be noted that continuity and crisis were central themes for two key figures of the Italian postwar debate: Ernesto Nathan Rogers and Manfredo Tafuri. See for example Ernesto Nathan Rogers, “Continuità.” Casabella-Continuità 199 (November 1953): 1-3; “Continuità o crisi?” Casabella-Continuità 215 (1975); Esperienza dell’architettura (1958; Milan: Skira, 1996); Manfredo Tafuri, Teorie e storia dell’architettura (Bari, Laterza, 1968); “Per una critica dell’ideologia architettonica” Contropiano. Materiali Marxisti, no. 1 (1969); Progetto e utopia (1973; Roma-Bari, Laterza, 2003); Marco Biraghi, Progetto di Crisi. Manfredo Tafuri e l’architettura contemporanea (Milano: Marinotti, 2005).


Argan, “Sul concetto di tipologia architettonica,” 76.


As Argan bluntly puts it, “it would be absurd to affirm that the artistic value of a round temple is greater the more it approximates the ideal type of round temple.” Argan, “Sul concetto di tipologia architettonica,” 75.


One of the most profound account of Brazilian ethos is still Sérgio Buarque de Holanda and Pedro de Alencastro, História geral da civilização brasileira. (São Paulo: Editora Brasiliense, 1953); a fundamental reference is the monumental work in 3 tomes Sergio Buarque de Holanda and Pedro Campos Moacyr, eds., História geral da civilização brasileira. (São Paulo: Difel, 1996).

Among the extensive bibliography on the Bandeirantes see Richard Skidmore, The Abolition of Slavery in Brazil: the “Liberation” of Africans through the Emancipation of Capital (Westport, Conn: Greenwood Press, 1999), 731-736.


Melandri essentially provides a logic to the archaeology of knowledge that Michel Foucault was developing in the same years. See Gergio Agamben “Archeologia di un’archeologia” in Enzo Melandri, La Linea e il circolo, XI-XXXV, Enzo Melandri, Michel Foucault: l’epistemologia delle scienze umane,” Lingua e stile, no. 2 (1967); Michel Foucault The Archaeology of Knowledge (1969; London: Routledge, 2002).


As Melandri demonstrated, the dialectic can be separated from its object only at the price of vainly spinning, as it is precisely in the relationship with the object that the dialectic can keep open the horizon of knowledge and at the same time represent the negative complement to the totality of knowledge. The arch that archeology can reach is precisely this dishomogeneous totality where the finite humanity presents itself as a mobile image of its infinite complement. Agamben “Archeologia di un’archeologia,” XXX.

Virno, Grammatica della Moltiplicazione, 75-79.


Melandri, La linea e il circolo, 810.

“On Typology,” 37. On this point Ezio Bonfanti strongly disagrees, since he considers the ‘città analoga’ not an utopian city but “a progressive shift of the existing one, a consolidation of certain concrete or imagined aspects that belong to history, in particular the more objective ones that utopism contests with its superficial mannerism of innovation.” Ezio Bonfanti, “Elementi e costruzione. Note per il libro di Sabatino, ed., Nuovo e moderno in architettura (Marsilio: Venezia, 1966).”


Typology here should be interpreted not as a specific type - as it is commonly misunderstood - in its etymological meaning of discourse (logos) on type (type), that is the analysis of the city in the relationship between the political and economic conditions and its concrete manifestation in a typological series.

For Carl Jung the content of an archetype is “determined only when it has become conscious and is therefore filled out with the material of conscious experience.” See Carl Gustav Jung, The archetypes and the Collective Unconscious”, in Collected Works, vol. 9 (London: Routledge 1969); Carl Gustav Jung, Man and his symbols (London: Aldus Books, 1964).


While underlining the importance of addressing the question of type in the essay, Moneo bitterly but prophetically remarks that “the traditional typological approach, which has tried to recover the old idea of architecture, has largely failed. Thus, perhaps the only means architects have to master form today is to destroy it.” Moneo, “On Typology,” 41.


6 Modern Architecture prevailed on the Neoclassicist and Neo-colonial tendencies in providing a technical and representational framework that could give a specific Brazilian identity to the newborn Estado Novo. This conflict was won on three grounds: the definition and conceptualization of a national historical and artistic heritage, the construction of institutional buildings and the construction of mass housing. See Cavalcanti, Moderno e Brasileiro, 9-16.

7 The essay on Jesuit architecture is not an isolated case in Lúcio Costa's production, but the third and more substantial of his contribution on the SPHAN's journal, on which he had already published “Documentação necessária” in 1937 and “Notas sobre a evolução do mobiliário luso-brasileiro” in 1939. In “Documentação necessária” Costa clearly states the importance of a thorough investigation on the origins and legacy of Brazilian design for Modern Architecture. “It is important to know better our architecture… in order to have the opportunity to use it as a material for new research, but also for us, modern architects, to take advantage of three hundred years of experience as an exemplary lesson, so that we would not just reproduce a dead exterior appearance”. Lúcio Costa, “Documentação necessária,” Revista do serviço do Patrimônio Histórico e Artístico Nacional, 1 (1937). Translation by the author. Lúcio Costa, “Notas sobre a evolução do mobiliário luso-brasileiro,” Revista do serviço do Patrimônio Histórico e Artístico Nacional, 3 (1939).


9 The debate about the existence of a specific and official Jesuit style is a long-standing querelle. In the 19th century Jesuit architecture was branded as the most pompous and formalist expression of Baroque culture. However more recent studies have demonstrated the indifference of the Society of Jesus to a stylistic question and, on the contrary, emphasised their peculiar adaptability to local circumstances. A thorough reconstruction of this debate is in Sandro Benedetti, Fuori dal classicismo (Roma: Multigrafica editrice, 1984).


11 The success of the Society of Jesus in their evangelical mission could also rely on the particular character of their members, who were mostly intellectuals and members of noble European families, devoted to bringing the message and the example of Christ throughout the world. See Sabina Pavone, I gesuiti dall’origine alla suppressione (Bari: Editori Laterizi, 2004), 8-12.

12 The Jesuits profess the vows of chastity, poverty and obedience like the religious orders of mediaeval origin, but they add since the beginning a particular vow of obedience to the Pope, which makes a Society of Jesus an operative arm at the service of the pontiff. See Pavone, I gesuiti, 7-11.

13 Pavone, I gesuiti, 15;


19 Among the vast bibliography on the Gesù Church and on the Jesuit architecture in Rome see Pietro Tacchi Venturi, La casa di S. Ignazio di Loyola a Roma (Roma, 1924); Pio Pecchiai, Il Gesù di Roma (Roma: Società Grafica Romana, 1952); Pietro Pirri, Giovanni Tristanio e i primordi dell’architettura barocca in Roma (Rome, 1955).

20 On the role of the consiliarius adfictorum see Sale, Pauperismo architettonico e architettura gesuitica (Milano: Jaca Books, 2002).

21 On the role of the consiliarius adfictorum see Sale, Pauperismo architettonico e architettura gesuitica (Milano: Jaca Books, 2002).


24 The seven reductions on the eastern side of the Uruguay River basin were incorporated into Brazilian territory with the treaty of Madrid in 1750, just after the expulsion of the Jesuits from South America and a series of conflicts in which the Guaraní took an active role of resistance. See note 29.


27 The plan of Brasília is entirely governed by archetypes: not only is the Eixo Monumental a sequence of paradigmatic forms hosting the main institutional buildings, but also the residential quarters are based on the archetype of the Superquadra, defining specific formal rules for the occupation of the plots and the organisation of the buildings in the landscape. The overall plan itself, in the use of the cross and in the curving of the Eixo Rodoviário, can be understood as the attempt to stretch the method of the archetype to a territorial scale, configuring Brasília more as an immense architecture than as an urban plan. See Farés El-Dahab, Lúcio Costa: Brasília’s Superquadra (Munich: Prestel, 2005); Martino Tattara, “Brasília Cidade Parque. Il progetto della città come pratica del limite.” Ph.diss., IUAV, 2008; Milton Braga, Nelson Kon, and Guillerme Wimsik, O concurso de Brasília para projetar uma capital (São Paulo: Cosac Nally, 2010); Martín Ganea Corullón, “A plataforma rodoviária de Brasilia: infraestrutura, arquitetura e urbanidade (Master diss., FAUUSP, 2013).

28 The relevance of Jesuit reductions, and in particular Guaraní ones, is striking if we consider the population data. In 500 years - between the foundation of the first Guaraní reduction in 1608 and the moment of maximum expansion in the mid 18th century - the Jesuits gathered more than half of the population of all the missions of Latin America, consisting in total of about 260,000 people. Furthermore the reductions constituted more than 50% of the population of the entire region and the largest reductions could arrive at 7,000 inhabitants, an extraordinary number, considering that an important city like Buenos Aires reached just about 11,000 inhabitants. For a study of the Guaraní population in the reductions see Ernesto J.A. Maeder and Alfredo S.C. Boli “La población guaraní de la provincia de Misiones en la época jesuitica: evolución y características (1671-1767),” in Cuadernos de Geohistoria Regional 4 (1980): 1-45. Julia J.S. Sarre, The Guaraní and their missions. A socioeconomic history (Stanford: Stanford University Press, 2014): 48-53.

29 Since 1493 the region fell entirely under the Spanish Crown in virtue of the bull decreed by Pope Alexander VI, confirmed by the Treaty of Tordesillas of 1494 and by the bull Ex qua pro bono pacis promulgated by Julius II in 1506. The seven reductions on the eastern side of the Uruguay River basin were incorporated in the Brazilian territory with the treaty of Madrid in 1750, just after the expulsion of the Jesuits from South America and a series of conflicts in which the Guaraní took an active role of resistance. After the Paraguayan war of 1870 the region of the Trinta Povos acquired the current configuration in terms of political jurisdiction, split between Paraguay, Brazil and Argentina. See Alberto Armani, Città di Dio e città del sole: le ‘Stato’ gesuita del Guaraní (Roma: Studium, 1977): 218-224; R. B Cunningham Graham, Un paradiso comparato (Roma: Castelvecchi, 2014): 218-223; Sarre, The Guaraní and their missions, 93-114.

30 The Bandeirantes were Portuguese adventurers, mostly from the region of São Paulo, who explored and penetrated the most inaccessible areas in search of precious metals and indigenous population to enslave and trade. Originally established as a special unit of the Portuguese army, their role became more ambiguous in the course of the 17th century, where their private economic interests and freedom of action in a rich and unknown territory largely prevailed over the institutional role. Such ambiguity proliferates in the broad and complex question of the relationship between political, juridical and economic power in the urban development of contemporary Brazil. Among the extensive bibliography on the Bandeirantes see Richard M. Morse, The Bandeirantes: the historical role of the Brazilian pathfinders (New York: Knopf, 1967); John Manuel Monteiro, Negros da terra: índios e bandeirantes nas origens de São Paulo (São Paulo, Companhia das Letras, 1994); Luiz Felipe de Alencastro, O Trato dos viventes: formação do Brasil no Atlântico Sul, séculos XVI e XVII (São Paulo, Companhia das Letras, 2000).

31 The primary and secondary literature on the Jesuit reductions and in particular on the so-called Trinta Povos Guaraní is very extensive, yet, as the large majority of the original documents are accounts of the Jesuits themselves, the discourse on the reductions is partly compromised by the bias of the sources. This issue, together with the controversial position of the Jesuits within the process of colonisation, generated an extremely polarised debate which often saw the Jesuits either as facilitators of the violent process of colonisation or as courageous educators and forerunners of Christian values. For the Jesuit perspective see Guillermo Furlong Càrdiff, Missiones y sus pueblos de Guaraníes (Buenos Aires: Imprenta Balines,1662); Arnaldo Bruxel, Os trinta povos guaraníes: panorama histórico-institutional (Caxias do Sul: Universidade do Sul, 1956); Pablo Fernández Hernández, Missiones del Paraguay: organizacion social de las doctrinas guaraníes de la Compania de Jesús. 2 vols (Barcelona: Gustavo Gill, 1913). For a more laic and balanced perspective see Alberto Armani, Città di Dio e città del sole: lo ‘Stato’ gesuita dei Guaraní (Roma: Studium, 1977); Maxime Haubert, La vida cotidiana de los indios y jesuitas en las misiones del Paraguay (Madrid: Temas de Hoy, 1991); Regina A. F. Gadelha, ed., Missões Guaraní: impacto na sociedade contemporânea (São Paulo: EDUC, 1999); Barbara Gazono, The Guaraní under Spanish Rule in Rio de la Plata (Stanford: Stanford University Press, 2002); Guillermo Wilde, Religión y poder en las misiones de guaraníes (Buenos Aires: Editorial Sh, 2009); More recently numerous scholars elaborated rigorous reconstructions of the phenomenon of the Jesuit reduction, based on the cross reference of historical documents and archaeological surveys, in the attempt to deputate the primary sources from their excessively ideological stance. See among others Ramón Gutiérrez, Historia urbana de las reducciones Jesuiticas Sudamericanas: continuidad, rupturas y cambios (siglos XVII-XX). (Madrid: Fundación Ignacio Larramendi, 2011); Sarre, The Guaraní and their missions. A socioeconomic history. (Stanford: Stanford University Press, 2014).


