Villa Plus

THE WELLNESS VILLAGE FOR YOUR GOLDEN YEARS
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Special thanks to Andrea Borghi Architect and "cultore della materia".

For the Thesis titled
Villa Plus:
The Wellness Village for your Golden Years

A project started in March 2018 and completed in December of the same year.
BOOK II *

Chapter 1
GREEN HOUSE

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* This book is the continuation of the research presented in BOOK I
"Green House"
Multi-sensory experience

"A healthy mind is the true key to happiness."
— Dalai Lama
Approximately 100 meters to east from Villa Arconati’s main building, there is a Green House located in the gardens, on the south flank of Via Origona. The abandoned building used to be a place to grow plants, thus the main objective of the project is to bring back the splendor of the Green House by reinterpreting the concept. Even though nowadays the building is ineligible for any activities whatsoever, it has conserved its basic functional capability and potential to become a beautiful and useful venue. Following the purpose of the Villa Plus project and offering an important addition to the concept, the Green House is designed and planned having the older adults in centre.

Throughout the planning process of the Villa Plus concept, as the main themes of the project, sustainable aspects are highlighted. The Green House and the research of its development pursued to attain maximal self-sufficiency. This can be reached by choosing the best of the latest innovations and taking advantage of the current form of the building. Furthermore, during the construction, the environmental impact of chosen materials are taken into consideration, but also the maintenance and durability of the products. Thus, The Green House communicates sustainability with its every part.
The Green House in the context of the Villa Plus masterplan.
1.1.1 Location in the Villa

- Noble court
- Main garden axis
- Secondary garden axis
- Main garden axis
- Green House

1.1.2 Current state

- Abandoned Greenhouse
- Structural diagram
  - Brick and concrete columns
  - Steel structure
  - Brick supporting wall
- Filter for visitors
- Circulation axis
- Access for inhabitants of Villa Plus
- Access for external visitors

Layout
1.1.3 Photographic Survey
1.2 Theoretical Support

1.2.1 Aging Well

As previously stated in the research part, the three areas that should be considered in order to achieve an integral state of wellness are the body, the social and the mental aspects.

Body Wellness:
There is a misconception that exercise is about lifting weights or running marathons, the truth is that doing physical daily activities already accounts for a good amount of the work. Exercises that involve using oneself body weight are very recommended to build enough strength to carry out everyday tasks. Among the recommended exercises for aging people, there is yoga, taking walks and doing bare exercises. Not only is exercise beneficial for the heart, the muscles, lungs, and bones but it is also beneficial for the brain; there is a link between exercising and better memory and quicker learning. There is even some research that suggests that exercise can delay the onset of Alzheimer’s.

Social wellness:
While aging, the social-network composed by family, friends, neighbors, colleagues, acquaintances and even pets, turns to be essential for a healthy lifestyle. Staying connected to people and the community are an integral state of wellness are the body, the social and the mental aspects. Body Wellness:
The Real Estate wellness in this case means, for example, a community and meeting at the Real State Wellness projects and community developments projects. According to Ophelia Yeung, the senior research fellow from GWI, the Real Estate wellness will remain as one of the three core markets in future. The overall potent of the wellness industry indicates many things, for instance about the development of the innovations and effectively spreading new trends, methods and different treatments, but especially about the attitudes of the consumers. According to a WGSN report by Theresa Ye e, instead of relying on the healing healthcare, health-consumers are focusing on switching their lifestyle towards more proactive. The report also encourages brands in wellness business to team up to educate consumers with workshops and to promote about the importance of inner beauty and mindfulness. This, in a nutshell, is what the concept of The Green House represents in addition to the social approach.

The aging population is having an enormous impact on the world and the wellness industry recognizes that the end of life care is a business opportunity. Recently, spas and wellness facilities have started to have "the death" conversations and help people deal with the stress-related issues. Open conversations about the topic help people discuss important end-of-life decisions and talk about what matters in life as well as in death. Caring is in the DNA of the industry, that is why they also give back to the community and meet new people. The Real Estate project focuses on The 2018 Global Wellness Economy Monitor which is provided by a non-profit organization, Global Wellness Institute (GWI). During 2015-2017 the global wellness industry grew 12.8% and is now worth of €3.680 billion. According to the report highlights the future development of Real Estate sector within Wellness industry that in between 2017-2022 is prospected to grow 47%. The Real Estate wellness in this case means, for instance designing and materials of construction projects and community developments projects.

