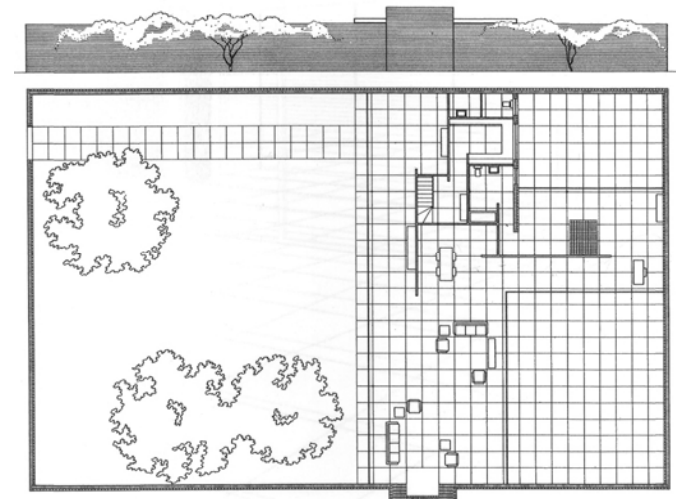


The world of architecture has experienced a big change in the last years: the implementation of new technologies in the design process is producing all kinds of results. Most of them are extremely complex formal solutions that try to compete for the first place in originality. It is very important to remain critic and understand that what makes a piece of architecture "more advanced" is not its physical appearance but the quantity and quality of the relations that it can establish with the environment. There are three different environments (natural, cultural and informational) and the ways we deal with them as architects can be described in six types of relations: positional (systems by illation), metaphorical (systems by analogy), atmospherical (systems by interaction), disturbed (systems by alteration), intangible (systems by correlation) and environmental (systems by energy). The relations between nature, technology and human being (architect) are the central topic of Sanford Kwinter's text "Cooking, yo-ing, thinking". It states that nowadays computers are not just a tool but an extension of our vision, of our experience, that allows us to understand the complexity of nature with a new global vision. The study of contemporary houses according to its different types of relations with the environment is the key to determine whether they are advanced or not. The Studio House by F451 arquitectura establishes a positional relation with the terrain: each part of the house interacts with the ground in a different level (emerging, aligned and detached). Some elements of the project try to emphasize an environmental relation: the skylights to catch the northern light from above, the cross ventilated spaces, the open hallway that acts as a climatic regulator, the green roof for thermal insulation and the water recollection system. It is even possible to see some kind of analogy between the organization of the house in plan and a branching structure (metaphorical relation). However, the relations in this project aren't strong, the house is mainly concerned about the interior spaces and despite its complex appearance it is not the best example of advanced architecture. Something similar happens with the Never Never Land house designed by Andres Jaque: an overdesigned complex shape (probably with too many elements) is the consequence of a simplistic analogy with the tree structure (bad metaphorical relation). The apparently good intentions of the project are only translated into keeping some trees and the overall relation with the environment is very poor. There are other examples of architecture that despite their simple appearance are much more successful in establishing relations with the environment and, therefore, they become examples of more advanced architecture. We can see a very suggestive example of positional relation in Rudofsky's holiday house in Málaga where walls are placed extremely close to trees and the branches pass through some holes made into the wall. It is an "architecturization" of nature. The Hexenhaus by the Smithsons shows an interesting way of using the metaphorical relations: wood elements in the porch imitate branching formations of the forest in which the house is placed. The environmental relations can be understood in Phillip Ram's section diagram of functions related to thermal zones according to the height of each room. In his text "Form and function follows climate" he explains that

