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IRAN

AVANSIAN HOUSE

VERNACULAR ARCHITECTURE ANALYSIS

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INTRODUCTION

HISTORY

The Avansian House is a valuable example of vernacular residential architecture in **Rasht**, dating back **over 100 years to the Qajar period**. The house reflects the climatic, cultural, and social conditions of **northern Iran** through its spatial organisation, materials, and architectural elements.



Originally built by **Avadis Vardanian**, an Armenian silk cocoon merchant, the house combined production and living functions. The ground floor was used for silk processing, while the upper floor served as the family's living space. Over time, ownership changed until the house was acquired by the Ministry of Culture and Islamic Guidance.

LOCATION & SITE

- Located near Rasht Municipality Square, between Saadi Street and Neshat Street.
- Plot area: ~615 m²
- Built-up area: ~360 m²
- Two-storey structure with a central courtyard.
- Surrounded by residential buildings and service spaces.

PERIPHERAL SYSTEM & COURTYARD

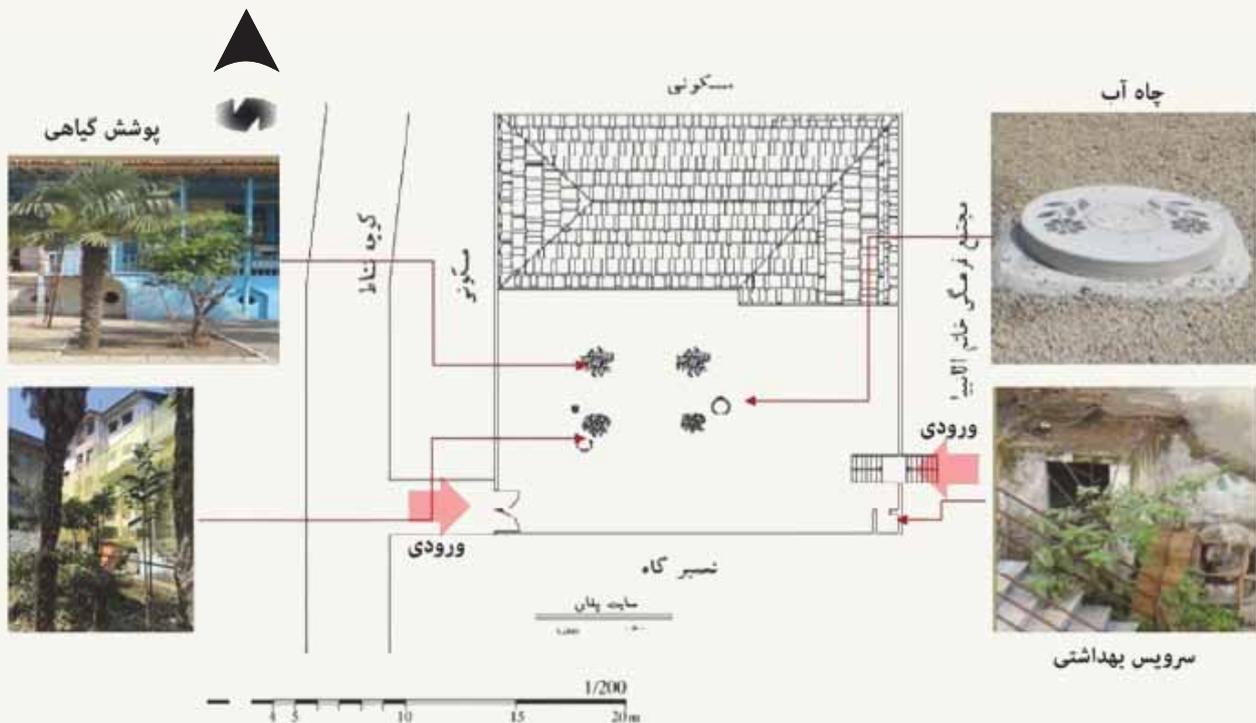


Image source: Publisher

COURTYARD FEATURES:

- Located on the south side
- Contains a water well and lavatory
- Planted with fig, citrus, and persimmon trees
- Acts as the main source of light and ventilation

The house is oriented along the east-west axis, receiving natural light from the south, east, and west, while the north façade remains closed.

