

## SPACE, FUNCTION AND SYMBOL. ARCHITECTURAL FURNITURE IN DOMESTIC SPACES

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### ABSTRACT

The Baldaquin of the Saint Peter's Basilica in Rome represents the spiritual core of the building and holds a distinctive meaning for the complex and the people in it. This piece, defined for this research as architectural furniture, conditions the use of the space it belongs to, affects its scale, gives purpose to its routing, and defines the symbolic reading of the whole.

This monumental object is used as a reference, and its personal, social, spatial, and functional implications are relayed across the field of architecture to the domestic space. An approach to furniture to create a home molded to the needs and desires of the individual and the society he belongs to is detected in the pieces of furniture by Ettore Sottsass and Joe Colombo, presented in the exhibition Italy, the new domestic landscape in 1972. This paper intends to indicate those concepts embodied in a selection of four contemporary housing renovation projects that have used furniture as a complex design element to shape homes.

### KEYWORDS

Furniture; living environment; domestic space; design; renovation.

### 1. SAINT PETER'S BALDACHIN

The Saint Peter's Basilica would be very close to the top of the long list of must-see buildings when visiting Rome. Besides being at the heart of the Catholic Church, it is also a vibrant building full of history and art. When approaching it, the vast square guides one to the beautiful main façade elevated by stairs and crowned by the statues of the apostles, and behind rises the massive dome—42m wide and 132m tall. Everything is gigantic, and one feels tiny while reaching for the doors with thousands of other visitors. Inside, a sudden feeling of overwhelming amazement and mightiness fills the atmosphere. And immediately, all eyes turn to the center of the space, where precisely under the immense dome, covering the main altar, is the Baldachin of St Peter (Fig. 1).

The precise meaning or importance of this structure may not be known to all, but its hierarchy is evident. Its location, right in the center, its function as the main altar, its size, and the detailed shape of the element make it hard to ignore. The Baldachin is a ten-story-high structure, fixed in its position thanks to a sturdy foundation, consisting of a canopy held by four black Solomonic columns made of bronze. Under the effect of the dome's light, it rises tall, slender, seemingly lightweight, or even fragile, but at the same time so high and impressive it seems to shorten the distance to the dome.

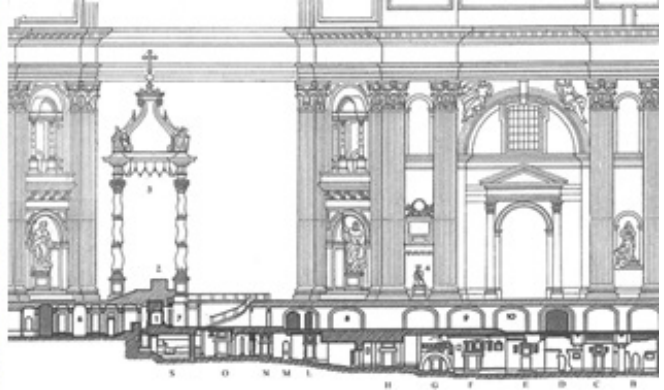


Figure 1. St. Peter's Baldachin

The real meaning which the Baldachin conceals is, in fact, the connection between God and the Catholic Church through the traditional location of the tomb of St. Peter, Christ's vicar and first Bishop (Kirwin 1981, 143). The tomb location determined the position of the church's crossing and the dome, the highest construction point, with the most outspoken spatial qualities. By placing the Baldachin over the main altar, the most important place in the church, where God is, is spatially accentuated (Frankl 1981, 219). However, this was not always the case. Following the dome's completion in 1590, numerous temporary structures were built, signaling the tomb (baldachin) and defining a main altar in the apse (ciborium) or combining the two structures with their different iconographic and symbolic elements into one. The Baldachin, which appears so substantial and intrinsic to the space, was only commissioned in 1623 to Bernini. Nevertheless, the Baldachin's presence and influence on the whole space are difficult to deny. It brings the whole building down to a more human scale and organizes the disposition and functioning of the rites happening in the church. It introduces a new reality to a building that had already changed its spatial and even structural design at least eleven times before the definite

furniture came in. The spirit of the space is born from its furnishing (Frankl 1981, 213), making it impossible to explain its architecture without considering the Baldachin as an essential piece of architectonic furniture.