33 A series of quite bizarre hypothesis have been formulated by various authors to explain the specific urban and architectural form of the missions, claiming ideal models such as Plato’s Republic to be the blueprint of the Guaraní settlements, Thomas More’s Utopia, Tommaso Campanella’s Città del Sole or even Marxist principles. See Manuel M. Marzal, La utopía posible: indios y jesuitas en la América colonial (1549-1707) (Lima: Pontificia Universidad Católica del Perú, 2005); Arno Alvarez Kern, Missões e utopia política. (Porto Alegre Brazil: Mercado Aberto, 1982); Clovis Lugos, A república comunista crioula dos guaraní, 1610-1768 (Rio de Janeiro: Paz e Terra, 1968); José Martins Perdões, A República de Platão e os guaraníes (Assunção: Parroquia de San Rafael 2003).


35 The definitive collection of the legal framework for the Spanish colonies, the so-called Leyes de las Indies, will arrive just in 1680 with the promulgation of the Recopilacion de leyes de los reinos de las Indias. However the first precise indication on the character of the new settlements dates back to 1519 and will be progressively updated during the 16th century. Already in 1573 the city foundation policies were systematised in the Ordenanzas hechas para los nuevos descubrimientos, conquistas y pacificaciones. See Francisco de Solano, Estudios sobre la ciudad iberoamericana (Madrid: Instituto Gonzalo Fernández de Oviedo, 1983): 244-252.


37 The stable and prosperous commercial relationships turned the Portuguese Far East colonies into a key element of the empire. However, the Mediterranean route, controlled by Italian and Arab fleets, was subject to continuous conflict and danger, a circumstance that encouraged the Portuguese to use the Atlantic route. Yet, given the currents and the prevailing wind in the Southern Atlantic, it was more convenient to sail South along the coast of Brazil than attempting to descend the coast of Africa, giving to the Brazilian coastline a strategic role. See Renato Pereira Brandão, “A especialidade missionária Jesuita no Brasil colonial”, in José Maria S.J. Fernandes, et al., A Forma e a imagem: arte e arquitetura jesuita no Rio de Janeiro colonial (Rio de Janeiro: Pontifícia Universidade Católica do Rio de Janeiro, 1991-1994): 153.


39 The Caipitanías of Brazil were an administrative system through which the land was subdivided and allocated by the Crown to noble donees, with the task of colonising and administering the territory, and exercising the judiciary power. However, until the establishment of the Capitanía Geral, the majority of the Caipitanías failed to control their territory and promote adequate urbanisation. Caio Prado Júnior, Evolução política do Brasil, 13-17.

40 The mercantile economy - entirely based on the export of sugar cane - the commerce of slaves and the import of luxury products for the elite, prevented the development of an internal market and therefore of a stable urban growth. It was not until the mid-1600, with the fall of the sugar price, that the political-economic relationship between colony and metropolis changed, favouring the growth of the internal market and a stable growth of urbanisation. See Nestor Goulart Reis Filho, Contribuição ao estudo da Evolução Urbana do Brasil (1500-1720) (São Paulo: Livraria Pioneira Editora, 1968).

41 The importance of the Church, and in particular of the Jesuits, in the formation of the territory is confirmed by the urban reform of the Marquis of Pombal in the 18th century, which aimed at reinforcing the power of the government by turning the missionary settlements into towns, weakening the influence of the Church. See Maria Helena Ochi Flexor, "Cidades e vilas pombalinas no Brasil do século XVIII", in Universo Urbanístico Português 1415-1812 (Lisboa: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses, 1998).

42 The enslavement of the natives, especially of the populations considered hostile, was widely diffused and crucial to provide the labour force for the sugar mills, where they constituted the majority of the workers until mid-1600. Since the late 1500 a number of instructions limited the possibility to enslave the natives, largely because the commerce of black slaves from Africa became more profitable and easier to control for the Crown. Jorge Gouveia, A construção do Brasil: amêndoados, portugueses e africanos, do início do povoamento a finais de quinhentos (Lisboa: Edições Cosmôpolis, 2011).


44 Conventionally we can distinguish among three kinds of settlements: the aldeia, which is the original indigenous village, the aldeamento, which is the village where the natives are reduced and the more generic povoamento, which is the settlement of the colonists. Although some settlements located in close proximity and certainly economically and functionally interdependent, the settlements always maintained a racial segregation to avoid the risks of conflicts and ultimately the possibility of dissolution of the aldeamento. Pasquale Petrone. Aldeamentos paulistas (São Paulo: EDUSP, 1995); Goulart Reis Filho, Evolução urbana do Brasil, 124-127.


47 Lorenzo Suárez de Figueroa, Trevo de Córdoba de la Nueva Andalucía, 1577, Archivo General de la Nación Argentina, Buenos Aires.


50 Luís Teixeira Albernaz, Todas as fortificações que se mostravam no lugar do Recife até a Villa de Olinda e ainda adiante até o Rio tapado de treschinas Redutos e Plataformas que se estendem por base de sua levas de terra se fezera por mandado e Ordem do Governador Geral Mathias de Albuquerque na ocasião em que os holandeses tomarão a Bahia, ca. 1626, in Livro que dá Razão do Estado do Brasil, Instituto Histórico e Geográfico Brasileiro, Rio de Janeiro.


52 Specific architectural and urban studies on the Jesuit reduction are in Hernán Buzaniche, La arquitectura en las misiones jesuíticas guaraníes (Santa Fe, Editorial Santa Fe, 1955); Ramón Gutiérrez, Evolución urbanística y arquitectónica del Paraguay 1537-1911 (Corrientes, Argentina: Universidad Nacional del Nordeste, 1975); Rafael Carbonell De Masy, Estrategias de desarrollo rural en los pueblos guaraníes (Barcelona: Antoni Bosch, 1992). See note 31 of the present chapter.

53 The plaza of the Trinta Poves is either square or rectangular and its dimensions can slightly vary according to the peculiarity of the conditions. However the overall formal relationship between the main elements (square, church, colegio and houses) is always carefully respected in all the variations. Luiz Antônio Custódio Bolcato, “Formas de conversión y asentamientos jesuíticos: contribución a su estudio,” Apuntes vol.19, no.1 (2006): 25. It’s interesting to notice that the vara, used as a measurement unit, was the stick that symbolised the power of the cacique. Alberto Armani, Città di Dio e città del sole, 115.

54 While the colegio, the cetoguazu, the tambó and the cabildo are clearly identified in the plans and there is no doubt about their role and importance in the organisation and management of the reduction, the indications and the accounts on the other kind of institutional buildings are less clear and they don’t seem to have a particular form or position within the system of the reduction. A reasonable hypothesis is that such buildings were developed in a late stage of the reduction as the result of the growth of the population and the consolidation of its physical and administrative structures.

55 The hortus would provide just a minor support to the food necessities of the inhabitants, mostly related with medicinal herbs, spices and some fruits and vegetables. Most of the food supply would come from the cultivation of larger fields and the breeding of cattle in the surroundings. The reductions were also farms with an extensive amount of land, and agricultural labour played a key role in the process of conversion. See Juan Villegas S.J. "Evangelinez y agricultura en las reducciones jesuíticas del Paraguay" in Gadelha, Missões Guarani, 167-181.

56 Extensive documentation on the Guarani houses in the reduction is in Fülörg Cârdiff, Missões y sus pueblos de Guaranie, 237-51.

57 On the fluctuation of the reduction population see Sarreal, The Guarani and their missions, 49-53. A thoroughly documented account of the administrative organisation of the reductions is in Armani, Città di Dio e città del sole, 107-186.

58 Graham, Un paradiso scomparso, 171-184; Armani, Città di Dio e città del sole, 108.

59 The reduction of São João Bautista was founded because of the excessive growth of the reduction of São Miguel. The case is well documented through the accounts of the founding father Antônio Sepé. Antônio Sepé, Viagem as missões jesuíticas e trabalhos apostólicos (São Paulo: Livraria Martins-UP, 1972).


61 Fülörg Cârdiff, Missões y sus pueblos de Guaranie, 615-616. Armani, Cittá di Dio e città del sole, 111.

62 Hernán Buzaniche proposed the classification in three building phases, which is widely accepted. Buzaniche, La arquitectura, 21-22; Bolcato, "Arquitetura e os ordemamentos," 77-78; Armani, Città di Dio e città del sole, 109-114.

63 The cabildo was elected by its former members and was composed by a lieutenant, two Alcaldes with administrative and judicial role, two Alcaldes responsible for law enforcement, four Cabildoguara (councillors), one Mayor domo responsible for the administration of the common goods, two Ibirararuzu (police officers) and a Quatianopaba (secretary). Armani, Città di Dio e città del sole, 115. Wilde, Religion y poder, 73-79. Sarreal, The Guarani and their missions, 53-64.

