

TECTONICS IN THE PERIPHERY: ALTERNATIVES FOR DESIGN TEACHING **TECTÔNICA NA PERIFERIA: ALTERNATIVAS PARA O ENSINO DE PROJETO** JULIANA SICURO, ANA SLADE

Juliana Sicuro Corrêa is an Architect, holds a Master's degree in Architecture and Urbanism and is a doctoral candidate in the Graduate Program in Urbanism at the Federal University of Rio de Janeiro (UFRJ), Brazil. She studies the relationship between architecture and territory, urban history and theory of architecture and urbanism, with an emphasis on infrastructure, public spaces, and the production of the common. sicuro.arq@gmail.com

<http://lattes.cnpq.br/6975842091230075>

Ana Slade Carlos de Oliveira is an Architect and Ph.D. in Urbanism. She is an Adjunct Professor at the Faculty of Architecture and Urbanism at the Federal University of Rio de Janeiro (UFRJ), Brazil, and the Graduate Program in Urbanism at the same institution. She coordinates research on Brazilian Modern Architecture, architecture teaching, architecture and the city, architecture for housing and work, suburbs, and projects for vulnerable communities. anaslade@fau.ufrj.br

<http://lattes.cnpq.br/8206318584355989>

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Abstract

This paper addresses the pedagogical experience of the “Ateliê Aberto” at the Faculty of Architecture and Urbanism of the Federal University of Rio de Janeiro (FAU-UFRJ) in recent years, which has been debating and building possibilities for an alternative design teaching to the hegemonic approaches of a colonial-modern matrix with a strong European reference, in the sense of repositioning the role of the architect, aiming at greater infiltration in contemporary urban territories. The Ateliê Aberto seeks to answer two issues identified as recurring problems in architectural design teaching: on the one hand, the devaluation of drawing and constructive thinking, understood as fundamental tools for contributing to society, and, on the other hand, the distancing from urban social reality and of its inhabitants in all its extension and complexity. The approach that has been tried at Ateliê Aberto for the architecture design studio is presented, as well as the repertoire used for an approach based on tectonics for the Brazilian peripheries. Recent Latin American architectural production is valued for bringing together examples capable of, from a small scale, to promote qualitative transformations in the spaces of everyday life and for the strong approximation between thought and construction. In this way, we seek to equip future architects for the expansion and revision of the professional field through the possibility of transforming territories from architecture.

Keywords: Tectonics, Urban Peripheries, Design Teaching, Latin American Architecture

1 Introduction

This paper treats a pedagogical experience of architectural design teaching, developed over the last three years at the Faculty of Architecture and Urbanism of the Federal University of Rio de Janeiro (FAU-UFRJ), which has been debating and building possibilities for an alternative teaching of design to hegemonic practices, based on some main guidelines: the repositioning of architects in relation to urban peripheries; the construction of a relevant repertoire for this performance, which strengthens the affinities with contemporary production in Latin America; and the questioning of the separation between thinking and making, seeking to bring the design closer to the universe of self-construction. The main motivations that guided the proposal, its methodology and preliminary results will be addressed throughout the article.

Formulated by a group of four professors¹, in collaboration with a team of tutors and monitors, the “Ateliê Aberto”² began with the resumption of academic activities in remote mode, due to the Covid pandemic. The use of the term “open” was intended to materialize, in some way, aspects that seemed fundamental for the development of transversal and collaborative work that is always under construction. According to Sennett, (2019, p. 16), an open system is one in which simple operating rules give rise to complex, sophisticated and adaptable collective behavior.

Anchored in the themes of “Minimum Architectures” and “Poetic Structures”, it developed and took shape, adding new professors and students and presenting itself as an alternative for a project teaching engaged in the transformation of reality and in a critical review of the teaching of architecture design at the Brazilian public university. The interest of this pedagogical proposal is focused on the crossing of two main agendas (on the idea of agendas for design teaching see Lassance, 2015): tectonics, understood as “poetics of construction” (Frampton, 1995), as claim to value constructive thinking and the potential for constructive expression of architecture; and the issue of urban peripheries, which becomes both a central theme for reflection and a practical field of action in design studio.

This cross-agenda aims to develop pertinent design reflections, linked to the daily realities of students, and possible from a material, constructive and economic point of view. We seek, in this way, to equip future architects for other modes of action

¹ Namely: professors Diego Portas, Ana Slade, Andrés Passaro and Juliana Sicuro (assistant), tutors Ariane Pereira and Caio Carvalho and students (monitors) Gabriela Moussa and Larissa Monteiro. In subsequent semesters, the team has been joined by the teacher Rodrigo D’ávila (assistant), professors Luciana Andrade, Jorge Fleury and Jonas Delecave, and, among others, tutor David Morales and students (monitors) Renata Esteves, Angela Blanco, Moana Reis, Ana Carolina Nonato, and Isabelle Tiemi.

² The Ateliê is inaugurated in 2020, during the remote experimental semester, from open classes called “Conversations in Design”. These classes proved to be an alternative for teaching design in remote mode and built a collective collection available on youtube <https://www.youtube.com/channel/UCv4UDMLAIOLwfaJxKdcvRBA>.

in the different territories with which they may operate in an alternative way to the “grand gesture” of the author-architect. We bet that small-scale interventions, combined and thought out in a systemic way in the existing city, can become true “infiltration tactics” in territories that are inaccessible to architecture and urbanism projects, as proposed by Fernando Diez (Diez, 2010).

2 Stem from the Small

We can currently observe, at FAU-UFRJ and from contacts with other Brazilian schools, a predominance of exercises at design studios that depart either from a “diagnosis” of a specific context or a “needs program” from which they are developed. medium to large scale projects. In addition to the evident – and questionable – functionalist heritage in the aforementioned approaches, the exercises presuppose reality scenarios in which the State or the market would be the motivators of hypothetical demands. However, the reality faced by architects who leave university is quite different and the demands for large-scale urban or architectural projects are increasingly rare.

Not discarding the potential of approaches aligned with the aforementioned hegemonic pedagogical practices, we claim the need to approach the social realities in which students are inserted. This reality presents social and environmental challenges, as well as limitations from an economic perspective. In addition to socio-environmental urgencies, we deal with the positive amplification of debates related to racial and gender issues, destabilizing the modern epistemological foundations that supported and still largely support the disciplinary field.