Chapter 1: Green House

According to the Global Wellness Institute\(^8\), Aromatherapy is an ancient practice that consists of the use of essential oils from plants to prevent or treat illness, impact the mood or enhance well-being. It has been present for centuries with the religious, cosmetic and medicinal purposes. Ancient civilizations made use of it through different applications: directly to the skin (usually diluted), as part of massages, added in bath water, via steam inhalation or in mouthwashes.

The variety of essential oils commonly used for aromatherapy is vast. The oils are completely free of synthetical chemicals and are extracted from flowers, roots, leaves and needles, resins, seeds, fruits, berries, bark, and wood. Many are obtained from familiar herbs and spices such as basil, anise, nutmeg, cumin, garlic, ginger, and oregano.

From the senses, only the olfactory response is instantaneous and leads directly to the brain. It is also associated with the memory. This gives our central nervous system a direct susceptibility to the environment. The power of scent for therapeutic qualities nowadays is taking a turn with customized treatments based on how the user wants to feel\(^7\). Working in collaboration with botanist and with the use of high tech digital technology, aromatherapy can be used with intention. It can be used as a treatment of pain, mood enhancer, sleep therapy, improvement of cognitive function.

### 1.2.2 The power of scent

Music Therapy is another ancient technique which enhances traditional healing practices. Different states of mind for healing can be created through the music. It can be used to help uncover emotional responses and stimulate creative insights. Sound therapy sessions can be used to influence physical, emotional and social well-being. Among other settings, music therapists work in many kinds of healthcare facilities including senior centers, nursing homes, and day treatments centers. Therapy can include listening to music or performing with or without the presence of an expert. Sessions can be individual or for groups depending on the specific needs of participants.\(^9\)

In recent years, music and sound have become the main event in some wellness venues. This new approach is rooted in vibrations and frequencies. The concept is that various systems and organs in our bodies vibrate to different frequencies and disruption can alter our health and wellbeing. The reactions to vibration medicine help people relax, clear energy blocks and relieve pain.\(^9\)

### 1.2.3 The art of Sound Healing

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### 1.2.4 Light and Color Therapy

The color theory sustains how color and light can affect the mood, emotions, and wellbeing of people either in a positive or in a negative way. Color is reflected light that hits our retinas through vibrating wavelengths (which is then interpreted by our brains) — so color is both a physical sensation and a vibration. Chromatherapy is based on this principle and uses colors to generate electrical impulses or fields of energy that activate the biochemical and hormonal process that sedate or stimulate us.

Many spas and wellness venues are incorporating Ayurvedic medicine, which conceives the body in terms of seven chakras, associated with a specific organ and with a specific color. High intensity light is shown, among others, to improve skin, mood and sleep disorders and it helps in treating seasonal affective disorders.\(^10\)

### 1.2.5 Multi-sensory experiences

Another trend in the wellness industry is to combine experiences that enhance different senses. Through the vibrations of music, sound, light, and color, spas are proposing an explosion of “good vibrations”. In addition to the smell and the tactile senses, wellness venues are creating blends designed to release people from stress intensely. The goal sometimes is to bring people into a new awareness of space, time and consciousness. Nowadays there are a number of new high tech devices that contribute to having multi-sensory experiences.\(^10\)
1.2.6 Cradle to Cradle

The Green House relies on the Cradle to Cradle sustainable design approach. To summon this concept, Cradle to Cradle focuses on innovation, quality, and good design through the safe and potentially infinite use of materials in cycles. The concept, inspired by nature and the principles of an ideal circular economy, is about eco-effectiveness and its implementation creates equal economic, social and ecological benefits.\textsuperscript{11}

The structure of Cradle to Cradle design concept is divided into two nutrient cycles: the biological and the technological cycles for materials. In this case, the project focuses on the natural cycle. The functioning is quite simple: the waste of an old product becomes the food for a new product. In the biological cycle, the waste returns to the biosphere as compost, and new materials are created from that. The purpose of this type of model is to minimize the volume, velocity, and toxicity of the material flow system, drawing upon methods such as recycling.