PHYSICAL STRUCTURE & FORM



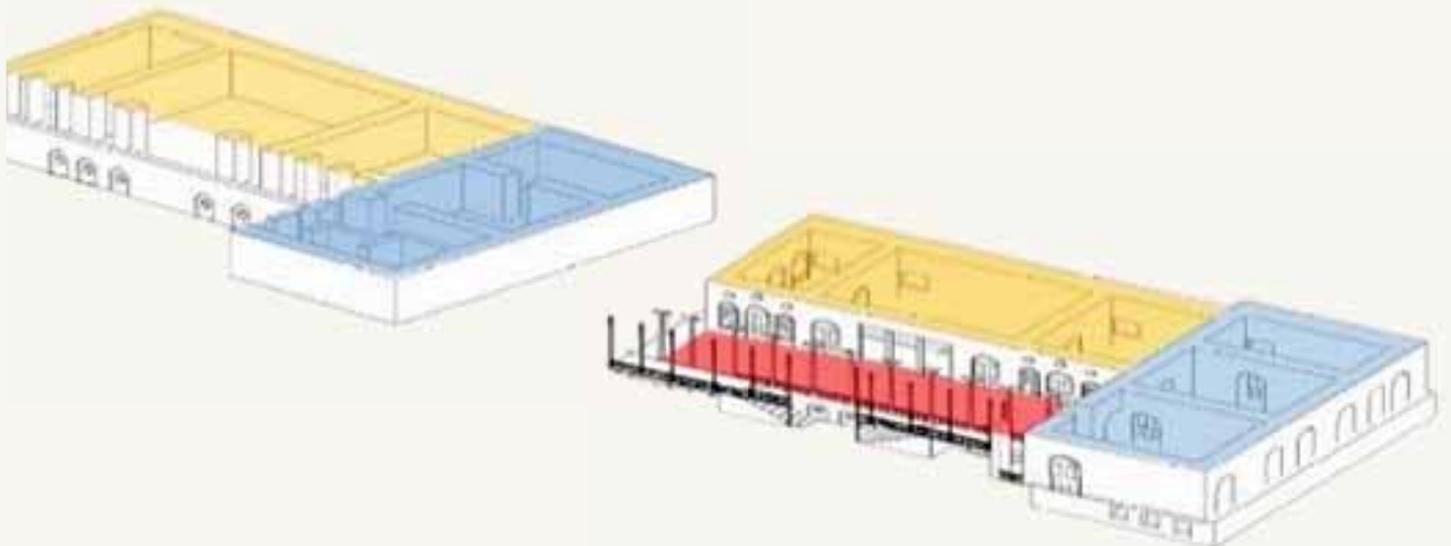
MAIN FEATURES OF THE HOUSE:

The Avansian House consists of simple and readable volumes, reflecting the clarity and stability of vernacular architecture.

Structural characteristics:

- Two floors:
 - Ground floor: Silk cocoon processing
 - Upper floor: Residential spaces
- Main floor raised 180 cm above ground to prevent moisture
- L-shaped plan with a multi-gabled pitched roof
- Elongated form along the east–west direction

The raised main floor enhances ventilation and visually emphasizes the importance of the living spaces.



FAÇADE, MATERIALS & COLOR

The southern façade is the most important and expressive elevation of the Avansian House, facing the central courtyard and forming the main visual and functional interface between interior and exterior spaces. Its composition reflects both climatic adaptation and architectural order typical of vernacular houses in Rasht.



The façade is organized through:

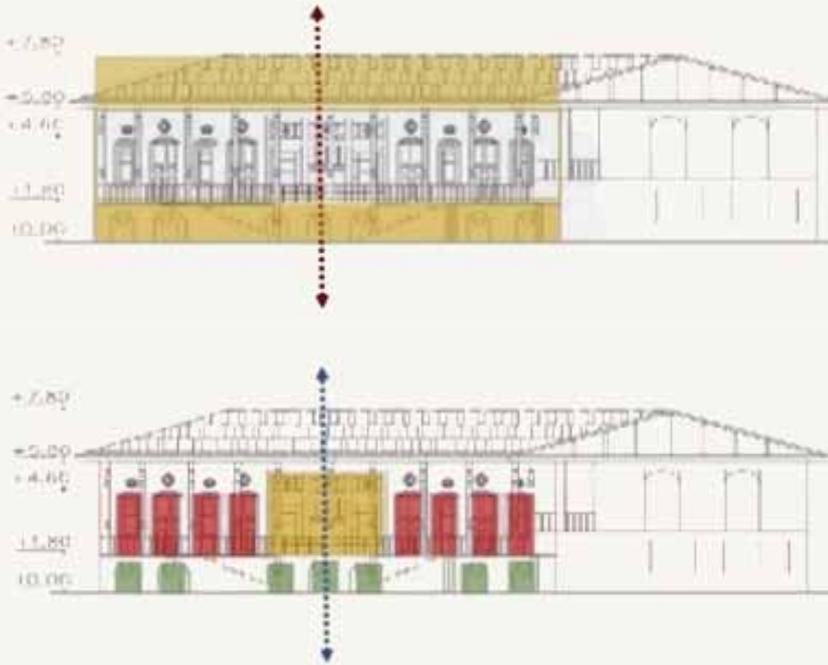
- Axial symmetry, centered between two staircases
- A continuous veranda (Iwan) extending along the façade
- Paired wooden columns creating rhythm and balance
- A regular arrangement of doors, windows, and oriel windows
- A deep roof overhang protecting walls and openings from rain



