# ISSUE TEN | SPRING 2022

-ARTFUL LIVING MEETS WELL-BEING-



PATRICK BLANC The Living Art GARDEN ART David Harber Design for Health & Well-being PENTHOUSE LIVING in the City of Light

# The Living Art

## **Patrick Blanc**, French Botanist & Inventor of Vertical Garden

#### In conversation with Ilona Lee

#### ILONA LEE: When did your love for plants start?

#### PATRICK BLANC:

Since my childhood I have love tropical living creatures, both animals like fish and birds and plants. I visited with my parents all the museums and exhibitions featuring tropical plants and animals. I remember the first international Floralies exhibition in Paris when I was nine years old and I was so much impressed by all the reconstitutions of trees and rocks covered by many different plants, mostly Ferns, Orchids and Bromeliads. Just afterwards, I began to install many plants in my room and finally, at about 15, I created my first vertical garden.



#### ILONA LEE: What do plants mean to you?

#### PATRICK BLANC:

I am always surrounded by plants, either at home or in the tropical forests for my research at University and then the National Center of Scientific Reasearch (CNRS). When you observe the plants, either at home or in the different tropical forests, you understand that their evolution is mostly guided by very sophisticated structural ways of adaptation. The plants mostly don't move so they need structural responses of their changing environment, either the predation by herbivorous animals or the falling of a tree branch, or an unusual dry season or a sudden drop in temperature or a new disease... Plants are thus fascinating because they present a wide array of responses to the moving life conditions. And the right morphological or behavioral response means harmony and beauty.

#### ILONA LEE: What was your most challenging project?

#### PATRICK BLANC:

In fact, each project is a challenge because I always have to select the right plants. The smallest one, about only one foot tall in my home, was only covered with different moss species and it was not at all simple to select these species. On the other hand, a tall project like the 200 meters tall Towers with Jean Nouvel in Kuala Lumpur is of course challenging, because the top is very windy and fully exposed to the sun, while the lower parts are totally protected and over shaded. Once again, the advantage of being a scientific botanist is the quick and accurate response that I can give to each situation. But we have to keep in mind that plants are living creatures and that sometimes they show some unexpected responses in their growth habits. Finally, this is the best thing to see that first of all plants are living individuals and that each one can exhibit a different response to situations that we considered as perfectly understood and well managed; The plant life expressions are always a wonderful surprise and many times I have seen plants growing in an unusually beautiful architectural way on my vertical gardens.



Le Nouvel Towers, Kuala Lumpur, Photo: Ody Effandy



"My vertical garden mimics the rocks and tree trunks covered by mosses in forests, where the plants are growing with the root system radiating among the very thin moss and algae layer covering rocks or trunks."



#### **ILONA LEE:** You invented the modern Vertical hydroponics Garden. Tell us more about your invention.

**PATRICK BLANC:** 

I invented the vertical garden in its present conception about 45 years ago and a full page article was published in 1978. Since that time I have made quite a few technical modifications but, thanks to my botanical researches and numerous travels in forests of the world, I extend more and more the proper selection of the plant species according to each situation. In fact, my vertical garden mimics the rocks and tree trunks covered by mosses in forests, where the plants are growing with the root system radiating among the very thin moss and algae layer covering rocks or trunks. I just replaced the moss layer with a very thin, 3 mm thick felt with high water diffusion power, allowing the roots of the plants to grow radially among the fibers of the felt. Since this felt is not biodegradable, it lasts for some tens of years (my oldest felt elements date back to 1982) and the plants can exist on the felt almost eternally, at least when considering our human span of life. Irrigation is from the top with a perforated hose and there are usually two to four sequences every day, the duration of each sequence being usually 2 to 5 minutes according to situation and season.





#### ILONA LEE: What are your favorite plants?

"I love all plant species! The only important thing is to see them growing in the best way year after year and this is why the selection of the right species for the right place is most important. But I must say that, first of all, I love shade loving plants."

#### ILONA LEE: How do you choose plants for each project?

#### **PATRICK BLANC:**

There are two different situations, indoors or outdoors. The plant selection for my indoor vertical gardens are similar concerning their requirements all over the world since the indoor temperature is everywhere about 20°C. My selection concerns the available species from nurseries in each country. For instance, most of the glasshouse nurseries in the USA are mostly along the East coast, in Florida and in California. I always select a mix between some common species and much more architectural and rare species. Of course, every time the project concerns an outdoor creation, I, first of all, take in consideration the global climate, especially the lowest winter temperatures and the local conditions of exposure to the sun and if the situation is a narrow canyon street or a exposed façade. This fully that the selection of means the right species for each place in an outdoor vertical garden is almost infinite, ranging from ferns and shade loving plant species to sun and wind loving species for the top of my vertical gardens.



#### ILONA LEE: What is the future of green walls? Are Vertical Gardens sustainable?

#### **PATRICK BLANC:**

During about twenty years I was mostly the only person to create vertical gardens in the world, my first public installation being in 1986 for the Museum of Sciences and Technology in Paris la Villette. Now, mostly since 2005, the vertical gardens have become more usual elements of the so-called Green Architecture. This means that I created a new perception of the cohabitation between plants and human beings inside the cities without losing the very precious space at the ground level. The ecological sustainability advantages of a well managed vertical garden is that the water consumption concerns only the biological needs of the plants since there is no water surface run off nor vertical water percolation through the soil. Of course, the best way is to recycle the water from a lake for instance or from large indoor tanks or aquariums as in my home. Collecting water from the roofs and from car parkings is also the best way to save water consumption.

### " I created a new perception of the cohabitation between plants and human beings inside the cities without loosing the so precious space at the ground level. "



# "At home, I try to recreate the most harmonious living situations that I can observe and delight in Nature."



#### ILONA LEE: What are you working on currently?

First of all I am a botanist and I still work on publications and videos on my field trips in tropical forests, the last ones during this 2021 covid year being Tanzanian forests and the cloud forests of Ecuador. Considering my vertical garden projects I have some of them in Europe (and even in France...) but most are in different parts of the world, especially USA with a beautiful residence project in Oakland, California and a new exciting one in the center of Manhattan. The biggest one (450 m long indoor vertical garden) just finished in Kuweit, a new one in Doha and quite many in Asia, especially in Singapore with the green renovation of the Changi airport terminal T2, a long term and so exciting very diversified project in Shenzhen, named C Future City and more projects on the way.

#### ILONA LEE Is your jungle home in Paris your favorite place on earth?

Yes, of course ! And just because here, at home, I try to recreate the most harmonious living situations that I can observe and delight in Nature.

## Quai Branly Museum, PARIS

### GREENWALL BY PATRICK BLANC





# MOMA TOWER, NEW YORK

### VERTICAL GARDEN BY PATRICK BLANC