As Carranza and Lara point out, it is necessary to revise certain modern precepts and the repositioning of the field of architecture implies a change of scale. Converging with this look at the design problem, the theme of “Minimum Architectures” is proposed to guide the exercises in the studio. According to Carranza and Lara:

At the same time, the idea of utopia held in the past has been abandoned, as we’ve become skeptical of any solution to the problems. Instead, we focus on the transformative power of smaller interventions and their potential for dissemination. For that reason, we now call social awareness what we called utopias before. It implies a change in scale (smaller projects) and also means that architecture no longer claims to have the power to change any given societal problem. (Carranza; Lara, 2015, p. 354).

The “minimum” is not a new theme for architecture and urbanism. The subject was widely promoted in the context of the modern movement in order to find efficient answers to the massive housing production. However, when associated with constructive rationality and the universality of the modern project, the ideal of the minimum often became a producer of generalizations and was, to some extent, responsible for distancing architecture from the diversity of individuals and ways of life that make up a democratic society. In the rereading proposed here, the minimum is understood as a possible catalyst for the aforementioned critical review, and can assume different manifestations: the minimum as infrastructural, the minimum as small-scale intervention, the minimum as an approximation to the constructive detail, the minimum as economy of resources.

3 Two Agendas

In this pedagogical proposal, the concept of tectonics is displaced from its original context – Frampton's recognition of works by renowned authors – and takes on political contours, presenting an alternative for future architects to actively participate in the production of the landscapes they inhabit. It is important to contextualize the interest in reflecting on our urban reality, cities and metropolises resulting from intense land subdivision and horizontal expansion processes, that form heterogeneous and complex urban fabrics, in which the plot of blocks developed from the subdivision of single-family houses lot is one of the most representative patterns.

We call “periphery” the territories resulting from a space production process identified by Teresa Caldeira as “peripheral urbanization” (Caldeira, 2017). These territories do not necessarily correspond to the “edges” of the city. The phenomenon of peripheral urbanization, according to the author, is present in several cities of the so-called Global South. It is characterized

by the presence of self-construction, at different levels, and by the use of “transversal logics” with regard to urban regulation and legality more broadly.

The low density characteristic of many of these peripheries means latent constructive potential and generator of new spatial configurations and economic arrangements. Although we are dealing with a portion of the city commonly understood as consolidated and where the presence of architects is extraordinary, it is a territory that is in constant change through self-construction inside the lots. We identified in the architectures produced in these contexts a specific repertoire of materials and solutions that arouse interest and a rich dynamic of uses and activities between the public and the private, both in the spaces of expansion of the house to the street and in the incorporation of other functions to the house beyond of housing (Slade, 2019).

Another component of the pedagogical approach presented here is the emphasis on the building issue, understood as a fundamental disciplinary aspect. It is important that the study and in-depth knowledge of the architectural project be recovered, hidden by the consumption and excessive reproduction of images that leads students to superficial apprehensions of “attractive” images that circulate freely on the internet (Passaro; Favero, 2006) and distance us from the concreteness of the constructed artifacts.

In opposition to the teaching of design that commonly prioritizes form and space unconnected to technical-constructive confrontation, the proposal of Ateliê Aberto is to value constructive thinking from the early stages of the design process, starting with the choice of materials, systems and methods in an imbricated manner with the formal and spatial proposition, in a sensitive relationship with the context. Just as claimed by Frampton in the 1990s, “we are not alluding here to mechanical revelation of construction but rather to a potentially poetic manifestation of structure in the original Greek sense of *poesis* as an act of making and revealing.” (Frampton, 1990, p. 19).

The technical-constructive understanding allied to relational and expressive (aesthetic) issues can promote new architectural practices that take advantage of the power and specificities of the territories in their social, cultural and political dimensions. The approximation between thinking and making is also a way of dealing with structural disciplinary impasses pointed out by Sérgio Ferro in “O Desenho e o Canteiro” (Ferro, [1975] 2006), configuring new, less exploitative productive arrangements based on the exchange of knowledge and possibilities of other forms of production.

4 An Emerging Repertoire

Once this double agenda is established, it is necessary to build a repertoire that helps its application in the practice of project teaching. It is worth making a brief defense of the study of previous architectural works as a tool for design process. Although frequent in many pedagogical approaches, schools of architecture have not always used this method of teaching and learning. We know that in the *Beaux-Arts* tradition, students were encouraged to copy the works of the great masters. In the modern tradition disseminated by the Bauhaus, history is no longer of interest and the methodologies practiced in design studios are based on formal and compositional exercises, stimulating “creative genius” and innovative solutions - unprecedented - to the problems faced and having originality as a value (De Duve, 2003).

The problematization about which repertoire to mobilize - and its implications - is necessary. As Nilce Aravecchia (Aravecchia Botas, 2018) points out, the historiographical production in architecture and urbanism has been assimilating important aspects of decolonial thinking; however, the teaching environment has less adherence to this debate and has been restructured more slowly. The author calls for a radical critique and for the necessity of a deep rupture with the Eurocentric bases of colonial thought that guided modernity and still represent the hegemonic thought in the field of architecture and urbanism. It is worth emphasizing here, as Aravecchia Botas suggests, the importance of understanding Latin America as a cultural project of resistance and not only as a territory marked by European heritage. In this sense, a curatorship of emerging practices related to tectonics in countries with social, economic, political, cultural, and environmental characteristics closer to the Brazilian context is triggered. These practices seek an approach to the site, tensing the division between thinking and making that structures the disciplinary field since its origin, and that reinforces the dominant power structures.

We can cite examples such as the contemporary Paraguayan production that demonstrates inventiveness in constructive experimentation with handmade labor and traditional low-cost materials (Goma Oficina, 2019). An internationally recognized

example is the experimentation with bricks in Paraguay, in the built work of the Gabinete de Arquitectura by Solano Benitez and Gloria Cabral (Fig. 1). Other practices, such as those of the collectives Al Borde³ in Ecuador and OCA (Oficina Comunitaria de Arquitectura)⁴ in Paraguay (Fig. 2), are also in the selected repertoire, for starting from constructive techniques and local materials, combining low-cost construction with community articulations and educational practices.



Fig. 1: Children's Rehabilitation Center Teléton, *Gabinete de Arquitectura*, Assuncion, Paraguay, 2010). Source: Federico Cairoli, 2015. Available at: <http://www.federicocairoli.com/works/-fundacion-teleton/>. Accessed 27 Oct 2022.

