

Since the beginning of the third millennium, the rapid changes that contemporary societies are facing are radically transforming the perception and the structures of our cities. New topics seem to dictate the political agenda, suggesting alternative options to manage the emerging urban mutations.

An increasingly "data driven society" is forcing the migration into an almost immaterial world, prompting Information and Communication Technology together with the Smart City.

The crisis of the traditional real estate industry, propelled by the global finance system, is contributing to re-evaluate the theme of Public Space as a "space of encounter, sharing, experience and inclusivity", mapping the everyday life to discover unexpected Urbanities, through the application of innovative strategies and tools.

As an immediate consequence, new "forms" of cities are strongly brought to our attention: the "city of sharing", the "city of temporariness", the "city of Life between buildings", giving an unexpected impulse to incremental Urbanism of evolving cities.

In such a way, the very idea of the city is radically under discussion. We are then required to answer these numerous questions in order to define the scientific coordinates for the City of the 21st century.

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Marco Maretto, Nicola Marzot, Annarita Ferrante



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MORPHOLOGY AND URBAN DESIGN

new strategies for a changing society

PROCEEDINGS

edited by

Marco Maretto, Nicola Marzot, Annarita Ferrante

with the collaboration of

Silvia Tagliazucchi, Francesco Scattino, Greta Pitanti

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Urban landscape and morphology as operable material for the architectural project: the work of Bruno Violi in Bogotá

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Keywords: *urban morphology, landscape interpretation, architecture and morphology, Colombian modern architecture, Bruno Violi in Bogotá.*

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Abstract. *The relationship between architecture, topography, urban morphology and landscape is addressed and investigated through the critical analysis of four buildings designed by the Italian architect Bruno Violi (Milan, 1909 - Bogotá, 1971) in Bogotá between 1950 and 1962. The case studies have a different scale, functional program and location within the urban fabric of the Colombian capital: two private residences, the Shaio House (1950), located in a newly expanded residential area with a regular urban layout, and the Violi House on Carrera 2e (1953), sited on a sloping lot at the foot of the mountains, totally immersed in nature; the headquarters of the Volkswagen car company (1955), facing an important road axis; and the Quintana Building (1962), an office complex with a roof floor for residential use that dialogues with the consolidated fabric of the colonial historical city. Bruno Violi's work describes how the interpretation of geographic and urban characters of the site is acknowledged as an operational condition and an active design device, capable of strongly binding the architecture to the place, contributing to define its form, compositional choices and identity, as well as a tool for analysing the urban context. The contribution builds on the results of the PhD thesis in Architectural and Urban Composition entitled 'Modern Architecture in Colombia and European Contribution: opportunities for a cultural encounter. Critical analysis of the work of the Italian architect Bruno Violi in Bogotá' (2018).*

Introduction

Topography, morphology of the urban fabric and landscape participate in defining the reference environment of the city and represent a supporting medium for design process, capable of guiding strategies of transformation, relationship and settlement in the specific area (Gregotti, 1982), as well as configuring itself as a device for observing the rules of the project itself.

These elements - even more so when particularly marked - can reveal and support the understanding of the identity of a territory, in terms of tradition, history and urban growth dynamics.

The present paper builds on the results implemented within the PhD thesis in Architectural and Urban Composition aimed at exploring the role of the European contribution in the process of development and affirmation of modern architecture in Colombia, in the period 1930 to 1960, focusing on the critical analysis of the figure of the Italian architect Bruno Violi.

The research investigates the essential characters of Violi's work considering his European background of reference and the cultural, morphological and geographical characteristics of the city of Bogotá, as well as the main aspects that characterized the debate of the time in the South American country. In addition to the technical vocation of architecture and the value entrusted to craftsmanship and construction, the relationship with the landscape and the urban fabric outlines a fundamental lens in defining the identitarian features of Colombian modern architecture.

Compositional principles of classical matrix between rule and variation, tectonics and the language of construction, reading and interpretation of the characters of the place, define the main research topics with respect to which, the all Violi's works have been analysed at general level, and have been deepened for a selection of four case-studies, different from each other for scale, functional program, location within the city, and realized between the 50s and 60s - a significant period corresponding to the so-called golden age of modern architecture in Colombia (Samper Martínez, 2000). The three broad and transversal themes overlap in determining the contribution of the Italian architect who, while always maintaining strong ties with his European origin, mainly operated in the Colombian context.