64 The Guarani army made over 70 military interventions between 1640 and 1766, including the battle of the Mbororé River of 1641 that decided the conflict between the Portuguese and Spanish Crown and stabilised the configuration of the Rio Platense region. The Guarani army was officially
dependiente del español y el ejército se pagaron un diario de servicio. Armani, *Città di Dio e città del sole*, 121-125.
68 On the daily life of the reduction see Armani, *Città di Dio e città del sole*, 148-160; Sarreal, *The Guarani and their missions*, 66-72. According to Armani the drums played as a way to mark time during the night, however the relevance of reproduction was paramount and seems reasonable that could be encouraged within the framework of Christian religion.
69 Most of the literature tends to analyse and discuss the churches of the Jesuit reduction in terms of their evolution over time and their stylistic relationship with the general framework of Jesuit architecture. However in the context of the reduction it seems more relevant to focus on the spatial and urban role played by the church. See for example Attur H.E. Barcelos, *Espaco e arqueologia nas missões jesuíticas: o caso de São João Baptista* (PortoAlegre, Brazil: Pontificia Universidade Católica do Rio Grande do Sul, 2002); Noberto Levinton, *La arquitectura jesuítica-guaraní: una experiencia de interacción cultural* (Buenos Aires: Editorial SB, 2008).
70 Most of the urban analyses claim the cross as the foundation figure of the reduction, emphasizing the intersection of the two median axes of the square. However, such reading does not completely conform to the reductions plan, since in several cases such cross does not occur. For example in the reductions of San Carlos and San José the transversal axis are two and equal in size, weakening the figure of the cross and its symbolic value. Furthermore, while the main axis is generally emphasised through a larger width and by architectural elements like crosses or chapels at the intersection with the square, the orthogonal axis never acquires a particular relevance in the urban fabric. The housing arrangement of the settlement is completely uniform and dictated less by streets defining a grid of plots than by the sides of the square, to which the blocks are always parallel. From this perspective the Jesuit reduction seems to depart from the blueprint of Spanish colonial cities in South America under the influence of the scheme of the Brazilian Jesuit settlements. See note 51.
71 The performative aspect of the parvis has often been associated with the theatricality of the Baroque. However the scenographic aspect of architecture for the Jesuits was never a matter of style, but always subordinate to functional and pragmatic considerations related with the specific liturgical needs. See Benedetti, *Fuori dal classicismo*, 68-70; Sale, *Pauperismo architettonico*, 21-25. See also note 9.
74 Cuturi, “Adaptarsi, modellare e convertire,” 45-49.
75 Armani, *Città di Dio e città del sole*, 153-155.
76 On the history of indigenous people of Brazil see Carlos Fausto, “*Fragmentos de historia y cultura tupinambá*” da etnologia como instrumento crítico de conocimiento etno-histórico,” in Manuela Carneiro da Cunha, ed., *História dos índios do Brasil* (São Paulo: Companhia das Letras, 1992); José Otávio Catafesto de Souza, “*O sistema econômico nas sociedades indígenas Guarani pré-coloniais*,” *Horizontes Antropológicos*, 8, no. 18 (2002): 211-253; It is worth noting that just the natives who were already accustomed to agriculture could bear the radical conversion from their original way of living to the reduction. The many indigenous ethnic groups that were conducting a fully nomadic life could never adapt to the reduction and the European presence, and were forced to either find refuge in the most internal areas or engage in desperate battles. Such difference would even inform the Spanish and Portuguese law for which the “hostile indigenous” could be actively killed or enslaved. Brandão, “*Especialidade missionária Jesuíca no Brasil colonial*,” 155-157.
78 In a letter to father Torres Bollo of 1613, Saint Roque González underlines the link between architectural organisation and moral behaviour: “to end the chances of sin, I decided to build the village following the Spanish manner, so that each family had a house, with well defined limits, impeding an easy access from one to another.” Carlos Leonhardt, ed., “Cartas anuais da província do Paraguai, Chile e Tucumán, de la Compañía de Jesús 1691-1614” in *Documentos para la Historia Argentina*, vol. 19 (Buenos Aires: Facultad de Filosofía y Letras, Instituto de Investigaciones Históricas, 1927).
81 In this respect the accounts of the fathers distinguished between the difficulty to make the natives productive in the agricultural labour and their ability and passion for artisanal work or music, which had an immediate outcome. Leite, *História da companhia de Jesus*, 159-164. Armani, *Città di Dio e città del sole*, 155-156. José Otávio Catafesto de Souza, “*Uma análise do Discurso Missioneiro: O caso da ‘indolência’ e ‘imprevideância’*” ed., *O Unicórnio*, 1 (1986) 143-150 see also Shallenberger, “*Missões: trabalho e evangelização*” in *Anais do VII Simpósio Nacional de Estudos Missionários, As Missões Jesuítico-Guaraní: cultura e sociedade* (Sant`A. Rosa RS, FFCL. D. Bosco, 1998), 103-123.
82 For a thorough discussion of the correlation between the notions of habit, habitat and the urban context see Agamben, *Atíssima povertá*.
83 The historiography commonly identifies three phases in the construction and consolidation of the reduction. See note 62.
84 Luiz António Custódio Bolcato uses the word *mutirão* anachronistically to describe the collective nature of the settlement construction process. Bolcato, *“Formas de conversão*,” 32.
85 Sometimes fathers with architectural experience or architects coming from Europe worked on the construction of the churches. The most notable example is São Miguel, designed by the Italian architect Gian Battista Primoli. Gutiérrez, *História urbana de las reducciones*, 300-308.
86 The research trajectory that connects the process of evangelisation with the labour of building has not been further explored, but methodologically refers to the work of Sérgio Ferro, which will be further investigated in chapter 4. See Sérgio Ferro, “*O Canteiro e o Desenho*” in *Arquitetura e Trabalho livre / Sérgio Ferro* (São Paulo: Cosac Naify, 2006), 105-200.
88 The idea of growth through replication of the settlement, rather than expansion, resonates with ancient Greek colonisation, and it’s possibly one of the reasons that induced many scholars to compare the Jesuit reduction with the Republic of Plato. However the same principle was also rooted in the semi-nomadic Guarani culture, which entailed the periodic foundation of new villages. Lucio Costa will advocate the same idea for the growth of Brasilia: the capital should have never exceeded 500.000 people but rather be the centre of a network of satellite cities. Lucio Costa, “*O relatório do plano piloto de Brasília*”, n. 8 (1957).
89 The reference is to the discussion on the notion of *bios* and *zē* developed by Giorgio Agamben in his work *Homo Sacer. Giorgio Agamben, Homo Sacer. Il potere sovranò e la nuda vita* (Torino: Einaudi, 1995). From an urban discourse on the same philosophical question see Andrea Cavalletti, *La città biopolitica: mitologia della sicurezza* (Milano: ESBMO, 2005).
Chapter 2

1 The city of São Paulo dos Campos de Piratininga was founded by a group of twelve Jesuit missionaries, among which were two of the most prominent figures of the Society of Jesus in South America, Manuel de Nóbrega and José de Anchieta. The foundation of the city was marked by the construction of the Jesuit College, started on the 26th of January 1554, around which the mission and the city itself were established. The college - later joined by the buildings of other monastic orders such as the Carmelites (1592), the Benedictines (1598) and the Franciscans (1640) - was central to the spiritual and economic life of the town, embodying both the military and the pedagogic ethos that distinguished the Society of Jesus from the other religious orders. For more on the foundation of the city and its geographical position see Séram Leite, “Os Jesuistas na vila de São Paulo,” Revista do Arquivo Municipal, no. XXI, ano II, (March 1936): 3-50; Pierre Monbeig, “La croissance de la ville de São Paulo,” Revue de géographie alpine, tome 41, no. 1 (1953), 67-71; Roberto Pompeu de Toledo, A capital da solidão: Uma história de São Paulo das origens a 1900 (São Paulo, Objectiva, 2012), 180-181; Caio Prado Júnior, “Nova contribuição para o estudo geográfico da cidade de São Paulo,” Estudos Brasileiros, vol. 7 (1944): 195-222 Among the many accounts of travellers see Auguste de Saint-Hilaire, Voyage dans les Provinces de Saint-Paul et de Sainte-Catherine (Paris, A. Bertrand, 1881); for a list of travellers see Monbeig, “La croissance,” 80. On the relevance of the Society of Jesus in the colonisation of Brazil see chapter 1 of this thesis.

2 The territorial structure of the area of São Paulo, similarly to other parts of the inland, is the result of the strategy of “villageing” used by the Jesuit fathers. Converting a semi-nomadic population, dispersed in a vast region, implied the reduction of the native population to permanent settlements with a manageable size of about 1000 inhabitants. The archetype of the reduction thus became a method to fulfill the mission of evangelisation, constructing new relationships between the landscape and the life of the inhabitants by means of exemplary dwelling forms. Pasquale Petrone, Aldeamentos paulistas e sua função de valorização da região paulistana: estudo de geografia histórica (São Paulo: EDUSP, 1964), the archetype of the reduction is analysed in chapter 1.


6 The expressions “cinturão das chácaras” and “cinturão caipira” were coined by the geographer Jurgen Richard Langenbuch and can be roughly translated as the “farm belt” and the “rural belt.” See Jurgen Richard Langenbuch, “A estruturação da Grande São Paulo. Estúdio de Geografia Urbana” (PhD diss, FFCLHC USP, 1968).

7 See Nestor Goulart Reis, São Paulo, 88-91; The lifestyle of the chacars, more than the architecture itself, were the model for the palacete Paulistano, the dwelling of the wealthy elite that characterised the early phase of the Avenida Paulista. See Maria Cecilia Naclério Homem, O palacete paulistano e outras formas de morar da élite costeira: 1678-1918 (São Paulo: Martins Fontes, 1996); On the role of the chacars in the territorial structure of São Paulo see also Alice Piffer Canabrava, “As chacaras Paulistanas,” Anais da Associação dos Geógrafos Brasileiros, vol. 4, no. 1, (1953): 67-104; Affonso Freitas, Tradições e reminiscências paulistanas (São Paulo: Governo do Estado, 1978); Francisco Marcio Alves Manzoni, “Camps e cidades na Capital Paulista: São Paulo no final do século XIX e nas primeiras décadas do século XX,” Histórias & Perspectivas 36-27, (Jan-Dec 2007), 81-107.

8 Maintaining slaves in the chacars was much cheaper than in the city centre. Homem, O palacete paulistano, 39.

9 Langenbuch, A estruturação, 85.

10 The mercantilist nature of Brazilian economy is the result of the international division of production, established in the beginning of the 19th century as a response to the rapid industrialization of Europe and is still largely in place today. Under developed countries like Brazil, abundant in land and minerals, were exporting food and commodities towards the industrialised countries where agriculture was declining and the consumption of raw materials for the industry increasing. At the same time non-industrialised countries constituted an increasingly significant market of manufactured goods produced in the advanced economy and, later, of basic services such as energy and transportation. Thus the gaps in the industrial development, constructed through three centuries of colonialism, established the condition for a strong dependency on non-industrialised countries from the international market. The mercantilist economy, together with the feudal structure of the territory, also incentivised the formation of large monocultures, driven by the international demand, fuelled by slave labour and reliant more on the large availability of land rather than on the improvement of productivity and technological development. On the genetic and character of Brazilian economy in relationship with the international economic and political forces see Caio Prado Júnior, Formação do Brasil contemporâneo (São Paulo: Editora Brasiliense, 1942); História econômica do Brasil (São Paulo: Editora Brasiliense, 1945); Celso Furtado, Formação econômica do Brasil (São Paulo: Editora Brasiliense, 1959); Boris Fausto, “Declínio e queda do Império,” in Sérgio Buqué de Holanda and Pedro Mcocay Campos, eds., História Geral da Civilização Brasileira, Tome II, Vol. 4 (São Paulo: DIFEL, 1952), 85-137; Francisco de Oe, 85-137; “A economia do modo de produção de mercadorias: Uma interpretação teórica da economia da república velha no Brasil,” in História geral da civilização do Brasil, ed. Boris Fausto (São Paulo: DIFEL, 1975); Wilson Suzigan, Indústria brasileira. Origen e desenvolvimento (São Paulo: Brasiliense, 1986).


12 The large quantities of gold and diamonds discovered in the captivity of Mina Gerais in the 18th century unleashed a gold rush and urged the Portuguese to move the capital of the colony from Salvador to the harbour of Rio de Janeiro. Closer to the mines, the Court could better organise and control the profitable traffic of precious minerals from the colony to the motherland. Furthermore the Janeiro became capital of the province after the Napoleonic invasion, becoming the first capital of a European Kingdom outside Europe. The move of the entire court to Rio de Janeiro – which remained the capital until the foundation of Brasilia in 1960 – gave a strong impulse to the economic and cultural activities of the region, starting the political and economic hegemony of the South-East over the rest of the country. Prado Júnior, História econômica, 101-141.

13 Sugar cane, the first and most important export product of Brazil for almost two centuries, lost its primacy due to several factors: the fall of land fertility caused by the longlasting, intensive, exploitation; the lack of technological development and productivity; the introduction of beetroot sugar in the United States and Europe, which heavily reduced international demand. On the rise and fall of the sugar economy see Stuart B. Schwartz, Sugar Plantations in the Formation of Brazilian Society (Babia 1550-1835) (Cambridge University Press, 1985); Prado Júnior, História econômica, 157-167.

14 Introduced in Brazil in 1722, and established in the north east of Brazil in the mid-18th century, the cultivation of coffee arrived in the region of Rio de Janeiro by the end of the 1700s, but for a few decades remained a relatively small business, mostly catering to local use. However, at the turn of the 19th century two major phenomena occurred in Western countries, increasing the international demand. Brazilian production was especially boosted by US demand that, after Brazilian independence in 1786, sought to import coffee outside the British Empire, absorbing more than 50% of Brazilian coffee production. This key economic link between the two countries favoured the decisive political economic influence of the USA, amplifying the effects of the 1929 Wall street crash in Brazil. The dominance of the South-East over the North-East in the coffee production is to be found in the specificity of the plant which, differently from the sugar cane, is permanent and particularly delicate. The coffee plant requires a specific climate and takes four to five years to produce fruit. These conditions, together with the resistance to change of a consolidated agricultural tradition, made it difficult for the North-East landowners to replace the decadent sugar cane plantations with coffee. On the contrary in the South-East coffee found an abundance of good soil, ideal climatic conditions and an agricultural production which was organised but not yet fully developed and the availability of labour due to the end of the mining cycle. Coffee overtook sugar as the principal export product in the

15 At first coffee plantations rapidly developed along the steep topography of the Paraíba River in the inland of the Rio de Janeiro region, which offered favourable climatic and soil conditions but also a delicate ecosystem. The exploitation of the land in this area was so fast and intensive that it provoked a dramatic environmental alteration and a substantial fall in productivity. Indiscriminate deforestation and intensive monoculture eroded the ground, depleted soil fertility and caused devastating plagues. As a consequence, starting in the 1850s, following the direction of the Paraíba River, coffee plantations began to spread out into the Oeste Paulista. Here coffee production met the “terra roxa” – the purple soil – resulting from the decomposition of volcanic basalt rock which turned out to be incredibly suitable for the coffee plant. Joseph L. Love, São Paulo in the Brazilian Federation 1889-1937 (Stanford: Stanford University Press, 1980). Prado Júnior, História econômica, 162-165.