³ For further information, see: <https://www.albordearq.com/>. Accessed 27 Oct 2022.

⁴ For further information, see: <https://oca.com.py/>. Accessed 27 Oct 2022.



Fig. 2: Community Development Center, OCA + Bonini Arquitectos, Luque, Paraguay, 2014. Source: Federico Cairoli, 2015. Available at: <http://www.federicocairoli.com/works/-centro-de-desarrollo-comunitario/>. Accessed 27 Oct 2022.

The proposal that has been experimented in the Ateliê Aberto is to study architecture through drawing and the identification of “architectural devices”⁵ that are operative for the students’ design in development. Beyond design, we are interested in understanding alternative forms of insertion of the architectural project, beyond the hegemonic architect-client relationship, enabling more participative and collective processes or the provision of services for low-income social classes.

The Vila Matilde House, designed by the São Paulo studio Terra+Tuma (Fig. 3)⁶, was one of the starting points in the construction of Ateliê Aberto’s repertoire. It is a work that aroused interest for exemplifying the above mentioned scenario of a client who, at first, would not hire an architecture office. Moreover, from the tectonic perspective, for its constructive system, which explores the structural masonry planes of concrete blocks associated with precast slabs in balance, resulting in spatial, climatic and luminous quality in a narrow lot.

⁵ We call “architectural devices” fragments or strategies extracted from the studied works to be transposed or to influence the students’ design in process.

⁶ For further information, see: <https://terraetuma.com/portfolio/casa-vila-matilde/>. Accessed 27 Oct 2022.



Fig. 3: Vila Matilde House, Terra e Tuma Arquitetos, São Paulo, Brasil, 2015. Source: Pedro Kok, 2015. Available at: <http://www.pedrokok.com/house-vila-matilde-sao-paulo-brazil/>. Accessed 27 Oct 2022.

The recent Argentinean production also arouses great interest due to intervention strategies in the interiors of residential blocks in Buenos Aires. The small architecture works developed by firms such as Adamo Faiden, Alonso Crippa, FRAM architects, AToT, IR arquitectura and Florencia Risotti, among others, stand out for their constructive rationality and accurate detailing and experimentation with construction systems such as light metal frame and wood structures and other available materials. We can also mention the Brazilian experiences of young offices such as Terra e Tuma, Gru.a and Messina Rivas that have been working on small scale works and exploring the economy of resources. The works of the above mentioned architects include projects for different social classes and not always with low cost solutions. However, there is an interest in the way they conceive design, in the way they relate and explore materials and constructive systems, with a certain simplicity and inventiveness.

Despite the contextual specificities, and the diverse authorial poetics, we identify in common in these practices an attitude towards reality and the exercise of the project, precisely explained by Adamo and Faiden in the article "The Contemporary Constructor": a way of operating with what is within reach of hands, in a new constructive rationality. It is a practice attentive to the local culture, but not necessarily contained in its conditions, open to bring learnings from other contexts and knowledge. As Adamo and Faiden describe it:

The contemporary builder understands the world as a collection (...) not a jigsaw puzzle whose pieces will reconstruct a whole by fitting into each other. He describes it as a mosaic without glue, with multiple loose, free pieces that have value in themselves and in relation to each other, forming different associations and changing connections (...) he constantly expands his relational network. He knows that if he only knows "people from the neighborhood" he will be stuck in the lexicon in which he was educated, so he tries to build knowledge with unknown builders, techniques and environments. (...) he stands on the shoulders of others. He goes much further on the achievements of those who preceded him (...) he often imitates. He gets as close to the original as he can because he knows that he will never fully succeed and that the difference will be frankly remarkable.⁷ (Adamo; Faiden, 2009, p. 1-2, our translation).

The Martos House⁸ (Fig. 4), like other projects by Adamo Faiden, is the result of an inventive association of catalog materials that form a system that is applied with variations in other projects. The light tubular metallic structure is the support for a

⁷ From the original, in Spanish: "El constructor contemporáneo entiende el mundo como una colección (...) no un rompecabezas cuyas piezas reconstruirán un todo al encajar unas con otras. Lo describe como un mosaico sin pegamento, con múltiples piezas sueltas, libres, que tienen valor en sí mismas y en relación con las demás, formando diferentes asociaciones y conexiones cambiantes. (...) amplía constantemente su red relacional. Sabe que si solo conoce "gente del vecindario" quedará atascado en el léxico en el que fue educado, de manera que intenta trabar conocimientos con constructores, técnicas y entornos desconocidos. (...) se sube a los hombros de otros. Llega mucho más lejos aupado por los logros de los que lo precedieron (...) muchas veces imita. Se acerca al original tanto como puede porque sabe que nunca lo conseguirá del todo y que la diferencia será francamente notable."

⁸ For further information, see: <https://Adamo-Faiden.com/index.php/projects/data/af-casa-martos>. Accessed 27 Oct 2022.

diversity of panels made up of industrialized elements such as the tile, the screen, the metallic grids, which with their gradations of opacity provide a variety of relationships between the interior and exterior and the quality of light. Vegetation is another important element in their lexicon, being present in patios, terraces and balconies or mediating the private and the urban environment in "thick facades" (Eskinazi, Engel, 2019).



Fig. 4: Martos House, Adamo Faiden, Buenos Aires, Argentina, 2012. Source: Cristobal Palma, 2012. Available at: http://cristobalpalma.com/casa_martos. Accessed 27 Oct 2022.

Other annex buildings, such as the Palos House, designed by the AToT⁹ (Fig. 5), provoke reflection on alternative ways of acting in residential neighborhoods in Brazilian peripheries. The use of a metallic structure over pre-existing building points to lighter solutions than the typical construction of drilled bricks with reinforced concrete structure.

⁹ For further information, see: <https://atotarq.com.ar/portfolio-2/casa-palos/>. Accessed 27 Oct 2022.