The eco-effective approach doesn’t focus on eliminating waste, minimizing material use or prolonging product lifespan, on the contrary, it actually encourages the creative application of materials even in short product lifespans as long as all the materials maintain their status as productive resources.\textsuperscript{12}

Opposed to the eco-efficiency approach which begins with the premise that industry is 100% bad, the eco-effectiveness approach departs with the assumption that industry can be 100% good and that it can support and regenerate ecological systems and empower a long-term economic prosperity. Cradle to cradle is a promising model because it promotes awareness within companies and presents itself as an appealing market solution.


The Horticultural Spa and Apothecary experience was a temporary pavilion, conceived as a social and gathering space intended to replicate the atmosphere of a traditional bathhouse. The project was a special commission for Nine Elms on the South Bank for the 2015 London Festival of Architecture and the Chelsea Fringe Festival. The Horticultural Spa gives new life to the River Thames Path and invites people into an ephemeral and futuristic tea-house and bath. Once inside the visitors are served a herbal brew through clouds of fragrant fog consumed through breathing and absorbed into the skin.

The project was born as a response to the problem of water shortage. Through this pavilion, studio Loop.Ph transformed the public garden to tell how innovative technology and social models could be redeveloped to reduce consumption of water and encourage public bathing again as a ritual and social enrichment experience. They wanted to recreate the lost social communal bathhouse with an immersion of light scented water mist. This is a model of a future spa for plants and people, part greenhouse and part pneumatic bubble.

The aromatic mist was developed by medicinal herbalists who advised on the properties of the different plants. The mist was dispersed through a nebulizer fog machine mostly used in agricultural warehouses. The herbal-brew menu changed according to the time of the day offering a refreshing grapefruit, lemon balm and peppermint scent in the early part of the day; a more invigorating bergamot, juniper berry and parsley infusion for mid-day; and a relaxing chamomile, lavender and basil fragrance for the evenings. It's not only about the essence of the plants, but about the different effects that they have in the body and mind.

“A new spa and ‘bublic’ experience that's part greenhouse, part pneumatic bubble. Inflated with medicinal fog for people to come, stop, breathe and connect.”

-Loop.Ph
As part of the program, the experience included meditation sessions and a special event where Dom Bridge, creator of Haeckles, curated the fog. The ambient was enriched by a soundtrack especially created by Mileece, a sonic artist who generates music from the electromagnetic emissions from plants.

Conclusions:

The Horticultural Spa and Apothecary Experience is a benchmark for my project since it presents a clear example of the developed experimentation of a Herbal Therapy that is induced through the mist. This project is quite innovative and futuristic in a way that encourages people to socialize and create conscience about the scarcity of water. In my opinion, it is quite interesting that the care of plants and people are combined under the same structure, and furthermore under the same type of treatment. It is also important to highlight the importance of providing multisensory experiences that have a real impact on human beings.

Highlights

- The main substance of this pavilion is the aromatic fog.
- The idea of this project comes from a response to the problem of water shortage.
- The project promotes social interaction and community creation.
- Multisensory experience: Smell, touch and hearing.

The NeighborHub is the winning project of the Solar Decathlon Competition that took place in 2017 in Denver, Colorado. Designed by the Swiss Team (which reunites 4 Swiss schools), the project addresses a decrease in the consumption of energy of the population and eventually the preservation of natural resources. This aim is considered the Swiss Living Challenge. The project developed by the students encourages inhabitants from a neighborhood to adopt sustainable behaviors thanks to its solar house, the NeighborHub. The house is considered a place of meetings where neighbors can discuss and imagine more energy-efficient solutions to consume less and better. The architectural layout of the house comprises a multifunctional area equipped with tools to facilitate shared activities that help towards putting the ideas into practice. The NeighborHub is designed to be an instigator of change, supporting the statement that by changing our habits today we can change the world of tomorrow.
There are seven themes on which everyone can act: energy, water, management, waste management, food, materials, and biodiversity.

- **Energy**: Encourage the use of renewable energies in our homes can reduce the exploitation and our reliance on fossil and nuclear fuels. The model includes use of solar panels.

- **Water management**: The water from the rain is collected through the roof and it is employed to water the plants and do laundry. The separation of different types of water is another crucial act, considering that our water resources are limited. The use of dry toilets is promoted in order to avoid wasting the precious resource and to produce compost by giving nutrients back to the earth.

- **Biodiversity**: They actively participate in the development of biodiversity by equipping the house with a vegetated roof, garden boxes, and greenhouses. Gardening equipment is available in the house as well as courses and workshops.