16 Beyond environmental matters, the difference in cultural and political attitude allowed São Paulo to outclass Rio de Janeiro in the coffee business and thus in both urban and economic growth. While the monarchic and mercantile Portuguese court, closely linked to the Portuguese Crown, hoped to maintain their hegemony by resisting structural changes, the coffee elite Paulistana, on the contrary, strategically embraced on-going transformations. By supporting the formation of a Republican Party and joining forces with the rising bourgeoisie of businessmen, entrepreneurs, engineers and lawyers, the Paulista ruling class largely preserved existing power relationships within a new growth of political and economic liberalisation. “By 1820, São Paulo had surpassed Rio de Janeiro as the industrial leader of Brazil and by 1940 had established the largest industrial base in Latin America.” Hanley, Native Capital, 2.

17 In the independence treaty of 1822 Brazil was forced to commit to abolishing slavery, a clause imposed by the British Kingdom that was determined to expand its political and economic influence in the country. Since then, and with increasing military pressure, the British Crown pushed the Brazilian government to proceed towards abolition. However the landowning elite was heavily reluctant and succeeded in delaying the process for over 20 years. Gilberto Freyre, Ingleses no Brasil: Aspectos da influência britânica sobre a vida, a paisagem e a cultura do Brasil, 3rd ed.(1948; Rio de Janeiro: Topbooks, 2000).


19 The Lei das Terras declared the purchase as the only legitimate means of occupying land. Instead, until 1850, the land was exclusively owned by the Crown and distributed through the system of sesmarias, royal grants through which the King conceded its use to petitioners in exchange for their commitment to manage and cultivate it. However in 1850, small-scale plots were forcefully dispossessed and occupied by the majority of the newcomers. See, Sálvio de Almeida Azevedo, “Imigração e Colonização no Estado de São Paulo,” Revista do Arquivo Municipal, vol. 75, (1941): 105-158; Douglas H. Graham and Sérgio Buarque de Hollanda Filho, Migrações internas no Brasil: 1872 – 1970 (São Paulo: IPEUSP, 1984); José Oscar Bezzo, Brasil: 500 anos de migrações (São Paulo: Ed. Paulinus Centro de Estudos Migratórios, 1992); Plínio Carneir Júnior, A imigração para o Brasil: a viagem, o trabalho, as contribuições (São Paulo: FTD, 2000).

20 During thirty years of hasty expansion throughout the Oeste Paulista, between the independence of 1822 and the regulation of land ownership in 1850, small-scale plots were forcefully dispossessed and occupied by large-scale landowners. As a consequence, the latifundium, first illegally formed, was then legalised, giving de facto access to the land only to the wealthy, turning the dispossessed farmers into a reservoir of cheap labour. According to Erminia Maricato, Habitação e Cidade (São Paulo: Atual Editora, 1997).

21 The decision to resort to foreign immigration, rather than converting slaves into workers or to favour the movement of unemployed people from the North Eastern region, was also based on racial prejudice, as the black or mixed race population was largely considered inferior. As such, the project of mass migration also had racial connotations, in the sense of introducing European blood in Brazil. Fausto, A concisa história do Brasil (Cambridge: Cambridge University Press, 1999), 55-58.

22 The Sociedade Promotora de Imigração (Society for Promotion of Immigration) was founded by the private initiative of some of the most prominent landowners in São Paulo to attract immigrants to the coffee plantations. For this purpose a series of measures were arranged, including paid transportation from the homeland to the plantation and subsidised housing upon arrival. Carlos Botelho, Breve notícia sobre a Hospedaria do Paíma Ingleses no Brasil, Ed. Paulinas Centro de Estudos Migratórios, 1992; Plínio Carneir Júnior. A imigração para o Brasil: a viagem, o trabalho, as contribuições (São Paulo: FTD, 2000).


25 Between 1885 and 1889 São Paulo received 168,127 immigrants with recorded arrivals rising from 6,500 in 1885 to 92,000 in 1888. In the following five years (1890-1894), the registered immigrants reached 219,790 people. Between 1895 and 1899 the plantations absorbed 415,296 foreign workers. In just 15 years 903,203 immigrants drove the new growth of São Paulo, with co-farming and early urbanisation. “By 1820, São Paulo had surpassed Rio de Janeiro as the industrial leader of Brazil and by 1940 had established the largest industrial base in Latin America.” Hanley, Native Capital, 2.

26 Monbeig, “La Croissance,” 86.

27 In particular, the last quarter of the 19th century can be understood as a new founding moment for the city. In just 25 years, São Paulo turned from a quiet and secondary town of about 30,000 inhabitants in 1872, into a sleepless and bustling metropolis of 240,000 people in 1900, reaching the first million in the 1930s. The number of buildings constructed grew from 3,000 in 1875 to 21,000 in 1900. Pasquale Petrone, “A cidade de São Paulo no século XX,” Revista de História, nº 21-22, 1955: 127-170; Nogueira de Matos, “A cidade de São Paulo,” 106-116; Guairau Reis, São Paulo, 88-91; Paulo Singer, Desenvolvimento econômico e evolução urbana (São Paulo: Companhia Editora Nacional, 1968).


31 The expression is used by Pierre Monbeig in “La croissance,” 83-97.

32 From the 1850s, with the rise of the middle-upper class, the composition of the army, which until then had elitist traits, substantially changed. While the heirs of noble families were dissuaded by the low pay and difficult living conditions, lawyers and professionals of the emerging bourgeoisie saw in the military ethos an echo of Auguste Conte positivism, based on scientific method, on technical progress, on law and hygiene and ultimately on modernisation against the empty and corrupt formalism of aristocratic customs. More predictably, the positivist ideals of modernisation also permeated the liberal professions. Holanda, “Novos Tempos,” in Raízes do Brasil, 26th ed. (1936). São Paulo: Companhia das Letras, 2018, 322-361; Robert G. Nachman, “Positivism, Modernization, and the Middle Class in Brazil.” Hispanic American Historical Review, vol. 57, no. 1 (1977): 1-23; Pedro Paulo Filho, O bacharelado brasileiro (da colônia à 171

33 The Republican movement began in Rio de Janeiro in the 1870s but never became a proper party due to the influence of the monarchy in the capital. Expression of the middle upper class of urban professionals of Rio de Janeiro that supported a popular revolution over a peaceful transition to the bourgeois system, the movement advocated individual rights and the abolition of slavery. On the contrary the PRP supported the Republic and a federal government to maintain the control of the profitable coffee and immigration business, maintaining instead a much more ambiguous position on individual rights and abolition. Borís Fausto, "The Republican movement," in A concise history 267-279; José L. Love, São Paulo in the Brazilian Federation, 1889-1937(Stanford, Calif.: Stanford University Press, 1980).

34 According to the new Republican constitution all the literate males with more than 21 years of age could vote. However the vote was recorded in a city with a vast majority of foreigners and illiterate, thus the elite could easily manipulate the democratic representation using mechanisms of pressure and exchange based on the essential coincidence of work, power and personal relationships. Borís Fausto, Declínio e queda do Império, 85-137; Raquel Rolnik, São Paulo, (São Paulo: Publifolha, 2001), 21-22.


37 The most famous and important of these companies was the São Paulo Tramway Light and Power Company Limited, founded in 1899 with Anglo-Canadian capital and also operating in Rio de Janeiro, that in the space of a decade became the monopolist in the provision of energy, telephone and collective rail transport. Edgar de Souza, The history of Chicago press, 2005).


40 All Latin American states, with the exception of Cuba and Puerto Rico, achieved independence from the Spanish and Portuguese Crowns between 1808 and 1825. In the long run independence favoured urbanisation but, in the short term, a devastating period of civil wars and stagnation restrained the growth of the urban centres in favour of a tendency to decentralisation and ruralisation which lasted until the 1860s. Arturo Almandoz, ed., Planning Latin America's Capital Cities 1850-1950 (London: Routledge, 2002), 15.


42 "For Gilberto Freyre the key trend of institutional history of 19th century Brazil is the shift from the rural casa grande (large house) to the urban sobrado (town house) of the bourgeoisie." Richard M. Morse, Latin American Cities: Aspects of Function and Structure, Comparative Studies in Society and History, vol. 4, no. 4 (July 1962), 481; Gilberto Freyre, Sobrados e mucambos, 13th ed., (1936; Rio de Janeiro: Record, 2002).

43 According to Brian Roberts "foreign investments, especially the British, were deployed in ways likely to increase primacy (of capital cities) by helping rights and the administrative and economic infrastructure of exports; this infrastructure was concentrated in the major cities through which export was channelled". Brian R. Roberts, City of Peace. The Political Economy of Urbanization in the Third World (London: Edward Arnold, 1998), 47-48.

44 The increase in urban population was directly related to the level of integration of each city in the world market, evidence of the dependency of Latin American states on foreign powers and capital. Almandoz, Planning Latin America's Capital Cities, 15-16.

45 Gutiérrez, Arquitectura y Urbanismo, 514-532.

46 Almandoz, Planning Latin America's Capital Cities, 24-27.

47 "Britain was chosen, so to speak, as the economic godfather of the young republics, whereas France was confirmed as their cultural grandmother – a peripheral yet useful honour for the European countries, especially in restraining the emergence of the United States as a continental superpower." Almandoz, Planning Latin America's Capital Cities, 16-17.


49 Enrico Ferdinando Londei, La Parigi di Haussmann. La trasformazione urbanistica di Parigi durante il secondo impero (Edizioni Kappa, Roma, 1982), 197.


51 Hausmann’s work has a methodological precedent for the plan designed by Domenico Fontana for Pope Sixtus V, who Sigfried Giedion considered “the first of modern town planners,” because “he was aware of the city as a complex organism, and he knew that the beauty of open squares and wide streets had to be buttressed by social implementation.” Sigfried Giedion, Space, Time and Architecture (1941; Cambridge: Harvard University Press, 1982), 100.

52 Hausmann, Mémoires, vol.3, 46.

53 For the distinction between strategy and tactics see the canonical Niccolò Machiavelli, Art of War, trans. Christopher Lynch (Chicago: The University of Chicago press, 2005).

54 A thorough discussion of Hausmann Paris as a tactical project that aimed at productive performance is in Maria S. Giudici, “The street as a project. The Space of the City and the Construction of the Modern Subject” (PhD diss., Delft University of Technology, 2014): 207-229.


56 Maria S. Giudici, “The Street as a project”, 218-219.


58 “Il faut regarder une ville comme une forêt. Les rues de celle-là sont les routes de celle-ci; et doivent être percées de même. Ce qui fait la beauté de la forêt, c’est l’ordre et la variété de ses rues qui s’étendent de part et d’autre.” Marc-Antoine Laugier, Essai, 259-260. For a reading of Laugier’s theoretical framework in


60 Benevolo, La cattura, 48.

61 Benevolo, La cattura, 73.


64 “Lent’ère d’une Ville est destinée à faciliter la sortie des habitants et l’abord des étrangers; afin d’éviter les embarras du concours il est nécessaire que tout y soit parfaitement libre et dégagé. Les avenues contribuent beaucoup à cet dégagement. Faut enfin que les chemins qui conduisent à la Ville auxquels il faut donner d’autant plus de largeur, que la Ville est plus peuplée, et qu’il y a plus d’affluence. Il ne suffit pas que l’avenue ait cette largeur tout au près de la Ville, il faut que cette largeur commence à une assez grande distance, pour qu’il n’y ait plus d’embarras à craindre.” Laugier, Essai, 245-246.


66 Monique Sassiier, “Avenue,” in Christian Topalov et al., eds., L’entrée d’une Ville est destinée à faciliter la sortie des habitants et l’abord des étrangers; afin d’éviter les embarras du concours il est nécessaire que tout y soit parfaitement libre et dégagé. Les avenues contribuent beaucoup à cet dégagement. Faut enfin que les chemins qui conduisent à la Ville auxquels il faut donner d’autant plus de largeur, que la Ville est plus peuplée, et qu’il y a plus d’affluence. Il ne suffit pas que l’avenue ait cette largeur tout au près de la Ville, il faut que cette largeur commence à une assez grande distance, pour qu’il n’y ait plus d’embarras à craindre.” Laugier, Essai, 245-246.

67 Topalov, “avenue,” 55.


69 A scale of Sully’s intervention is given by the expenses for the national street network, which increased from 600 to one million pounds in ten years. Maximilien de Béthune Sully, Les Oeuvres royales de Sully, edited by David Buisseret and Bernard Barbiche (Paris: Klincksieck, 1970).