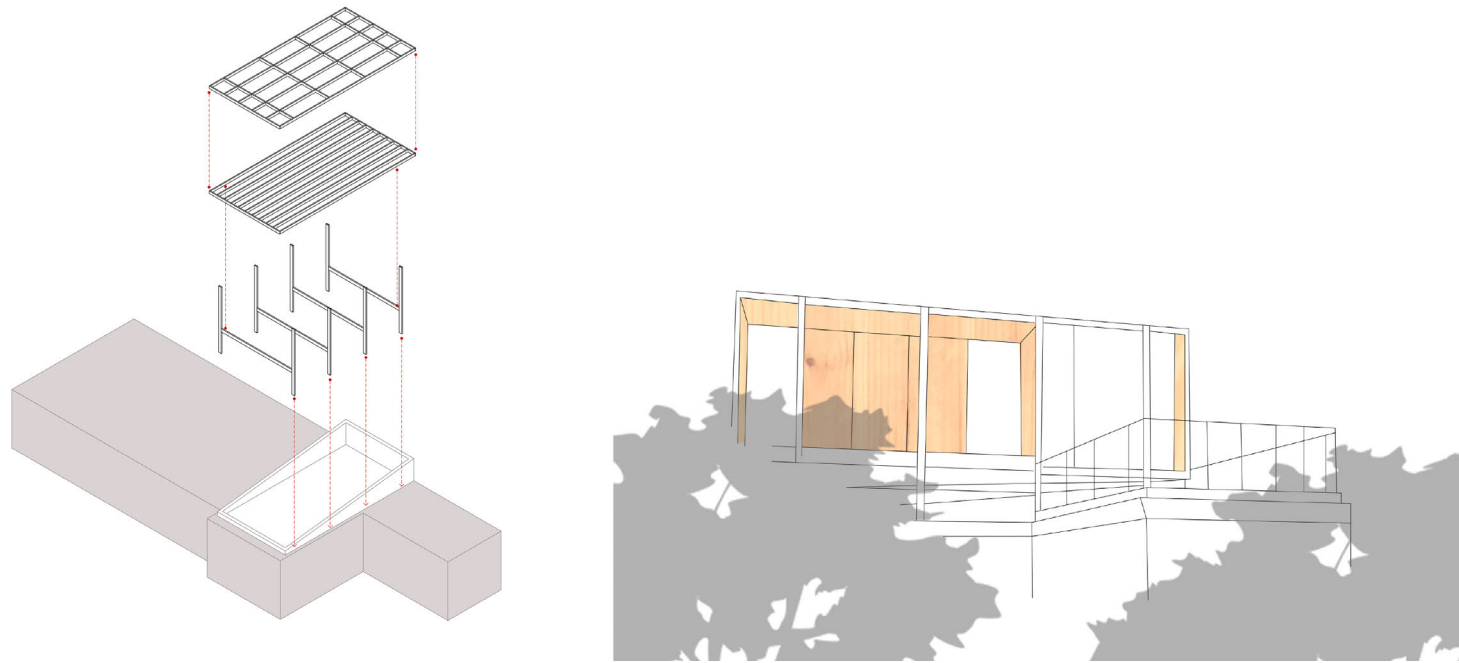


Fig. 5: Palos House, de AToT, Buenos Aires, Argentina, 2015. Analysis drawings made by students. Source: Julia Reyes and Wallace Alvim, 2021.

In the Urban Refuge, by architects Agustin Berzero and Valeria Jaros¹⁰ (Fig. 6), the intervention started with the demolition of small sections of slab that occupied almost the entire lot, forming backyards, large enough to ensure quality ventilation and light. A membrane built with common ceramic brick forms the border of the lot with the street. The brick is laid horizontally - a recurring technique in Brazilian self-built houses - becoming a hollow element that allows light and ventilation to the internal space, or in this case, also to the external one. The constructive solution adopted is different because it makes use of reinforced joints, which enables the adoption of a large volume constituted by the hollow elements. The result demonstrates the sophistication of the project in terms of tectonics that produces an environment of filtered light and preserves views of the landscape and the sky without giving up privacy in relation to the surrounding urban space.

¹⁰ For further information, see: <https://www.archdaily.com.br/br/911981/casa-estudio-refugio-urbano-estudio-berzero-jaros>. Accessed 27 Oct 2022.



Fig. 6: Urban Refuge, Estudio Berzero Jaros, Cordoba, Argentina, 2016. Source: <http://www.federicocairol.com/cortometrajes/-refugio-urbano/>. Accessed 27 Oct 2022.

In the Brazilian context, some practices of young offices can be presented as examples of Adamo Faiden's design posture. The Gru.A's Videiras Pavilion¹¹ (Fig. 7) is based on the choice of a wooden structural system associated with catalog materials (handmade and industrial) in an inventive process and care in the details and joints. In Messina Rivas' Ingá Mirim chapel (fig. 8), the expressive power of stone as an element that composes a hollowed wall acquires an unexpected lightness. The approach to the rural context - identifying available materials and topographical nuances - as well as the exchange of knowledge with local builders characterize the approach that could be practiced in other contexts.

¹¹ For further information, see: <https://www.grua.arq.br/projetos/pavilhao-videiras>. Accessed 27 Oct 2022.



Fig. 7: Videiras Pavilion, Gru.A arquitetos, Rio de Janeiro, Brazil, 2016. Source: Federico Cairol, 2019. Available at: <http://www.federicocairol.com/encargos/brasil/-pavilhao-videiras/>. Accessed 27 Oct 2022.



Fig. 8: Ingá Mirim Chapel, Messina Rivas, São Paulo, Brazil, 2018. Source: Federico Cairoli, 2019. Available at: <http://www.federicocairoli.com/encargos/brasil/-capela-inga-mirim/> Accessed 27 Oct 2022.

5 Active Transformation

Instigated by architectural works and practices such as those mentioned above, students are invited to the design challenging task called “Active Transformation”. In this exercise, an 'uncomfortable look' – as we call – at reality is stimulated, that is, from a critical and propositional posture towards the spaces they inhabit, the students define a place and problem for the project. The clipping can be in the domestic sphere or in the public space – a small community facility in a neighborhood square, an annex on a family member’s lot – as long as it can be visited for a physical and photographic survey and for recognition of daily life activities.

Pre-existence is treated as a central aspect. Recognize the potential of what exists, do not seek to “correct” what can be identified as imperfect landscapes of the cities we live in or produce “tabula rasa” in these contexts, but rather add or subtract elements to conquer new qualities. Problems related to ventilation and natural lighting, accessibility, privacy and user flows derived from additions that were built without planning are frequent. Although the additions – popularly called “puxadinho” – often meet user demands, the need to expand free space inside the lots is evident to guarantee essential values of habitability. In this sense, most of the proposed interventions expand the presence of natural light in domestic interiors and introduce new thermal-environmental control mechanisms (shade elements, recesses and eaves, light filters on facades, among others).

