ARNE JACOBSEN. HOME ARCHITECTURE The courtyard and the pavilion

Berta Bardí-Milà

Foreword Cristina Gastón Guirao Arne Jacobsen shows unprecedented observation and discernment abilities by so skillfully tweaking the profile of a glass goblet and the three-dimensional fitting together of pieces of large format, pre-tensed concrete for a set of buildings alike. The Danish architect is the creator of prodigious work endowing the utmost sensitivity to all of life's spaces and objects. Among his contributions, we recognize designs for public institutions, schools, sports facilities, industrial complexes, office buildings – all in the plural – always envisaged and implemented with exceptional quality accounting for everything from the geography to the minor details of lighting, glasswork, textiles, taps and a breathtakingly long list of others.

In a priceless piece of research, Bardí-Milà reveals that the number of homes that Jacobsen designed totals one hundred twenty-eight. A titanic work on family home architecture stands as if it were nothing at all. No methodical work to describe this ensemble had ever been undertaken, and the researcher must be thanked for her meticulous, diligent work which presents this aspect of the architect's production to us through a rigorous critique.

Berta Bardí-Milà also availed herself of other characteristics of the disciplinary tool of drawing in its full array of possibilities. The doctoral thesis put forward seven hundred and twenty graphic references including sketches, floor plans, details, perspectives, outlines, mappings and photographs, although the current format of the book has been reduced. These documents, all perfectly accredited, constitute an enormous arsenal of proof attesting to the integrity of the research and enabling readers to retrace

the researcher's steps and also affording them the opportunity to continue discovering new threads to follow. With whatever technique he employed, Jacobsen boasted extraordinary graphic qualities, be it through ink, pencil, watercolour or photography. This is what makes it so pleasurable to peruse this most valuable material which also includes reproductions of full design sheets and pages of publications of the day.

Based on this original material, the research unfolds different editing and graphic comparison procedures, delving into them through various concepts, i.e. chronology, site plots, exterior volume, interior space, development of each case, section of the land on the same scale and in series, and on different occasions allowing for common strategies, experiments and constants to be identified, all providing a clarifying vision of an ensemble.

Berta Bardí-Milà adds a key counterpoint factor by including in the deliberation the traditional Danish rural home, and specifically the *farmhouse* and the *longhouse*. This proves that Jacobsen is able to learn from everything and everyone including both peasant homes and the best contemporary international examples. Bardí-Milà then moves on to set forth her highly plausible hypothesis, i.e. that there are two basic elements around which Jacobsen's home architecture designs revolve, the courtyard and the pavilion through those architypes of Nordic tradition, the *Scandinavian longhouse and farmhouse* made up of pavilions standing around a courtyard.

By following the locations of these houses we are given the opportunity to travel across Denmark's geography at the same time. The Strandvejen, the

road that follows the coastline from Copenhagen northwards, leads us to the area of Klampenborg, where a large number of Jacobsen's designs stand. The prodigious Bellevue ensemble completed over three decades from the first phase of bathing facilities that even included a theatre, up to the block and set of courtyard houses, to the Søholm I, II and III housing clusters, one of which was to be chosen by the architect for his home. This key cluster is representative of how Danish architecture and society evolved in the central decades of the twentieth century and affords insight into Jacobsen's work in other facets of architecture.

Some seven kilometres north of Bellevue stands the Rüthwen-Jürgensen house, around which this entire piece of research hinges. The home is unique in that it is highly unusual. Seen in the context of its contemporaries, it challenges those attempting to disentangle the reasons behind its shape. As the preliminary sketches show, the initial conception involved regular square perimeter with a central courtyard, a formula that Jacobsen had availed himself of on many occasions. Yet successive versions of the design reveal developments towards a U shape with a central body accommodating common areas for the family in parallel to the coastline, and the main bedrooms turned on a diagonal affording views overlooking the sea, thus departing from the right angles of the rest of the house. The central body stands out for its double storey volume providing it with a longitudinal slanted roof. The wooden cladding on the upper portion of the façade shelters the porch-terrace on the second storey and the opposite panoramic windows on the bottom provide views overlooking the sea from the open courtyard through the living room. Berta Bardí-Milà puts forward two bold graphic hypotheses pointing to a

potential genealogy stemming from the Delsbohof farm and the Møller home, one of Jacobsen's boldly suggestive designs.

