# HISTORY OF SPACE AND SPACE OF HISTORY: role played by history in architectural design and teaching process





## Camilo Vladimir de Lima Amaral

Project and City Postgraduate Program, Faculty of Visual Arts, Federal University of Goiás, Goiânia, GO, Brazil.

camilovla@ufg.br





# 孰 Adriana Mara Vaz de Oliveira

Project and City Postgraduate Program, Faculty of Visual Arts, Federal University of Goiás, Goiânia, GO, Brazil.

amvoliveira@ufg.br

### Abstract

Integrating the content of architecture history classes to design practice has been a major challenge to architecture courses and, overall, it is not even the subject of discussion. Topics such as history and design addressed in the daily practice of architecture courses remain comfortably confined and disciplined in their premises, disconnected from each other, and separating historical reflection from design process. A few questions arise as goals to be pursued in this article: Why should architects study history? How can they use this theoretical knowledge in their practice? What attitude should be expected from designers towards history? The current study explores a proposition to integrate disciplinary fields such as history and architectural design, by using the epistemological reflection about the meaning and historicity of the concept of history, and its application in design processes. Furthermore, we analyze student design exercises aimed at dialoguing with history. This experience has shown that linking teaching and research can help building new perspectives on classical architectural topic, as well as pointed the way for further studies. Integrating these disciplines has also evidenced likely innovations to be added to architectural knowledge and production, based on a rare reflection about the architectural field that systematically and thoughtlessly repeats models built for different historical contexts.

Keywords: teaching, architectural design, history, disciplinary field, daily practice, didactic experiences.



# INTRODUCTION

The term 'discipline' has more than one origin; thus, its sense and meaning have changed throughout history. As a Latin term, it derives from the Greek word mathema (study, science, knowledge), which refers to a given science seen as object of learning or teaching (BRANDÃO, 2009, p.29). On the other hand, according to Fagundes and Burnham (2001, p. 41), this term was initially used to indicate disciples of a certain teacher or school; however, over time, it started to designate the act of learning, of following a given doctrine, until it referred to teaching-learning, in general. The idea of discipline corresponds to knowledge institutionalization- through universities - and to teaching organization ruled by coherence criteria (typical to the rational and positive logic) in a set of statements and contents referring (each) to a certain part of the scientific content to be transmitted.

On the one hand, it is interesting noting that university is an institution born from medieval corporations, which were the origins of the role of controlling and organizing work, as well as of defining attributions, training processes and those who are qualified to perform a certain activity. It is done by defending the monopoly of the aforementioned activity based on its own interest (COÊLHO, 2005). Thus, university subjects students to a process aimed at rectifying their thoughts and at controlling their activities. Such a fact is also a form of maintenance and hierarchy process, according to which, masters are always in control of how students act.

Nowadays, this attitude remains in place as control and power maintenance strategy. New ways of controlling the alterity of thought were implemented, even throughout modern society's formation, when the old rules of tradition were broken. Thus, modern rationality recreates the form of organizing and dividing work in order to make it more efficient and controlled, while it intensifies the process to rule out the plurality of views and the autonomy of students in the construction of an increasingly instrumental knowledge. Such an organization is seen in the control and manipulation of relationships and in exchanges between masters and students. It is done through an action implicit to the knowledge system itself, according to which, individuals embody the oppressor of their own freedom and act under rules of conduct and principles of truth that work as previously digested "straitjacket" (FOUCAULT, 2005).

The specific disciplinary corpus of Architecture, in its turn, is shaped by Renaissance treatises. According to Brandão (2009, p.30), "by giving an intellectual and scientific dimension to Architecture, the theory unfolds as criticism, as history and as an established and universal body of knowledge to shape, criticize, parameterize, give meaning and serve as alterity for empirical practice, and vice versa". On the one hand, this procedure has distanced discipline from official and technical procedures carried out by corporations in the Middle Age; it was done by abandoning the thought from old disciplinary systems. On the other hand, it brought us closer to the reality of



courts of princes (from Machiavelli's time), which shaped other regulation and hierarchy systems that, over the years, gave rise to the one-dimensional (MARCUSE, 1967), instrumental (ADORNO and HORKHEIMER, 1996), abyssal (SANTOS, 2007) and terrorist (LEFEBVRE, 1991) reasons that are so real nowadays.

Disciplines such as "architectural history" and "architectural design" have turned into real minefields within this (historical) heritage, since they keep their borders guarded and controlled, while each party fights to defend its territory. Therefore, nowadays, it is necessary reintegrating these knowledge types by exploring the creative potential brought by history to design processes. In order to do so, it is necessary breaking the boundaries of these disciplines to turn their disciplinary traits into a critical autopoiesis process.

### THE HISTORY OF HISTORY

Traveling the paths of history does not mean acclaiming it, because by realizing the historicity of the very concept of "history" (FOUCAULT, 2005, p. 271), one can understand the different roles played by it in the construction of human knowledge and destiny. Furthermore, History, in its multiple perspectives, encompasses a little part of every individual, mainly when memory becomes the object of historical knowledge.