However, can all furniture be equally representative? Can a cupboard or a wardrobe be determining for a space? Can housing benefit from an approach to interior design that takes furniture as its core design element? This paper focuses precisely on the furniture that can shape spaces to determine whether a similar approach to interior design can and has been taken in housing. The paper looks for furniture that, similar to the Baldachin, can be imbued with both functional and symbolic value and therefore dictate the use of the space, direct the user throughout it, or even create spaces of its own.

Two questions arise regarding an alternative way to approach furniture in the home. First, the Baldachin is not domestic but domesticates the space it is in. It possesses the characteristics that allow a function to be held by a person, and its size, location, and overall design determine the space within and around it. *What kind of objects in the home can similarly condense functions that will influence the space around them and provide it with purpose?* And second,

the Baldachin, in broad terms, does not have a complex design. It is a table and a canopy on top. Nevertheless, it serves as the symbolic center of the space. A symbolic meaning is given to it that provides hierarchy past its functional qualities. It is therefore asked, *under which conditions can objects in the domestic sphere be loaded with social or personal meanings that will make them paramount to the space?*

Two primary sources have been used for this paper to answer these two questions: The MoMA catalog for the exhibition *Italy, A new domestic landscape*, in 1972 and the online Architecture platform *ArchDaily*, as they both are very representative of their time and scope. The complementary perspectives of Ettore Sottsass and Joe Colombo, portrayed in their objects and environments on display at the MoMA exhibition, will later enable to approach furniture inside the home in four contemporary projects from a point of view that creates a bridge between the designer and the user. Whereas the environments and objects commissioned for the exhibition have an experimental quality that allows them to express clear intentions while circumventing real-life constraints, the architectural magazines take advantage of the diverse solutions required for real-life application. By studying either approach, the paper intends to cover both the conceptual and the pragmatic.

## 2. THE NEW DOMESTIC LANDSCAPE

The Museum of Modern Art of New York held the 1972 exhibition *Italy: the new domestic landscape. Achievements and problems of Italian design*, edited by Emilio Ambasz. This exhibition condensed the creative, critical, and subversive proposals of the most representative Italian architects and designers of the time, following the belief that led the museum to open an architecture department in 1932: the inherent meanings in works of architecture and design should be "as consciously investigated and evaluated as are those in works of painting and

sculpture" (MoMA, NY 1972, 11). The exhibition organized the pieces into two sections: Objects and Environments; and offered a catalog with additional critical and historical articles that help understand the complexity of the very diverse and often wildly contradictory design approaches.

One Environment by Joe Colombo and a series of objects by Ettore Sottsass stand out concerning the aims of this paper: *The Total Furnishing Unit* and a series of cupboards and wardrobes (also known as Superboxes in other publications) were curated because of their socio-cultural implications. Both Colombo, and Sottsass, had a pro-design attitude and believed in "design as a problem-solving activity" (MoMA, NY 1972, 137) capable of tackling socio-cultural problems and were therefore commissioned with environments in which they could express their particular visions regarding the domestic landscape.

Colombo's Environment takes a functional view of a furnishing element that goes in line with the first query of this paper. In contrast, the particularly expressive cupboards from Sottsass align with the second query regarding furniture's symbolic meaning. The following chapters will study the conceptual approach stated by these two elements and how they can be linked to recent housing projects.

## 3. THE TOTAL FURNISHING UNIT: A COMPACT SOLUTION

As hinted by its name, the *Total Furnishing Unit* (Fig. 2) combines into one single module four different units (a kitchen, a bathroom, a cupboard, and a day-and-night unit). The whole module can then be fitted into an apartment to serve all of its occupants' basic needs. The Environment, following a set of guidelines handed by the museum, explores the "domestic landscape with a sense for its places" and designs the "spaces and artifacts that give them form, and the ceremonies and behaviors that assign them meaning." (MoMA, NY 1972, 137)



Figure 2. The Total Furnishing Unit. Source: MoMA NY 1972

The differentiated units can be grouped or displaced to adapt to several kinds of surrounding spaces and opened or closed to display its several functions. While the kitchen and bathroom units serve only this one purpose, the day-and-night unit includes all living functions, from sleeping to eating, reading, receiving friends, and withdrawing privately to the inner closed space, allowing "the user to make his own statement about both privacy and communality" (Ambasz 1972, 21). The space within the units is intended to be "dynamic," and "it should be in a continual state of transformation" (MoMA, NY 1972, 172) thanks to the interaction between the user and the units. This interaction shapes the space around the units and allows it to function by extending or hiding the beds or by displaying the cupboard to obtain a new privacy layer.