Geography, topography, urban morphology and landscape of Bogotá are critically understood and analysed as design conditions capable of linking the architecture to the place, contributing to define its compositional choices. Archive documents and historical pictures, jointly with the direct observation, supported the re-drawing process and the analytical elaborations developed in order to acknowledge the relationships between architecture and the urban context, both formal and visual.

Framing the overall research context

In Colombia, the transatlantic transfer of knowledge followed trajectories of indirect and direct nature, involving among others, many architects, urban planners and engineers from Europe, who participated in the debate around emerging modern architecture through intellectual, professional and academic activity.

The experience developed by the Italian architect Bruno Violi, analysed as part of the avant-garde group who led the change of direction in architecture and urban planning, can be considered a significant storytelling example of a broader process of adaptation, exchange and contamination between cultures and knowledge, which played a key role for the development and affirmation of modern architecture in the country.

The research results show how Violi was able to combine, in a transversal way, the knowledge

base built in Europe with aspects of the Colombian geographical and cultural environment, more precisely of the city of Bogotá, where he spent almost half of his life.

First, to better understand the way through which the dialectic between different contributions developed, it is necessary to report some biographical information on the author.

Violi was born in Milan in 1909. He trained between the Academia of Brera, the Schools of Architecture of Rome and Milan, where he finally graduated in 1934. Between Italy and Europe, the young architect develops his first professional experiences, going to form his cultural framework of references, mainly described by the study of classical and renaissance architecture – as documented by the large number of drawings and survey exercises conserved in his archive; and the period spent in Paris working in the studio of Denis Honegger, former pupil of Auguste Perret. These experiences, addressed by the research as tools of analysis, turned out to be lessons learned translated by Violi into compositional rules and the ability to finely treat the building materials, in particular concrete. In particular, the classical reference was constantly fed by the knowledge provided by the architectural treatises of authors such as Palladio, Scamozzi, Alberti and Vitruvius, part of his personal library and which he daily analysed (Rother, 1986).

At the end of the Thirties Violi left Europe and moved to Colombia. In Bogotá he participated in the debate on the nascent modern architecture; he conceived and built a considerable amount of works, considered today part of the modern architectural heritage – first working for the Ministry of Public Works and later developing a professional career full of prestigious assignments; he carried out a constant commitment in the academic field, participating in the critical training of the future generations of Colombian architects.

What makes his contribution relevant and the study of his work interesting is the transversal form with which Violi took part in this process, merging the experience developed in Europe with the features of the Colombian environment, physical and cultural.

Reading the characters of the place

Violi designed and built most of his works in Bogotá, a city with extremely peculiar geographical and physical features.

Spanish foundation centre of 1538, the Colombian capital extends on the Sabana plateau, located at the foot of the mountain range of the eastern Andes, at 2650 meters above sea level.

The mountains and the rivers that cross the vast plain have always been elements of comparison for the construction of the city.

The regular so-called damero geometrical layout, founded on the repetition of a regular pattern of blocks (manzanas or cuerdas in Spanish), and organizing the system of road axis in Carreras (on the north-south direction) and Calles (with east-west orientation), had to confront with the territorial geographical and topographical conditions, in addition to the uncontrolled expansion of the modern city.

The joint system defined by the background screen of the mountains and the regular urban fabric, describes a scenario of great power perceptible in both directions, from the city looking at the mountains and vice versa. In particular, the mountains (los cerros in Spanish), considered a sacred place since the pre-Hispanic epoch, are an evident presence and a constant reference point that 'make unique Bogotá' (Alcaldía de Bogotá, 2017), so strong to convert into a cultural fact and an artefact north (considering that are placed to the east) with respect to which the cartographies are commonly oriented.

Even Le Corbusier, invited to develop a Pilot Plan for the city, on the occasion of his first visit in

June 1947, described this landscape as 'admirable' (Vargas Caicedo, 1987), capturing its peculiar features - the foundation centre, the regular texture of the urban fabric, the rivers, los cerros and the north-south axis that runs parallel to the mountains - in his first sketches. Elements so relevant that will be included in the planning strategies at the metropolitan scale.

Regarding the urban fabric, in the colonial epoch, it was established by buildings of maximum two floors on the model of the patio, closed on the public street and oriented towards the interior space of the courtyard.

The city, until the mid-nineteenth century, continued to develop within the boundaries of the consolidated centre, following a process of increasing densification, by division and subdivision of the existing blocks. The original system, developed on a quarter of manzana, began to change until assuming a conformation similar to the Gothic lot of European reference. The patio continued to be clearly legible, even if fragmented and placed in a variable position.