The works Casa Fundos, Casa Rabelo and Casa Araújo represent recurrent design operations in the studio's works that are dedicated to face the residential lot issues. In Casa Fundos (Fig. 9) an annex is proposed on the top of the existing house, which uses the brick as a construction element, exploring the structural masonry and variations of block laying in order to create hollow planes. A perforated façade detached from the volume of the house creates a kind of patio, which controls the entrance of light and privacy in the internal environments and balconies of all floors.

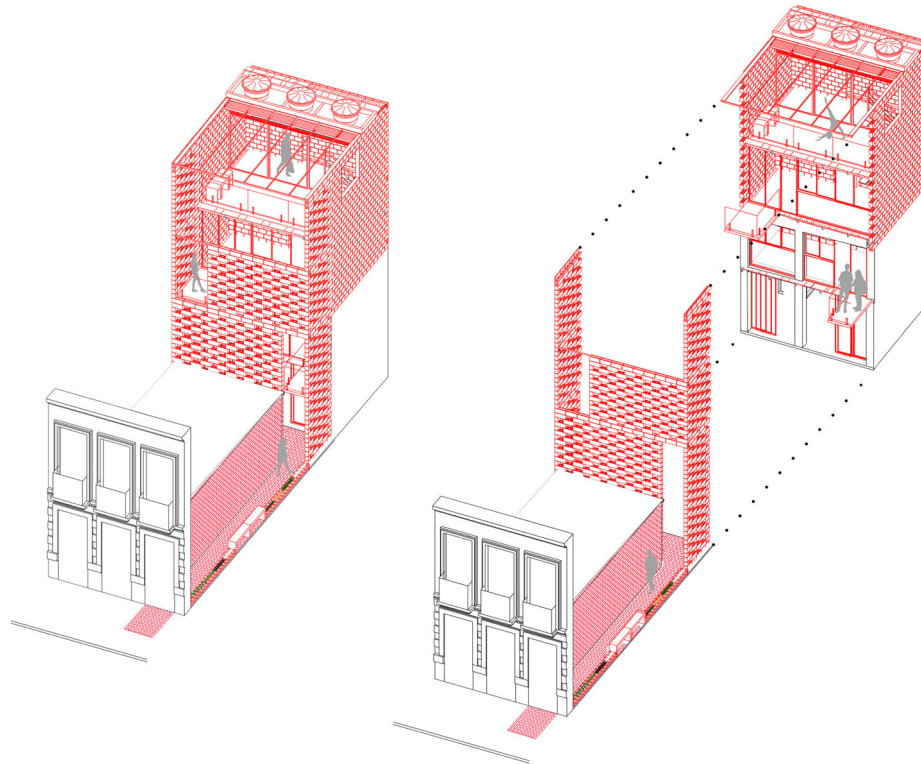


Fig. 9: Casa Fundos, Centro, RJ. Fonte: Ayumi Nakato e Leticia Hora, 2021.

In Rabelo House (Fig. 10) the "construction of voids" (patios and setbacks) is operated in order to provide ventilation and natural lighting for the first floor. The current roof of the house, which does not favor natural lighting, is replaced. The manipulation of the panels of the new roof provides variations in ceiling height and well-ventilated and illuminated internal spaces. In the third project, Araújo House (Fig. 11), the design operation consists in superimposing a new light structure over part of the existing construction and in removing the masonry that prevented the contact between the internal spaces of the house and the backyard, creating a large and airy space responsible for the intermediation between inside and outside.

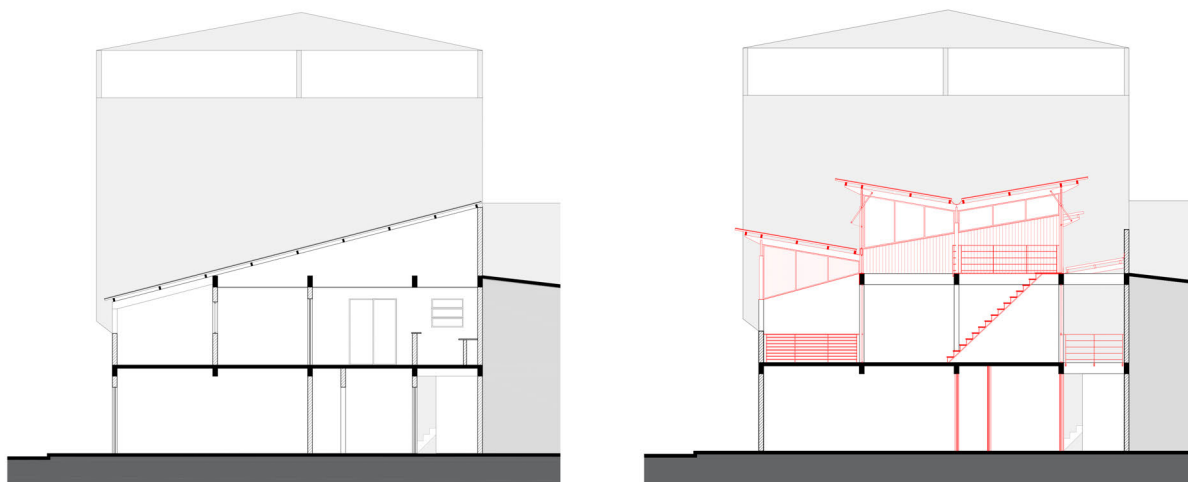


Fig. 10: Rabelo House, Japeri, Rio de Janeiro, Brazil. Source: Lívia Borges e Vinicius Soares, 2021.



Fig. 11: Araújo House, Rocha Miranda, Rio de Janeiro, Brazil.. Source: Cindy Raísa e Duana Araújo, 2022.

Beyond the issues related to the physical-material environment, the debate about "indeterminacy" (Maciel, 2015) and flexibility of spaces is addressed. It provokes the reflection on how to design spaces - domestic or public - to house the collective life in its complexity and constant transformation, allowing the re-signification by its dwellers, recognized as agents of production and invention of everyday life (De Certeau, [1984] 1996). In this sense, the backyard, the terrace, the balcony and the garage, places characterized by collective appropriation through multiple planned and unpredictable activities, present themselves as potent spaces. In the work Guca Terrace (Fig. 12), a wooden structure is proposed with a metallic mesh closure on the perimeter of the existing terrace, which functions as a visual filter for the space. The quality of the terrace

is preserved (and potentiated) as a support for diverse appropriations. In the work Aerial Squares (Fig. 13) a new external circulation tower allows independent access to the community space on the roof slab of a collective residential building.

