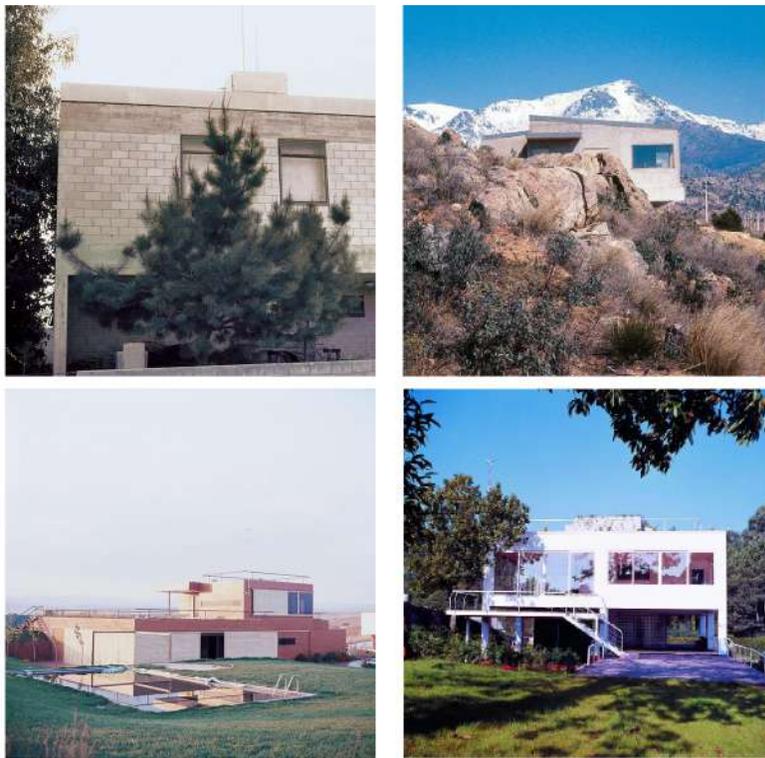


“Form follows function”. An essential characteristic of the architecture of the 20th Century and in particular, of Alejandro de la Sota’s architecture, is that the form is the result of the function, the volume responds to the resolution of the needs of men. Therefore, it is worrying that a high percentage of M.M icon houses have become museums of themselves (75% of the revised). Is it possible to live in the houses of the Modern Movement? Is it possible to keep them without going against their identity, as fundamental models of the Spanish architecture of the XXth century? The demolition of the Guzman’s House, that took place halfway of this research underlines the relevance of this question. This work delves into this issue and bets on the recovery of the function as the key of its conservation as heritage, supporting Sullivan’s thought.



Picture 1: Alejandro de la Sota’s houses, aim of this work
(Photos belonging to Fundación Alejandro de la Sota)

A series of essential questions about the preservation of the heritage of the M.M, are formulated: Does the housing of the M.M continue being valid as a home, without losing its original quality? In the permanence of heritage, is it important to feel the passage of time? In the actions of conservation-restoration with the purpose of the permanence of a good of the M.M, is it possible to combine the material authenticity with the survival of the form (image), or necessarily is it compulsory to choose between one of them? As a first approach, it is developed a review of the current state of the XXth century icon houses. A common denominator is observed: the houses are today museums of themselves and have recovered their original image. Next, an analysis is made of three representative cases of the Italian "Primo Novecento", where they have maintained the use as housing. Its evolution is studied, from its construction until today. With these data as a starting

point, it is addressed the empirical object in which to solve the initial question: the single-family dwellings of Alejandro de la Sota; Houses Velázquez (1959), Varela (1964), Guzmán (1972) and Domínguez (1976). Four houses of the second half of the XX century, which are in a key moment, because the generational change of the owners and therefore the change of needs, is determinant in their permanence and conservation as heritage. Each singular case is studied in depth in a complete temporal overview from its origin until today, following common parameters that facilitate the subsequent comparison. The original state is analyzed through the original graphic and written documentation and the redrawing of plans. The keys of each project are extracted and the permanence of these four houses is deciphered. Finally, the evolution and current condition of each one is reviewed through a personal interview with each of the owners and a visit to each of the houses.