The museum guidelines also point attention to the exploration of new materials and techniques of production. Therefore, the units are suitable to be mass-produced, and the functions have been carefully studied to be designed as fitting as possible, taking advantage of the contemporary materials and technologies giving, as a result a white box with rounded corners and with yellow doors and slabs that does not resemble any traditional piece of furniture. Due

to their expressive design, the Units will stand iconic in almost any space they are placed in. Additionally, grouping and solving everything in one element in contrast to several more minor or ephemeral solutions (which would allow the user more freedom in furnishing) will make the Units simultaneously visually, functionally and spatially central to the space.

The Furnishing Units condense not only the spatial qualities necessary for life but also the activities society generally considers to be important. Joe Colombo was mainly focused on the problems related to the human habitat and was motivated to make good design widely available to all social classes. Dwellings, he thought, should be "closer to man's true requirements," and consequently, the house "should be adapted more and more to man, rather than the other way around." (MoMA, NY 1972, 172) However, the *Total Furnishing Unit*, like the other environments of the exhibition, does not produce the container space but is, in turn, thought to be potentially placed in any standard apartment. Specific attention is put to each piece instead of the space surrounding it, meaning that the furnishing units irradiate and fundamentally affect, shape, and give function to the space around (or inside) them but do not depend on it.

### 3.1. Apartment in Gracia and Principe's Box House

The independency of the *Total Furnishing Unit* and its massive influence on the space around it suggests that some of its concepts can be translated into housing projects nowadays, particularly in the case of renovations of homes and even more if the intervention strategy involves emptying the space. This section will present two recent projects: *Apartment in Gracia* by Kahane Architects & Maria Alarcón (Barcelona, 2018) and *Principe's Box House* by u+a arquitectura (Vigo, 2012). Both renovation projects take place in Spain in buildings from the early 1900s. The couples living in each apartment were responsible for commissioning the renovations.

The first home renovation, *Apartment in Gracia* (Fig. 3), takes place in a long 70 m<sup>2</sup> apartment with windows only on the short sides. The project reinterprets the spatial conception of a typical last-century apartment full of interior rooms, doors, and halls, "which does not adapt to the current needs of a living space." (Kahane Architects and Alarcón 2018) Therefore, the architects chose to take out partitions, rediscovering the original elements of the apartment. A minimalistic piece of furniture that contrasts with the recovered original elements redistributes the space to the needs and desires of the new

users. "The chosen materiality, oak wood, contrasts with the original elements and marks the intervention." (Kahane Architects and Alarcón 2018)

A wooden box containing the kitchen storage, the dressing room, and a bookcase is attached to the long wall, dividing the space into two and "activating the adjacent spaces, providing it with different uses." The two "main rooms of the house" are the social area and the sleeping space. All other functions needed to be optimized and placed strategically in the space; to that end, the bathroom and working space are carefully located out of the way from the main spaces. In contrast to the generic approach of the *Total Furnishing Unit*, having set users allowed the designers to know their priorities and how they view the world, and personalize their living space accordingly. "Concentrating the intervention in a single volume on the interior of the floor plan" facilitates the spatial consequences significant to the user, creating a "large, open space, flexible and suitable for the current needs of a living space." (Kahane Architects and Alarcón 2018) This furnishing box acts as a background to the spaces around (the living room and bedroom), which are the project's primary concerns. This "singular piece" regulates the connection and privacy between the areas, defining "a new way of seeing, using and living in space." (Kahane Architects and Alarcón 2018)