It was not by chance that History was consolidated throughout the 19th century as the "Mother Science", due to the development of the modern era, when fast changes, as well as the flow of successive ideas and social forms, highlighted its "grandiosity as great science" (LEFEBVRE, 1971, p. 17). From Hegel to Braudel, this knowledge was what made sense of the vertigo caused by the process to replace tradition. Therefore, History - as representation of change – has invaded several science fields: from the history of philosophy of science to the history of religions, from the history of the evolution of species to the history of the universe. Building these histories was, at the time, the main way of interfering in reality, understanding its truths and proposing alternatives. However, history no longer enjoys this grandiosity; we live its "great disappointment", the "revolution did not bring freedom, but other forms of oppression" (LEFEBVRE, 1971: 229-230). It is necessary rethinking the history of history, as well as its use and methodologies, in order to build a new role for it to play in the contemporary world.

The philosophy of history was born from Voltaire, from "a small number of invariable principles' that gave history a certain unity" and, similar to the Newtonian world, it was possible understanding how men lived "in a static world of eternal laws and perfect models" that generated a general sense to the empire of custom, as vast as that of appearances of nature (BAUMER, 1990, p. 175, 176). However, Voltaire's procedure was already an expansion of the ethnocentric ideas of history, since it was a "new kind of universal history [...] with chapters about China, India, America, among others." (BAUMER, 1990, p. 182).



Thus, history was built by considering other societies an evolution apart from the European one, but its meaning was cannibalized by its core perspective:

> A 'causal' history, rational connection and objective knowledge of historical causes, science having as object facts linked according to laws and constituting well-defined series, it was never more than a caricature of history: a social physics (having the 18th-century physics as model, as it happened at the time of Saint-Simon). This bastardized concept, which claimed to be objective, allowed historians to weave history, to choose the plot and thread, to select the causal series based on their ideology and taste, in other words, on their subjectivity. Hence the [...] oscillation between positivism and subjectivism. (LEFEBVRE, 1971, p. 185)

The definitive ascent of history took place through the resumption of Hegel's dialectic, which enabled giving meaning to the contradictory movement of successive human ideas and values. Marx's subsequent contribution lied on the inclusion of factual situations in different perceptions of history; on the quest to extend history and the construction of truth in the world of praxis; on understanding the historicity of social structures (concepts and relationships); on the association between Sociology and Economics; on understanding the internal tensions driving social systems; and on the idea of history as instrument to help building a better future for men (HOBSBAWN, 1998).

It was the sense based on which Jacques Rancière (1994) defended the inseparability among (historical) discourse, politics and ethics. In his book "Names of History: On the Poetics of Knowledge", he starts to build the understanding that there are different forms of history and that they are all associated with ethical intentions and with a way of conceiving and imagining the past and the future of man. Therefore, he considers replacing the "Chronicle of the Kings" by a history moved by the masses, which was widespread by Marx (1852) and developed by the "Annales school" (from Lucien Febvre and Fernand Braudel to Michel Foucault and Jacques Le Goff) as turning point in the way to understand the unfolding of human facts.

Even before the 20th century, Romantic Historiography included everyday life in the construction of facts, but it did so by basing its contents on its spokespersons. revolutionaries and leaders (illiterate / literate), or - similar to classical historiography - it made characters of the people speak through its language (the erudite language), which was the only one with the right to the truth. According to Rancière (1994), at first, historiography disqualifies the other voices, as lacking the knowledge of the order, as devoid of the truth of facts behind foolish appearances, as acting as agents blind to their own virtue, rather than as engines of history. Therefore, the New History would be the inversion of the relationship between appearance (insignificant commonplace facts) and historical truth (what moves it). Rancière suggests the figure of the Ocean as metaphor for history: on the surface, turbulent waves move and turn the water from



agitated into calm (mobility is the apparent movement), whereas calm reigns at the depth, submerged in the status quo.

Thus, the Annales School's endeavor is not simply to give voice to those who are excluded from scholarly circles, but also to place them as movement capable of destroying the established hierarchy and expanding the political space, i.e., of instituting new spaces where the voices of different representatives of a given historical time can be heard and generate meaning for the world we live in. According to these authors, making history would lies on bringing back to life the words of those who are no longer in this world, on bringing to light their founding acts, which continuously rebuild the lived space.

The concept of these new engines of history is mainly important for two aspects of the contemporary world, namely: there is a movement towards playing-up the capital leaving the production sphere (the factory floor) and moving towards the reproduction scope (accumulation takes place and increasingly depends on targeting and boosting consumption) (LEFEBVRE, 1991); and it is possible enabling a dialectical movement of reality (which Lefebvre called the dialectic of the triad), which starts from the so-called "particularisms" (movements linked to particular issues, such as race, gender, ethnicity, environment, housing and, in the past, factory work conditions) and extends to a "universalist" degree of abstraction, an "infinite in the finite", where the struggle of the few can be seen as the "salvation of the many" (see Harvey, 2000), each one of them contributes, in its own way, to the global movement (understood in a multidimensionality) of reality.