Starting from the early XX century, the development of mechanical transport systems (such as the tramway), brought the need to intervene on the section of the narrow Calles of the chaotic and congested colonial centre, through demolitions that allowed the widening of roads and the construction of new buildings, leading to the progressive change of the 'modern' city image and its public spaces.

At the same time, new residential districts began to develop in the outskirts of the city, which soon will lose its compact form to follow the direction of the north, south and west expansion axes. In this sense, the decade 1940-1950 marked an impressive acceleration of the process, in particular due to a massive and systematic migration from rural areas to the main centres of the country, causing a considerable increase in population (Arango 1989). The traditional and regular layout, although not always rigorously, continued to organize the built territory in close dialogue with the topography of the mountains, confirming the role of such elements as structural and distinctive features of the Bogotan landscape (see Figure 1 and Figure 2).

Bruno Violi spent almost half of his life in Colombia and the work he carried out in the country demonstrates how he has been able to understand - as happened to Le Corbusier - the value and significance of these characterizing elements, translating them into architecture.

The components involved are many and of different nature: the assumption of the typical features of the Bogotan environment as design conditions, the interpretation of the traditional model of the patio house or the needs related to the public space of a modern city in the making.

The re-drawing and the critical analysis of four buildings - built in Bogotá between the 1950s and the 1960s, with different scale, functional programme and location - supported the acknowledgment of the kind of relationship, both visual and formal, that Violi was able to draw up with the urban fabric and the cerros, directly and constantly involving the compositional process. These two elements, as already mentioned, not only define the structure and geography of the territory, but also represent for the city cultural assumptions.

Violi's work demonstrates an extreme attention to the different aspects involved: the conformation of the site, the topography of the terrain, the scale of the urban fabric, the public space, and the surrounding landscape, near and far.

Four case studies

The research analysed the four case studies with the aim of investigating this dialectic connection between architectural form and urban context, defined by the geographical elements and the urban fabric of regular matrix.

The case studies include two private residences, the Shaio House and the Violi House; the

Volkswagen car company seat; and the Quintana Building, hosting offices, commercial spaces and an apartment on the roof floor. The buildings are located in different areas of the city, dealing respectively with: the urban fabric of a new residential neighbourhood, the Shaio; a site in direct contact with the mountains, overlooking the Sabana plain and the city, the Violi House; an important road axis tracing the city expansion towards the west, the Volkswagen; the context of the historic city, the Quintana (see Figure 3 and Figure 4).

The Shaio House (1950) stands on the north-west corner of a large plot (about 390 square meters) located in the barrio la Cabrera, one of the urbanizations that at the end of the 1940 marked the limit of extension of the city to the north. A regular layout ordered in manzanas an area characterized by the presence of a few buildings - mostly single-family residences for the bourgeois class - surrounded by a dense vegetation of acacias and eucalyptus (Rother 1986). The building consists of a compact two levels block, with an almost square plan. The rooms, overlooking the garden in the southeast direction, are articulated around a large patio located in a decentralized position. Two secondary pavilions, on the west side, delimit a smaller courtyard. The plan describes the relationships that the building establishes with the limits of the lot, marked by the boundary wall, generating a succession of volumes and voids, according to a well-defined hierarchy. The interior spaces look outwards in various directions, creating a system of visual relationships that finds the main focus in the atrium, placed at the centre of the composition and framing the view towards the mountains, characteristic element of the Bogotan landscape. Element, this latter that in addition to defining the fixed scene of reference, seems to suggest a direct reference to the sinuous lines of the roof. The project seeks and sets up a close and deep connection with the surrounding environment, through the settlement on the site, the visual and formal relations: the landscape is part of the elements that guide the composition of the house.

The Violi House (1953-54), or House of Carrera 2e, was designed by the architect for his family. The building is located in the northern area of the city, at the foot of the mountains, on a steeply ground completely surrounded by nature, enveloping and wild.

According to these site conditions, the project choice was to get as far away as possible from the road, located at the bottom, and to arrange the entrance through a long open-air staircase, which follows the perimeter of the lot. The composition orders seven blocks of regular form, designed according specific modular rules, with vaulted roof and different orientation, articulated with respect to a main axis, placed on the north-south line and perpendicular to the level lines. The volumes, placed on four different quotes and raised with respect to the terrain, follow and adapt to the natural character of the site.