architecture should be free of formal and functional predeterminations and it should have spaces that could be used in different ways according to the variations of light, temperature, and other conditions of the climate. "The shape of energy" by Sean Lally deals with a similar topic and states that the architectural shape should be the result of the energies of the environment, every piece of architecture would become, thus, site related and could not be built anywhere else. In some way, climate and energy are an habitable space. When talking about environmental relations we talk about energy. Energy can be measured and it must not be confused with atmosphere, which is the central topic of Mark Wigely's text "The architecture of atmosphere". The atmosphere is a fragile illusion and it is completely subjective. Despite the difficulties of describing and measuring the atmosphere in an empirical way, it has always been one of the most important issues of architecture and it can be a very powerful relation when properly designed. The Wall house by FAR deals both with environmental and atmospherical relations. The facade of this building is a multilayer membrane with different solutions and geometries as a response to interior needs and climatic requirements. That special wall also blurs the boundary between the interior and the exterior, which is also one of the main issues of the House N by Sou Fujimoto. This house is formed by 3 shells, it is "a box inside a box inside a box", creating a gradient of privacy and combining exterior and interior by placing the garden inside the outer box. The sun light coming through the semi-exterior garden, the changing shadows and smells and the constantly growing and evolving natural elements create a very rich atmospherical relation. In his text "Primitive future", Fujimoto explains many of the ideas that we can see in the house: the nesting concept, the importance of the gradation in architecture and the in-between architecture (in this case between interior and exterior, between the house and the street). He also states that the ideal architecture is an outdoor space that feels like an indoor and an indoor space that feels like an outdoor; and the garden (nature manipulated by people) is the archetype of architecture. This idea is closely related to the Rudofsky's theory of "The conditioned outdoor room". Rudofsky is against the modern tendency of using technology to control the climate only in the interior spaces. This tendency is leading us to an increasingly indoor life (we could even end up living in an underground world or into sealed buildings). According to Rudofsky, climate control shouldn't end at the doorstep and we should see the garden as potential living space: it could become a room with the sky (with its changing moods) as the ceiling. He also explains that, paradoxically, the use of glass walls in architecture has alienated the garden: it has become something to be observed and not to be felt or lived. A good example of this is the View house (by Arraigada and Marklee). It consists of a circular house (with some subtractions) designed to frame only some desired views of the landscape. Apart from not being very successful in achieving its goal, it is conceptually wrong from Rudofsky's point of view. We should try to include nature inside the house instead of placing a strange object in the landscape. In this mission of enclosing nature the wall plays a very important role. It is a container of the garden; it generates privacy (makes the garden belong to the house and not to the street); it creates a protected air space that keeps temperature; it acts as a heating panel after being exposed to the sun; it gives human scale; its artificial shape contrasts with the natural forms in a

complementary way; and it provides all kinds of shadows and reflections during the day. The walled garden is, thus, the ideal "conditioned outdoor room" according to Rudofsky. This idea of enclosing the gardens suggests a very interesting research topic: the relation between the house, the garden and the city in an urban context. Rudofsky's idea of using walls to separate the typical American front lawns from the street to make them become an exterior room of the house is at the same time outstanding (from the point of view of the house) and preoccupying (from the point of view of the city). If we compare the image of the green streets thanks to the front lawns with the image of an endless wall at both sides of a road, we will realize that Rudofsky's project has a bright and a dark side. The house with three courts by Mies van der Rohe illustrates this: it has an incredibly pleasing interior space and a worryingly tough exterior facade. What is the desirable relation between the house, the garden and the city? Complete separation with a wall or "useless" generosity with a front lawn? There are many examples to be studied and a clear answer will be difficult -if not impossible- to find. However, as most of the problems in this world, an intermediate solution tends to be a good answer. As an example of this we can find, again, the House N: it has a semi-interior garden enclosed with a perforated wall. The garden belongs to the house but it can be seen from the street. Another suggestive example is the Moriama House designed by Ryue Nishizawa. In this case the garden is not completely closed, it is just the space between different units, but it is certainly used as an outdoor room being, at the same time, directly connected with the street. It is a controlled open space. These two projects are very good examples to illustrate and summarize the essential idea of this text: the most simple shapes and structures can be the most advanced architectural pieces as long as they establish rich and numerous types of relations with the natural, social and informational environment.



Three court house by Mies van der Rohe. Plan (pleasing interior space with walled garden) Vs. facade (no relationship with the city).