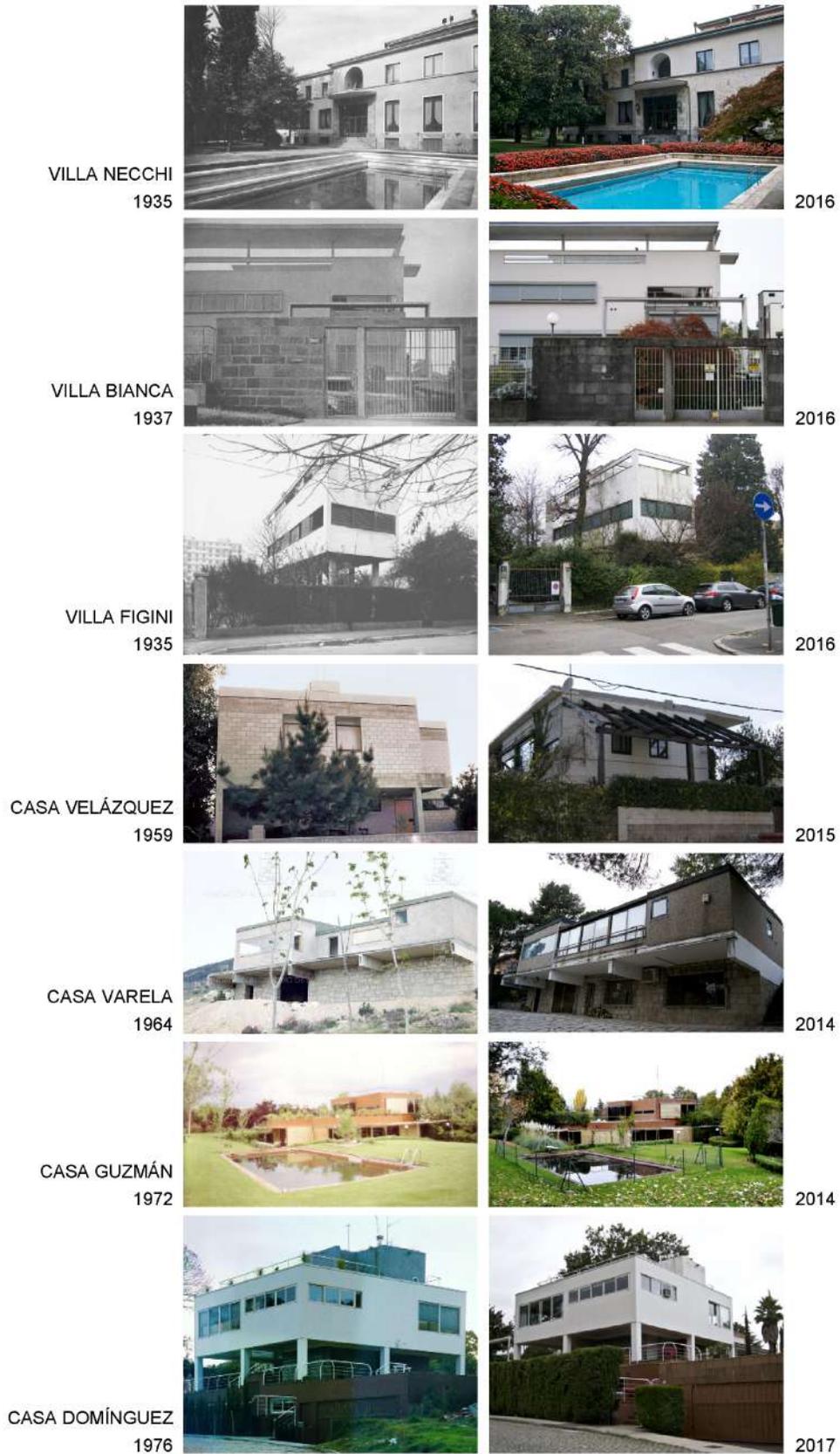
The comparative study of the houses of the Italian Novecento shows that it is possible to inhabit a house of the XX century and preserve it as heritage. Three factors are decisive: the owners, conscious or not of the value of their property, the protection and existence of a qualified higher organization that studies the values of the property ensures that certain limits are not exceeded independently of the will of the owner or the architect, and the definition of the limits of transformation. For this, it is essential to make a thorough study of the original, to obtain a complete knowledge of the work being able to extract the keys or intrinsic laws of the same, their invariants.

The study of the four houses is addressed from the function and inhabitation: the house as a refuge. It is confirmed that all of them (including the Guzman house until its demolition), are current houses as housing structures. All possess spatial qualities that would allow to accept an actual and different domestic use to the original one; they are located in inhabited towns and equipped with up-to-date infrastructure, they are organized according to the rationalist criteria that are still valid today in terms of distribution that distinguishes day zones and night zones, have well-lit and ventilated rooms, are solid and coherent constructions with the medium in which they are located, and allow the user the contact with the nature and the outside. Rarely "the crustacean" is perfectly adapted to "the shell". In villa Bianca (1938), Piemonti, owner of the house since 1988, adapted the circulation of the first floor and expanded the bathrooms to live more comfortably. Enrique Guzmán, original owner of the house in Sto. Domingo, wanted to have in the last years of his life, more independence than the one of the spaces normally inhabited by his sons, already adults. Although it never came to be executed, he also proposed to expand the house, with the purpose of having the office closer and a space to store classic cars and works of art. But when "the crustacean" does not fit in any way with "the shell", there are alternative housing formulas. For example, Can Lis that houses residential programs for researchers or the Villa Mairea, which maintains its domestic use by allowing concerted visits in advance to specific stays. Unfortunately, today the possession of a modern house of the twentieth century frightens and enslaves, as has been proven in the interviews with the owners of the houses analyzed. It seems that the "reincarnation" is the only exit for the houses of the XXth century, because the extended musealization in the icon houses, is an unsustainable destiny for the majority of houses of the XX century.

