# FROM CONTEXT SPECIFICITY TO ARCHITECTURAL DESIGN IDENTITY DISCOVERY

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## INTRODUCTION

The discussion about developing an Architectural Design, in university teaching context, involves a critical approach to the complexity of a specific reality and exploring architectural design transformation capacity. We are facing a long-term process usually initiated at the faculties of architecture and carried out during an architect's lifetime.

Developing an Architectural Design is an act of synthesis. It involves apprehending the context attributes and searching for a specific architectural identity. The project process manipulates a wide range of information and factors, some of which have objective characteristics that can be quantified objectively, while others are subjective objects of interpretation. We face an intertwined universe where places, author and user references, choices, and speculation interact. Project development involves the manipulation of countless variables, conflicts, and constraints. Some identified from the start, others discovered during the elaboration process. We are facing a universe of complexity, where it is necessary to make choices for the synthesis elaboration. Information selection and path choices are inherent to the process.

The paper presents a case study based on context and architectural program interaction. We propose to explore and apply the possibilities of combining the apprehension of contextual characteristics (physical, human, and cultural) and architectural program (space formalization of the program).

The presented reflection supports the development of finalist students' projects, year 5 of Integrated Master in Architecture and Urbanism, at ISCTE, Instituto Universitário de Lisboa. The paper introduces the concepts of Context and Architectural Program followed by the studio strategy presentation. Afterward, we go through the different intervention moments, followed by two of nine examples of design proposals by the students. To finish, the conclusions are presented.

We anticipate enhancing the students' cognitive capabilities to critically evaluate the contextual framework, historical perspectives, and past experiences. By broadening their cognitive capacity, we aim to facilitate the synthesis of knowledge, leading to the exploration of novel possibilities.

## CONTEXT

In architectural design, the word context is associated with factors that frame the act of designing. The context evokes several attributes that architecture is confronted with. It defines constraints, boundaries, and limits but also opportunities. It can be seen from multiple points of view and in different circumstances, whether physical and spatial, historical, social, cultural, political, et cetera.

The physical and spatial components are involved with objective attributes that refer to the human activity marks in the natural or built territory. They reflect the long-term appropriation and use of spaces. It concerns the physical aspects of the environment that intervene in our daily lives. From a broader perspective, geographical location constitutes a determinant factor. Climatic conditions, environmental conditions, and proximity to materials and resources are determinant factors to be considered. Recently some associated phenomena have gained relevance. Climate changes, availability of energy, water resources, and proximity to applied building materials, are some of them.[1]

The historical components allow an understanding of the processes of transformation, referring to the overlapping of different occupations and the transformation of territories. The territory and the city can be seen as a complex system, resulting in multiple layers of occupancy overlapping. Somehow the city shape carries the conscience and the memory of itself. For Aldo Rossi, the historical method is a tool that allows for assessing the validity of proposals for a city.[2]

Christian Norberg-Schulz introduced the concept of Genius Loci, a quite wide approach that embraces a phenomenological view. Along with the cultural components, the concept focuses on the qualitative aspects of a specific place. The cultural perspective of a place goes beyond measurable aspects, it enquires about its essence and its meaning, related to the people who inhabit and use the space. It proposes to quest for the "spirit of the place".[3] This approach has been widely explored in different cultures and has a particular influence on the panorama of Portuguese architecture. The architecture and written reflections of Fernando Távora[4] and Alvaro Siza[5] are some of the examples that can be pointed out.