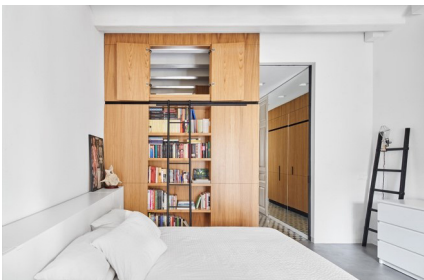


Figure 3. Apartment in Gracia. Source: José Hevia, Kahane Architects 2018

The second home renovation, *Principe's Box House* (Fig. 4), takes place in a U-shaped 53m<sup>2</sup> apartment on the upper floor of a townhouse with openings only on the short sides. After evaluating the existing situation, the architects similarly chose to strip the place and by doing so they uncovered a previously hidden space. "Its conservation becomes the goal and inspiration of the project" (u+a arquitectura 2012), so much it dictates a centralized furnishing box as an intervention that contrasts with the rest of the space. It was "important to maintain a reference to the past, discovering what already existed placing it in a new context of time but keeping its essence and history." (u+a arquitectura 2012) Following the former logic, the strategy to free the space is condensing elements in a box. In this case, its "wooden box" houses the kitchen front, the toilet, laundry, sinks, shower, and a small closet. The technical uses are concentrated in a simple and light structure, and "around it, the rest of spaces flow while being at the same time visually isolated." (u+a arquitectura 2012) The living room is isolated from the bedroom. Inside the box, the toilet is also closed, but the washing areas and the kitchen are, in contrast, open to the sides,

creating tension with the sleeping area and the living room, respectively.

So far, the approaches are very similar: to empty a space that does not accept these two couples' new requirements, but, in contrast to Gracia's attitude, the *Principe's Box House's* main element is its titular box, not the spaces around it. To reinforce this idea, it uses visual cues such as a concise geometry, a seamless material, and a zocalo. It is also noticeably lower than the ceiling, allowing the owners to climb it and experience the space from different angles. In this way, the whole box reads as an independent element. Additionally, the box is made of timber, "a symbolic reference that relates beyond the space to the life of the owner" (u+a arquitectura 2012). Building the box with maple wood is a "tribute to the owner's love for Spanish guitars, usually made of this material" (u+a arquitectura 2012).

The project condenses in the central box the functional spaces, giving them more prominence inside the house. They do not only function on the inside but dialogue with the spaces around them, creating tension and putting the act of cleaning and cooking in the center of the apartment life. Placing the



Figure 4. *Principe's Box house*. Source: Héctor Santos-Díez, u+a arquitectura 2012

secondary or serving activities in the wooden furniture box transforms the act of washing and cooking into a major event in the space. A body worship becomes an articulating element of the house.

Looking back to the Baldachin, the three objects in this section (the Italian prototype and the two boxes in the houses) are functionally, visually, and spatially paramount to the space. They provide functions and spatial guidelines to the space around them and reflect the society and the time they belong to. The two housing projects, in particular, can successfully bridge that gap between users and designers by understanding their personal and specific needs. At the same time, the prototype has been thought to be used by a general user and therefore carries more social connotations.

#### 4. SUPERBOXES: A SINGULAR OBJECT

Looking back at the MoMA exhibition, the second piece to be discussed in this paper is the Cupboards and Wardrobes, also

known as *Superboxes* (Fig. 5), designed by Ettore Sottsass Jr. for the Italian firm Poltronova. They belong to the group of objects selected for the exhibition for their socio-cultural implications because their formal characteristics derive from, or are motivated by, the "ironic manipulation of the socio-cultural meanings attached to existing forms, rather than with changing those" (Ambasz 1972, 20). Sottsass and other designers within this group are redesigning conventional objects with new references, repurposing known forms with altered meanings. Sottsass, in particular, is trying to charge objects with a "ritual weight." "The object is given sculptural form and conceived as an altarpiece for the domestic liturgy." (Ambasz 1972, 20)

The cupboards are highly abstract, oversized objects produced in plywood and plastic laminate. In their making, there are no traces of traditional furniture nor any clues as to how to use them. Sottsass has favored meaning over form and ritual over functionality. About Sottsass and his pieces, Vittorio Gregotti, in his historical article in the MoMA catalog, said,