The functional program is marked by the form, orientation and size of the single blocks: an articulated volumetry that corresponds to a clear floor plan assuming the peculiarities of the site as main design conditions. The building fully integrates with the surrounding landscape, following, in shape and layout of the blocks, the lines of the level curves in plan and the profile of the mountains in elevation. The relationship established with the characters of the site, is not limited to a respectful insertion in the natural environment, but is expressed through the experience of the domestic life, interpreted through a promenade architectural exploring the conditions of the context of reference. The inhabitant is forced to 'feel' the mountain and find a contact with nature before entering the house. The distribution coincides with the longitudinal axis, which organizes the composition and connects the different rooms, finding a direct relationship with the landscape, near and far. The path, moving through the interior space guides the gaze towards two main miradores, placed in a studied position: the main one is placed in the middle of the facade of the block that houses the living room, and frames the

view of the Sabana of Bogotá. The understanding of the characteristics of the place, in terms of the conformation of the site and views towards the landscape, represents an unavoidable condition of the process of composition and construction of the final character of the house. The Volkswagen Building (1955), designed for sale, storage and repair of the well-known German company cars, overlooks the Avenida El Dorado or Calle 26, an important road axis - at the time under construction - that crosses the city in the east-west direction, connecting the centre with the airport. The building occupies a whole 'L' shaped lot of about 3,500 square meters, located at the end of a large block free on three sides. The main front stands on Avenida El Dorado, where the public and pedestrian entrance is located, while the driveway access to the workshop area is located on the back. The building is characterized by a geometric concrete structure that, in section, draws the volume of the two blocks with vaulted roof and flat terrace that houses respectively the sales area and the work area. The Volkswagen finds a direct relationship, of dual nature and hierarchy, with the Avenida El Dorado through the facade. The building stands as a large showcase, exhibiting a monumental dimension emphasized by the giant order of pillars. At the same time, the connection with the public space of the sidewalk, from which access to the sales area takes place, is reported 'on a human scale' through some cantilever elements and the design of the windows. Considering the visual relation, the better place from which to look at the city is located under the roof facing the main road, where the vertical lines of the pillars and the curvilinear lines of the vaults, frame the view of the Sabana. As already pointed out for the Shaio and the Violi Houses, the curves of the roof formally recall the profile of the mountains in the background.

The Quintana Building (1962) is located on a corner lot, between Carrera 7 and Calle 12, just one cuadra away from Plaza Bolivar, in the very historical centre of the city.

The Quintana is a compact volume of eight levels, slightly overhanging compared to a double-height base that includes a mezzanine floor. The main block is flanked by a lateral body, in which the distribution is organized, and concluded by an attic floor, intended for residence. The building dialogues on both sides with the architectures that describe the urban character of this area of the city, entrusted to the contrast between high modern buildings, headquarters of financial and commercial companies, and the fabric of colonial plant.

The Quintana, in particular through the base, creates a direct link with the street in accordance with the needs and use of the 'modern' city public space and the functional program with its open and double height commercial plant.

In addition to this, the way of treating the corner refers to the interpretation of an element typical of colonial architecture, that is to say, the wooden structure galleries, normally placed on the upper levels of the buildings, through which the relationship with the public space of the street was traditionally established.

The terrace, located on the roof level offer the view of the surrounding landscape: to the east in the direction of the mountains, to the south towards the Catedral Primada in Plaza Bolivar.

Acknowledging the formal and visual relationships

The analysis highlights the ability of Bruno Violi to acknowledge, understand - and reinterpret - the potential of the site, transforming it into operative material for the project.

The graphic elaborations (see Figure 5) describe this connection as multiple and overlapped links, in particular, referred to how the buildings integrate and respond to the urban fabric, and capture the view towards the Sabana or the mountains.

In a similar way, methodologically speaking, the perspective drawings describe the formal and visual relationships between architecture, urban form and landscape. A reading key that can

be particularly appreciated for the two houses analysed: the volumes of the roof recall the profile or the curves of the mountain level lines; the main 'social' spaces (the hall and the living room) are converted into devices to bring the view of the surrounding landscape - near and far - within the experience and ritual of domestic life.

The critical understanding of the place also emerges from the re-interpretation of the central space. In addition to the four case studies, the analysis of a larger sample of Violi's works confirms and shows how the composition is often guided from the core, ordered by geometric rules and corresponding to the hall, the living room or a patio. Going beyond the references traceable through his classical academic education and the architectures by Perret and Honegger, the central space also refers to the so-known suburban Quintas houses of the Republican Epoch (1890-1930), which organized the different rooms around the entrance space overlooking the garden: a distribution scheme confirmed even in later periods (Arango, 1989).

