



**SÃO PAULO'S THICK GROUND:  
A STRATEGY FOR THE RE-DESIGN OF *MINHOCÃO'S* ARCHITECTURAL FRONT**

4.154 ARCHITECTURE DESIGN OPTION STUDIO

*SÃO PAULO, SP*

STUDIO INSTRUCTORS: ANGELO BUCCI + GABRIEL KOZLOWSKI

SYLLABUS

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PHOTO CIRO MIGUEL

**Instructors:**

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**Credit Units:** 0-10-11G

**Prerequisites:** 4.145 or 4.153

**Room:** 3-415

**Schedule:** TR 1-6

**Open to:** MArch students

### Course Description

**Abstract**

This studio aims to design architecture.

It will focus on a specific area in Sao Paulo downtown that was severely affected by a top down urban intervention: a 2.7km viaduct, the Minhocão, which ripped off a preexistent and consolidated zone, causing building degradation and urban disaggregation. Lately, as a result of the population's persistent appeal, car's traffic time was limited to working days and hours. During idle times, it is appropriated by people as a linear park.

Assuming this alternation of activities as a duality to inform the design process, our goal is to redefine the Minhocão's front as an updated and meaningful architecture.

**Context**

In 1970, under a dictatorship, a 2.7km long urban viaduct, later called Minhocão, was inaugurated in Sao Paulo downtown. This top-down measure for promoting a high-speed and long distance east-west connection for cars created a dividing line that generated degradation for the existing buildings and the local neighborhood's life. That authoritarian decision caused private losses – properties suffer severe devaluation – and public disaggregation – the urban fabric was cut and disconnected. Socially, it increased segregation and degradation.

Nevertheless, once built it became somehow part of the 'physical support' of the urban life while forged a somewhat unique 'constructive culture' in Sao Paulo.

Paradoxically, the purpose that guided the decision to create that huge construction in 1970 does not fit with the affective reason why people have embraced it as one more stone to the cathedral of their culture, mostly since the 90s. Actually, the motivation for building it was right the opposite of the reason for its winning people's affection in their everyday life.

Nowadays, as a result of public mobilization and activism, cars are no longer allowed on Minhocão at late night and weekends. On those periods, that space belongs exclusively to pedestrian, bikers and skaters who fully crowd it. Thus, its use became seasonal, switching between oppositions: day x night, working days x weekends, traffic functionalism x not defined programs; highway x leisure; rush x spending time; cars x people.

## **Project site | Location**

The project site is not the viaduct itself but its borders.

This dual meaning and seasonality of the Minhocão has never been considered systematically as a design assumption to propose buildings along its both sides. Although people has appropriated this duality, the existing buildings along it were not informed by the existence of an upper and a lower ground level; they didn't consider the resulting thick ground as a new possibility for configuration and proposition, mostly for public programs.

This studio aims to explore new possibilities of designing buildings along the Minhocão to properly redefine its architectural front according to its current new paradigm.

Focusing on just a 1,2km long segment of the Minhocão, it is possible to identify voids and vacancies for the elaboration of design strategies.

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Placed in downtown of the city of São Paulo, the studio site is easy to be accessed and recognized. The Minhocão itself is a landmark of the city, besides the fact that it is surrounded by iconic buildings such as Copan, designed by Oscar Niemeyer.

The specific site location is defined by a sector of the viaduct, starting at Consolação Avenue on Praça Roosevelt; going toward north over Amaral Gurgel Avenue for 750m up to Largo do Arouche; deviating to northwest for 450m until reach São João Avenue.

This piece of city is framed by a 1,500m x 1,000m rectangle, which basically corresponds to 1/100 of the entire metropolis dimension.

## **Design goals**

- To be able to properly deal with the opposition of Minhocão's dual activity periods;
- Assuming the viaduct as a 7.5m elevated ground, consider a three-story thick ground as a architectural device for vertical transfer and multi-level public connections;
- To combine public and private programs, which will be mostly organized, or overlapped, vertically.

## **The Program**

Since the beginning of the seventies, in parallel and related to the history of the Minhocão, the downtown area of Sao Paulo has expelled a significant portion of its dwellers. The whole area has been converted more and more into a mono-functional one: overcrowded during the day and abandoned at night and weekends.

The way the population use the Minhocão during the weekends attests how things changed nowadays. However, the lack of dwellers still prevails due to the low offer of housing.

1. Apartment building is the primordial program in this studio; but housing have to be combined with a complimentary public program;
2. Small public facilities or 'arcades' is requested to complete the program.

A reason for proposing small public facilities is to recover what was lost in the process of dweller evasion. In the other hand, arcades have an important role in the 'constructive culture' of the city of Sao Paulo, mostly in the neighborhoods built in the fifties; besides it provides good possibilities for connections between the public levels.

## **Scale of work**

Although related to the urban scale — with the length of the Minhocão and system of public spaces on ground level — the ulterior scale of this work is that of a building.

Each specific site will be chosen from the border along that 1.2km fragment of the viaduct.