These new forms of historiographical constructions that have emerged in the 20th century, and have deepened since then (cf. GRAMSCI, s.d.; SINGER, 1998; ESCOBAR, 2004; SANTOS, 2007), enable building different perspectives by expanding the plurality of those that are heard. The history of everyday life, and the history of women, children, among others, enable approaches to other disciplines such as Architecture.

### THE SPACE IN HISTORY

Authors such as David Harvey, Edward Soja and Manuel Castells have transformed history by being inspired by Einstein's theory of relativity. After all, if Physics proposes the inseparability between time and space, how could we understand social and cultural changes in time, without reflecting about their implications in space?

Accordingly, Soja has suggested a historical-geographic materialism (with many references to Foucault and Lefebvre) not only aimed at meeting a positivist demand (better describes the world), but also at giving a new theoretical and practical "sense" to



the world's transformation by including space as agent capable of building differences, power hierarchies and social movement-related causalities.

Thus, according to Soja (1993), Foucault took an irreversible step with his theory of "heterotopias", based on a critical reorientation that has enabled "opening history to interpretive geography". Still, according to Soja, Foucault's book "The History of Madness in the Classical Age" has shown that his genealogy is a spatialized history. Thus, Foucault does not eliminate history, he tries to reframe it:

> The good historian, the genealogist, will know what to think of all this masquerade. Not at all that he refuses it in a spirit of seriousness; on the contrary, he wants to take it to the extreme: he wants to stage a great carnival of the time when masks ceaselessly return. [...] Genealogy is history as an orchestrated carnival. (FOUCAULT 2005, p. 278)

Foucault is aware that the appearances of what we understand as reality and change are versions of reality, they are objects created by the thoughts of different subjects to understand and interfere in the world. Thus, one can understand space and, consequently, architecture as a carnival of 'visualities', a carnival of temporalities inscribed in the human habitat; architects should excavate these spaces to understand their conformation, just like Walter Benjamin, in his task to brush History against the grain, described history as the rediscovery of old utopias buried by ruling classes.

### THE SPACE OF HISTORY

Foucault's (2005: 261-262) proposal is to reject the "meta-historical deployment of ideal significations and indefinite teleologies. It opposes itself to the search for 'origins'", whose main exponents were Enlightenment intellectuals, such as Voltaire and Hegel, who take laws as axioms and who pursue a single truth in an absolute essence. Where could this origin, this fundamental fact that historians are looking for, be placed? According to Foucault, "simply in an invention (Erfindung), in a magic trick, in an artifice (Kunststück)". Foucault explores Nietzsche's teaching, according to which, things do "not have essence", they are just "an invention".

This sense enables us to understand architectural spaces not as a given reality or a positive fact, but as a succession of inventions that require reflecting on their formation over time in order to be understood.

Thus, genealogy emerges as an instrument capable of investigating the emergence and invention of architecture, piece by piece, as we see it as "real". It is necessary tracing its "innumerable beginnings", where "the analysis of provenance allows dissociating the Self and make a thousand of now-lost events swarm in the places and corners of its empty synthesis." This provenance would not be a solid and closed inheritance, but "a set of flaws, fissures, heterogeneous strata that make it unstable" and find their "inscription surface" in the body. Therefore, the real becomes real "in the body articulation with history" (FOUCAULT, 2005: 265-267).



However, Ranciére (1994) has a somewhat broader view of the "hierarchy of descent" and attacks genealogy. According to the genealogical scheme, evolution is always a reduction that comes from the diversity of origins and reaches a certain point, namely: the firstborn. Thus, there is a certain subordination to the past, since it reduces the current construction to ascendancy, to the subordination of one's child to its lineage.

Rancière's "poetics of knowledge" differs from Foucault's genealogy because, instead of always submitting to knowledge, it takes "ownership" of it, like an "opening": descendants take ownership of their parents' inheritance, although in a free manner, by recreating it. Thus, architects have a non-hierarchical relationship with knowledge, they must use it, recreate it, emancipate themselves from its absolute truths, play with them and brush their inheritance against the grain.

# THE PLACE OF HISTORY

According to Rancière (1994), conservative history - which aims at legitimizing the status quo - would be linked to historical concerns, since it focuses on accurately describing relationships and conflicts within the "nobility" field by taking "official documents" and their accurate dating as object of study. Thus, the historical process' core was built on the shoulders of great historical characters, whereas the real life of society was excluded from the legitimate space of historical making (as if social reality did not have a qualified voice to interfere in the chain of facts).