Furthermore, the central space recalls the patio model, in terms of composition and relationship established with the lot, in particular for how the traditional model transformed over time, by progressive densification of the urban fabric, with the courtyard, always present but placed in a variable position. This model of urban growth can be observed both in the consolidated fabric of the historic city, both in the neighbourhoods of new expansion. The Violi's buildings interact with the limits of the lot that become part of the design elements (See Figure 6). In addition to this, the central space often corresponds to the better point from which to admire the landscape, or from which the visual relations between internal and external space are articulated.

Another analysed aspect, dealing with the relationship between architecture and elements of the context, is the compositional tripartite system. The basement, as well as recalling the classical architecture principles, is used to address specific design conditions, such as the connection with the public space and the pedestrian area, with respect to which stands as a direct extension. An attitude that emerges especially from the projects developed in the centre of Bogotá, on the Carrera Séptima - the historical axis that crosses the city from south to north starting from the square of foundation, Plaza Bolívar. In particular, the relation with the public space also arises from an unique document: a letter, written a few months after Violi's arrival in Colombia, in which he describes the project for the National Building of Pasto. The issues is addressed through the construction of a 'portico', defined by Violi 'as an urban innovation that will introduce an interesting variation to the trace of the traditional closed blocks and a new space in the urban centre, as an effective device of circulation'. Violi reports an interesting approach that proves the contextual understanding of tradition and the attention in answering to the changes of the modern city.

Finally, the urban dimension of Violi's architectures is described by his poetic charcoal perspectives representing the buildings in the urban landscape: drawings able to demonstrate his capacity to reinterpret the relationships with context of reference, that he probably learnt at a young age from the study of Italian historical cities.

Conclusion

The relationship established with the elements of built and natural environment, for instance, topography, landscape, geometries of the fabric urban, and so forth, clarifies the Bruno Violi's ability to understand the characters of the place and to translate them into compositional and design condition.

In the Shaio House, it is the reinterpretation of urban morphology and the patio typology; in the

Violi House, are the mountains to dictate the design of the building; in the Volkswagen, it is the comparison with an important road axis; in Quintana it is the relationship with the public space. Aspects that, together with the view constantly turned towards los cerros and the Sabana, give meaning to the architectural project choices and deeply link the works to the tradition and geography of the Bogotan territory. The reading of the characteristics of the place also manifests in the references to traditional architecture, in the solutions adopted in responding to climatic conditions, in the constant dialogue with the limits of the lot, or the topography. To conclude, the research results confirm the relation with the context as a fundamental character of Violi's work, as well as for many of the buildings that contributed to the development of the 'Modern' Bogotá identity and image, defined by architectures built in concrete rising next to traditional colonial blocks, within the regular fabric of Spanish pattern and an extremely peculiar landscape, characterized by the constant presence of the mountains and the Sabana plain. Architectures that, 'without losing the characteristics that make a contemporary work distinguishable, are a direct translation of the physical, social and cultural environment of the country' (Samper, 1963).