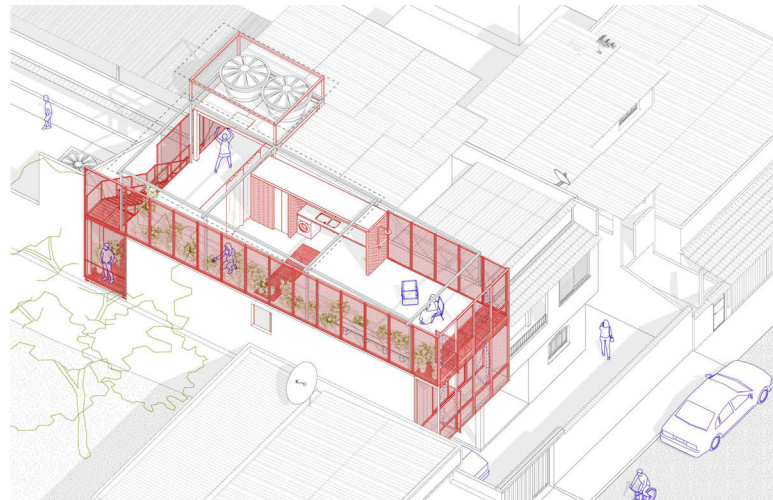


Fig. 12: Guca Terrace, São Gonçalo, Rio de Janeiro, Brazil. Source: Gláucia Cunha e Roger Costa, 2021.

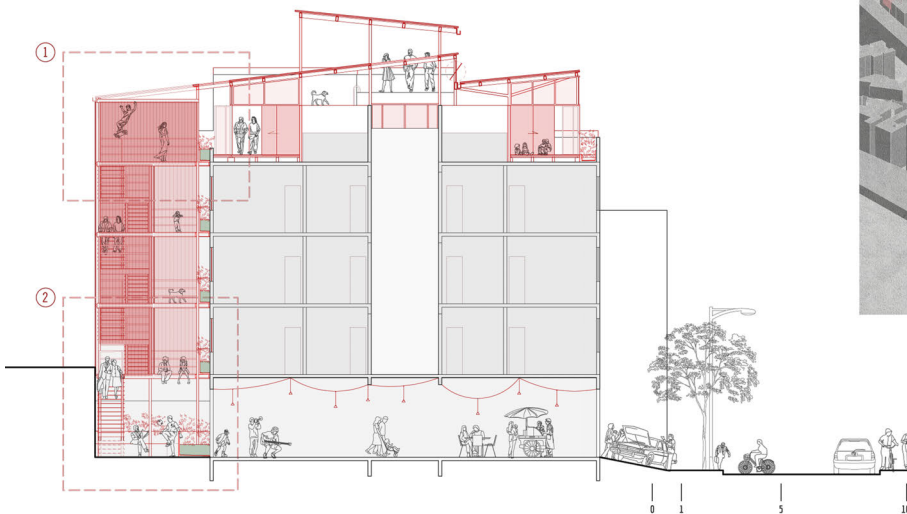


Fig. 13: Aerial Squares, Vila Isabel, Rio de Janeiro, Brazil. Source: Joanna Ferreira e Thaina Bessa, 2021.

Another relevant aspect in peripheral contexts is the conjugation to the residential environment of spaces destined to paid work (hairdresser's, bar, sewing workshop, mechanic's workshop, among others). The façade on the ground level becomes more porous and the house expands to the street, denoting a cultural aspect of popular neighborhood life in Rio de Janeiro (Vogel, 1985) and other Brazilian cities. The project of the Bar-house (Fig. 14) deals with the coexistence between house and shop, between private and collective life. The challenge of managing circulation and access is the starting point for the project. From the constructive standpoint, it is started from a system that is usual in these peripheries in the construction of roofs over terraces and sidewalks, which consists of a metallic tubular structure of small section. The simple galvanized steel tile, also common in self-built landscapes, is explored not only as a roof but also as a vertical sealing material. These choices allow for the creation of large balconied and shaded circulations for collective appropriation, of the house or the bar, on different levels.

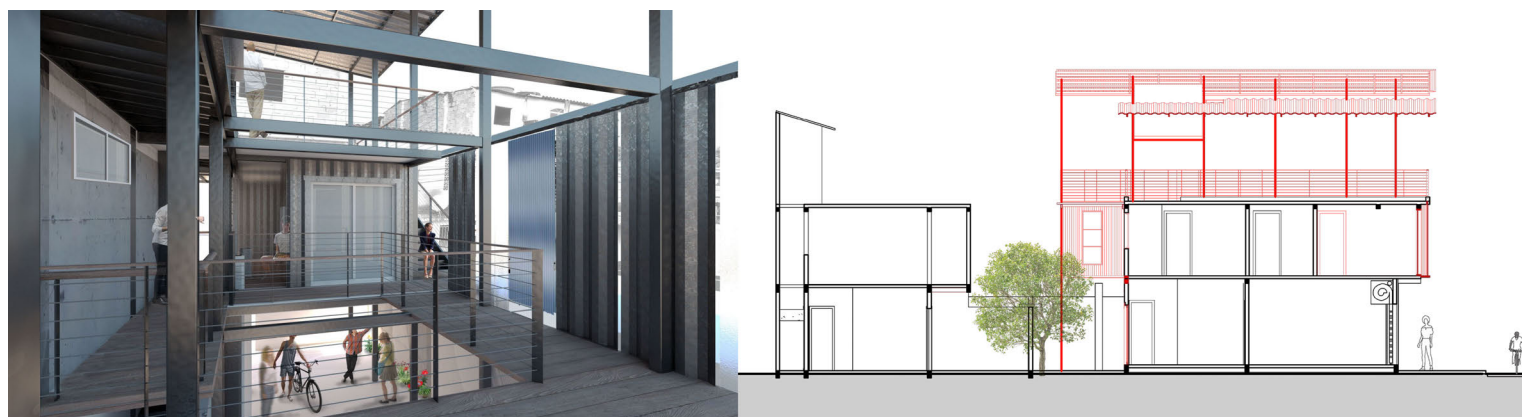


Fig. 14: Bar-house, Guaratiba, Rio de Janeiro, Brazil. Source: Desirée Vacques e Taís Vicente, 2020.