- **Mobility**: The NeihborHub is equipped with an electric vehicle and charging terminal, as well as bicycles and three-wheeled scooters. The project also aims at restoring the local life around services and proximity leisure to reduce the mobility by car.

- **Waste management**: The first step consists of sorting and composting waste, trying to give a second life to the garbage. Another step consists of completely eliminating waste by avoiding packaged products for example. Repair tools are places in the structure and there are workshops to learn how to give new life to waste.

- **Food**: Buying local food reduces the energy required for transportation. The NeihborHub serves as an exchanging place between local producers and inhabitants. Gardens around the house are also considered for public use in order to grow vegetables and fruits.

- **Materials**: Use of renewable materials with a low ecological impact. The project encourages especially the use of local material that is easily reusable and recyclable.

**Conclusions:**

The NeihborHub is a reference for my project since it proposes a model which is sustainable in its three dimensions: the environmental, the social and the economic. Furthermore, it illustrates how to develop an auto-sufficient structure and provides the necessary tools to make people participate and be active in finding solutions together. The seven themes proposed are on point and they address actions that can easily be contributed by the diversity of inhabitants.
Wolke 7 Cloud 9

Wolke 7 Cloud 9, created by Viennese artist sha, in collaboration with sauna and spa company Klafs, is a holistic spatial artwork focused on achieving an individual comforting experience that captivates and celebrates the senses.

The product designed for spas, is a swinging multi-sensual couch made of plexiglass, LED lights and, integrated vibrating membranes playing relaxing music. It is composed of two cradles facing each other, inspired on the shape of a cloud. The user reclines on the low cradle which shape is designed to relax the body. It features complex components that activate the different senses:

- **Cloud of Movement:** The cradle moves gently to have the perception of floating in the air.
- **Cloud of Light:** Both cradles glow, alternating between subtle light/dark progression to accentuate the three-dimensional cloud effect.
- **Cloud of Color:** The color of the cradles changes in a slow-fluid mode creating a sense of deep calm and warmth. The luminescence radiates with all the hues of the heavens.
- **Cloud of Sound:** The specially developed audio delivers a multidimensional experience to soothe the senses.
- **Cloud of Images:** The cradle above the head serves as a projection surface for a video installation designed to transport the visitor to the land of dreams.

**Conclusions:**

The all-in-one artwork device is very relevant for my project considering it experiments with combining different sensorial experiences to achieve an integral relaxing experience. The selection of the colors, together with the projection of the video installation are two features of this project that can be adapted into a built environment. The floating perception of this furniture enhances the whole relaxing experience.

**Highlights**

- Multisensory experience: sight, hearing and touch.
- The focus is on the individual experience.
- The project features light therapy, including color transitions and image projections.
- All-in-one device.

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Artist: sha.
Origin: Austria
Typology: Furniture designed for Spa
Project Year: 2014
Cue: Light and Color Therapy

Project

The Green House: Multi-sensory Experience
1.3 The Green House

The main idea of the Green House is to offer a compound place for the people of Villa Plus inhabitants and the visitors of Villa Arconati to seek peace through meditative experiences. The three means to strengthen one’s mental and physical state are to empower body-, mind-, and social wellness, whereas The Green House supports these activities altogether. To convey the experiences, the ground floor has a hall divided in three spaces with a specific function for each room. Each room host a multisensory experience to activate senses such as hearing, smell, touch, and sight.

Multisensory Experience

In the sound therapy space, the design provides an acoustic space enabling the sound to appear without disturbance. It can be used for listening to relaxing music, and different sounds, but also guided classes with a sound therapist. The space for herbal and aromatic therapies is designed with an emphasis on the odorless, neutral materials to provide an interference less experience with the essences. Design of the third space, for color and light therapies, consists of the latest smart glass technology to enable clear white light in the room but also additional lamps for the projections and color transitions. The concept is to offer experiences according to specific personal needs, by clarifying the status of the person and consulting about the type of treatment. The Green House also serves as a place for workshops to learn and prepare your own natural cosmetics. In this way, the spaces for the experiences can be used in a multi-functional way.

The passage

In line with its purpose, the Green House features an interior garden on the first floor, and an exterior garden to cultivate the herbs for the herbal therapy. The inner garden is a place where the plants are cultivated and where the visitors can spend time, relax and get connected with the plants. The cultivation supports one of the main objectives of the concept, the self-sufficiency. Furthermore, on the ground floor there is a laboratory where the extraction of the oil is delivered. The designed open model enables the visitors to participate to the production of the essences. The outside of the building hosts an educational pathway, where visitors can see and learn about the plants and their properties. To complete the cycle, there is also a compost box to process the nutrients of the waste left from the oil-extraction process and a Flow Hive so that the bees can help in the cultivation phase.