References

- Alcaldía de Bogotá (2017), *Oriéntate los cerros son nuestro norte*, (Buenos & CReativos S.A.S., Bogotá).
- Arango, J., Martínez, C. (1951), *Arquitectura en Colombia* (Proa, Bogotá).
- Arango, S. (1989), *Historia de la Arquitectura en Colombia* (Universidad Nacional de Colombia, Bogotá).
- Cruz, R. J. (1955), 'Casa para el arquitecto Bruno Violi', *A, Arquitectura y Arte* 3, anno I, 16-21.
- Gregotti, V. (1982), *L'architettura dell'ambiente*, in *Casabella* 482, 10-11.
- Samper, G. (1963), Prologo, in Martínez, C., *Arquitectura en Colombia* (Proa, Bogotá)
- Martínez, C. (1963), *Arquitectura en Colombia* (Proa, Bogotá).
- Orlandi, S. (2017), 'Un esempio di architettura moderna tra Europa e Colombia. Bruno Violi e la casa Shaio a Bogotá', *Eda esempi di architettura July*, 1-19.
- Orlandi, S. (2018), *Architettura moderna in Colombia e contributo europeo: opportunità di un incontro culturale. Analisi critica dell'opera dell'architetto italiano Bruno Violi a Bogotá* (PhD thesis in Architecture, 30 Cycle, Alma Mater Studiorum University of Bologna. DOI 10.6092/unibo/amsdottorato/8334).
- Orlandi, S. (2019), *Habitar el cerro: la casa del arquitecto Bruno Violi en Bogotá*, in Calatrava Escobar, J. (ed.) *La casa: espacios domésticos, modos de habitar* (Abada Editore, Madrid) 1530-1542.
- Proa (1949), 'Residencia (Dr. Shaio) en Bogotá-Violi & Lanzetta', *Proa* 23, 20-22.
- Proa (1950), 'Violi & Lanzetta, Casa en Bogotá', *Proa* 42, 16-17.
- Proa (1955), 'Bruno Violi, Edificio Volkswagen', *Proa* 89, 12-14.
- Proa (1960), 'Bruno Violi, Edificio de apartamentos, Bogotá', *Proa* 132, 12-15.
- Rother, H. (1986), *Bruno Violi. Su obra entre 1936 y 1971 y su relación con la arquitectura colombiana* (Universidad Nacional de Colombia, Bogotá).
- Samper Martínez, E. (2000), *Arquitectura Moderna in Colombia. Época de Oro* (Diego Samper Ediciones, Bogotá).
- Trentin, A., (ed.) (2016), *Des.de BOG. Desarrollo de Bogotá* (La Greca, Forli).
- Vargas Caicedo, I.H. (1987), *Le Corbusier en Colombia* (Cementos, Boyaca).
- Varini, C. (1998), *Bruno Violi. Arquitecturas y lirismo matérico* (Centro Editorial de Instituto Italiano di Cultura, Universidad Nacional de Colombia, Bogotá).

Illustrations and tables



Figure 1. Bogotá, the urban context seen from the mountains, 2018



Figure 2. Bogotá, the Andes mountains, 2018



Figure 3. Plan of the city of Bogotá indicating the location of the four case studies analysed: 1. Shaio House, 1950; 2. Violi House, 1953; 3. Volkswagen Building, 1955; 4. Quintana Building, 1962

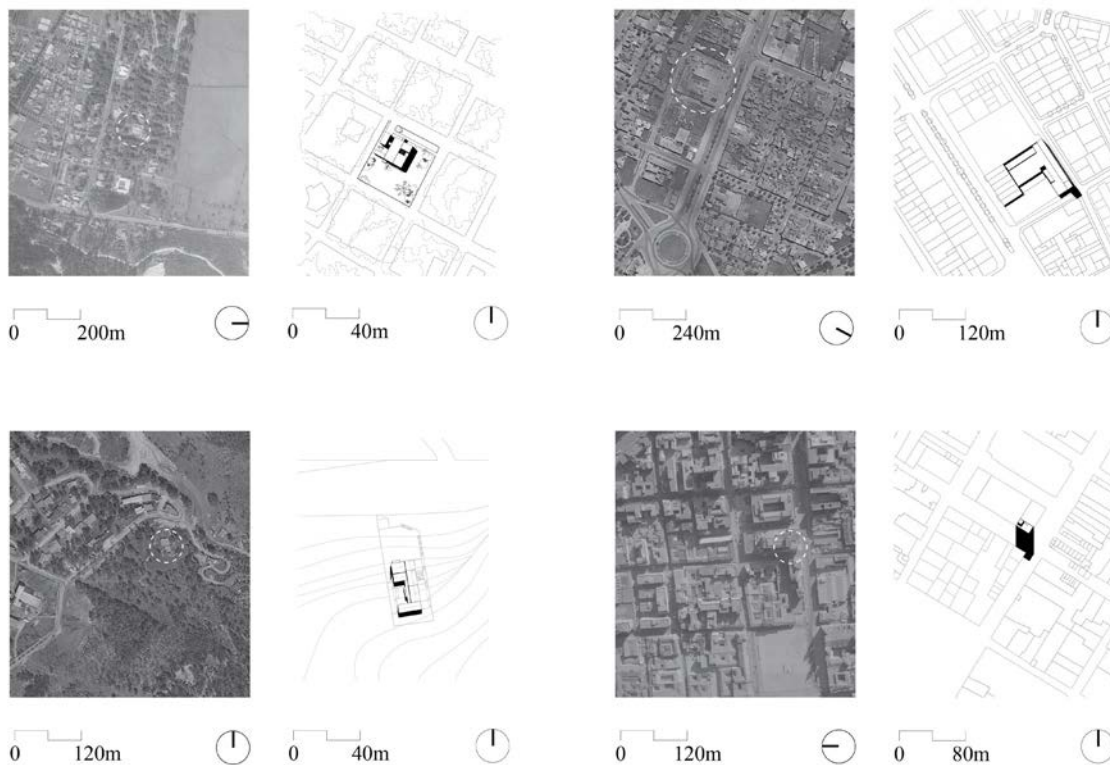


Figure 4. Aerial views of the urban context and Planivolumetric drawings. From top to bottom, from left to right view: Shaio House, 1950; Violi House, 1953; Volkswagen, 1956; Quintana, 1962