70 Maria S. Giudici, “The Street as a project”, 231.


74 The first systematic use of the notion of avenue and allée in the organisation of gardens appears in the treaties of the early 17th century such as Olivier de Serres, Théâtre d’agriculture et mesnage des champs (Paris, Saugrain, 1665); Jacques Boyceau, Traité du jardinage, 1638; Antoine Joseph Desailler d’Argenville, La Théorie et la pratique du jardinage, 1709. On the Tuileries Gardens see Emmanuel Jacquin, Les Tuileries, Du Louvre à la Concorde (Paris: Editions du Patrimoine, 2000); Dominique Jarassé, Grammaire des Jardins parisiens, (Paris: Parigramme, 2007).

75 On the political connotation of the garden see Olivia Neves Marra, “The Garden as Political Form: From Archetype to Project” (PhD diss., Architectural Association, 2020).
89 Since the beginning, the area of the Parque Villon was open to public use even if it remained privately owned by José Borges de Figueiredos. The Municipality of São Paulo purchased the area of the park just in 1911. See Daniele Pisani, O Triângio do M&M ao MASP: arquitetura e política em São Paulo (1946-1968) (São Paulo: Editora 34, 2018). See also Toledo, Álbum iconográfico, 65, Moraes, Estudo crítico, 121.

90 Diário Popular, May 11, 1801, in Azevedo Filho, Um pioneiro, 27-30.


93 In Campos Elíseos for example the frontage of the plots varied from 4.4 to 115 metres. Homem, O palacete paulistano, 123.

94 As a matter of fact Avenida Paulista was chosen as the symbol of São Paulo in a “democratic vote” held in 1991 with a voter participation of 1.5 million people. Called “Eleja São Paulo,” the campaign was financed with $1 million from the Itau Bank – the major Brazilian bank – and promoted by Rede Globo – the major private broadcasting network. The event celebrated the centenary of Avenida Paulista and the formation of the association Paulista Viva, which had a fundamental role in the process of gentrification, securitisation and privatisation of the 1990s. Heitor Junior Frigoli, Centralidade em São Paulo: trajetória, conflitos e negociações na metrópole (São Paulo, Cortez – EDUSP, 2000): 133-137.

95 The popular adage refers to the two ends of Avenida Paulista which are a street lamp in a roundabout and a sculpture, which fail to provide a space for representation and a new territorial dimension.

96 According to the chronicles the name was decided by Joaquim Eugênio de Lima during the inauguration, refusing to entitle the avenida after himself, as the enthusiastic participants were proposing. Beyond the truthfulness of this account, it is interesting to notice how crucial and “natural” the ambivalence is between gift and profit, between individual and collective identity, private and public property in the construction of the urban milieu of São Paulo. See Gabriel Marques, Ruas e Tradições, 44.

97 The idea of a new foundation of São Paulo at the turn of the century was first associated with the “improvements” of the city realised under the Partido Republicano Paulista. See Maria Margarida Cavalcanti Límena, Avenida Paulista. Imagens da metrópole (São Paulo: Educ, 1996): 11; Moraes, Estudo crítico, 137-158.


99 Here I refer to the fundamental notion of “conservative modernisation” debated by Brazilian economists and sociologists since the 1960s. See Murilo José de Souza Pires and Pedro Ramos, “O termo Modernização debated by Brazilian economists and sociologists since the 1960s. See here I refer to the fundamental notion of “conservative modernisation” of Avenida Paulista that such transformation will find a space of receptions, including meetings of the Partido Republicano Paulista. Moraes, Estudo crítico, 132-136.

100 Toledo, Álbum iconográfico, 65; the Triânon hosted banquets and official receptions, including meetings of the Partido Republicano Paulista.

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7 On this aspect I refer to the considerations of Manfredo Tafuri on the grid of New York in Manfredo Tafuri, Progetto e Utopia: Architettura e sviluppo capitalistico (Roma-Bari: Laterza, 1973), 37-38.

9 Pedrosa refers to the paradigm of the oasis developed by the art historian Wilhelm Worringer to describe Egyptian civilization. According to Worringer the oasis is a completely artificial environment that liberates its inhabitants from the conditions of natural growth, to become participants in an existence that is above natural history, above history even. As such in the oasis there is no ‘organic’ culture – in the sense defined by Freibrun as “the soil that man turns organic” – but just civilization. The absence of this link with the land and with history gives the inhabitants of the oasis the capability to negate their own nature, therefore to accept and absorb external cultural contributions. See Mario Pedrosa, “Reflexões em torno da nova capital”, 133-146; Wilhelm Worringer, *Einzelformen der Kunst* (London: Putnam’s Sons, 1928); Leo Freibrun, *Das Unhafte Afrika* (München, Verlag C.H. Beck, 1922).

10 Mário Pedrosa, “Reflexões em torno da nova capital”, 133.


12 It is important to remind one here that Brazilian Modernism, the avant-garde literary and artistic movement of the 1920s, attempted to exploit and subvert the tendency of culture to absorb foreign cultural products and constructs. In his *Manifesto Antropógafico* of 1928 Oswaldo de Andrade proposed the practice of anthropophagy as a means to reclaim the point of view of the colonised by means of ingestion, deglutition and digestion of the colonisers cultural framework. See *Revista de Antropofagia – Revistas de Modernismo* (1922-1929) (São Paulo: Imprensa Oficial do Estado de São Paulo, 2014); Oswaldo de Andrade, *Obras Completas*, vol. VI (Rio de Janeiro: Civilização Brasileira, 1978).

13 The term “conservative modernisation,” first introduced by Barrington Moore Jr., indicates a political pact between the rural oligarchy and the urban bourgeoisie, granted by the State, which allows a transition between the feudal and the industrial order without a violent change of power and based on a preservation of the land property status quo. After the translation of Moore’s work in 1975, the notion of “conservative modernisation” was long debated in Brazil by important economists and sociologists such as Alberto Passos Guimarães, Fernando Antônio Azevedo, Ignácio Rangel and Florestan Fernandes among others. See Barrington Moore Jr., *Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World* (Boston: Beacon Press, 1966); Florestan Fernandes, *A revolução burguesa no Brasil: ensaio de interpretação sociológica* (1974; Rio de Janeiro: Zahar Editores, 1981); Murilo José de Souza Feres and Pedro Ramos, “O termo Modernização Conservadora: sua origem e utilização no Brasil.” *Revista Econômica do Nordeste*, vol. 40, n. 3 (July-September, 2009).

14 The passage between the Empire and Republic at the end of the 19th century coincides with the abolition of slavery and the substitution of slaves with land property as a measure of capital. This process resulted in an abundance of available labour force and in the private control of the political and economic power before the beginning of industrialisation. Erminía Maricato, *Brasil, cidades. Alternativas para a crie urbana* (Petrópolis: Editora Vozes, 2001), 16-24. See also Chapter 2 of the present thesis.

15 Interestingly enough the widely diffused slogan “Brazil: pais do futuro” was launched precisely in the 1940s, in conjunction with the early development of Modern Brazilian architecture, by a book written by a Jewish refugee escaping Nazi Germany, Stefan Zweig, *Brasilm: Ein Land der Zukunft* (Stockholm: Bermann-Fischer, 1941).

16 As Claude Levi-Strauss had already noticed in his *1935-1939 trip to São Paulo, ‘cities of the New World…pass from first youth to decrepitude with no intermediary stage…newness is their whole being and their justification…for they are not merely ‘newly built’; they are built for renewal, and the sooner the better.” Claude Levi-Strauss, “São Paulo,” in *Tristes Tropiques* (London: Hutchinson, 1963), 109.

17 As the economist Celso Furtado thoroughly demonstrated, underdevelopment is not a temporary stage of an evolutionary process, but rather a structural condition in the global system of capitalist production that allows the centre to perpetuate its domination on the periphery both at a global and local scale. According to Furtado, in technologically and financially dependent economies based on the export of natural resources, like Brazil, industrialisation has a “strategic tendency to exclude the mass of the population from the benefits of accumulation and technical progress.” Paradoxically, development increases the gap between a wealthy minority that consumes imported high-standard commodities and the vast majority relying on low-tech goods produced for subsistence. See Celso Furtado, *Desenvolvimento e subdesenvolvimento*. (Rio de Janeiro, Fundo de Cultura, 1961); *O mito do desenvolvimento econômico* (Rio de Janeiro, Paz e Terra, 1974).

18 The urban population skyrocketed from less than 20 million people in 1940 to over 140 million people in 2000, maintaining a similar trend until today with Brazil’s urban population exceeding 180 million people in 2019, with 87% of the total population living in urban areas. World Bank, https://data.worldbank.org. For a concise account of the development of urbanisation in Brazil see Erminía Maricato, *Brasil, cidades*.


22 Following the critique of architectural ideology of Manfredo Tafuri we can understand urbanisation as “the reality of the plan.” “Architecture as ideology of the plan is swept away by the reality of the plan when, the level of utopia having been superseded, the plan becomes an operative mechanism. The crisis of modern architecture begins in the very moment in which its natural consignee – large industrial capital – goes beyond the fundamental ideology, putting aside the superstructure.” Manfredo Tafuri, *Architecture and Utopia. Design and capitalist development* (Cambridge MA, MIT Press, 1979), 135.

23 In a 1954 article the Italian critic and art historian Giulio Carlo Argan underlined how the lack of planning and the spreading of urbanisation in Brazil were not an informal tendency but rather a top-down direction. “The renewal of architectural forms proceeds from the centre to the periphery or, if you prefer, from top to down; it is therefore more the expression of urbanisation than of urbanism. For what we know from the general condition of the country, it seems that the next step for Brazilian architects is to conquer a more profound city planning consciousness and a more tight link between urban and economic planning.” Giulio Carlo Argan, “Arquitetura moderna em Brasil,” *Comunidade 24* (1954), 52. Translation by the author.

24 Since the 1930s the emerging generation of modern architects, led by Lúcio Costa, was also the one that established, with their texts and projects, the conceptual framework in which modern and colonial architecture were not in opposition but rather part of the same tradition. In the colonial technique of the pau a pique, in the separation of structural skeleton and infill wall, in the horizontality and the large openings of the rural houses and in the technical devices modulating light and ventilation, Costa saw the roots and “reasons of a new architecture,” founded on a sober aesthetic and on the honest use of available building techniques and materials. See Lúcio Costa, “Razões da nova arquitetura” *Revista da Diretoria de Engenharia da prefeitura do Distrito Federal* 3, no.1 (January 1936): 3-9; “Documentação necessária,” *Revista do serviço do patrimônio histórico artístico nacional*, no.1 (1937): 31-40. Orílla Arantes has thoroughly underlined the political implications of this cultural position in Otília Beatriz Fiori Arantes, “Resumo de Lúcio Costa” in *Mais Anelli “João Vilanova Artigas and the meanings of concrete in Brazil“* (London, Reaktion Books, 2012); Felipe de Araujo Contier and Renato Anelli “João Vilanova Artigas and the meanings of concrete in Brazil“* (London, Reaktion Books, 2012);

25 See note 9 of this chapter.

26 The Pampulha ensemble in Belo Horizonte, commissioned by Júlio Costa, was also the one that established, with their texts and projects, the conceptual framework in which modern and colonial architecture were not in opposition but rather part of the same tradition. In the colonial technique of the pau a pique, in the separation of structural skeleton and infill wall, in the horizontality and the large openings of the rural houses and in the technical devices modulating light and ventilation, Costa saw the roots and “reasons of a new architecture,” founded on a sober aesthetic and on the honest use of available building techniques and materials. See Lúcio Costa, “Razões da nova arquitetura” *Revista da Diretoria de Engenharia da prefeitura do Distrito Federal* 3, no.1 (January 1936): 3-9; “Documentação necessária,” *Revista do serviço do patrimônio histórico artístico nacional*, no.1 (1937): 31-40. Orílla Arantes has thoroughly underlined the political implications of this cultural position in Otília Beatriz Fiori Arantes, “Resumo de Lúcio Costa” *Mais Anelli “João Vilanova Artigas and the meanings of concrete in Brazil“* (London, Reaktion Books, 2012);...

28 The territorial continuity granted by the archetype of the cover is often explained in relation to tropical climatic conditions, which require more protection from the sun than enclosure. However, while the climatic factor has a certain relevance, the territorial continuity provided by the cover can be more productively related with the historical continuity that characterises Brazil, a country that never really fought a war of independence, nor accomplished bourgeois revolution against feudalism, nor a liberation struggle for the abolition of slavery. Nor by chance, the archetype of the cover is a response to the modernisation of the country which will all play an essential role in the following golden decades of Brazilian modern architecture.