In contrast to relational places, defined by the articulation of physical elements and a strong connection between identity and history, there are non-places. They are non-relational entities. Both places and non-places are in permanent transformation and are rarely complete. They are like palimpsests where changes in relationships and identity are constantly being rewritten.[6]

## ARCHITECTURAL PROGRAM

It is relevant to establish the difference between the current reading of the program, understood as the listing of requirements and compartments with a predominantly economic and functional character, and the architectural program, which defines the beginning of the creative process and the formation of architectural spatiality form. It is also important to mention that the terms architectural program derives from the written work of José Villagrán García.[7]

To approach the architectural program involves dealing with one of the columns of architecture fundaments. Commonly it is associated with function and use of spaces, although we consider architectural program from a wider perspective.[8] It is considered the relationship between the architectural form and space. This means that the architectural program (Figure 1) is understood as the program transformed into an architectural space entity and form. It contains cultural, functional, and social attributes that articulate multiple factors that intervene in architectural design. This transformation is developed throughout the architectural design.
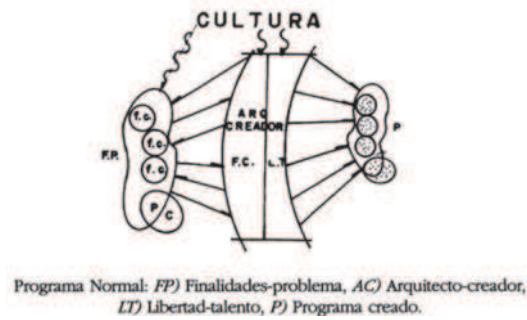
Programa Normal: *FP)* Finalidades-problema, *AC)* Arquitecto-creador,
*LT)* Libertad-talento, *P)* Programa creado.

*Figure 1. (Legend translation) Program structure Regular Program. FP) Problem-purpose, AC) Creator-architect, LT) Freedom talent, P) Created program*[9]

The process takes place within a specific temporal, spatial (geographical), and cultural context. The main agent of this transformation process is the architect, the author of the project. This relationship, which is established between the geographical location (space) and a given historical time, establishes the principles of chronotopic law. Each architectural program is unique, characterized by a specific location, a historical time, and an author.[10]

Assuming the nonexistence of a direct relationship between the program and its formal implementation (architectural program), other contemporary perspectives are relevant to enframe the theme. Rem Koolhaas defends that during project design the relation between the program and the form is subject to manipulation. The architect can redefine the initial assumptions of the program, adding political or cultural components. On the other hand, he highlights the expressive potential of the programmatic contents and the instability and inconsistency of this relationship. As for genealogy, the program is articulated with the idea of organizing urban structures. Referring to his journey through the disciplinary universe, more specifically "Delirious New York",[11] points out that the architecture and structure of New York City are themselves a program of a cosmopolitan culture.[12]

From another perspective, Bernard Tshumi considers that the program received by the architect at the beginning of the project is not a neutral element. Its transformation into a formal and spatial structure (architectural program) involves the redefinition of its principles and priorities, according to the strategy defined for the project. Assuming the program as the origin of the project it is possible to define two moments in its approach and transformation. The first is involved in apprehending the information contained in the program and defining the intentions of its organization. The second moment explores the different possibilities of concretion of space/form relations. As a support tool, it is proposed the use of diagrams highlighting the elected concepts and objectives for the transformation of the program. In the development of this process, the physical context (place) assumes particular importance in the insertion of the project in a specific situation. This contextualization operation defines relevant limits and constraints in the construction of the architectural program.[13]

In the cases of Rem Koolhaas and Bernard Tshumi conceptual, cultural, and political programatic issues are to be included in the formulation of architectural design. Another important topic added to the debate focus on the physical, economic, and programatic charcteristics of urban structures.

## STUDIO, TERRAIN OF EXPERIMENTATION
The Studio teaching approach is based on the notion that "… the only learning which significantly influences behavior is self-discovered, self-appropriated learning."[14] The mere acquisition of information does not produce significant fruitful knowledge. We can provide the best conditions, create opportunities, inspire, and encourage, but teaching is centered on learner self-discovery. Learning ultimately belongs to the student.