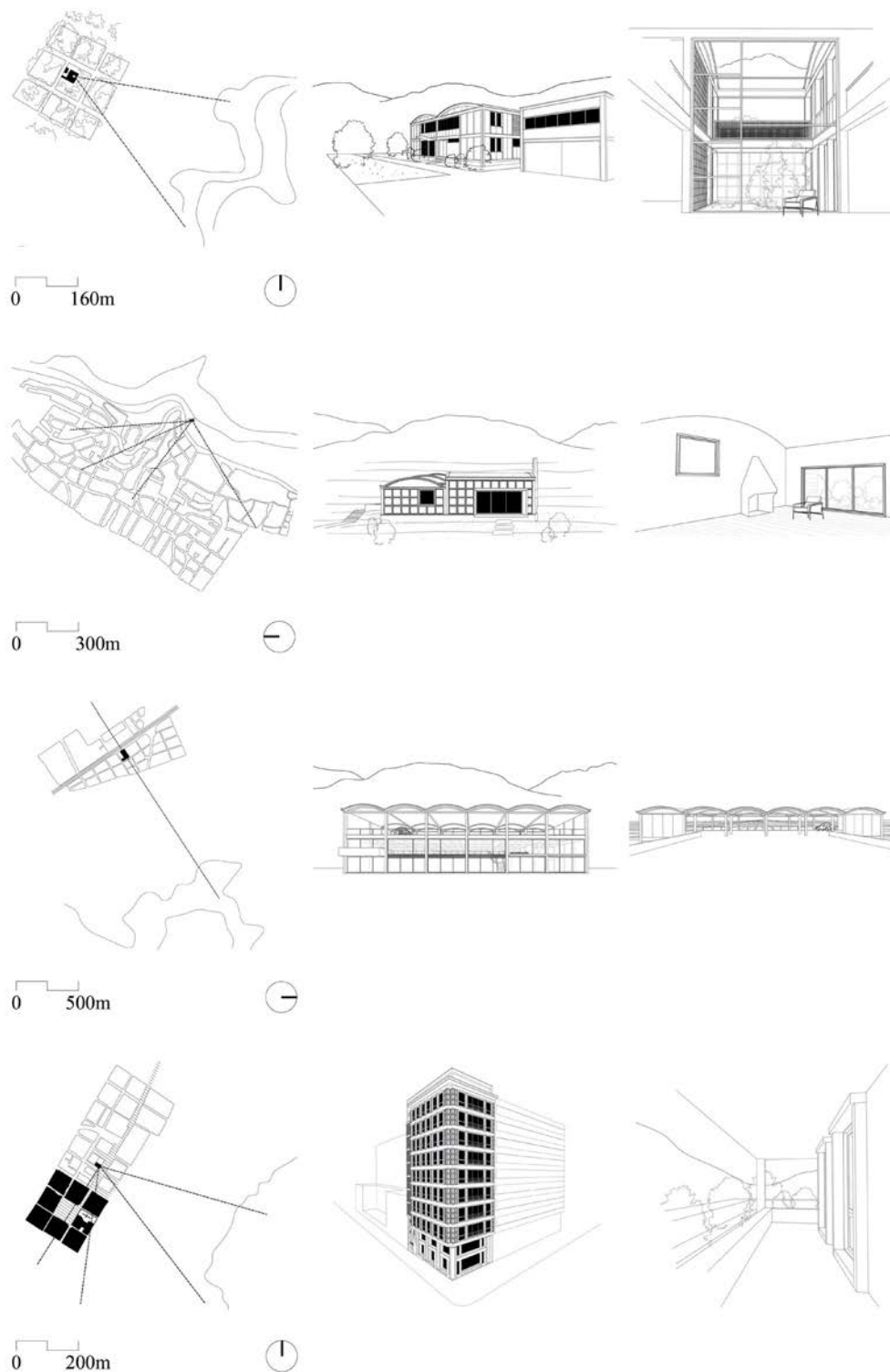


Figure 5. Diagrams and drawings highlighting the formal and visual relationships between architecture, urban context and landscape. From top to bottom: Shaio House, 1950; Violi House, 1953; Volkswagen, 1955; Quintana, 1962