Accordingly, most efforts undertaken in the historiography of architecture nowadays have the disadvantage of consolidating and stemming the practice, building genius myths to certain architects, building spaces for the nobility of the architectural court, ranking the production deriving from the great centers of power as legitimate and authentic, as well as disqualifying the peripheral production that, in its own way, reflects a solid and true social condition as inferior and anachronistic.

Furthermore, the space of history in Architecture schools can no longer be treated as space for propagating subservience to external models, as advocated by Boaventura Sousa Santos (2001, p. 187-233), or even by Ermínia Maricato, in her critique to misplaced ideas. However, it is important having the courage to expand such a critique in the sense undertaken by Francisco de Oliveira, in his critique to a dualistic reason, since intellectual colonization does not only take place based on external ideas, but it is also based on the submission process taking place inside the country itself. According to such a submission process, what is produced in the capitals is imposed on others as the truth (even stories about the countryside essentially present the architecture of characters coming from large cities).



# THE PLACE OF HISTORY IN THE PROJECT: DIGGING THE PAST TO **BUID THE FUTURE**

The herein advocated strategies focus on replacing the fragmentary scientificity produced by disciplinary knowledge and the "prospective" (LEFEBVRE, 1999, p. 63) formed by the linear perception of history, which starts from the extrapolation of data about the present and implies the construction of a new way of thinking about history, through the process called "transduction" (1999, p. 152). In order to do so, it is necessary changing traditional intellectual instruments:

> Transduction. This is an intellectual operation that can be methodically carried out and that differs from classical induction, deduction and the construction of 'models', simulation, as well as the simple statement of hypothesis. Transduction elaborates and constructs a theoretical object, a possible object from information related to reality and a problematic posed by this reality. Transduction assumes an incessant feedback between the conceptual framework used and empirical observations. Its theory (methodology) gives shape to certain spontaneous operations of the planner, the architect, the sociologist, the politician and the philosopher. It introduces rigor in invention and knowledge in utopia. (LEFEBVRE, 2001, p.108)

If history itself is the succession of human inventions engraved in space, thinking about the future means formulating new ideas for social reality, building spaces of hope and solid utopias for the world, whereas the role played by architects, as the ones who conceive the space to be lived, acquires a new and reinvigorated social aspect.

Boaventura Souza Santos (2006), in his book "A Gramática do Tempo" [The grammar of time], fights against the idea of an infinite future and suggests "expanding the present and contracting the future". It would mean exchanging the infinite future (empty and absolute) "by a solid future of realistic utopias", which manifests itself in an expanding present (in fact, the present when one's entire life takes place, although it becomes extremely ephemeral and temporary in modern times), in a present that does not create hierarchy between backward and advanced, but that is formed by different temporalities, which are all contemporary and qualified. Since turning them into "present means being considered alternatives to hegemonic experiences, their credibility can be discussed and assessed on a reasoned basis" (SANTOS, 2006, p. 104). Establishing that certain synchronic societies are not contemporary is a form of domination, since "it hides a hierarchy, i.e., the superiority of those who establish the time determining contemporaneity." (SANTOS, 2006, p. 100).

Therefore, it is necessary understanding the present time of architecture as a thick field comprising multiple temporalities; thus, in order to be recreated, it must be excavated, turned over, distorted and, finally, transformed. Thus, understanding all these social temporalities as contemporary is a form of including the "other" based on a new idea of time, on a non-linear way of seeing both the flow and change that add a more open and democratic essence to it.



### HISTORY OF ARCHITECTURE IN REGRESSIVE-PROGRESSIVE TOPICS

According to Lefebvre, History is deeply changed by the inclusion of space in the reasoning about time, since it starts to present multiple temporalities. According to José S. Martins (1996), these temporalities refer to contradictions from the past, which manifest themselves in the present: they would be formed by the entire historical burden of conflicts that remain as residues and germs; thus, it is necessary using a regressive-progressive method to unveil their origins, meanings and potential.

In the stories produced by Lefebvre (MARTINS, 1996, p. 20-21), notably in his study about the Campan Valley, he shows how the unresolved conflicts of the past present themselves nowadays as superimposed contradictions that give a plural and dynamic movement to history and, likewise, multiple possibilities of emancipation can simultaneously appear as virtualities. This regressive-progressive method comprises three movements: the first one is the "horizontal" movement, which consists in describing what is visible (based on theory and information) by presenting each social relationship, yet without time; the second one is the "vertical" movement, which comprises a regressive analysis in time, in order to decompose reality and date each social relationship and cultural data understood by the present as remnants of specific times; and the last movement is the reunion with the present, whose contradictions are clarified: "The return to the phenomenal surface of social reality elucidates what is perceived by what was theoretically conceived and defines the contradictions and possibilities of what was lived" (MARTINS, 1996, p. 22). Thus, Lefebvre (1971, p. 271) proposes the overcoming of history, which would lead to a "differential history" formed by other categories (now "transhistorical"), such as: trajectory-project, discourse-path, possible -impossible and difference-transparency.