The facade's identity is defined by its use of local wood for structural and decorative elements, fostering a deep connection to nature. Gilan's signature blue is paired with warm, neutral tones to create a balanced palette. Subtle Islamic geometric patterns and arabesque details add symbolic depth and elegance without compromising the design's inherent simplicity.



SOUTHERN FACADE



The southern facade includes the eastern section and the continuous porch. The facade of the ground floor has several openings and two flights of stairs. .

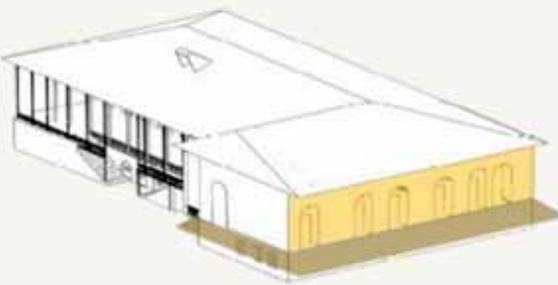
On the second floor, behind two rows of wooden columns, there are several openings and doorways for the three rooms behind the porch. The two flights of stairs divide the facade into two equal parts, thus creating a symmetrical facade.

NORTHERN FACADE



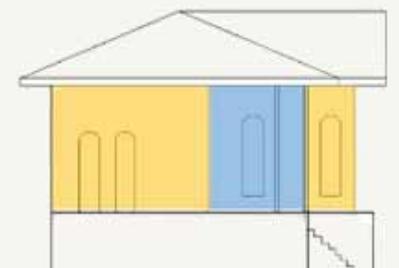
The northern facade has no openings and is adjacent to the northern wall.

EASTERN FACADE



The eastern facade has several openings. The porch continues to the end of it and has no columns. The openings are not symmetrical