Community and personalized experience

Socialization is a key component for the project, which is why it is important to provide meaningful activities for different kind of people. It is necessary to take into account their needs and preferences towards customized experiences. Thus, the Green House encourages building community and social interaction but it also provides personalized experiences. The Oil-extraction laboratory produces natural cosmetics for the herbal experiences and for the shop. The production of the essences can be done for specific purposes, for instance insomnia, with interaction of the client. The multisensory experience can happen as a group activity where the sound, herbal and light therapies are curated by experts in each field, or it can be a personalized treatment according to specific situations or life events. Furthermore, the Green House promotes the organization of workshops for all generations. Topics can be diversified: from learning how to do natural cosmetics; discovering of the properties of herbs and their medicinal uses; experiencing how to build your own garden box and plant your own food; or even learning techniques to illustrate and paint herbs and flowers.

Empowerment

Following the Villa Plus concept of empowerment, the Green House is an attractive space for different generations, and it invites to share a wellness community. The venue intends to change the negative perception of growing old and instead put emphasis on health, educational and culture programs.
Concept
Empowerment Inspiration
Sustainable Approach

The Greenhouse, featuring the Multi-sensory Experience follows a sustainable approach and seeks to become as auto-sufficient as possible. It aims at creating conscience about the importance of the plants and inviting all generations to be inspired and more in contact with nature. The sustainability is applied in the following themes:

- **Energy**: Use of photo-voltaic glass to generate solar power and be less dependable on non-renewable sources.
- **Biodiversity**: Integration of green spaces in the interior and the exterior of the building. The project also considers a bee house in the exterior garden.
- **Herbs**: Intended as the primary substance, they are cultivated in-house and used for the production of natural oils and cosmetics.
- **Materials**: The original structure is maintained and the new materials added in the architectural design seek to be lasting, renewable and from recycled sources.
- **Waste management**: The project considers a compost system to recuperate the nutrients of the oil-extraction waste.
- **Water management**: Collection of water from the tilted roof to water the plants and for the toilets.
- **Mobility**: No need to bring the raw material from the exterior since everything is cultivated and produced in-house. Besides, the Greenhouse is part of the walking path of the Villa Gardens.

The Green House proposes a sustainable cycle based on the nutrient cycle from the Cradle to Cradle design approach. The cycle begins with the **Cultivation of the Plants** in the interior and exterior gardens. It is followed by the **Production** phase where the essential oils are extracted. It is important to remark that these phases are considered educational since they invite the visitors to learn and get involved in the processes.

Once the **Product** is ready, it is available for its **distribution** at the shop. The **Use Phase** is considered as the Multi-sensory Experience or personal use of the products.

The **Bio-Degradation** process starts when the waste from the oil extraction goes to the compost, and from there the **Bio Nutrients** are given to the earth to start the cycle again.

**Fig. 02** Nutrient Cycle from the Cradle to Cradle design applied to the Green House.
Chapter 1: Green House Villa plus

Existing vs new buildings

The new volume becomes the core of the building featuring a open-lab where the herbal oils are produced and the public can get involved in the process.

Circulation axis
Public and private

Public in general
Semi public
Private - only staff

Ground floor

First floor

Accesses and routes

Possible routes

Possible arrival

First floor

Emergency exit

Main access

Service access

Ground floor

Possible arrival

Possible arrival
Chapter 1: Green house Villa plus

General Layout

- Multisensory experience
  - Area for Workshops

- Internal Herbal Garden

- Vertical circulations

- Compost

- Storage

- Educational pathway

- External Herbal garden

Main Building:
- Reception
- Open Lab
- Shop
General Layout

1. Terracotta Tiles
2. Interior Reclaimed Endgrain Wood
3. Exterior Reclaimed Endgrain Wood
4. Bamboo Deck
5. Self-cleaning concrete
6. Recycled glass tiles

Main Building:
- Reception
- Open Lab
- Shop

Vertical circulations

Compost

External Herbal garden

Educational pathway

Flow Hive

Ground Floor

First Floor

Internal Herbal Garden

Multi-sensory experience

Storage
General Frontal Elevation

Completion of the structure in corten

Internal Herbal Garden

-Multi-sensory experience

Vertical circulations

Main Building:
- Reception
- Open Lab
- Shop

Storage
The Main Building is situated on the ground floor and it is sheltered by the new photo-voltaic glass structure. As one accesses the building on the south facade, one encounters a great unique island that plays the role of a reception, a shop and an open laboratory for the extraction of the natural oils. The designed open model enables the visitors to participate in the production of the essences.