To avoid the rigidity of processes, maladjustment concerning student specificities and the expectancy that following a certain sequence of procedures will lead to a good result a specific methodology is not followed. Instead, various procedures are used aiming to find adjusted options to the student specificities. The approach is sensitive to student particularities, which must fit into the working group dynamics. However, it is possible to frame our approach in the universe of experiential learning and current education research on Constructivism. As for experiential learning[15] research, thinking, doing, and reflecting are strongly connected through a non-linear or sequential procedure. This network of possibilities can improve the interaction between theory and knowledge acquired from working in real situations. Based on the experiment and in testing different design hypotheses, by trial and error, it is possible to identify what needs to be improved or modified to obtain a better result. Constructivist pedagogy is an active and collaborative process, "… it emphasizes what students have to do to construct knowledge."[16] It is focused on the effectiveness of relevant and meaningful knowledge for the students and their capacity to produce and assemble knowledge. Being a student-centered process enables the capacity for the discovery of design possibilities and personal paths.

Student characteristics and level of knowledge can expand through an intense interaction overlapping design and personality discovery. Teacher and student establish a reciprocal action in the discovery of a cultural, ethical, and personal positioning in architectural design contemporaneity and its insertion in the world context. Conceptual and abstract research plays an important role in the development of student skills.

## TERRITORY CITY, TERRITORY PLACE

Caldas da Rainha is the name of the city proposed for the ongoing year 5 project studio. The architectural design exercise focuses on approaching the dynamics of relationships that are established between the existing, the proposed buildings, and the territory (Figure 2). Particular attention is given to public space relations. The projects are developed in a close relationship with the City Hall and Associação Destino Caldas, a very dynamic cultural agent in the city and region. Other actors - cultural agents, entrepreneurs, associations, real estate agents, and citizens in general - will be called upon to participate in debates, mid-term critiques, and project exhibitions.



*Figure 2. Urban voids and project opportunities.*

It is up to the students to develop the reading and interpretation of the existing territory and consequent selection of the specific place, theme, and program to be developed (Figure 3). Areas with greater potential for regeneration should be privileged: building refurbishment, public space, green areas, construction of new equipment and rehabilitation of the "natural" marks, etc.
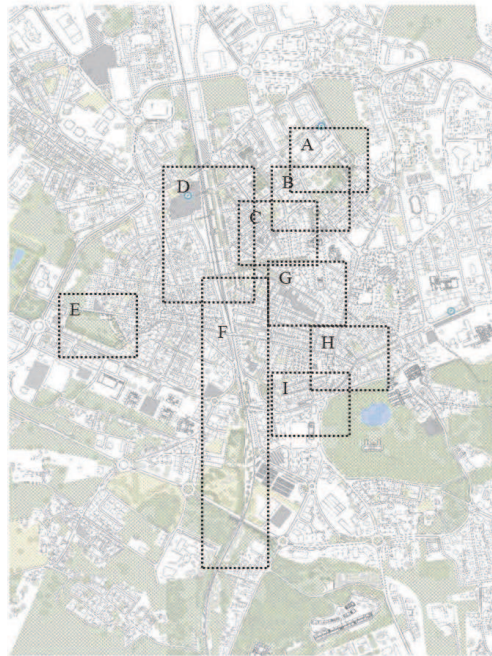


*Figure 3. Proposals, general plan.*

The proposals are engaged, among others, to promote:
- Critical reflection on the disciplinary field of architecture and its capacity for political action.
- An open city for free citizen.
- Local and global identity.
- The integrity of a sustainable environment.
- Programs and spaces that prove to be relevant and regenerative of the local context.

**Context apprehension**

The mapping of the city's territory was carried out using bibliographical research, information gathering, and a series of visits to the site. During an intense three-day stay in the city, different routes were covered and graphic records, photographs, and videos were collected. Students and teachers inhabit and felt the city "spirit" in the different living cycles of the day. On the last day, a session to present and comment on the results was open to partners and locals.

This phase focuses on addressing issues of context and mapping the city. Mapping Caldas da Rainha is understood beyond quantitative data, it seeks to frame the qualitative issues. Based on context apprehension, it is proposed to investigate the first fundamentals of the project. This is a very active phase, seen as a project in action. Imprecise intuitive proposals are developed allowing the discovery of potential ideas connected to the architecture world. The outputs can represent an important database to supply and inform further inflections on design ideas development. It also allows overcoming the "… fear of white paper"[17] a paralyzing commonplace in the creative process.