29 The book and the exhibition Brasil Builds produced by the MoMA are a direct outcome of Franklin D. Roosevelt’s Good Neighbor Policy, during which the attitude of the USA towards the American continent shifted from direct military intervention to economic and cultural hegemony. Philip Goodwin, Brasil Builds: Architecture New and Old 1652-1942 (New York: Museum of Modern Art, 1943).

30 In the post-war years modern experiments in peripheral countries, such as Brazil or Finland, caught the attention of the international debate – figures such as Sigfried Giedion, Nicholas Pevsner, Giulio Carlo Argan underlines how Brazilian modern architecture tended to "mingle expression of Brazilian modern architecture – and the introverted and light tropical exuberance of the modernisation of the country which accompanied the various phases of Brazilian history, from the Vargas Era to the democratic State"; see Cavalcanti, "A construção do Homem Novo," in Roberto Conduru, "Tropical tectonics" in Andreoli and Forty, eds., Brazil’s Modern Architecture, 56-105.


32 The historiography of Brazilian modern architecture is largely dominated by the dialectic between Rio de Janeiro and São Paulo, between the sensual and a certain agrarian rhetoric – all elements derived directly from Italian architecture's aesthetic and construction techniques – and the introverted and light tropical exuberance of the expression of Brazilian modern architecture – and the introverted and light tropical exuberance of the expression of a new Brazilian national identity see Cavalcanti, Moderno e Brasileiro, 9-16.

33 The crisis of coffee exports, begun during World War I and burst with the crash of 1929, exposed the contradictions inherent to the Brazilian political and economic regime of the Old Republic. The rural oligarchy, which based its wealth and power on the export of a single dominant product, coffee, could not organise the development of industry and urbanisation, which implied the establishment of a wider base of consumers and an accelerating dynamism of capital and production. Such critical conjuncture found in Getúlio Vargas’ Estado Novo – begun with the Revolution of 1930 and then definitively imposed with the coup of 1937 – the authoritarian power needed for the restructuring of the country. See Robert M. Levine, The Vargas Regime: The Critical Years, 1934-1938 (New York: Columbia University Press, 1970); Ely Diniz, Empresário, Estado e capitalismo no Brasil: 1930-1945 (Rio de Janeiro: Paz e Terra, 1978).

34 For an account of how modern architecture succeeded in becoming the expression of a new Brazilian national identity see Cavalcanti, Moderno e Brasileiro, 9-16.


36 For an account of how modern architecture succeeded in becoming the expression of a new Brazilian national identity see Cavalcanti, Moderno e Brasileiro, 9-16.

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44 The Morro do Castelo was a hill predominantly inhabited by the lower classes in the central area of Rio de Janeiro. Deemed as a geographical, social and economic obstacle for the development of the city, the demolition of the hill began in 1922 within the extensive plans for the commemoration of the centenary of the country’s Independence. See Sonia Maria Queiroz de Oliveira, ed., _Planos urbanos do Rio de Janeiro: Plano Agache_ (Rio de Janeiro: Centro de Arquitetura e Urbanismo, 2009).

45 The project of the MES was initially commissioned through an open competition won by the architect Archimedes Memória with a project in “marajoara” style, a fantasy on indigenous themes. However, under the pressure of various cabinet members – advocates of modernity such as the writers Carlos Drummond de Andrade, Manuel Bandeira and Mário de Andrade – the minister Gustavo Capanema cancelled the result of the competition and assigned the commission directly to Lúcio Costa. A thorough reconstruction of the sequence of events is in Cavaçal, _Moderno e Brasileiro_, 34–42.


47 The MES building is not the first high rise building in Rio de Janeiro, as the process of verticalization started in the first decades of the century, fostered by the opening of the Avenida Central in 1904. The structural engineer of the MES, Emílio Baumgart, had worked on the skyscraper of the newspaper _A Noite_, inaugurated in 1929, which has been the tallest building of Latin America until the construction of the Martinselli building in São Paulo in 1934. See Lucio Costa, “Muita construção, alguma arquitetura e um milagre. Depoimento de um arquiteto carioca,” in _Registro de uma vivência_ (1951; São Paulo: Empresa das artes, 1995), 167.

48 A thorough analysis of the role of the pilotis in Le Corbusier is in Laurent Israël “Les pilotis,” _Architecture Mouvement Continuité_, no.49 (1979): 38–44.

49 For a profile of Affonso Eduardo Reidy see Nabil Bonduki, _Affonso Eduardo Reidy_ (Lisboa-São Paulo: Blau – Instituto Lina Bo e P.M. Bardi, 2000); Eline Caixeta, _Affonso Eduardo Reidy: o poeta construtor_ (Barcelona: Servei de publicacions de la Universitat Politècnica de Catalunya, 2000).


55 The project can also be understood in the framework of Franklin D. Roosevelt’s Good Neighbor Policy and in light of the relationship between Francisco Matarrazzo and Nelson Rockefeller. The American businessman intended to expand the influence of MoMA in Brazil as leverage for his economic and financial interests, for which he financed a planning study for São Paulo by Robert Moses in 1947. See Zeuler R. M. de A. Lima, “Nelson A. Rockefeller and Art Patronage in Brazil after World War II: Assis Chateaubriand, the Museu de Arte de São Paulo (MASP) and the Museum of Arte Moderna (MAM),” _RAC Research Report_, (New York: Rockefeller Archive Center, 2010); Robert Moses et al., _Programa de melhoramentos públicos para a cidade de São Paulo_ (New York: Steidinger Press, 1950); Ana Claudia Castilho Barone, “Ibirapuera,” 138-142.

56 Initially Francisco Matarrazzo appointed a planning team composed of mostly Paulists, with the exception of Oscar Niemeyer who was the time was vice president of the São Paulo section of the Institute of Brazilian Architects. The team worked on the planning of the site and definition of the program between September and December 1961. See Ana Claudia Castilho Barone, “Ibirapuera,” 99-99. The second team, led by Oscar Niemeyer, included Zenon Lotufo, Hélio Uchôa, Gaústa Estelita, Carlos Lemos and Eduardo Knesse de Mello – the latter being the only member of both teams.


61 For the relationship between the triangulo and esquina see chapter 2.

62 Given the strategic location and despite public ownership, the site had been at the centre of legal disputes since the 1920s. The municipality intended to turn the swampy area into a public park and private real estate developers sought an opportunity for profit. With the project for the Centenario the State economic and political reason ultimately prevailed over the local interests. A thorough reconstruction of the legal disputes on the land of Ibirapuera is in Ana Claudia Castilho Barone, “Ibirapuera: parque metropolitano (1926-1954)” (Phd diss., FAU USP, 2007), 16-45.

63 The project is elaborated in on both main versions with significant differences leading to a higher level of refinement and abstraction: the overall arrangement became more rigorous in its geometry and composition; the form of the marquise was simplified, more clearly expressing the tension between leisure and infrastructure; the palace, which originally exposed its structure similarly to Reidy’s MAM and to Niemeyer’s Ibirapuera Factory, became abstract white prisms. Furthermore, the entrance platform was never built, the theatre was only completed in 2005 with significant variations and the planetarium later became a museum known as the Palácio das Artes. See Oscar Niemeyer et al., _Anteprojeto da exposição do IV Centenário de São Paulo_. (São Paulo: Edições de Arte e Arquitetura, 1952); Oscar Niemeyer, “A verdade sobre o projeto e a construção do belo traçado às conmemorações do IV Centenário de São Paulo: a concepção, a realização e o que pode ainda ser feito,” _Revista Módulo_ 1 (March 1955): 18-25; Joaquim Cardoso, “O Conjurto Arquitetônico do Ibirapuera,” _Brasil Arquitetura Contemporânea_, no.2-3 (January 1954): 49-62.

66 The most notable examples of marquises in Niemeyer’s work of that period are the Casa do Baile, the Casaio and the rebuilt _Hotel de Turismo_ within the Pampulha complex of 1942 and the Duchen Factory in São Paulo in 1950. For the complex of Pampulha see Niemeyer, “Pampulha,” 22-35.

67 For a discussion on the paradigm of the street see chapter 2. See also Maria S. Giudici, “The Street as a project. The Space of the City and the Construction of the Modern Subject” (Phd diss., Delft University of Technology, 2014). See also Eric Alonzo, L'architecture de la voie historique et théorique (Marseille: Parenthèses, 2017)


70 The heterogeneous group of architects operating in São Paulo known as Escola Paulista, included key figures such as Carlos Millan, Joaquim Guedes, Flávio Motta, Fábio Penteado, Pedro Paulo Saraiva, Paulo Mendes da Rocha, Abrahão Sanovicz, Jon Maîtrejau, Ruy Ohtake, Gian Carlo Gasperini, Marcello Fraggi, Decio Tozzi, Sérgio Ferro, Rodrigo Lefèvre, João Walter and Lima Bo Bardi. Among this group João Batista Vilanova Artigas is largely unknown, even though scholars such as Ruth Verde Zein have downplayed his role to emphasize the link with Corbusian and British Brutalism. Ruth Verde Zein, “A década ausente.”, no. 1 (1980), 2; Marlene Millan Acayaba, Residências em São Paulo: 1947-1975 (São Paulo: Projeto, 1986); Rosa Artigas, Casas de Artigas (São Paulo: Fundação Vilanova Artigas, 1993); Márcio Cotrim, Vilanova Artigas: casas paulistas 1967-1981 (São Paulo, Romano Guerra, 2017).

76 The palácete Paulistano, based on the French model of the hôtel, was the house typology of the coffee elite, which moved from the countryside to the city in the end of the 19th century. See Maria Cecília Nacelmento, O palácete Paulistano e outras formas de morar da elite cafeeira: 1867-1918 (São Paulo: Martins Fontes, 1996). See chapter 2 of this thesis.

77 The Palácete broke with the traditional continuity of the urban fabric of sobrados or semi detached houses by isolating the building within a larger plot, staging architecture as representation of wealth and power – a character further emphasised by highly decorated eclectic facades as index of cultural references of ethnic origins. See chapter 2 of the present thesis.

78 The official position of the Brazilian Communist Party maintained the necessity of the proletariat to ally with the bourgeoisie as a step towards the formation of a mature industrial economy and working class. On the politics of Artigas’ houses see Pedro Fiori Arantes, Arquitetura Nova: Sérgio Ferro, Flávio Império e Rodrigo Lefèvre, de artes aos mutivos (São Paulo, Editora 34, 2002); 12-27; Miguel António Buzzar “A Idéia de uma Casa Brasileira,” V Seminário Nacional DOCOMOMO (São Carlos, 2003).


80 The expression by Artigas is published in Ferraz, Vilanova Artigas. Among the extensive bibliography on the FAUUSP see Fábio Moura Pentado, “Vilanova Artigas, construtor de escolas,” Arquivó 377 (Sept, 1970); Flávio Motta, “João Vilanova Artigas e a escola de São Paulo” Módulo, número especial Vilanova Artigas (1985).

81 For a thorough analysis of the building, its design and construction process, see Felipe de Araujo Contieri “O edifício da Faculdade de Arquitetura e Urbanismo na Cidade Universitária: projeto e construção da escola de Vilanova Artigas” (PhD diss., IAU USP São Carlos, 2015).


83 The adjective “Nova” was borrowed from the “Cinema Nova,” a cinematographic movement lead by directors such as Nelson Pereira dos Santos, Ruy Guerra and Glauber Rocha, which questioned the very idea of development by assuming the scarcity of resources as an opportunity to challenge the dominant aesthetic and mode of production. See Ismaïl Xavier, Serras mar: Glauber Rocha e a estética do fome (São Paulo: Brasiliense, 1983).

84 Sérgio Ferro and Rodrigo Lefèvre, while still students, had the chance to realise some large commercial and residential buildings in Brasilia and thus to experience the construction of the new capital. “I closely followed the horror of Brasilia’s construction sites. Out of an ethical obligation, I was forced to review the airy certainties of the profession - and so I continue today,” Sérgio Ferro, “Arquitetura e luta de classes: uma entrevista com Sérgio Ferro,” interview by Lelita Oliveira Benoit, Critica Marxista 15 (2002): 1-5. Translation by the author.