I believe the Rüthwen-Jürgensen home still holds some mysteries. Many of its elements challenge the ostensible rationale behind its configuration. I can enumerate a few. The two walls of the open courtyard seem to seem to owe to a reconsideration of the unbuilt side of the courtyard, awaiting the completion of its fourth wing. The outdoor staircase leading from the second floor to the garden is on a perpendicular to the interior stairway. The most characteristic image of the home, the one most repeated in publications, is provided by the inclined side profile as it cuts out the sky and highlights the landscape on the sloping land. Yet paradoxically, after endowing the house with such an open entrance courtyard, no photography is found to show the front door. The articulation of the living room's central wing and the bedrooms also point to divergent structural solutions.

The balance of possibilities remains open. In any event, Berta Bardí-Milà's research promises not to disappoint with its satisfying delight of delving into these mysteries. Because the house can no longer be interpreted based on the current version which has undergone significant alterations undertaken by its subsequent owners, archives of originals, or better still, documentary baggage, compiled and critically presented in this research must be resorted to.

Félix Solaguren-Beascoa was the one to first introduce us to Jacobsen's architecture in this part of the world. In fact, three of his books appear in the arquia/temas collection: *Aproximación a la obra completa 1926-1949*, 1950-1971 and *Arne Jacobsen*: *Dibujos 1958-1965*. He also inspired a fertile line of research examining parallelisms, influences and translations between Danish and

Spanish architectural cultures. The impact that Scandinavian architecture has had on several generations of Spanish architects over the second half of the twentieth century is significant, and the conveying of architectural values between Scandinavia and the Mediterranean remains necessary. Understanding the independence or dependence of architecture's aesthetic system as it relates to location and examining the aesthetic system as it relates to the facts determining its actual construction are essential spheres of study to build a programme on the theory and practice of architectural design in the Modern Movement in Europe and America. Ten years have elapsed since this thesis was presented at the Barcelona School of Architecture (ETSAB-UPC). Now, as I reread it, the text hasn't lost an iota of its timeliness. It is as alive and inspiring as ever.

I would merely like to thank Berta Bardí-Milà for her minuciousness, patience and effort in providing a basis for reference for other studies, and to celebrate the Fundación Arquia's commitment to making it available for the public.

Barcelona, 30 June 2022

THE HOUSE AS MATERIAL FOR STUDY

To visit buildings envisaged and built by him [Jacobsen] is to continuously feel at home, as if we had always been there, as we could stay there forever. They exude that pleasant sense of normality, that instant familiarity that makes us feel good.

Most publications on Danish architect Arne Jacobsen (1902-1971) are basically dedicated to showing his extensive number of works, particularly in the public sphere (a total of seventy), yet without stopping to analyse them much at all. The Aarhus, Søllerød and Rødovre City Halls, the Munkegård school and Catherine College, the Jespersen and Stelling Hus office buildings and the Royal SAS buildings take up these editions, leaving most of his designs, which were for homes, by the wayside. A total of one hundred and twenty-eight designs for single family homes can be tallied together with fourteen multi-family blocks.

This latter group of residential designs are more numerous and more easily illustrate the ensemble of the Danish architect's work. A great portion of these homes have yet to be analysed and linked to his notion of architecture. On this count, some authors have theorized, as Carles Martí explains, that for Jacobsen "the source of all architecture seems to be the home, the household sphere, while the social sphere is understood merely as a natural extension of the home". Stated otherwise by Josep Maria Sostres, "the starting point for all of his experiences seems to be household architecture, a factor that leaves its mark on his other works".