The territory experience and apprehension intertwine with moments of project synthesis and "reflection in action".[18]

### Test, attune, experiment

Design development involves complexity. It deals with large amounts of information,[19] so it is necessary to filter, select and reconcile, according to the principles defined for the project. The assembly of information and its organization can be a misty moment, which will gradually lead to a better adjustment to the project hypotheses. Through critical reformulation, the project's data gets closer to the formulated hypotheses. This is not a direct correspondence operation between data and the project, but rather the construction of a new architectural identity.[20] This construction is frequently involved in troublesome divergent situations, to be solved through data, constraints, and contradictions conciliation.

In developing the project's identity, the overlapping relationships that are established with the context are relevant. Architectural intervention can choose to respond, oppose, or be absorbed by the context.[21] To be more specific, we will address the relationships established with the place. If we consider what Christian Norberg-Schulz claims "The existential purpose of building (architecture) is therefore to make a site become a place, that is, to uncover the meanings potentially present in the given environment."[22] The notion of place appears associated with the people who inhabit it, how they use it, what activities they develop there and the poetic and symbolic values assigned. The spirit of the place is understood by its unique character with a specific location and atmosphere.[23] These particularities are considered materials that feed the project design.

The definition of a new architectural identity relates to the concept of historical and cultural continuity. Continuity in the sense that place and dweller establish an intense interaction relationship.[24] Through a phenomenon of osmosis place and dweller become a new identity.

### Darning the city – Proposal A (Maria Inês Vieira)

A large void in an expanding area of the city sets up the opportunity to complete the urban fabric and create green spaces for public and private use. It is also proposed a set of buildings that intend to filter and complete the built masses and the outer spaces (Figures 6, 7 - intermediate phase).



*Figure 4. General intervention plan (Maria Inês Vieira).*

*Figure 5. Model of the proposed project. (Maria Inês Vieira).*

### Along the line – Proposal F (Sofia Ferrinho)

*Along the line* develops a pedestrian and bicycle connection between the city center and the School of Art and Design located in a pine forest to the south. In addition to the north-south connections, along the route, there are new opportunities for crossing the railway line, as well as new equipment, public spaces, and uses (Figures 4, 5 - intermediate phase).
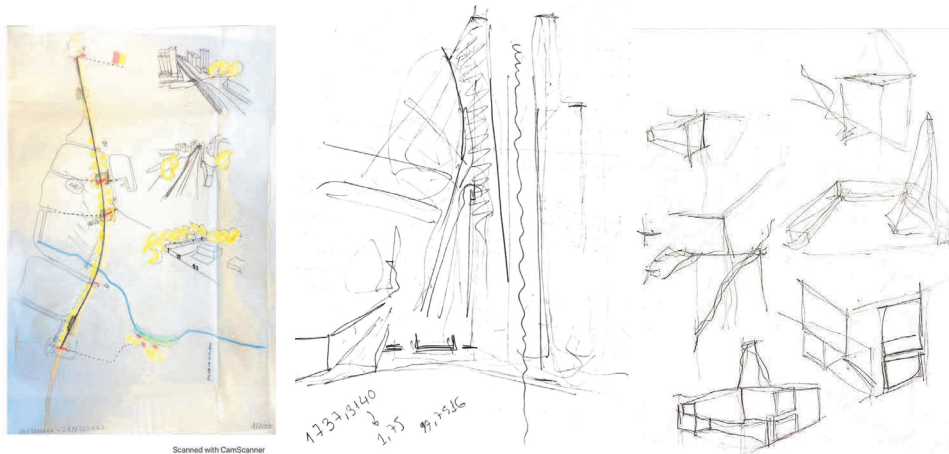


*Figure 6. Study and development sketches (Sofia Ferrinho).*

*Figure 7. General intervention plan (Sofia Ferrinho).*

**Next steps**

The final project work is transdisciplinary. The cross-links between theory and the project are decisive in its development and foundation. The elaboration of the project is articulated with a research process in the areas and themes that are related to the project decisions.