The collective dimension of the city is also addressed in the works Urban Yard (Fig. 15) and Aside from (Fig. 16), that are dedicated to small community equipment open to diverse publics. The former, an equipment in two corner lots, includes the street in the design space. Yards are usually spaces used for domestic activities (washing and drying clothes, cooking, etc.), for the cultivation of vegetable gardens, and for leisure and social activities. The proposal, however, displaces its original context (the interior of the domestic lot) adding the adjective "urban" and conferring a public dimension.

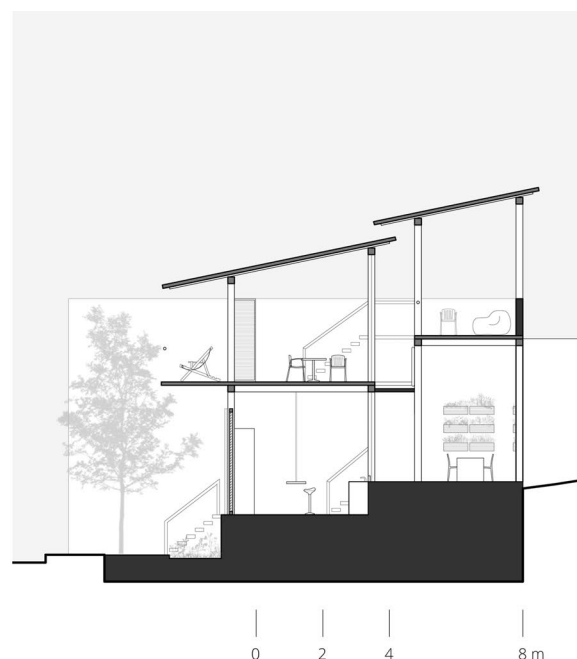


Fig. 15: Urban Yard, Belford Roxo, Rio de Janeiro, Brazil. Source: Carolina Rapozo e Isabela Martins, 2021.

Domestic work leaves the house and a collective laundry is proposed next to the kitchen and dining area. A kind of structural grid supports loose planes of metal roofing, giving these corners a character of openness and transparency. In the second example (Fig. 16), the proposal consists of a space for homeless people. The proposal starts from the modular structural system of scaffolding to build a covered shelter with open spaces for permanence and other closed spaces for storage. Coverage and closure acquire continuity from a sequence of translucent tile planes. Floor plans are also defined at several levels.

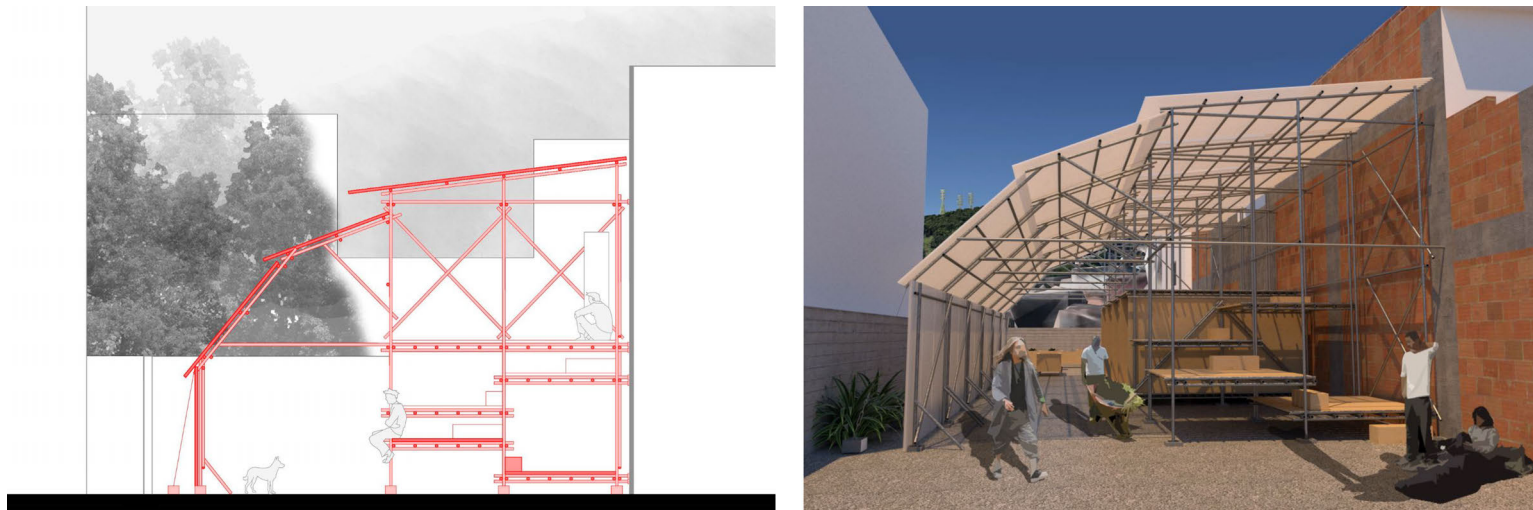


Fig. 16: Aside from, Madureira, Rio de Janeiro, Brazil. Source: Aleksander Moraes e Luccas Pereira, 2020.

The recognition of a set of common elements, materials and constructive solutions and their appropriation and creative reformulation is a recurrent procedure in Ateliê Aberto's works. To look at what is built without the presence of architects with design interest, "learning from" this commonplace architecture or the "ordinary", as proposed by Enrique Walker (Walker, 2010). This aspect is explicit in the work Clothesline House (Fig. 17), in which the clothesline itself, reinterpreted, gains scale and becomes an element of constitution of spatiality and ambience. And in the Chicken Coop work (Fig. 18), the ordinary also presents itself as an important creative key. The choice of an unusual program sheds light on the presence of other users of the space, non-human and usually neglected: the chickens. The project, however, goes beyond its initial function and becomes the gateway to the ranch. From the point of view of tectonics, the chicken coop metallic mesh and the ceramic brick, common materials, when used in an unusual way, gain poetic expressiveness.