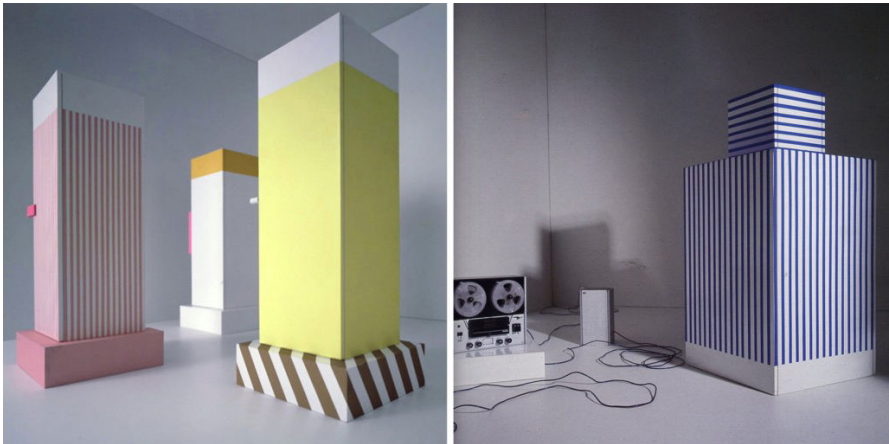


Figure 5. Cupboards and wardrobe, 1966. Source: MoMA, NY 1972



"A feeling of pleasure in colors also comes to the fore in Sottsass' activity in furniture design — but can we still use the word 'furniture' in this connection? They are violently colored presences, centers, and elements with magical references, new altars in which everything depends not only on a symbolic relationship with the object but even more on a ritual approach." (Gregotti 1972, 330)

The Superboxes were designed as industrial objects, but only some of the designs were actually produced and just for exhibitions or installations. The others remained as miniature models, photographed in domestic settings to understand the design intentions regarding the space around them. They are always set far from walls, at times arranged in the middle of the room, thus freeing them from their traditional function, turning them into the absolute protagonist. The *Superboxes* take an ordinary object, transform it in form and scale, and return it to the home as an iconic element that creates tension and structures the space around it by affecting the reading of the space.

#### 4.1. The Magic Box and The LightSlice

The space around the Superboxes relies on the furniture to radiate and influence its surroundings. However, even though the spatial influence of the Superboxes has been considered and specific attention is put to every piece, the space itself is not functionally prepared to be inhabited. In contrast, the following housing projects explore the spatial implications furniture can have when specifically designed for a location. *The Magic Box* by Raul Sanchez (Vindecans, 2020) and *The Lightslice* by Cometa Architects (Barcelona, 2016), much like the projects from the previous section, are also renovation projects found in Spain. They were commissioned by the people who inhabit them, giving the designers a clear input of their needs and values. The following projects are different in size, program, and number of users, but the strategies regarding furniture are comparable.

The first home renovation, *The Magic Box* (Fig. 6), houses a married couple and their two young daughters. It takes place in an oddly shaped 110 m<sup>2</sup> apartment on the ground floor of a townhouse with the advantage of having windows on all sides. A load-bearing wall divides the apartment into two long areas. To the west are the kitchen, access, and distribution areas, and to the east four consecutive rooms consisting of three bedrooms and a living room.

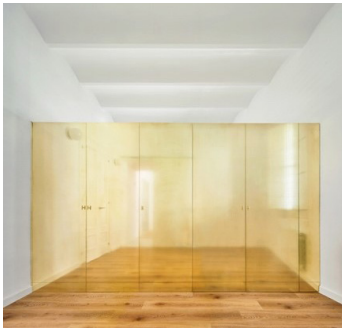


Figure 5. Cupboards and wardrobe, 1966. Source: MoMA, NY 1972



This intervention takes place in a bigger house, making it necessary to develop strategies that allow the house to function. The logic consists of stripes and passages one goes through to get to the next bedroom, creating a system of transitions between spaces. Two of these transitions are mainly functional since they host the bathrooms, while the third one is so unique that it lends its name to the project. Each transition is signaled with different materials, and the material chosen for the magic box is brass, which is intended to be a "special material of a precious but mysterious object." (Raúl Sánchez Architects 2020)

"The requirement to design a special space for the girls was present from the first moment", and so, "the project itself takes its name from this element." (Raúl Sánchez Architects 2020) The Magic Box is, in essence, a two-sided wardrobe dividing the two girls' bedrooms, and it would not be anything special if it were not for the meaning it has been given. A personal connection is established with the family and this object, which is given a personal meaning and intention. However, the influence of the magic box is not functionally or spatially crucial for the rest of the house.