Thus, contradictions are not reduced to clashes of interests between classes, they are also a mismatch of times and possibilities. After all, it is also necessary historicizing the problem of classes as a fact, which was fundamentally important in the 19th century, although it is not the necessary and universal contradiction of social systems, not even in Marx's theory. According to Hobsbawn (1998, p. 166, 168 and 316), "social relationships of production are fundamental, whereas contradictions internal to the systems of which class conflict is merely a special case" are secondary in Marx's analysis of the ancient Roman society-destructuring process.

The aims of disciplines focused on the history of architecture must be to help better understanding the trajectory of architecture over time and to develop individuals' ability to understand it as cultural-historical product. These aims were tested in the discipline 'History of Architecture I' - which is part of the Professional Knowledge Core of the Architecture and Urban Planning course at Federal University of Goiás - in the second semester, during 4-hour meetings held on a weekly basis (64 hours, in total). This



discipline is part of a sequence of three disciplines; it is preceded by two introductions to architecture and followed by several theoretical disciplines.

The initial proposal of the course is to familiarize students with the conceptual and factual contents of the topic (the horizontal movement on the reality of the topic), based on interactive-expository classes, seminars and discussions about referenced texts. Next, other historical content-motivational mechanisms are encouraged by investing in assignments engaged in content integration strategies: the production of papers about classical heritage in contemporary architecture and an in-depth study about referential works based on the production of mockups.

The format of the first assignment aims at integrating representation and computing disciplines by using the investigated means of visual expression. In addition, such a format avoids the unreflective use of information (that is nowadays easily accessible and plagiarized via internet), since the presentation in a folder limits the number of words and requires students to have synthesis and reflection skills.

The presentation of papers resulting from this first strategy, which is taught in a discipline focused on addressing the 16th and 17th centuries, aims at exploring (trans) historical topics (such as classic, anti-classical, persuasion, among others) in their relationship with a given architectural topic (balance, geometry, tension, vaporous, veil, among others) in order to draw parallels between the production of contemporary architects and historical architecture.

Thus, it breaks with the old precepts of linear history and encourages students to build a bridge between the historical content of the discipline and the architectural production, nowadays. This process enables them to understand how contemporary architects are influenced and inspired by, and even submerged in, the architectural production of the past, by clarifying that architectural procedures are based on the long-run. Furthermore, they enable students to critically analyze the contemporary architectural language, to understand it as historical construct, as well as to identify the elements that were gradually built by the solid action of architects, such as their future selves. This factor demystifies the current state of the art and allows them to interfere in this process.

With respect to the other strategy, producing mockups enables the in-depth analysis of constituent elements of a relevant architectural work in the investigated period. Such a process aims at covering the historical content through an intuitive and direct representation by offering students the opportunity to build an idiosyncratic relationship with historical architecture. It helps them to critically analyze and understand the details of the work, so they can build their own understanding and influence their professional performance (just as architects who were investigated in the previous assignment did).



Based on the mockup production process, students learn how to search for information about the representation of the work; they also learn the concepts of scale and volume planning, as well as how to use different prototype manufacturing techniques. Moreover, they deepen the study about a specific object and break away from the old disciplinary fields. Finally, students must deliver a report comprising the analysis and critique of the work, considerations on the teachings and value of the investigated work for contemporary times, as well as sketches and formal layouts interpreting contents observed in architectural designs.

Similar strategies can be used in the design discipline, for example, in the case of a proposal dealing with two project topics, namely: housing and trading.

### **HISTORY OF ARCHITECTURE IN THE DESIGN PROCESS**

The discipline 'Architectural Design III' is part of the Professional Knowledge Core of the Architecture and Urbanism course discipline matrix at Federal University of Goiás; it is taught in the fifth semester, based on 2 four-hour meetings held on a weekly basis (128 hours, in total). Architectural Design III is part of a sequence of architectural design disciplines; it is preceded by Design I and II, which address formal and functional issues, respectively. The emphasis on the referred issues does not exclude the global view of the act of designing.

In addition to these disciplines, students have already attended Introduction to Architecture I and II, History of Architecture I, II and III, Comfort I, Structural Systems I, Landscaping, Topography, Culture, City and Architecture, Computing Applied to Architecture and Urbanism I, II and III, and all disciplines belonging to the Foundational Knowledge Core. In the fifth semester, students attend Design III along with Environmental Comfort II, Architecture in the 21st Century, Interior Design, and Introduction to Urbanism and Structural Systems II.

This discipline has the following menu:

Design exercise(s) focused on promoting the understanding and mastery of relationships among program, site, built and/or natural environment, and the composition of the typical architectural space and its equipment. Study of functional, formal, conceptual and methodological issues in the organization and construction of architectural space and its components. Critical-comparative discussion about solutions developed by students. Medium-complexity design topics, with emphasis on typological exploration, as well as on its historical evolution and association with urban morphology (FROTA et alii, 2009, s/p).