The project's drawn pieces will be accompanied by a reflection text and a reference map, which addresses the themes and options of the project. Composed of text and images, this text reflects the theme, the site, the process used, the strategy followed, and the final result. The reflection will include a selection of the most relevant phases of the project's evolution process.

**CONCLUSION**

Combining the apprehension of contextual characteristics and architectural program can constitute a relevant design activator. It implies a reflexive interaction of decisions regarding the context and the architectural program materialization in the project synthesis. It implies choices and decisions, which may be contradictory to each other.

Controlled simultaneity and multiple design possibilities conciliation enable uncovering the meanings potentially present in a specific architectural design. According to our experience, handling these two components simultaneously will reinforce a greater understanding of the problems and improve awareness of the options and decisions to be taken. Consequently, we believe that it can be a possible path for a critical reflective framing of the personal and creative identity of future architects.

However, it is a process that needs time for its implementation and application. It also needs particular attention in the implementation of self-criticism, which must be implacable, although seeking a balance in the articulation between action and critical reflection.

We hope to expand the student's skills to interrogate the context, history, and memories; to expand their capacity to integrate what exists in discovering new design possibilities. By finding new architectonic identities, and creating unique and meaningful architectural designs, it is expected that the students will discover their paths, who they are, and how they design their architecture. This way, we hope to be able to enlarge the range of self-reflective practice.

## NOTES

[1]Edward Relph. "A Pragmatic Sense of Place" *Academia.edu* Accessed March 15, 2023.
https://www.academia.edu/35463917/A_Pragmatic_Sense_of_Place, 17.

[2] Aldo Rossi. *A arquitectura da cidade*. (Lisboa: Cosmos, 1977 [1966]).

[3] Christian Norberg-Schulz. *Genius Loci: Towards a Phenomenology of Architecture*. (New York, NY: Rizzoli, 1979).

[4] Fernando Távora. *Da Organização Do Espaço*. (Porto: FAUP Publicações, 1999 [1962]).

[5] Álvaro Siza. *Imaginar a Evidência.* (Lisboa: Edições 70, 2006).

[6] Marc Augé. Non-Places: *Introduction to an Anthropology of Supermodernity*. (London, New York, NY: Verso, 1995), 77, 79.

[7] José Villagrán García. *Teoría de la arquitectura*. (México D.F.: El Colegio Nacional, 2007)

[8] Pedro Mendes. "O programa arquitectónico no projecto de arquitectura: referências ao contexto português, a partir de seis obras de três autores - Fernando Távora, Álvaro Siza e Eduardo Souto de Moura". (Universidade Lusíada de Lisboa, 2012).

[9] Villagrán García, 287.

[10] Villagrán García. *Teoría de la arquitectura*.

[11] Rem Koolhas. *Delirious New York: A Retroactive Manifesto for Manhattan*. (New York: The Monacelli Press, 1994).

[12] Ana MiljackI, Amanda R. Lawrence and Ashley Schafer. *2 architects, 10 questions on program Rem Koolhaas and Bernard Tschumi*. Praxis: Journal of Writing + Building: Boston. n.º 8 (2006), 6-15.

[13] Ana MiljackI, Amanda R. Lawrence and Ashley Schafer. 6-15.

[14] Howard Kirschenbaum and Valerie L. Henderson, Eds. *The Carl Roger Reader*. (Houghton, Mifflin and Company Boston, New York, NY, 1989), 302.

[15] Ipo Koskinen, et al. *Design Research through Practice: From the Lab, Field, and Showroom*. (Burlington, Massachusetts, USA: Morgan Kaufman, 2011).

[16] John Biggs and Catherine Tang. *Teaching for Quality Learning at University*. (Maidenhead, UK: Open University Press, McGraw Hill, 2011), 14.

[17] Manuel Tainha. *Arquitectura em Questão: Reflexões de um Prático*. (Lisboa: AEFA - UTL, 1994) 67

[18] Donald A. Schon. *Educating the Reflective Practitioner*. (San Francisco, CA: Jossey-Bass, 1987), 26.