A voided or an under-occupied plot could be taken as a vacancy. Plots' size are typically in between 400 to 2,000m<sup>2</sup>. It is possible to combine in one individual project two plots placed in the same side or in both sides of the viaduct.

The maximum FAR is 4.0.

## **Studio Trip**

Experiencing a city and a studio site directly is priceless.

More than the site and its context, the trip will be an introduction to Brazilian modern architecture.

A few visits to some remarkable buildings will be scheduled.

Besides, students will be introduced to the Architecture School of the University of Sao Paulo, the remarkable building designed by Vilanova Artigas during the 60s.

Studio trip schedule: Flying on March **18<sup>th</sup>** evening [arriving 19<sup>th</sup> morning], and returning **23<sup>rd</sup>**.

## **Studio Meetings:**

Gabriel will attend every session.

Angelo will attend the following sessions:

February: 4, 9, 11, 23, 25.

March: 8, 10, 15, 17.

April: 5, 7, 12, 14.

May: 3, 5\*, 10, 12.

\*to be confirmed

## **Subject Objectives:**

- Strengthen the students' ability to research, conceptualize, and develop an understanding of complex urban environments.
- Strengthen the students' ability to conceive and develop an architectural project, as well as communicating it properly through accurate graphic representation.

## **Deliverables:**

- Large physical model of the site produced by the studio members collaboratively. Scale 1/500
- Physical models of the design projects produced individually. Suggested scale 1/200
- Design progress through pin-ups.
- Architectural project represented in at least in four scales (city, immediate context, building,

and building detail), through compelling visual material (plans, sections, axons, diagrams and renderings are mandatory, yet other means of visualization are also welcome and encouraged).

Grades will not be posted for students to view on their grade report until their work has been archived. The projects need to be properly prepared and formatted, and delivered to the studio instructors. The instructors will collect project archives from each student immediately following the review. Detailed requirements and instructions for formatting will be explained along with the presentation of the exercises.

### **Requirements:**

- Attendance is mandatory for all students enrolled in the studio. (Failure to attend the class will affect the final grade)
- Advanced knowledge of graphic representation tools, and 2d and 3d modeling.
- Students need to complete the studio assignments in a timely manner, and to be prepared to discuss and present their ideas.

### **Evaluation Criteria:**

- Attendance: 5
- Pin ups: 5
- Desk Crits: 5
- Physical Models (collaborative + individual): 10
- Pre-Mid-Term Design: 15
- Studio Trip's Inputs on the Project: 5
- Final Design: 25
- Final Presentation: 20

The grading will consider individual growth over the semester, ability to communicate clearly and objectively, and originality.

### **Grading Definition:**

A - Exceptionally good performance demonstrating a superior understanding of the subject matter, a foundation of extensive knowledge, and a skillful use of concepts, graphic representation, and design thinking. Ability to propose outstanding solutions to problems through design.

B - Good performance demonstrating capacity to use the appropriate concepts, a good understanding of the subject matter, and an ability to handle the problems and materials encountered in the subject. Ability to propose solutions to problems through design.

C - Adequate performance demonstrating an adequate understanding of the subject matter, an ability to handle relatively simple problems, and adequate preparation for moving on to more advanced work in the field.

D - Minimally acceptable performance demonstrating at least partial familiarity with the subject matter and some capacity to deal with relatively simple problems, but also demonstrating deficiencies serious enough to make it inadvisable to proceed further in the field without additional work.

F - Failed. This grade also signifies that the student must repeat the subject to receive credit.

## **Disabilities:**

If you have a documented disability, or any other problem you think may affect your ability to perform in class, please see me early in the semester so that arrangements may be made to accommodate you. For MIT's policy on accommodations for disabilities, please follow this link <http://mit.edu/uaap/sds/students/>

## **Academic Integrity + Honesty:**

MIT's expectations and policies regarding academic integrity should be read carefully and adhered to diligently: <http://integrity.mit.edu>

## **São Paulo Movie References**

- **Não por acaso**
- **O Invasor**
- **Ensaio sobre a cegueira**
- São Paulo SA
- Os doze trabalhos
- Passe de bola
- Carandiru
- A Hora da Estrela
- Luz nas trevas
- O ano em que meus pais saíram de férias
- Os 3
- Pixote - A lei do mais fraco
- Quanto dura o amor
- Salve geral
- O signo da cidade
- Os inquilinos
- Família Braz - dois tempos
- Os dois coelhos
- O Bandido da Cruz Vermelha
- Bróder
- As Amoras
- Cidade Oculta
- Estamos juntos
- Se nada mais der certo
- Durval Discos
- São Paulo: sinfonia da metrópole
- São Silvestre
- Bem vindo a São Paulo
- O sonho de São Paulo
- Pelada
- Boleiros
- As melhores coisas do mundo
- Chega de saudade
- O estômago
- Amor em Sampa
- Citizen
- O cheiro do ralo
- A estória de Clara Crocodilo
- Amor dez Matemática zero



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