The overall aim of this menu is to "develop a methodological and procedural basis for architectural design, with emphasis on the association between architecture



and urban design, by articulating them with typological, historical, urban morphology, plastic, technical, constructive and contextual issues" (OLIVEIRA, AMARAL, 2010, p.1).

In order to achieve this aim, the content was elaborated based on the selection of following design exercise topics: a single-family residence and a place for trade and service provision.

With respect to the topic 'housing', students were invited to explore the house by taking into consideration its history, by understanding it as an artifact constituted over time, by identifying, in the Brazilian case, different cultural contributions to its construction, and by acknowledging the miscegenation of cultures in the relationship between society and object. In addition, based on the concept of type, students investigated the construction and transformation of ways of dwelling, and their specificities in different countries (by exploring studies by Colquhoun, Rossi, Martinez, Argan and Tramontano). This historical knowledge enables students to build a critical understanding about contemporary housing production, by unraveling the origin of its models and types, rescuing solutions, transforming typologies, and proposing new ways of inhabiting.

The first stage of the exercise comprised readings conducive to theoretical reflection, which were aimed at the design exercise and carried out in groups of up to four students. The discussion about typology started from texts such as "On the Typology of Architecture" by Giulio Carlo Argan, "The Architecture of the City" by Aldo Rossi, "The Architectural Project" by Afonso Corona Martinez, and "Proyecto y Análisis" [Design and Analysis] by Bernard Leupen. The discussion about urban morphology was based on the text by Jose Resisha G. Lamas, whereas that about Brazilian residential and trading spaces was based on "História da Casa Brasileira" [History of the Brazilian House] by Carlos Lemos, "A Dimensão da Arquitetura" [The Symbolic Dimension of Architecture] by Cláudia Vial Ribeiro and "Matéria, Idéia e Forma" [Matter, Idea and Shape] by Elvan Silva.

After these readings of general scope, similar texts were analyzed for the housing project. Still, in groups, students selected a vernacular house, another one designed by a Brazilian architect and a third one designed by a foreign architect to analyze them by focusing on issues such as place, program, construction, parti and shape, starting from the methodological organization presented in the text titled "Reflexões Sobre a Construção da Forma Pertinente" [Reflections on the Construction of the Relevant Shape] by Edson Mahfuz.

The aim was to build the basis of a horizontal and vertical reading of the topic, based on the collective debate about all texts - which were presented on boards - to enable interaction and knowledge exchange. Results were quite satisfactory since the comparative analysis enabled students to understand the typology and morphology of analyzed houses and their relationship with the place they are inserted in.



Some of these texts have built remarkably rich perceptions about the space of housing and its evolution, as shown in the following examples. With respect to the work titled "What is a house?" (CARVALHO, BRITO, ELEIDA, 2011; Figure 01), students have questioned the essence of the house and investigated how different works, by different architects, at different times, built different senses to the act of dwelling.



Figure 01: Research topic built by students. Source: CARVALHO, BRITO, ELEIDA, 2011.

As for the work "The house is not a tree" (NAHAS, MORTARI, GUIMARÃES, DIAS, 2011; Figure 02), students - starting from a text by Christopher Alexander – have compared the functional scheme of modern architecture (hierarchical, sectorized, controlled co-circulation and branched) to that of a vernacular house in Pirenópolis County, where several environments were connected to one another through complex and multiple links (as a network), as well as to a contemporary proposal, according to which, the continuous and integrated space rules out the differentiation and the identity of environments and activities.

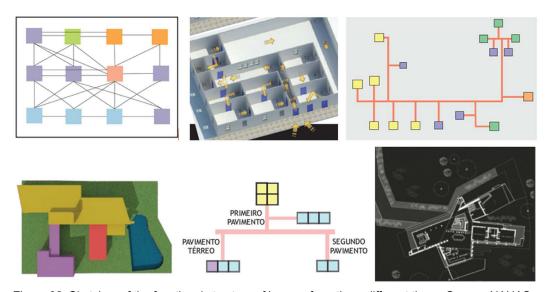


Figure 02: Sketches of the functional structure of houses from three different times. Source: NAHAS; MOR- TARI,.; GUIMARÃES, ; DIAS, , 2011.

The work "A casa reconstituída" [The rebuit house] (PERINI, MONIA, LION, CARTO, 2011, Figure 03) presents a systematic and complete study of the different elements forming the house, as well as compares different composition, technological systematization, organization and sector schemes.





Figure 03: Analysis of several aspects of three houses. Source: PERINI; MONIOS; LEÃO: CARTO, 2011.

The second stage of the project started with the selection of a plot of land, by the exercise supervisors, as well as of a preliminary dweller profile and the estimated area of the future residence. The family comprises six people: father (Roberto -Bob), mother (Joana), eldest son (Jimi), daughter (Janis), the youngest daughter (Moon), and the maternal grandmother (Dulce), who has been living with the family for ten years, now. In addition to the permanent members, the family always counted on services of a housekeeper and a gardener. The newest member of the family was a Labrador dog called Hendrix.