Space can be comprehended in two parts, the first one is the open and public area, where the multi-functional island stands; the second one is the service area in which the circulations, toilets, and changing rooms can be found.

The atmosphere has a very earthy look with a color palette inspired in natural colors. The selected furniture is also made from natural fibers to support the sustainability concept. From the new structure, plants float around the space to feel a complete immersion in the Green House.
The reclaimed end-grain pavement from the exterior enters the building transforming into an interior reclaimed end-grain material and integrates with the sustainable terracotta tiles.

Inspiration:
This texture appears constantly throughout Villa Arconati. In the main building is retaken to give a natural aspect with earthy colors.
The Reception Island is the main furniture of the Green House. It is a multi-functional unit that serves as a Reception, Oil-extraction-Laboratory and as a Shop. The idea is to have an open layout so that the visitors can interact and learn from the process of oil extraction. This space is designed to concentrate some of the different tasks of the staff into one single space to be more efficient.

Following the concept of Empowerment, the exterior wooden material enters into the building, integrates with the interior terracotta floor and climbs on the front wall of the counter. There is also a continuous line that surrounds the whole furniture, going up and down according to the area and it does the task of a “guiding thread”. This feature serves also as a guide for the LED light that illuminates the outline of the furniture.

The design of the Green House is centered in older adults, thus a feeling of security is mandatory to enable people to come to this space. Given this, the handrail design becomes one of the necessary features that lead to opportunities to play.

As the handrail follows its path, it can become a bench in the changing room or a sink surface in the toilets.

The handrail continues the “guiding thread” task, with LED light along its way. In some cases these guides intersect the floor or the walls to continue their journey.

Furthermore, the handrail element makes a cut in the walls, showing how these elements interact with one another and it leaves a very intimate space in between to host the light.
Reception, Shop & Open Lab

The Reception serves as welcoming point and provides information to the visitors. The Open Laboratory, which serves for the production of the natural cosmetics, empowers the visitors and inhabitants of Villa Plus by providing a learning experience. It provides opportunities to socialize and keep the mind active. In the Shop, visitors can buy the products elaborated in-house.

New Structure

Display

Original structure

Working Space

Staff Storage

Shop Showcase

Material empowerment:
The wood from outside enters and climbs the counter

Pieces of wood integrate with the terracotta tiles.
Changing room: Handrail detail

The changing room serves as a transitional space to enter into the Multi-sensory experiences. It features very intimate details which help with the transition. The handrail is born from the bench and it features a LED light which highlights the little nook between the opening of the wall. The ends of the bench take a peek outside the changing room co-existing harmonically with the wall.

- Original Slab
- Curtain made of Natural Fabric
- Original Brick Wall
- Toilet entrance
- Handrail intersection with the wall
- Reclaimed end-grain wood
- Illuminated handrail is born from the bench
- Material empowerment: Wood coexisting with the wall
The Internal Herbal Garden is located on the first floor of the green House, above the main building. At this point it is very easy to perceive how the gabled roof follows the form of the partly destroyed existing brick walls. The logical assumption is that there used to be a roof in this space, but with the lapse of time it has disappeared. The structure that holds the photovoltaic glass is placed inside the existing brick walls so that the heritage contained in those walls can be admired as in a museum.

This space serves as an internal garden to cultivate the herbs which will be used in the Open-Lab. The cultivation supports one of the main objectives of the concept, the self-sufficiency. Spread among the garden boxes, there are some benches where people can spend time, relax and get connected with the plants. This area also promotes an educational experience with the use of informative boards that communicate the properties of herbs.
As the Green House was originally a venue for the cultivation of the plants, the south orientation of this building is completely appropriate for this purpose. Keeping in mind this factor, the disposition of the garden boxes follows an east-west path so that they receive the best light. In the northern side of the internal herbal garden is a green wall that still receives appropriate light because of the glass roof.