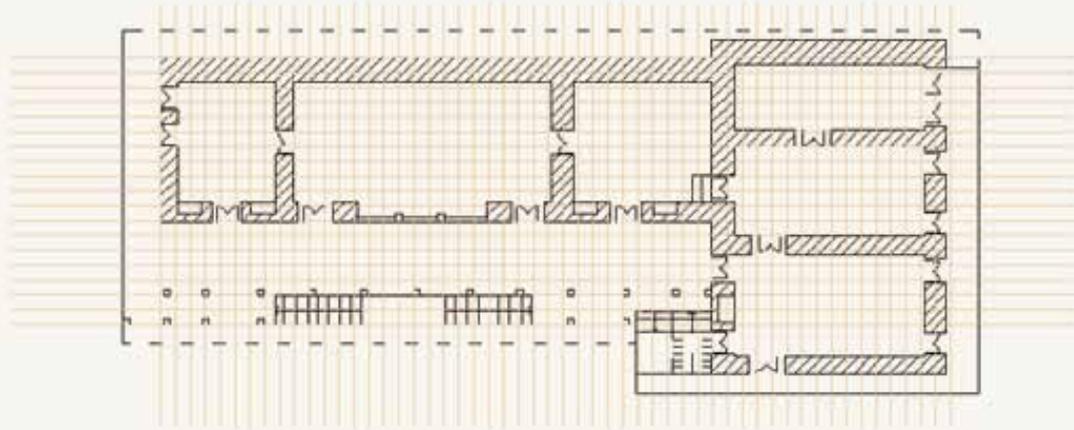
WESTERN FACADE



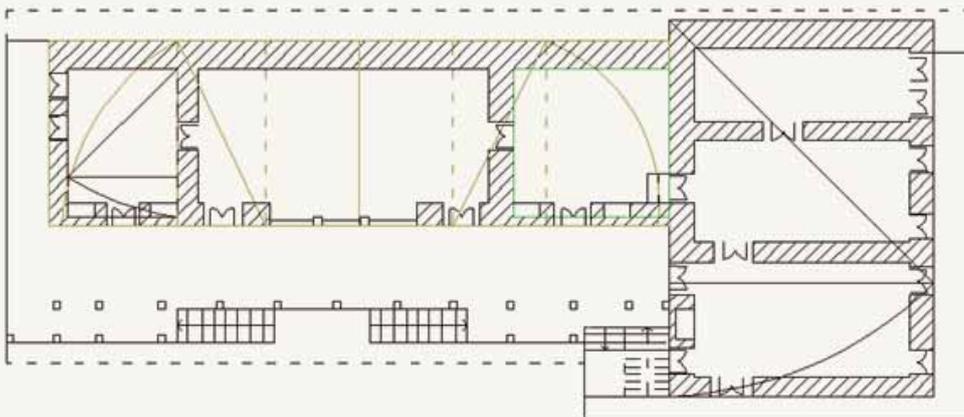
This facade also has a continuous porch. The rooms are behind the porch, and the depth of the porch with its paired columns makes the facade appear spacious.

PROPORTIONS & MODULAR SYSTEM

The Avansian House follows a clear proportional system and modular coordination, which plays a crucial role in achieving visual coherence and spatial clarity throughout the building. These proportional rules are not decorative but are embedded in the structural and spatial logic of the house.



A basic module of 42 cm governs the placement of walls, doors, windows, and spatial divisions. Most walls are constructed with a thickness of approximately 1.5 modules, indicating consistent application of this system across the plan. This modular approach ensures construction accuracy while reinforcing harmony between different architectural elements.

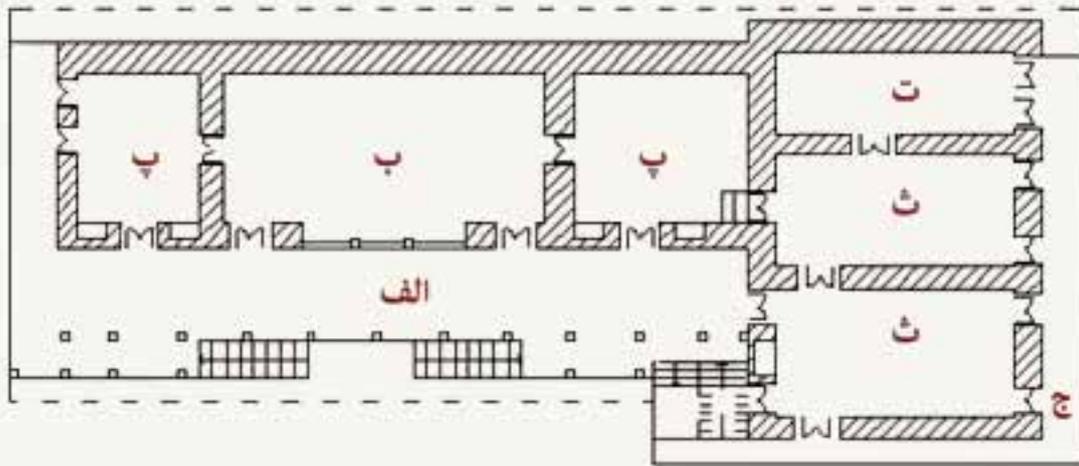


The proportional relationships of major spaces further demonstrate this order:

- The overall building has a length-to-width ratio of 2.73.
- The eastern section follows a ratio of $\sqrt{2}$ (1.414).
- The western section approaches the golden ratio (1.618).
- The central hall has a length approximately twice its width.

Together, these proportions create a balanced composition, enhancing both the aesthetic quality and spatial legibility of the house.