85 The critique of the role of the architect was elaborated on by the group in a number of polemic articles during the 1960s and early 1970s. Sérgio Ferro further elaborated and systematised the theoretical approach in the book O cantareiro e o desenho. For Ferro, building is not an industry but a manufacture, a labour intensive activity with little mechanisation that maximises the extraction of surplus from labour. It is precisely in virtue of its quantity, diffusion and backwardness, that the building activity plays a crucial role in the global capitalist organisation, extracting from labour the capital to be invested in more advanced sectors of the economy. Sérgio Ferro O cantareiro e o desenho (São Paulo: Projeto, 1979).

86 The definition of “poetic of economy” is published in an article by Sérgio Ferro and Rodrigo Lefèvre in 1963: “It’s from the useful, constructive and didactic minimum need that we take […] the basis of a new aesthetic which we could call ‘poetic of economy’, of the absolutely indispensable, of the elimination of all that is superfluous, of the ‘economy’ of means for the formulation of a new language entirely established in the base of our historical reality.” Sérgio Ferro and Rodrigo Lefèvre, “Proposta inicial para

87 See Arantes, Arquitetura Nova, 119.

88 Sérgio Ferro articulates the notion of the “aesthetic of separation” in his book O canteiro e o desenho republihed in Sérgio Ferro, O canteiro e o desenho,” in Arquitetura e Trabalho livre, 105-202.

89 Sérgio Ferro, A casa popular (São Paulo: GFAU, 1972); Koury, Grupo Arquitetura Nova, 100.

90 To describe this form of productive cooperation Sérgio Ferro used the metaphor of the jazz orchestra, where the free improvisation of the performers is allowed and encouraged within a common theme. Sérgio Ferro, “Flávio arquiteto” in Flávio Imperio em cena (São Paulo: SESC, 1997), 100.


92 Significantly William Morris’ sentence will later appear in paintings by Sérgio Ferro, who will discuss the legacy of the British architect in various texts.

93 Helena Buarque de Hollanda and Marcos Augusto Gonçalves, Cultura e participação nos anos 60 (São Paulo, Brasil: Brasiliense, 1982); Arantes, Arquitetura Nova, 49.

94 The official line of the Brazilian Communist Party (PCB) maintained that the path to the revolution required the development of the industrial means of production and therefore supported the project of developmentalism led by the national bourgeoisie. This was one of the most relevant points of friction between Arquitetura Nova and their master João Batista Vilanova Artigas, who was a prominent member of the PCB. Koury, Grupo Arquitetura Nova, 26-27. Arantes, Arquitetura Nova, 39-48.

95 Allowing the migrants to build their own illegal houses meant keeping workers in a precarious condition, sparing investments in the provision of housing and discounting the value of rent from the salary. The seminal book on the issue remains The housing question by Frederick Engels, written in 1872. Engels, Friedrich Engels, The Housing Question, C.P. Dutt, ed. (Lawrence & Wishart: London, 1942). The argument is also rehearsed in Rodrigo Lefèvre’s master thesis. Rodrigo Brotero Lefèvre, “Projeto de um acampamento de obra: uma utopia” (Master diss., FAU USP, 1981), 20-31. For the relationship between state, capital and social housing in Brazil see Bondukí, Origens da habitação social.

96 In his master’s thesis, Rodrigo Lefèvre discusses in depth the potential of the encounter between the migrant and the technician – “técnicas de nível superior” – forming a new subjectivity. The thesis is a systematisation of the experiments produced in the previous decade, synthesised in the project of a “school-construction site,” where an architectural and political paradigm based on cooperation could be built. See Lefèvre, “Projeto de um acampamento de obra.” The term “school-construction site” will be used later by Erminia Maricato in an article dedicated to Lefèvre. Erminia Maricato, “Sobre Rodrigo Lefèvre,” Projeto, n. 100 (1987): 111-113.


98 Arantes, Arquitetura Nova, 84-85.

99 Ferro, “Flávio arquiteto,” 100.

100 Roberto Schwarz, “Posfácio,” in Arantes, Arquitetura Nova, 231.


102 A complete list of works is in Koury, Grupo Arquitetura Nova, 133-135.

103 It is worth mentioning that Arquitetura Nova built a series of public schools between 1966-1967 and designed an unbuilt proposal for social housing in 1968, each using the system of the vault. However, these projects are exceptional episodes within the trajectory of their work. Koury, Grupo Arquitetura Nova, 70.

104 For a concise history and thorough critique of the notion of the domestic see Pier Vittorio Aureli and Maria Shehrazade Giudici, “Familiar horror: towards a critique of domestic space,” Log 38 (2016): 105-129.

105 Single-family houses constitute the most conspicuous and relevant part of Arquitetura Nova’s architectural production. Among the 18 houses they designed between 1960 and 1977, 12 assumed the form of the vault. There is no unanimous consensus among the scholars on what should be included in the production of the group: after Sérgio Ferro was exiled to France in 1971, Rodrigo Lefèvre continued to experiment with the vault-house while working on large scale projects for Hidroeserviço and Flávio Imperio dedicate himself to art and set design. However the houses of the 1970s are clearly a development of a common trajectory.

106 The structure of the vault was initially made of standard straight hollow bricks and prefabricated beams. Disposed longitudinally on wooden moulds to form the curved surface, the array of beams was then finished with a layer of lightly reinforced concrete. In the latest projects Rodrigo Lefèvre further refined the construction technique by turning the original catenary into a second-degree parabolic curve and using transversal curved beams, a system that made the construction easier and more efficient. Koury, Grupo Arquitetura Nova, 74.

107 According to Walter Benjamin, in the montage, “the superimposed element disrupts the context in which it is inserted. […] The interruption of action, on account of which Brecht described his theatre as ‘epic’, constantly counteracts the illusion on the part of the audience […] Epic theatre therefore does not reproduce situations; rather it discovers them.” Walter Benjamin, “The Author as Producer” in Selected Writing, vol. 2, part 2, 1931-1934, Michael W. Jennings, Howard Eiland and Gary Smith ed. (Cambridge, Mass.: The Belknap Press of Harvard University, 1999), 778.


109 Ana Paula Koury, Grupo Arquitetura Nova, 89.

110 Ana Paula Koury, Grupo Arquitetura Nova, 85.

111 According to Sérgio Ferro, the house Imperió-Hamburger, designed by Flávio Imperio for his sister in 1966, has been the most complete and original contribution of the group, a “legisign”, a term borrowed by Charles Sanders Peirce, which can be understood as synonymous to an archetype. Sérgio Ferro, “Flávio arquiteto,” 100. Translation by the author.

112 Here I refer to the political autonomy of the gesture as theorised in Giorgio Agamben, Mentre senza fine. Note sulla politica (Torino: Bollati Boringhieri, 1996).

113 The issue is briefly touched upon in Pedro Fiori Arantes, Arquitetura Nova, 120-130.


116 This condition is, to certain extent, reminiscent of 17th century French garden design, where the absolute power of the sovereign could be expressed only in the separate realm of the garden, as an experiment in vitro of an order otherwise unattainable in the complexity of the urban. See Leonardo Benevolo, La cattura dell’infinito (Bari: Laterza, 1991). See also chapter 2.

117 In this respect, the case of the FAU is particularly interesting. The military coup of 1964 took place during the construction of the project, turning the isolated condition of the campus from a field of experimentation into a means to control the riotous university community. See Felipe de Araujo Contier, “O edifício da Faculdade,” 26-27. Translation by the author.

118 In the post-war decades Avenida Paulista will quickly turn from wealthy suburb characterised by luxurious urban villas to epicentre of the city with residential and office highrise. For an analysis of the relationship between Avenida paulista, the archetype of the palacete and the evolution of the avenue through the 20th century see chapter 2 of this thesis. For a visual and historical overview of the development of Avenida Paulista see Benedito Lima de Toledo, Album iconografico da Avenida Paulista (São Paulo: Editora Ex Libris - João Forges Engenharia, 1987).


121 Francisco de Assis Chateaubriand Bandeira de Mello, known as Chatô (1892-1968), journalist, lawyer and entrepreneur, has been one of the most important public figures in Brazil between 1940 and 1970. Chatô came from the north eastern state of Paraíba and established his business in São Paulo, quickly becoming the head of *Diários Associados*, the largest communication network in Brazil. Fernando Morais, Chatô. *O Rei do Brasil.* (São Paulo: Companhia das Letras, 1994).

122 Between 1900 and 1960 the city of São Paulo grew from 240,000 inhabitants to about 4 million and continued this trend of growth well into the 1980s. Census IBGE, accessible online at https://sidra.ibge.gov.br/tabela/1287#/t/n/35500/n/591/p/all/p/t/resultado.


124 On the architectural consequence of the relationship between Brazil and USA in this moment see Cavalcanti, “O bom vizinho constrói: arquitetos/acadêmicos brasileiros e produtos americanos,” *O Antigo e o Novo* (Salvador, October 1958). However the conception of the museum as a “Câmara de Comércio da África” or a “Câmara de Comércio de Árabe” or a “Câmara de Comércio de India” or a “Câmara de Comércio de Europa” or a “Câmara de Comércio de America” or a “Câmara de Comércio de America do Sul” or a “Câmara de Comércio de America do Norte” was not built.

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130 On the architectural consequence of the relationship between Brazil and USA in this moment see Cavalcanti, “O bom vizinho constrói: arquitetos/acadêmicos brasileiros e produtos americanos,” *O Antigo e o Novo* (Salvador, October 1958). However the conception of the museum as a “Câmara de Comércio da África” or a “Câmara de Comércio de Árabe” or a “Câmara de Comércio de India” or a “Câmara de Comércio de Europa” or a “Câmara de Comércio de America” or a “Câmara de Comércio de America do Sul” or a “Câmara de Comércio de America do Norte” was not built.


133 Beyond the media of the Diarios Associados, which included newspapers and the first Brazilian TV (TV Tupi), Lina and Pietro Bardi founded the museum Habitat in 1947, directed by Lina Bo Bardi, and the Instituto de Arte Contemporanea, a school of design which saw the contribution of crucial figures of the Brazilian modern scene, including architects like Rino Levi, Oswaldo Bratke and Eduardo Kneese de Melo ou artistas como Lasar Segall, Elizabeth Nobling and the landscape designer Roberto Burle Marx. See Renato Anelli “O Museu de Arte de São Paulo: o museu transparente e a dessacralização da arte”, *Vitrivius Arquitetos* (September 2009), https://vitrivius.com.br/revistas/read/ arquitetos/10.112/22.

134 Lina Bo Bardi had already experimented with the idea of a “didactic museum” in her exhibition designs for the first location of the MASP in the headquarters of Diários Associados during the 1950s. These initial ideas are synthesised in *O Antigo e não tupi* in *Crônicas de arte, de história, de costume, de cultura da vida. Arquitetura. Pintura. Musica. Artes Visuais*, Sunday supplement of *Diário de Notícias*, no. 5 (Salvador, October 1958). However the concept of the museum as a strategic space for the struggle of the uneducated masses was further developed after her encounter with Bahia, a state in the Northeast of Brazil, characterised by the strong presence of African descendants, by acute contrasts between the concentrated wealth and diffuse poverty, but also by an extraordinary cultural vitality. In Bahia Lina Bo Bardi accentuated her interest for the Brazilian popular culture while teaching “Theory of Architecture” at the University of Bahia from 1958 and directing the *Museu de Arte Moderna e Popular da Bahia* (MAMB) from 1959 to 1964: a post from which was dismissed after the military golpe of 1964. See Lina Bo Bardi, “Cinco anos entre os ‘brancos’,” *Mirante das Artes*, no. 6 (Nov-Dec, 1960), 1; Miottto and Nicolini, *Lina Bo Bardi*, 18-28; Zeuler Lima, *Lina Bo Bardi*, 81-91.
Presenting the project, Lina Bo Bardi explicitly states that “the São Paulo Art Museum was conceived as directed specifically at uninformed, unintellectual, unprepared masses.” Lina Bo Bardi, “Museu de Arte de São Paulo” in *Museu de Arte de São Paulo* (São Paulo: Instituto Lina Bo e P.M. Bardi - Editorial Blau, 1997), n.p. In a mainstream newspaper she further clarified that it was her intention to “destroy the aura that always surrounds the museum, presenting the artwork as labour, as a prophecy of a labour within reach for all.” Lina Bo Bardi, “Explicações sobre o Museu de Arte,” *O Estado de São Paulo*, April 5, 1970, 28. Translation by the author.

Undated draft for an unpublished article attributed to Lina Bo Bardi, 01.05.10.05. Instituto Lina e P.M. Bardi. Translation by the author: For an integral transcription of the draft, including corrections, see Costa, “MASP e a cidade,” 261-262.