Yet this research stems from a broader perusal of Nordic household architecture. Specifically, it compares three contemporary works: Alvar Aalto's Muuratsalo house (1952-1953); Arne Jacobsen's Rüthwen-Jürgensen house (1954-1957) near Copenhague, and Jørn Utzon's Kingo housing development (1956-1960) in Helsingør. In all three instances, the starting point for the analysis is the courtyard as the primordial space in the general configuration of each one of these houses, and the architype that is also present in local tradition of the Nordic farmhouse and longhouse, an elongated Viking construction with a central interior space.

In fact, despite the different mechanisms that they use, in all three of these examples an open-air space seems to be the starting point. While in Muuratsalo and Helsingør the courtyard is tied to the building of a wall surrounding a space of the building's own, in the Rüthwen-Jürgensen house, the courtyard arises after having joined the different volumes that accommodate the house's brief.

Nevertheless, by delving into the various documents elaborated in the process of conforming each one of these three designs, the discovery was made that Rüthwen-Jürgensen originated as an atrium house and evolved into a design whose different parts surrounded a central open space, thereby taking on greater autonomy. This occurred to the extent that some took on the configuration of unitary volumes, much like *pavilions* with an intense bent towards the outer part of the house. Immediately subsequent designs commissioned to Jacobsen took that same path, such as the Kokfelt house (1955-1956) and the

Javier García-Solera: "Viajar a Jacobsen" in Félix Solaguren-Beascoa: Arne Jacobsen: La gran lección nórdica, pp. 99-101.

Carles Martí: "Arne Jacobsen: Arquitectura de lo inmanente", p. 113.

³ Josep Maria Sostres: "Arquitectura y urbanismo: Dinamarca", in *Opiniones sobre arquitectura*, p. 189.

Siesby house (1957), where the pavilion typology was to dominate the entire work. Yet meanwhile, explorations into the atrium house continued, and that same year, 1954, Jacobsen began to work on clusters of courtyard homes in Carlsminde. He later translated this experience into Berlin's Hansaviertel (1955-1957, Interbau) and to Ved Bellevue Bugt (1957-1961), so as not to mention other non-home designs such as the Munkegård school (1948-1956) where the courtyard stands as the basis of the layout to join the pieces.

This makes Rüthwen-Jürgensen an interesting work to explore Jacobsen's concept of a house. This research examines a series of single-family homes designed over the same period (1954-1957), a total of eleven residential designs, including single family dwellings and clusters: Søholm III (Klampenborg, 1952-1955), Jespersen & Søn en Ørnegårdsvej (Gentofte, 1953-1957), Carlsminde (Søllerød, 1953-1959), the Engelbredt house (Vordingborg, 1954), the Hallas Møller house (Holte, 1954), the Knud Kokfelt house (Tisvilde, 1955-1956), the Hansaviertel complex (Berlin, 1955-1957), Edwin Jensen (Charlottelund, 1955-1958), Leo Henriksen (Odden Harbor, 1956-1957), Erik Siesby (Virum, 1957) and the Ved Bellevue Bugt complex (Klampenborg, 1957-1961). These eleven designs that concurred in Jacobsen's studio with his design for the Rüthwen-Jürgensen house are what are termed contemporary houses.

Through the analysis of these different designs, the research aims to determine their guiding principles and to observe the extent to which their conception, hestitations and changes occur based on spatial elements such as the courtyard and the pavilion, that is, the vertical and horizontal development of the space. The methodology therefore is based on the analysis of all of the documents

generated over the creation process (sketches, floor plans, photographs, models, reports, and so forth).

Lastly, it must be underscored that the aim through this analysis is not to examine historical or social issues, but to clarify how the design covers a given need on a specific site. The spatial and formal relationships making the design paradigmatic are revealed by examining each design's underlying theory. The interest lies in attaining the specifically architectural theoretical aspects where the architect finds the support he needs to justify his formal architectural decisions.