Next, students have assessed the place where the house was supposed to be build and establish their program by interpreting the preliminary profile based on the previous reflections. The herein suggested program script and content comprised:

- Interpreting the topic.
- Organizing the program; Program relations; Qualification / Predimensioning of environments: layout sketching, ergonomics and ambiance.
- Place:
- Situation: land division, terrain, topography, poles, cuffs, trees, among others
- Surrounding area: Land use and occupation, surrounding buildings, landmarks, typologies, template.
- Roads: views, traffic, possible access, connection to centralities, among others.
- Considerations about: problems, potentials, solar orientation.

(OLIVEIRA, AMARAL, 2010, p.2)

After these studies, students delivered the architectural parti with the physical model, which was collectively evaluated. Subsequently, they deepened their exercise based on both individual and collective guidelines, until they delivered the preliminary architectural project. The delivered product - blue prints, cuts, facades, perspective, deployment, coverage, explanatory memorial, physical and/or digital model - was presented to the class and evaluated by an examination board of professors, as shown in the following examples.



The play among fluidity of space, intimacy and exposure, continuity and rupture in the "pavilion house", by student Raiane Dias (Figure 04), is associated with a formal continuity that builds a single visual course, whose curvature in the blueprint adapts to the topography of the land, while it builds a semi-public space separated from the intimate space in the backyard.



Figure 04: The house seen as space in transition. Source DIAS, 2011.

The formal unit associated with typological originality in the "Curve House", by Isabela Brito (Figure 05), shows strength and cohesion in a synthetic and systematic proposal. The building is proposed as object and it plays with the limit of the understanding, and essence, of dwelling by building a bold proposal.

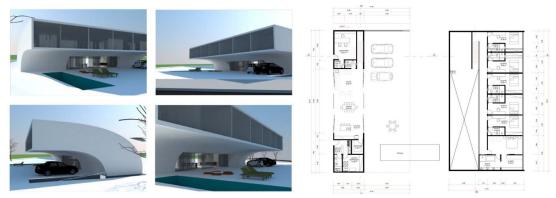


Figure 05: The house seen as object. Author: BRITO, I. Personal collection.

The space in the "Clay House", by Mathias Monios (Figure 06), is divided into plans (in rammed earth) that coordinate multidirectional and overlapping circulations. It is done by reinterpreting the use of the traditional rammed earth technique as structuring and aesthetic element. A house whose traces of history are recreated in a poetic manner is the result of it.

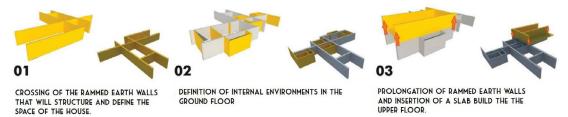


Figure 06: The house seen as cropped spaces. Source: MONIOS, 2011.



The "Courtyard Houses", by Laís Midori (Figure 07), subtly and sensitively rebuild the elemental typology of the house in a multiplication of similitudes, by overlapping reflexes of the same resemblance and by countering the center with the courtyard, as an ordered, simple, serene and cozy space.

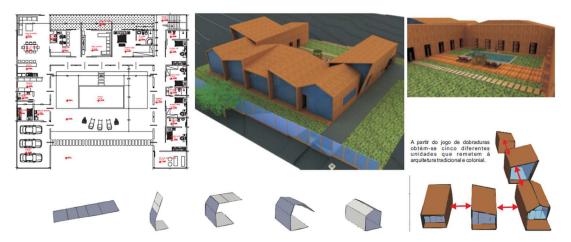


Figure 07: The folding and assembling house. Source: MIDORI, 2011.

The "Rehouse House", by Paulo Gustavo Perini (Figure 08), aims at originally recomposing the formal elements of both modernism and vernacular architecture, by rebuilding the courtyard house typology, while it institutes a unit of shape by deforming the rigidity of original types.



Figure 08: The house seen as the reconstruction of typologies. Source: PERINI, 2011.

The "Exploded House", by Priscila Mascarenhas (Figure 9), breaks with the regular unit of the house through the fragmentation and "explosion" of closed spaces that, paradoxically, recreate an outside/inside unit.

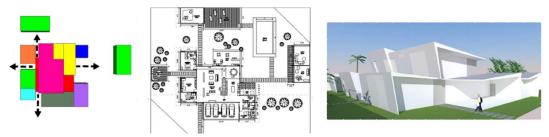


Figure 09: The house seen as expanding space. Source: MASCARENHAS, 2011.



Results achieved in this reflective and creative exercises were quite satisfactory, since they acknowledged the application of initial readings in idiosyncratic project processes. The history and the typological study applied to the project have proved to be important tools to build new forms of organizing housing spaces. Preliminary analyses, in association with the specific

study of the program and place, have provided design reflections and options that met the typology and morphology found in the surroundings, without intimidating the creation of new propositions.