[19] Donald A. Schon. *The Reflexive Practioner. How Professionals Think in Practice*. (USA: Basic Books, 1984), 130.

[20] Vittorio Gregotti. *Território da Arquitetura*. (São Paulo: Perspectiva, 1972), 25.

[21] Salomon Frausto (ed.). *Lexicon Nº 1: On the Role of the Architect*. (The Berlage Center for Advanced Studies in Architectural and Urban Design, Faculty of Architecture and the Build Environment, Delft University of Technology, 2016), 41.

[22] Norberg-Schulz. *Genius Loci*, 18.

[23] Peter Zumthor. *Atmospheres: Architectural Environments; Surrounding Objects*. (Basel: Birkhäuser, 2006).

[24] Juhani Pallasmaa. *Diseminaciones, semillas para el pensamiento arquitectónico*. (Barcelona: Gustavo Gili, 2022), 207.

## BIBLIOGRAPHY

Augé, Mark. Non-Places: *Introduction to an Anthropology of Supermodernity*. London, New York, NY: Verso, 1995.

Biggs, John and Tang, Catherine. *Teaching for Quality Learning at University*. Maidenhead, UK: Open University Press, McGraw Hill, 2011.

Frausto, Salomon (ed.). *Lexicon Nº 1: On the Role of the Architect*. The Berlage Center for Advanced Studies in Architectural and Urban Design, Faculty of Architecture and the Build Environment, Delft University of Technology, 2016.

Gregotti, Vittorio. *Território da Arquitetura*. São Paulo: Perspectiva, 1972.

Kirschenbaum, Howard and Henderson L. Valerie, Eds. *The Carl Roger Reader*. Houghton, Mifflin and Company Boston, New York, NY, 1989.

Koolhas, Rem. *Delirious New York: A Retroactive Manifesto for Manhattan*. New York: The Monacelli Press, 1994.

Koskinen, Ipo, et al. *Design Research through Practice: From the Lab, Field, and Showroom*. Burlington, Massachusetts, USA: Morgan Kaufman, 2011.

Mendes, Pedro. "O programa arquitectónico no projecto de arquitectura: referências ao contexto português, a partir de seis obras de três autores - Fernando Távora, Álvaro Siza e Eduardo Souto de Moura". Universidade Lusíada de Lisboa, 2012.

MiljackI, Ana and Lawrence, Amanda R. and Schafer, Ashley. *2 architects, 10 questions on program Rem Koolhaas and Bernard Tschumi*. Praxis: Journal of Writing + Building: Boston. n.º 8, 2006.

Norberg-Schulz, Christian. *Genius Loci: Towards a Phenomenology of Architecture*. New York, NY: Rizzoli, 1979.

Pallasmaa, Juhani. *Diseminaciones, semillas para el pensamiento arquitectónico*. Barcelona: Gustavo Gili, 2022.

Relph, Edward. "A Pragmatic Sense of Place" *Academia.edu*, Accessed March 15, 2023. https://www.academia.edu/35463917/A_Pragmatic_Sense_of_Place.

Rossi, Aldo. *A arquitectura da cidade*. Lisboa: Cosmos, 1977 [1966].

Schon, Donald A. *Educating the Reflective Practitioner*. San Francisco, CA: Jossey-Bass, 1987.

Schon, Donald A. *The Reflexive Practioner. How Professionals Think in Practice*. USA: Basic Books, 1984.

Siza, Álvaro. *Imaginar a Evidência*. Lisboa: Edições 70, 2006.

Tainha, Manuel. *Arquitectura em Questão: Reflexões de um Prático*. Lisboa: AEFA – UTL.

Távora, Fernando. *Da Organização Do Espaço*. Porto: FAUP Publicações, 1999 [1962].

Villagrán García, José. *Teoría de la arquitectura*. México D.F.: El Colegio Nacional, 2007.

Zumthor, Peter. *Atmospheres: Architectural Environments; Surrounding Objects*. Basel: Birkhäuser, 2006.