The magic box is "an abstract volume, like a jewelry box, a box of surprises" (Raúl Sánchez Architects 2020) which encloses the closets, a secret passage, and a surface for the girls

to climb onto, which is a place for them to play, explore, and bond. The architects have intended to highlight this one element throughout the house and, by doing so, the girls and their rooms are portrayed and turned into the *raison d'être* of the project. The relation with the Superboxes from Sottsass seems clear: a conventional object with a manipulated meaning and presence that affects, directly and indirectly, the users, the space, and the project.

The second project, *The Lightslice* (Fig. 7), has a less evident meaning but more robust spatial, functional, and conceptual connotations. The project takes place in a one-person, mostly triangular 46m<sup>2</sup> apartment with windows to the short side towards a balcony and halfway through the longest side to the inner patio. The odd shape of the apartment makes it necessary for the designers to implement some intervention logic to optimize and get light into the space. They position the private spaces to the back, and most of the furniture is fixed in place following one axis parallel to the longer side. The kitchen counter, the washbasin, and the bed have been "perpendicularly placed, freeing the walls and leading to a more contemporary experience of space." (Cometa Architects 2018) The living room is the only room that allows for more flexibility.

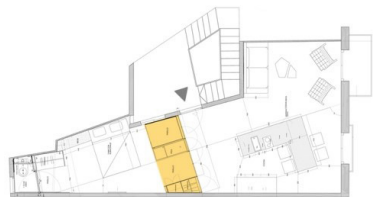


Figure 7. *The Lightslice*. Source: Vicente Ortega, Cometa Architects 2016

A second shorter axis uses a translucent box with the shower, sink, and wardrobe to induce a transition from private to public, both spatially and as a personal experience. The shower and sink are open to the private area of the house and closed with a light-filtering lattice screen to the social area of the house. It creates tension between the washing spaces and the bedroom, insinuating a celebration of the act of washing and grooming. Moreover, when the light is on, silhouettes are visible from the living room. The light-filtering screen that closes the box "allows light from the large balcony windows to reach the wet areas and bedroom" and "at night time, the lightslice amplifies the glowing dimmable light, creating a very relaxing ambiance." (Cometa Architects 2016).

The box, its symbolic meaning embodied in its playful light interactions, reinforces a living experience to see and be seen in contrast with a traditional isolated and closed washing space. The box embodies the concept of light; a light-slice that turns the apartment into a "bright contemporary spatial experience" that "reminds us that the natural light is the supreme of all architectural materials" (Cometa Architects 2016). This furniture translates the concept of the project into a visual, tangible element that the person can use, contemplate, interact with, and relate to. *Light* is the thread that binds this whole project together. The symbol of light is present throughout the entire project and is particularly highlighted in the *Lightslice* (the furniture). Light guides the design of the *Lightslice*, much like the *Girls* are symbolized by the *Magic Box*, and the concept of *God* is, in turn, highlighted and represented by the *Baldachin*.

## 5. FURNITURE TODAY

To conclude, what should be apparent by now is the functional and symbolic role that furniture can serve within a space, which is

why furniture can be so relevant in housing renovation, giving existing constructions a new life. While furniture can shape a space, it does not make it, as the space existed before any furniture was placed within it and will remain even after all the furniture has been removed. The space is, in fact, the "jewel" of the architectonic project.

"The four facades of a house, of a church, of a palace, however beautiful, constitute nothing more than the box in which the architectural jewel is included (.). In every building, what contains is the box of walls, the content is the internal space." (Zevi 1948).

Approaching architecture from its furnishing is functional and spatially representative. The function of a space can be partially, if not wholly, dictated by the furniture placed in it, adapting it to the requirements of the changing society. Therefore, it is logical to consider furniture a crucial part of designing spaces and, as such, a crucial part of architecture itself. The spirit or symbolic weight that links the spaces to the people using them is also embodied in the furniture. In the *Baldachin*, as well as in the exhibition's interiors and the presented renovation projects, only by understanding the philosophy and application of the architectural furniture can it be understood how these interior spaces are made. As Frankl said about furnishing objects, they alone give the space its emotional and intellectual existence.

A way of doing architecture that tackles the design of the interior space from the perspective of furniture, may allow designers to dialogue with the users and their experiences. Furniture can consequently be the link between architecture and the user; between design and society. Furniture opens up the possibility of personalization at the level of the individual. It can take a space constructed for many and shape it to serve an individual, a family, or an entire community.

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