COURTYARD AND PAVILION AS THE ARCHITECTURAL PRINCIPLES OF THE HOUSE

The premise of the thesis is based on the conviction that a house in itself contains the complexity of architecture's major themes, and is thus a useful vehicle to arrive at the formal and spatial mechanisms to be found at the basis of architecture's great works of all times, regardless of their place and scale. By studying the house, one can arrive at permanent, constant values, i.e. principles of architecture. It is not difficult to understand how during the age of Modern Architecture, houses have become laboratories for ideas of new ways of inhabiting the world. Modern houses became the common icon of the great masters of the twentieth century, from Mies Van de Rohe to Le Corbusier to Alvar Aalto to Arne Jacobsen and Jørn Utzon. This research starts out with these general considerations and focuses on Jacobsen's concrete model.

It is important to specify that when speaking of a house, what is understood as any set of spaces included in household designs: not only roofs and enclosures, but also all of the open-air spaces relating to these two elements. On the other hand, dwelling

refers to the ensemble of built spaces, enclosed and covered, meaning the part fitted to protect against the natural elements. 4 Often the gardens, terraces and approach areas are not considered part of the house when actually both the interiors and exteriors are equally and inextricably linked to the design.

Broadly speaking, the modern house is associated with a centrifugal space open to nature with which it establishes close ties. These characteristics are brought together in a specific typology: the pavilion. The word *pavilion* refers to a compact, free-standing building that opens up to the outdoors, or more abstractly to a dome or roof that covers and shelters a space while affording expansive views of the landscape.

These characteristics stand as the opposite of those associated with a *courtyard* house, organized around a closed space which is uncovered on the inside and on one side of the building. Traditionally, courtyards have been yet another room, only without a roof, taking up the central area of the house, overlooked by the rest. Courtyards usually appeared

as a hole in the built mass to afford ventilation and lighting in the rooms. They were part and parcel of an introverted model that shunned contact between the house and its surroundings. In the modern period, courtyards came to be formulated to join independent volumes that were autonomous enough not to depend on the courtyard to relate to their surroundings.

Thus far, pavilions and courtyards seem to be opposite spaces that are difficult to reconcile.⁵
But with the advent of Modern Architecture and the subordination of forms to codes inherent in abstraction, both of the two were boiled down to their essential and fundamental elements, which conferred them with the right attributes to be compatible. For pavilions, the abstraction allows for a reduction in their fundamental characteristics to finally attain the architectural principle of the porch: a roof that forces the structure to relate to its surroundings horizontally. And the courtyard, essentially conceived, is associated with another principle: enclosure, a wall establishing the relationship with the world through a great vertical axis linking land and sky.⁶

⁴ Rafael Díez: Coderch: Variaciones sobre una casa, p. 31.

Carles Martí: "Pabellón y patio, elementos de la arquitectura moderna", pp. 16-27.

⁶ Antonio Armesto: El aula sincrónica: Un ensayo sobre el análisis en arquitectura.

Biographical note on Arne Jacobsen

Danish architect and designer Arne Jacobsen (1902 - 1971) can be considered a preeminent exponent of Scandinavian modern architecture. His education focused on overcoming Nordic classicism. Having finished his course on Construction and Building at Copenhagen's Ahlefeldsgade Technical School in 1924, he was accepted at the Royal Academy of Fine Arts' School of Architecture, also in Copenhagen, where he graduated three years later. His training period was thus marked by technical studies, re-drawings, and elevations of vernacular buildings. This shaped his outlook not only as an architect, but also as a painter, photographer and gardener. His outlook always departed from theory, yet was highly attentive to material facts. And his work was earnest and sincere, diligent as those who love their trade. Jacobsen built a large number of buildings, furniture and decoration, particularly in Denmark, but also internationally as of the 1950s. The Aarhus, Søllerød and Rødovre City Halls, the Munkegård school, Catherine College, the Jespersen offices, the Stelling Hus and the Hotel Royal SAS can be highlighted among his public buildings. And more than a hundred residential designs, including the Søholm, the Rüthwen-Jürgensen and the Siesby houses, can be added to this.