FUNCTIONAL ORGANIZATION OF SPACES

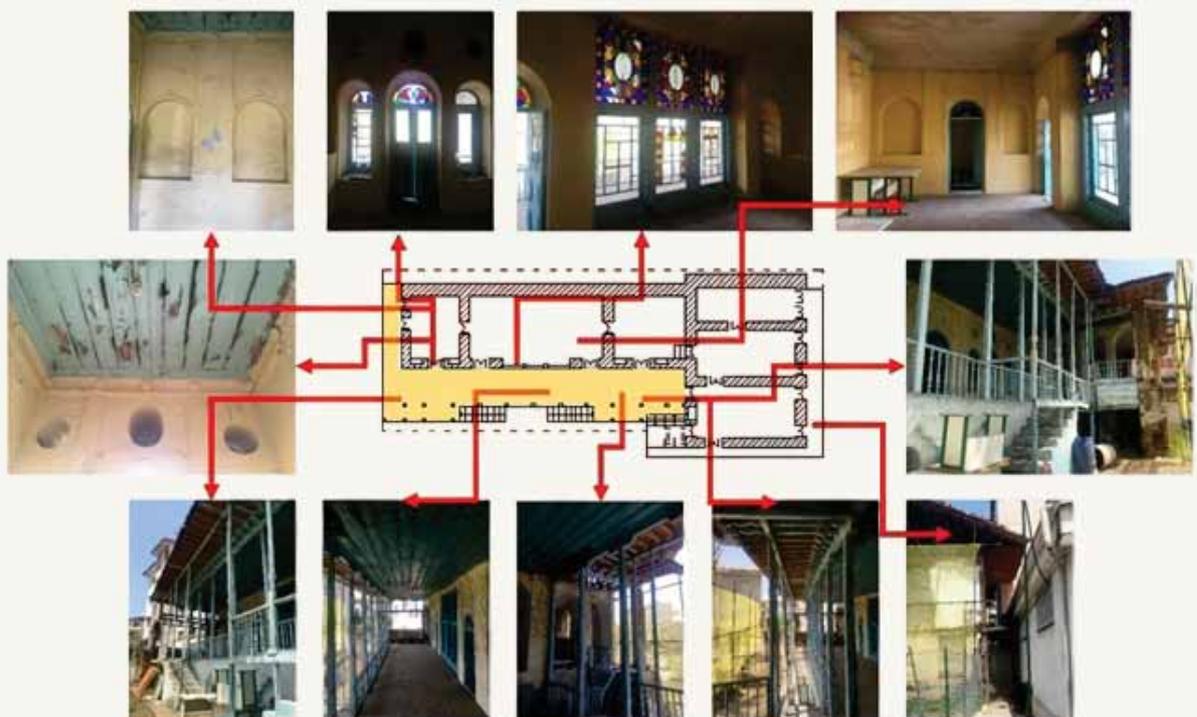


The functional organization of the Avansian House reflects both economic activity and domestic life, clearly separating production from living spaces while maintaining internal coherence.

Floor-based functional zoning:

- Ground floor:
 - Silk cocoon processing
 - Storage and service spaces
- Upper floor:
 - Residential and social spaces

On the upper floor, spaces are arranged in relation to the veranda, allowing flexibility and ease of movement between rooms.