Lina Bo Bardi’s design method is analogous to the one used by Berthold Brecht in his Epic Theatre, where canonical narrative and screenplay techniques are countered by deliberate moments of estrangement that aim at producing political awareness. Benjamin, “The Author as Producer,” 778; on the political meaning of Brecht’s method see Frederic Jameson, *Brecht and Method* (London - New York: Verso, 1998).

The legsibility of the structure is further emphasised by the red painting with the architecture of Mies van der Rohe see von Fischer, “The Concept of the Political” (Chicago: University of Chicago Press, 1996).


Lina Bo Bardi experimented with the sequence of portals of Miesian inspiration in *Museo di Arte di San Paolo*, a theoretical proposal for the for a museum published on the magazine *Habitat*, directed by Lina Bo Bardi herself, and part of the group *Diários Associados*. Lina Bo Bardi, “Balanços e Perspectivas museográficas: Um Museu de Arte di São Vicente,” *Habitat*, no. 8 (Sept. 1952). For the relationship of the project with the architecture of Mies van der Rohe see von Fischer, “The Horizons of Lina Bo Bardi,” 103-116.

The double internal beams support both the floor of the pinacoteca, the glazed enclosures but also the lowest floor plate, that is literally suspended above the ground by two lines of steel cables. See Bo Bardi, “O Novo Trianon,” 24.


Project

1. The most updated data are based on projections from the Instituto Brasileiro de Geografia e Estatística (IBGE), since the last official Brazilian census is from 2010. Source: IBGE Projeção da população, https://www.ibge.gov.br/apps/populacao/projecao/index.html.


3. Luiz Inácio “Lula” da Silva became President after three failed attempts in 1988, 1994 and 1998, a period in which the PT kept growing, gaining consensus and stimulating an intense national and international debate that was unprecedented for Brazil. An account on the effervescent atmosphere of hope and optimism of that period can be found in Félix Guattari and Suely Bohnik, Molecular revolution in Brazil (Cambridge: MIT Press, 2007).

4. The most complete and penetrating analyses of the political evolution of the PT has been developed by the Brazilian journalist and political scientist André Singer, founder member of the PT in São Paulo and Lula’s press secretary in his first mandate. André Singer, Os Sentidos do Lulismo. Reforma gradual e pacto conservador (São Paulo: Companhia das Letras, 2012); As Contradições do Lulismo. A que ponto chegamos? (São Paulo: Boitempo Editorial, 2015).

5. For an account in English of the last decades see Perry Anderson, Brazil Agrarian (London: Verso, 2019).

6. A critical reading from the left of Brazilian reformism can be found in Francisco de Oliveira, O ornitórrino (São Paulo: Boitempo, 2003); Paulo Arantes, Extinção (São Paulo: Boitempo, 2007); Leda Paulani, Brasil delivery, (São Paulo: Boitempo, 2007).


10. The idea of “primitive accumulation” was theorised by Karl Marx to explain the violent process at the origin of the formation of capital, which implies the appropriation of land and expropriation of the population. See Ariovaldo Umbelino de Oliveira, O cativeiro da Terra: Verso e Reverso (Campinas: Papel Social, 2016); Teresa Sacchet, Mis Amorim, (2009). On the philosophical and political implication of self-subsistence are discussed in Boaventura de Sousa Santos, Produzir para viver: os desafios da vida econômica, (Porto: Ed. Afromontado, 2004).

11. For a concise history of familiar agriculture in Brazil see Zender Navarro, “A Agricultura Familiar no Brasil: entre a política e as transformações da vida econômica,” in A Agricultura brasileira, 185-210. The notion of “Family Farming” was introduced in the legal context of Brazil in 1995, with the institution of the Programa Nacional de Fortalecimento da Agricultura Familiar (PRONAF), a program providing access to public funding for small scale producers. The program increased substantially from 2003 under the PT government while, since 2015, funds have been systematically cut. See José Miguel Pretto and Carlos Henrique Horn, “Uma avaliação do PRONAF no período 1995–2018” Colóquio vol.17, n. 1 (2020).


13. The idea of “primitive accumulation” was theorised by Karl Marx to explain the violent process at the origin of the formation of capital, which implies the appropriation of land and expropriation of the population. See Ariovaldo Umbelino de Oliveira, O cativeiro da Terra: Verso e Reverso (Campinas: Papel Social, 2016); Teresa Sacchet, Mis Amorim, (2009). On the philosophical and political implication of self-subsistence are discussed in Boaventura de Sousa Santos, Produzir para viver: os desafios da vida econômica, (Porto: Ed. Afromontado, 2004).


16. A critical account of the practice of architecture in the context of the program MCMV Entidades is offered by João Marcos de Almeida Lopes, professor of the EESC USP and founder of Usina CTAH, a collective that has been providing technical assistance to social movements for the housing rights since the 1990s. See João Marcos de Almeida Lopes, “Back of the City. The Landless and the Conception of Another City” in Another production is possible: Beyond the capitalist canon, ed. Boaventura de Sousa Santos (London: Verso, 2007); “Nós, os arquitetos dos sem-teto,” Revista Brasileira de Estudos Urbanos e Regionais, v.20, n.02 (May 2018): 237-253.

17. According to various research about 50% of the housing in major Brazilian cities has been built illegally, in complete or partial violation of the regulation. See Erminia Maricato, Brasil, cidades (São Paulo: Vozes, 2001).

18. For example, the beach in Rio de Janeiro, all along celebrated as the place of a “naked pacification,” is more often becoming the space of arrastões – mass violence and robberies of local gangs descending from the favelas to directly reclaim their share of wealth. As a counterpart the “military pacification” of the favelas became the privileged instrument for speculative projects through the relocation of large parts of the population. See Neiva Vieira da Cunha and Marco Antonio da Silva Mello, “Novos conflitos na cidade: A UPP e o processo de urbanização na favela,” Dilemas. Revista de Estudos de Conflito e Controle Social, vol. 4 (2011): 371-401; Ignacio Cano, Doriam Borges and Eduardo Ribeiro, Os donos do morro: uma avaliação exploratória do impacto das Unidades de Polícia Pacificadora (UPP)s no Rio de Janeiro (Rio de Janeiro, Heinrich Boll Stiftung, 2012).


22 For a reconstruction of the history of the Asylo Colônia Santo Ângelo see Marilene Moreira Feliciano, "Resgate histórico do leprosário Asylo Colônia Santo Ângelo" (Master diss., PUC-SP, 2008).


25 Interview of the author with Ivo, director of the cooperative APROJUR, November 2017.

26 Interview of the author with the architect Célio Teófilo of the municipality of Mogi das Cruzes, November 2017.
Introduction

0.1 Instituto Lina e Pietro Maria Bardi.

0.2 São Paulo, Urbanisation. Photo by the author.

0.4 'Plate 20, Ensemble d’édifices, résultats de divisions du carré, du parallélogramme et de leurs combinaisons avec le cercle,' in Jean-Nicolas-Louis Durand, Précis des leçons d’architecture données à l’École Royale Polytechnique, vol 1 (Paris, the Author, 1802).

0.5 Saverio Muratori, Studi per una operante storia urbana di Venezia. Roma: Istituto poligrafico dello Stato, 1959.

0.6 Casabella 278 (1963), 48

0.7 Instituto Tomi Otake.

0.8 Cloves de Magalhaes, “Novo Distrito Federal, Brasilia.” Acropole 256 (February 1960), 123.

Chapter 1

1.1 Arquivo Publico do Distrito Federal.


1.4 Drawing by the author based on La Nuova Topografia di Roma by Giambattista Nolli, 1748

1.5 Drawing by the author.


1.9 Drawing by the author.
Chapter 2


2.2 Drawing by the author.


2.4 Photo: Vincenzo Pastore. Istituto Moreira Salles.

2.5 Maria Cecília Naclério Homem, O palacete paulistano e outras formas urbanas de morar da elite cafeeira, 1867-1918 (São Paulo: M. Fontes, 1996).

2.6 Drawing by the author.


2.8-2.9 Drawing by the author.

2.10 Nicolas Sanson d’Abbeville, “Carté géographique des postes qui traversent la France” (Paris: Par Melchior Tavernier, 1632), available online at https://gallica.bnf.fr/ark:/12148/btv1b8490759k.

2.11 Drawing by the author.


2.14-2.15 Drawing by the author.


2.18 Avenida Afonso Pena, 1930s. Arquivo Público Cidade Belo Horizonte.


2.20 Avenida 9 de Julho (1940s ca.). Acervo Washington Lush, São Paulo.

2.21 Francisco Prestes Maia, Introdução ao estudo de um plano de avenidas para a cidade de São Paulo. (São Paulo, Melhoramentos, 1930), 52.


2.27 Drawing by the author. Maria Cecília Naclério Homem, O palacete paulistano e outras formas urbanas de morar da elite cafeeira, 1867-1918 (São Paulo: M. Fontes, 1996).


Chapter 3

3.1 Photo: Milton Guran.

3.2 Fazenda Colubandê Philip Goodwin, Brazil Builds: Architecture New and Old, 1652-1942 (New York: Museum of Modern Art, 1943), 35

3.3 Mario Fantenelle, Trilhas fundamentais. Lúcio Costa, Registro de uma vivência (São Paulo: Empresa in das artes, 1995), 281

3.4 Photo: Markus Lanz
Andres Lepik and Vera Simone Bader, eds., Lina Bo Bardi 100 (Ostfildern: Hatje Cantz, 2014), 250.

3.5 Drawing by the author.


3.8 Photo: Julieta Sobral.
Lúcio Costa, Registro de uma vivência (São Paulo: Empresa in das artes, 1995), 121.

3.9-3-11 Drawings by the author.


3.13-3.14 Drawings by the author.

3.15 Marcelo Carvalho Ferraz and Nabil Bonduki, Affonso Eduardo Reidy (Lisboa: Editorial Blau, 2000), 60

3.16 Drawings by the author.


3.18-3.20 Drawings and images of the author.

3.21 João Batista Vilanova Artigas Archive, FAU-USP.

3.22-2.24 Drawings by the author.

3.25 Photo: Raul Garcês.
João Batista Vilanova Artiga Archive, FAU-USP.

3.26-3.28 Drawings by the author.

3.29 Rodrigo Lefèvre Archive, FAU-USP.

3.30-3.32 Drawings by the author.

3.36-3.40 Rodrigo Lefèvre Archive, FAU-USP.

3.42-3.51 Drawings by the author.

Photo: Nelson Kohn.
Olivia de Oliveira, Lina Bo Bardi: Obra Construída (Barcelona: Gili, 2010), 63.

3.52 Photo: Paolo Gasparini.
Instituto Lina Bo e P.M. Bardi.

Project


5.2 Self constructed rural house in the area of the Chacara Santo Ângelo. Photo of the author.

5.3 Intense cultivation of vegetables in the productive area of the Chacara Santo Ângelo. Photo of the author.

5.4-20 Drawings and images of the author.
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Chapter 1


Albernaz, Luis Teixeira. “Todas as fortificações que se mostraraõ no lugar do Recife até a Villa de Olinda e ainda adiante até o Rio tapado de trincheiras Redutos e Plataformas que se estendem pormaes de huã legoa de terra se fezerao por mandado e Ordem do Governador Geral Mathias de Albuquerque na ocasião em que os holandeses tomarao a Bahia, ca. 1626.” In Livro que dá Razão do Estado do Brasil, Instituto Histórico e Geográfico Brasileiro, Rio de Janeiro.


Noelli, Francisco Silva. “Sem Tekohá nao ha tekó: em busca de um modelo etnoarqueológico da aldeia e da subsistência Guarani e sua aplicação à uma área de domínio no Delta do Rio Jacuí” (Master diss., IFCH - PUC RS, 1993);


Boyceau, Jacque. *Traité du jardinage*, 1638


**Chapter 3**


Ferraz, Geraldo. “Uma cidade universitária no Brasil: CUASO.” Zodiac, no. 11 (1963)

Ferraz, Marcelo Carvalho, org. Lina Bo Bardi. São Paulo, Instituto Lina Bo e P.M. Bardi, 1993.


Furtado, Celso. O mito do desenvolvimento econômico (Rio de Janeiro, Paz e terra, 1974).


Giudici, Maria S. “The Street as a project. The Space of the City and the Construction of the Modern Subject.” PhD diss., Delft University of Technology, 2014.


Fix, Mariana and Pedro Fiori Arantes. “Como o governo Lula pretende resolver o problema da habitação”, *Brasil de fato* (July 2009).