GENERAL DATA	VILLA NECCHI P. Portaluppi 1932-1935, Milano	2001. Bene FAI	1935-2001: Home of Necchi sisters 2001-2018: Museum	yes	high	high	yes	Advanced technology and modernity. Footprints of Portaluppi+Footprints of Buzzzi
	VILLA BIANCA G. Terragni 1937, Seveso, Milano	1988. Asset of Historical and Artistic Interest	1937-1960: Terragni's family house 1962-1980: Restaurant 1995-2018: House of Ferruccio Piemonti	no	low	medium	Diffuse but recoverable	Pure image Promenade architecturale. Spatial wealth
	VILLA FIGINI L. Figini 1933-1935, Milano	1992. Asset of Historical and Artistic Interest	1935-1985: Luigi Figini marriage house 1985-2018: Alessandro Figini marriage house	yes	medium	high	yes	Pure image Ext-int relation Minimal housing
	CASA VELÁZQUEZ A. de la Sota 1959, Pozuelo, Madrid	Without protection	1960-1980: Dr. Velázquez family house 1990-2018: Familiar house of Carlos (grandchild Dr. Velázquez)	yes	medium-low	low	no, but recoverable	Constructive sincerity Ext-int relation
STATUS OF PRESERV.	CASA VARELA A. de la Sota 1964, Madrid	Without protection. Included in Catálogo Inicial del PNPCPSXX of the IPCE.	1964-2017: Enrique Varela's family house 2018: Sale	yes	medium-low	medium-high	yes	Refuge Chacarater Means and aims
	CASA GUZMÁN A. de la Sota 1972, Algete, Madrid	Without protection. Included in Catálogo Inicial del PNPCPSXX of the IPCE	1974-2014: Guzmán's house 2017: Demolished	no (yes until demolition)	high (until demolition)	high (until demolition)	no (yes until demolition)	Relation user-surrounding, arq-surrounding. Functional and material dipole
	CASA DOMÍNGUEZ A. de la Sota 1976, Pontevedra	Without protection	1976-2018: Domínguez's family house	yes	high	high	yes	Functional and material dipole

Picture 2: Comparative scheme. Results regarding the conservation of the house.

(Photos of House Velázquez, Varela, Guzmán and Domínguez belonging to Fundación Alejandro de la Sota)



Picture 3: Comparison of the original and current state of the studied houses.

The successive inhabitants of a house suppose the evolution of the necessities, they cause the forced transformation of the architecture, of "the shell" to make it habitable by each user. Where is the limit of these transformations? The disappearance of the original architecture, as has happened in Casa Guzmán and is happening in Casa Velázquez. In the single-family homes of the Modern Movement, "microscopic trials of great experiences", this limit is found in the logic of the house itself, in its essence, in its keys. If it disappear, the original architecture vanishes. That is the permitted range of action until the essence of the building is modified.

In the evolution of housing from its origin until today, it is observed that the main difference between the Italian cases and the Spanish cases, is that the interventions studied in the first ones have not impaired in the architectural object. In the homes of Alejandro de la Sota, it sometimes happens that domestic use has led to the disappearance of the object of value, as is the case of Casa Velázquez or, manifestly, the Casa Guzmán. In the same way, an inhabited house can be the key to its own safeguard, as in the case of Casa Domínguez or Casa Varela. One or the other destination has depended solely on the level of sensitivity of the owners. The cause that differentiates the results between Italian cases and Spanish cases is the official protection of the works, since the interventions carried out on the Italian houses, cataloged and protected, have had to be approved by an organization interested in their conservation as heritage. Otherwise, imprudent interventions can directly attack the essence of a work. The unconscious actions that have been taken on Casa Velázquez are endangering even its structural stability. At Varela House, the way of covering the terrace significantly changes the image and expression of the original building. At Guzmán House, the lack of knowledge about how to manage the new needs of the owner have led to the total disappearance of the house. The single-family homes of the Modern Spanish Movement, still close in time and therefore in a generally acceptable state, must ensure a certain degree of comfort for the user. Therefore, in the conservation of this type of heritage, it is proposed to put the accent on the knowledge of the essentials (generally still living in the houses of the XX century), thus illuminating the how, the possibilities of transformation for its permanence.

This research proposes a methodology of study for single-family houses of the twentieth century, which first discriminate the accidental of the essential, to recognize the keys of the building. The conservation of the essence, unraveled from the in-depth analysis of the case, will ensure the safeguarding of the good and will delimit the scope of the necessary intervention to update a house.

Paradoxically, just like the illustration of the young-old of the draftsman W.E.Hill, it happens that the houses of the Modern Movement, old, precious, historical and cultural heritage, can remain young, houses that work and that subscribe to the modern "form follows function". The natural evolution of people and their needs, leads to accept the necessary transformation of the living quarters to ensure life in them and consequently their safeguard. A guideline is proposed, a warp to know the work and extract its keys. Respecting the essence of unique architecture house, we will obtain works that are testimony of the experience of time.