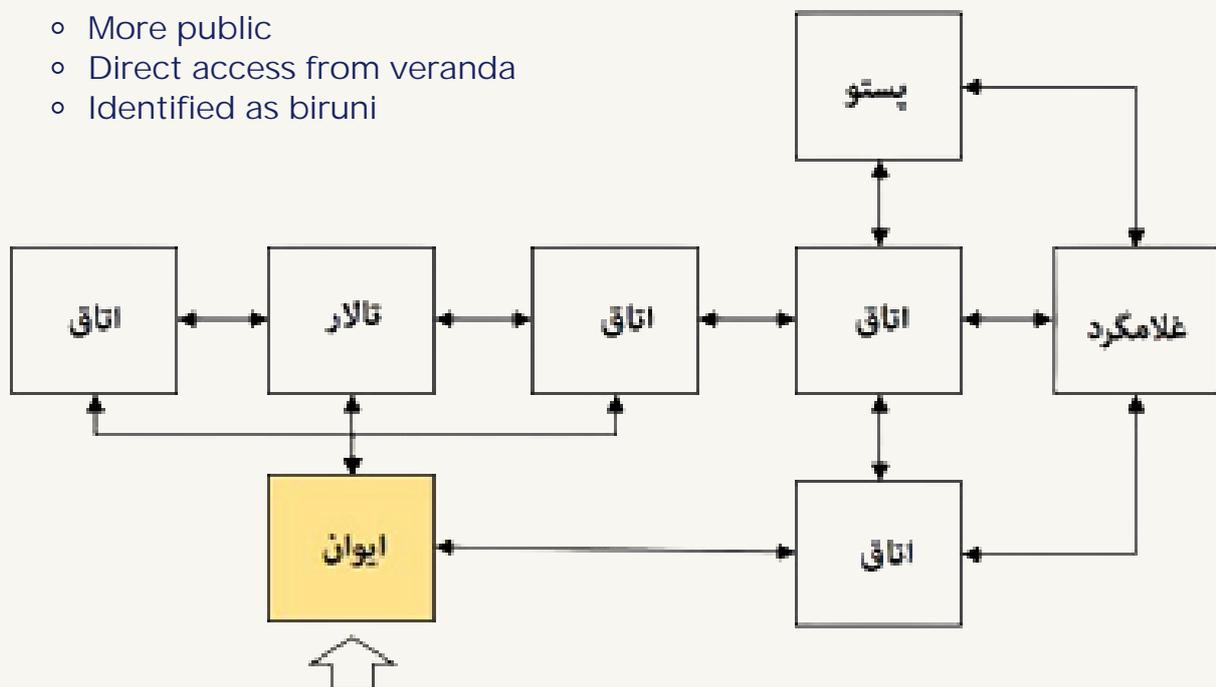


SOCIAL HIERARCHY & SPATIAL RELATIONSHIPS

The spatial relationships within the house express a clear social hierarchy, common in traditional Iranian houses, while still allowing adaptability.

Spatial hierarchy:

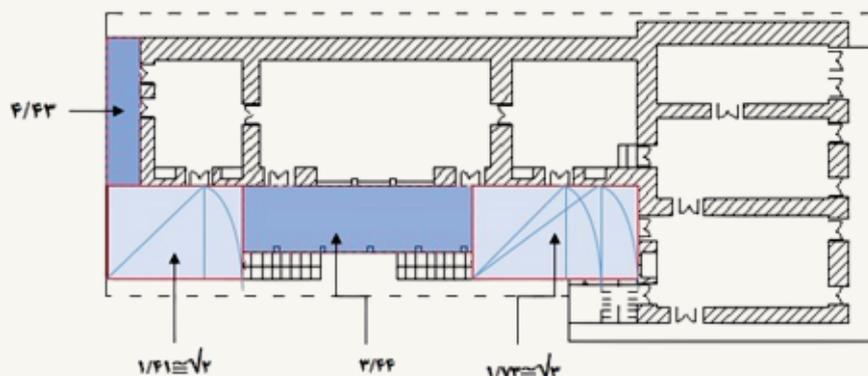
- Eastern section:
 - More private
 - Interconnected rooms
 - Identified as andaruni
- Western section:
 - More public
 - Direct access from veranda
 - Identified as biruni



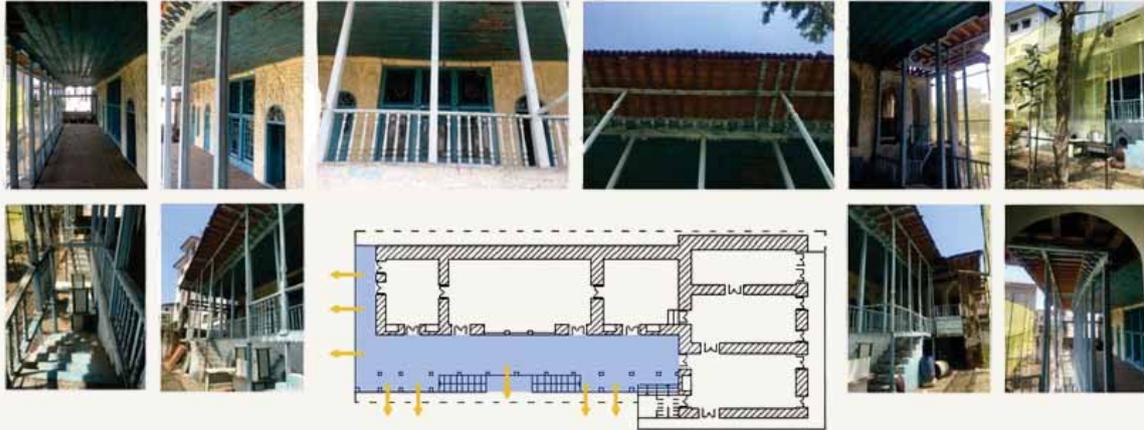
Key spatial characteristics:

- Rooms are directly connected to one another
- No strict single-function spaces
- Rooms can support multiple activities depending on household needs
- The veranda connects both public and private zones without fully separating them

This organization allows the house to adapt to changes in family size and function.