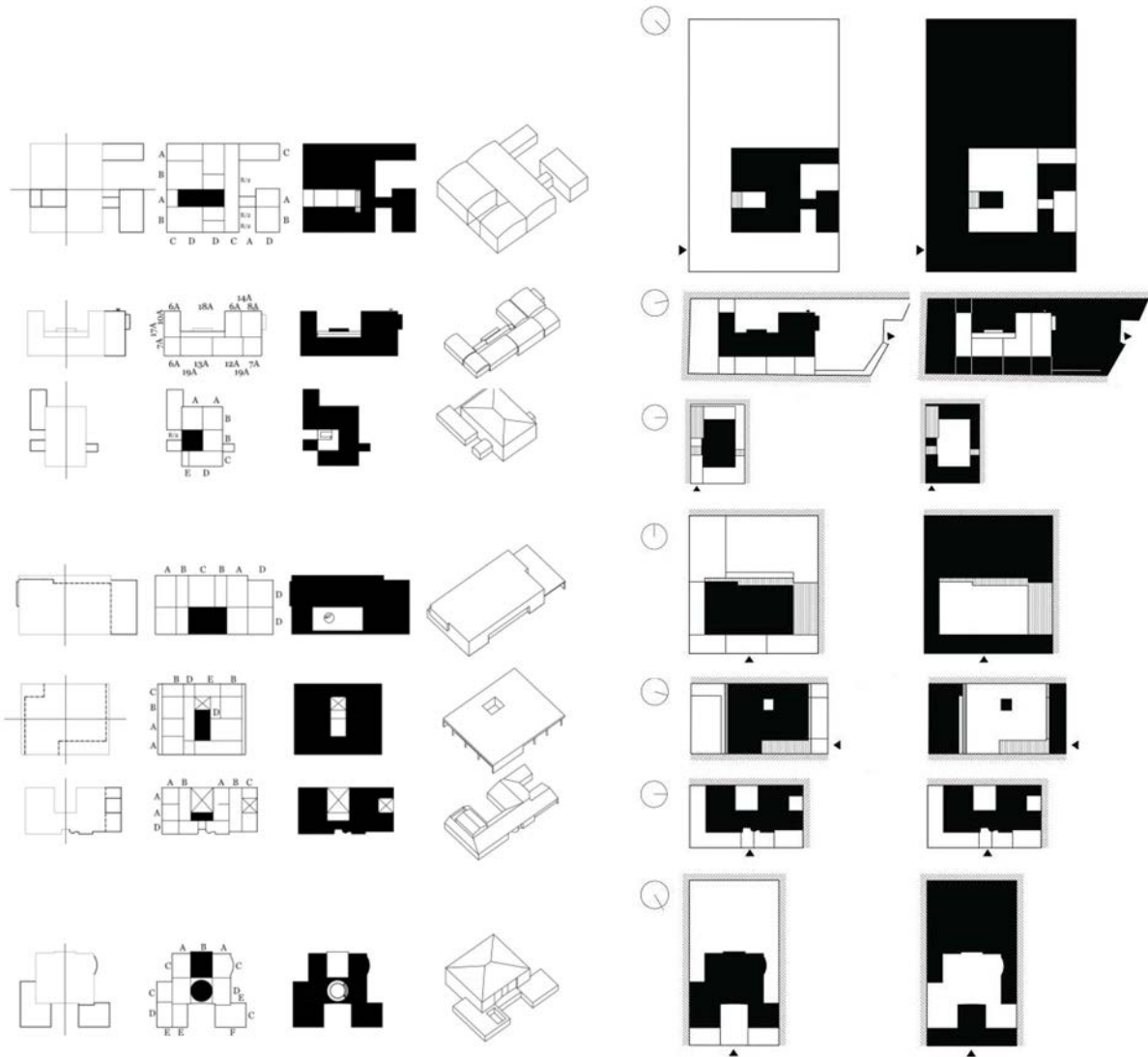


Figure 6. Diagrams and drawings highlighting the central space and the classical geometrical rules governing the composition, the relationship between the lot limits and the volumes. From top to bottom: Shaio House, 1950; Violi House, 1953; Castro Mosquera House, 1948; Dobrinky House, 1956; Wasserman House, 1962; Perez House, 1963; Uribe House, 1963