Students were invited to explore the topic of trade as space for exchanges and as workspace. In order to do so, they conducted research on the meaning of exchanges (material and immaterial, symbolic and economic), as well as on the separation (alienation) between workspace and lived space, in order to understand its evolution based on social, economic and cultural transformations observed in the modern and contemporary times, by adopting the regulation school methodology (HARVEY, 2004; GRAMSCI, 2007; BOYER and SAILLARD, 1995).

The gastronomic complex design process has followed the same procedures, except for the analysis of similar texts, which was replaced by directed studies focused on several aspects that were essential for the project (due to the complexity of the topic) and that, all together, constituted a changing typology. This exercise was performed by groups of students and discussed in the classroom. The presented boards were fixed to the classroom's walls; they were useful in the course of the project studies.

In this case, the complex had free profile and its only limitation lied on the resource available for the venture. Thus, the program was elaborated based on the initial reflection about the topic. A space undergoing remarkable transformation in the city was the selected land, since it is turning from residential area into a food and leisure area.

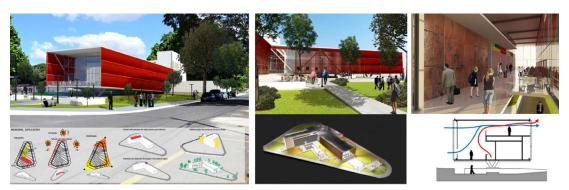


Figure 10: Gastronomic complex work. Source: PERINI, 2011.

The gastronomic complex required an area of approximately 2,000 m<sup>2</sup>, a fact that brought difficulty for some students. The complexity of the topic and its dimension



made it hard for students to interpret it and to find the architectural solution for it, unlike the housing exercise. Design exercises aimed at historical and typological issues, and applied in the fifth semester of Architecture courses, can require lower complexities, as well as smaller designed areas. However, preliminary studies of high-level architectural design, such as the ones performed by students Paulo Gustavo Perini and Mathias Monio (Figures 10 and 11, respectively) should be highlighted.



Figure 11: Gastronomic complex work. Source: MONIOS, 2011.

### **FINAL NOTES OR CONSIDERATIONS**

Associating teaching and research can help building new perspectives on classical architecture issues and opens room for further studies. Integrating knowledge from traditionally organized fields in a dissociated manner also brings innovations to this knowledge field, as well as to architectural production processes.

Design processes understood as the construction of alternative spaces to the inherited ones depend on the historical reflection and on a poetic perspective about the reality of this very same history.

Cataloguing, description and encyclopedic knowledge lose space for the creative appropriation of the constitutive genealogy of social spaces in the history of architecture, or in the history applied to architecture. Applied history is an instrument capable of articulating and leveling the so-called "architectural elite", through vernacular architecture experiences (among others). Thus, it shows that the confrontation and interpretation process can reveal other histories, which are buried under those of king architects, prince architects and ornery architects, as well as their respective historians (good court rapporteurs).



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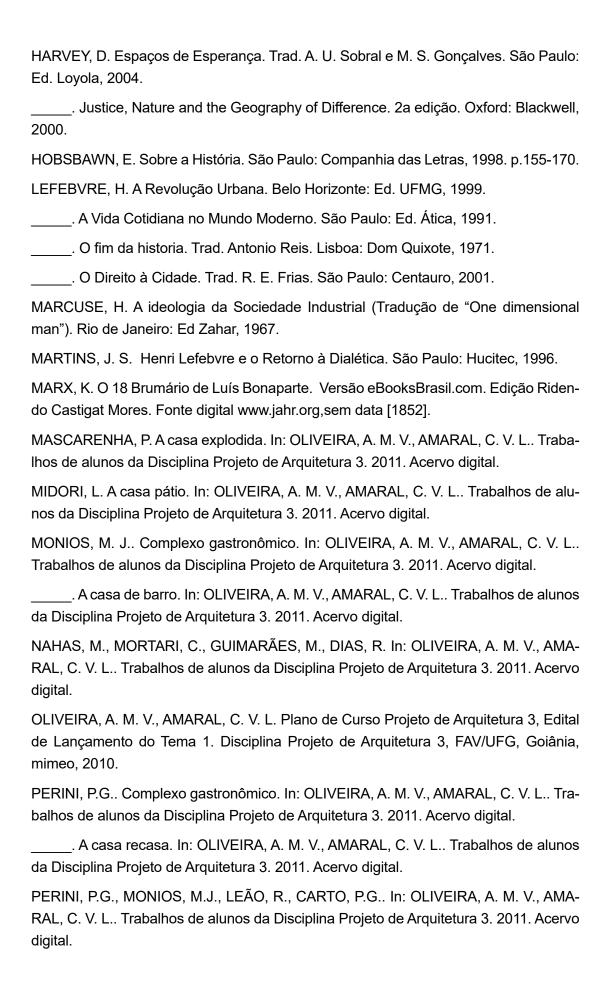
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