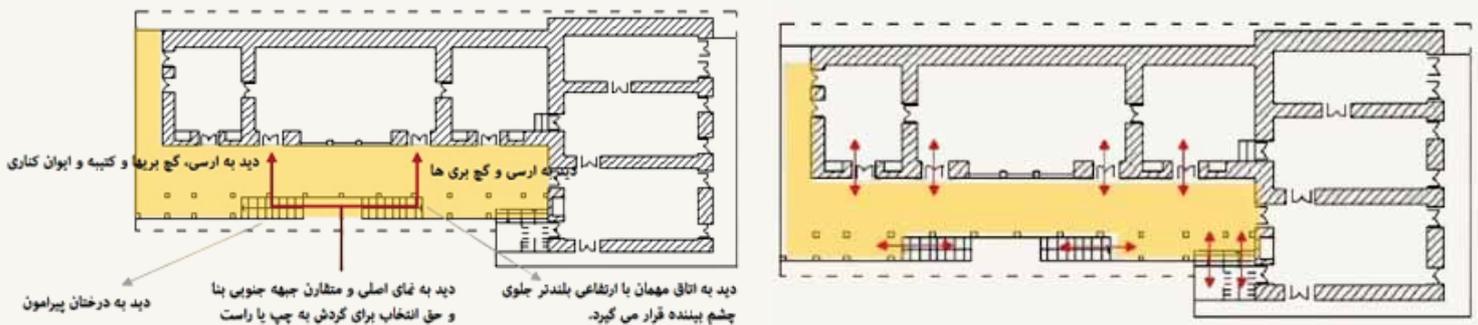
VERANDA (IWAN)- THE CORE SPATIAL ELEMENT



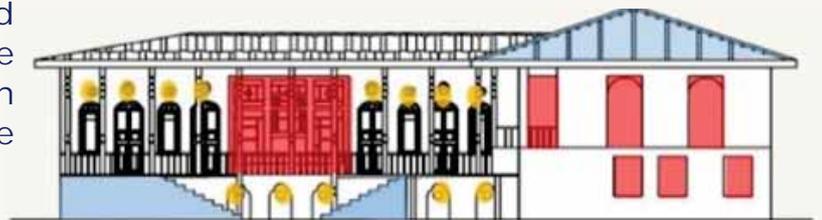
The veranda (Iwan) is the most important spatial element of the Avansian House and functions as the only true intermediate space (miandar). It plays a central role in circulation, climate control, and spatial hierarchy.

Physical and functional roles of the veranda:

- Connects courtyard → semi-open space → interior rooms
- Provides shade, ventilation, and rain protection
- Filters and softens natural light
- Acts as the main circulation corridor and a pre-entry space to all rooms

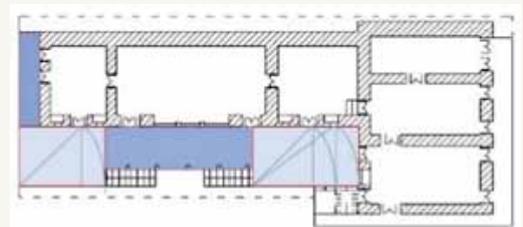


Through its spatial, functional, and symbolic roles, the veranda defines the architectural identity of the Avansian House and unifies all parts of the building.



Additional characteristics:

- Floor level equal to interior rooms
- Two symmetrical staircases:
 - Separate access when ascending
 - Single convergence point at courtyard level
- Rectangular geometry allowing flexible use of furniture



CONCLUSION

The Avansian House is a clear example of **Qajar-era architecture**. It skillfully balances function with beauty. The house uses a modular design and includes features that respond to the climate, especially **the central Veranda (Iwan)**.

This design creates a smooth connection between the inside of the house and the humid environment of Rasht. Originally, it served as both a space for silk production and a family home.

The house showcases the cultural and economic history of Northern Iran. It also highlights the lasting importance of sustainable, people-centred design. Preserving this house provides an important guide on how traditional architectural knowledge can still shape and inspire modern living

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THANK YOU