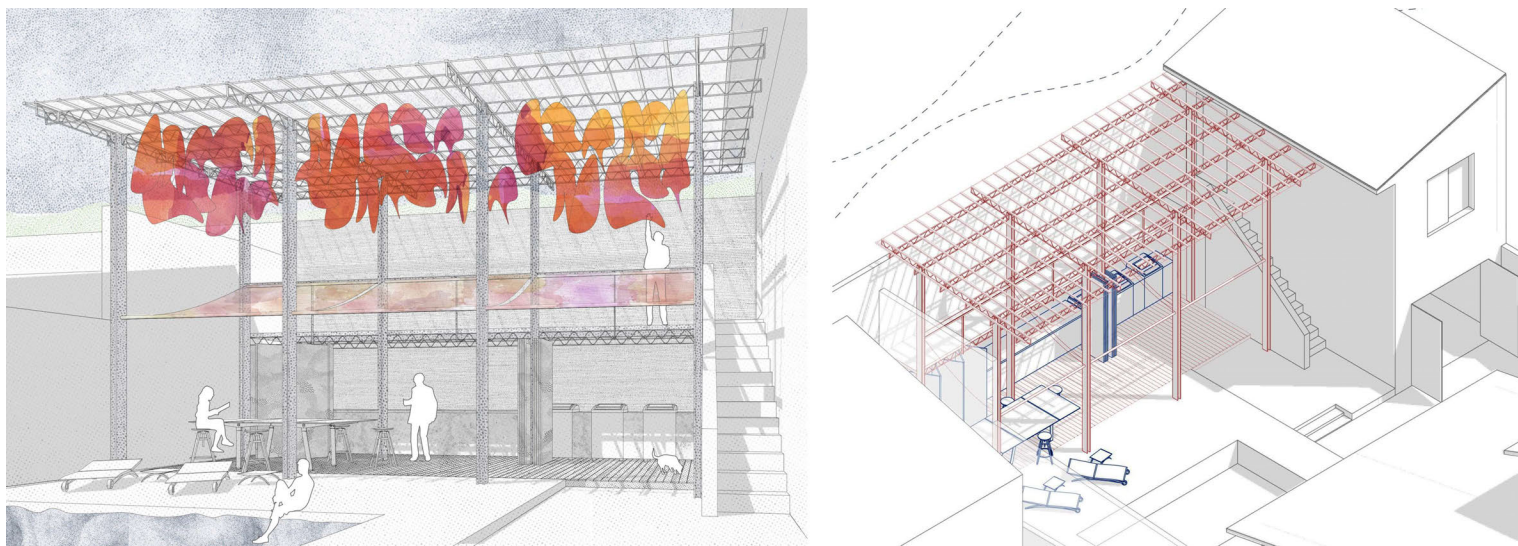


Fig. 17: Clothesline House, Ilha do Governador, Rio de Janeiro, Brazil. Source: Arthur Frensch e Ana Totti. 2020.

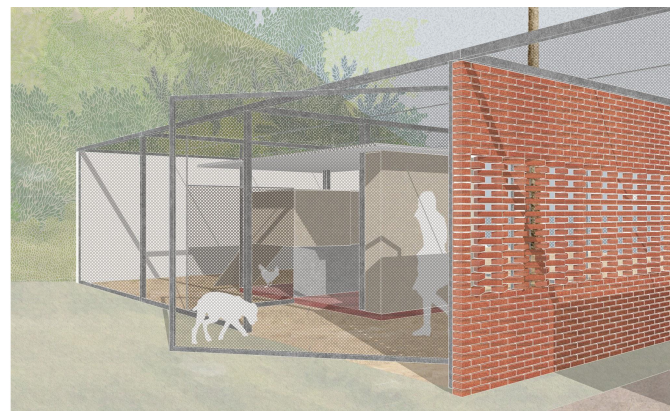
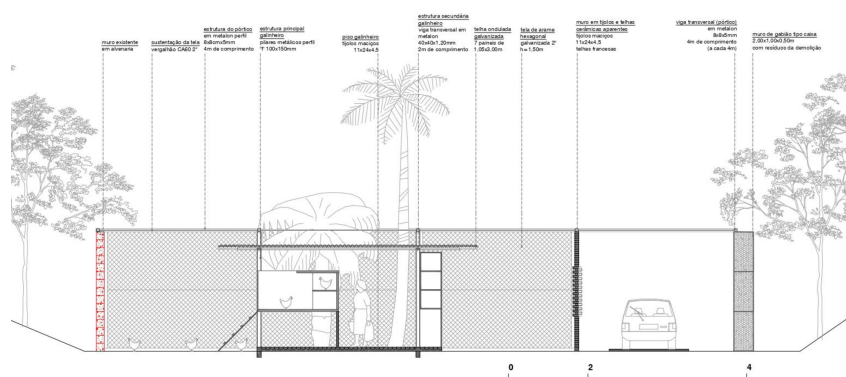


Fig. 18: Chicken Coop, Morro Azul do Tinguá, Rio de Janeiro, Brazil. Source: Renata Esteves e Clara Ebert, 2020.

6 Final Considerations

The "Ateliê Aberto" at FAU-UFRJ is a space for reflection and experimentation with design practice for the peripheries, where most of its students live. It is believed to be essential that the teaching of architecture be dedicated to broaden the action of architects beyond the high-income groups. Working in these contexts has been challenging and stimulating for students and professors. We can notice the students' motivation to have the opportunity to dedicate themselves to work in the contexts where they live. Thus, they see the possibility of acting in their professional lives in projects of this nature and of being important agents of transformation of these territories. On the other hand, by practicing the conventional ways of design conception, as far as graphic products and means of representation are concerned, we become aware of the need to establish a wider debate about other ways of designing and acting from architecture. We understand that the tensioning of the "common place" of the design challenges both the technical drawing of architecture, which often fails to account for aspects of use and transformation of space in time; and the very conception of the design as an authorial intellectual product.

The counter-hegemonic perspective presented here is built on the approximation to a repertoire of contemporary Latin American projects and practices, as well as on the link between thinking and making, contradicting the structuring separation of disciplinary construction. These are bets that aim to reposition the role of the architect for a greater infiltration in contemporary urban territories. The small scale presents itself as an instrument of resistance so that we can glimpse this possibility.

The students' proposals for qualification of the built environment are based, in their great majority, on operations that take place "from the inside to the outside", or from the individual lot to the urban space. The quantity and diversity of works carried out in the studio over the course of three years gains another dimension when brought together and analyzed as a whole, demonstrating the potential for collective transformation of peripheral landscapes from the small.

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