The Self-Cleaning concrete floor receives constant sun-light in order to realize its purifying purpose. Furthermore, the photo-voltaic glasses gather energy used in the whole building.
Details: Garden Boxes

The garden boxes are built in three different modules that can be arranged independently. The design includes a set of wheels to facilitate mobility. The first model is a double garden box. The second one is one plant bed and an individual bench, and the third one is a double bench. The idea is that people can hang around in the area where the plants are cultivated receiving the same treatment as a plant. The informative boards allow the visitors to learn about the properties of the plants.

The floating elements above the garden boxes, alternate between hanging plants, informative boards and lamps. This last element is situated above the benches.

The informative boards hang from the secondary structure. They contain an illustration of the plant, and next to it, a description of the type of herb and its properties. The boards are situated above the garden boxes that contain the mentioned herbs.
Interior Herbal Garden

The Inner garden is a place to grow the herbs useful for the extraction of the oils. The visitors are invited to meet the space and learn about the cultivation process and the properties of the plants. A few numbers of benches are scattered around so that people can relax and receive the same treatment as the plants that surround them.

- New Structure
- Photovoltaic Glass
- Hangin elements: pots, lamps and boards.
- Original Brick Wall
- Illuminated handrail
- Garden Boxes
- Self-cleaning concrete floor
- Green Wall
- Bench boxes
The Multi-sensory experience is situated in the old structure of the original greenhouse and it is accessed from the Main Building. This is the space where the Sound, Herbal, Light&Color Therapies take place. Its long and narrow shape was divided into three parts to give birth to the experiences. Visitors can walk from one experience to another according to their preferences. The distribution of the space is inspired by the Enfilade feature of Villa Arconati.

Each one of the three parts is set to enhance the different senses of hearing, smell, and sight, according to the type of treatment intended. In the Sound Therapy, the materials have acoustic properties in order to have a clearer and amplified the sound experience. In the Herbal Therapy, the materials are odorless to allow the perception of an intense herbal scent. The main substance of this space is the fog. Finally, in the Light&Color therapy, the atmosphere is neutral, mostly white to maximize the reflection of the light and the color.
The terracotta tiles make a transition into the bamboo deck as they enter the first multi-sensory experience: the sound therapy. The natural fibers of the wood help to dampen the sound and contribute to making a more acoustic environment.

In the second experience - the herbal therapy, the bamboo deck transits into self-cleaning concrete. The choice of the material comes from the properties of this type of cement of purifying the air and being odorless per se.

In the third multisensory experience - the light and color therapy, the self-cleaning concrete transits and integrates into a recycled-glass tile. The environment is neutral and colorless in order to appreciate better the therapy.

Inspiration:
The materials are chosen taking inspiration from existing materials in Villa Arconati. The modern version of this materials present sustainable features.
Chapter 1: Green House Villa plus

Lighting Design

Demolitions and Constructions

Section C-C'

Section D-D'

Section E-E'
Details: Enfilade

Enfilade, a constant feature inside the main building of Villa Arconati, is the inspiration for the circulation concept of The Green House. It extends all along the building but is best perceived in the multi-sensory experiences, where the spaces are connected without doors. The thresholds entering each room are aligned along a single axis and the visitors pass from one experience to another in a linear way. The enfilade ends on both sides with a glass door emphasizing the connection with the exterior.

Details: Rethinking the space

The space of the multisensory experiences can be used also to organize workshops. The free arrangement of the rooms gives opportunity to rethink the space for this purpose. These are some possible arrangements that can be achieved by using furniture already in the rooms or by bringing temporary tables and chairs from the storage rooms.
Details: Acoustic Tiles in the Sound Therapy

The acoustic tiles for the Sound Therapy experience are made of functional natural material. Besides being sound absorbent, they have moisture regulating and heat retention properties. It is a low emission product that comes in different shapes and colors. For this space, the configuration chosen takes inspiration from one of the textures of Villa Arconati.

Inspiration from the floor of the Red Room in Villa Arconati. The new tiles are reinterpreted and applied on walls and ceiling.

The tiles are placed on the walls and on the ceiling.

Details: Steam Generator in the Herbal Therapy

The main substance of the Herbal Therapy is the fog, thus the function of this furniture is to generate the scented steam. Around this installation, there is a fogged glass that directs the steam towards up and serves as the back of the surrounding bench.

Details: Lamps in the Light&Color Therapy

In the Light&Color Therapy there are some smart-glass lamps which change color and are a screen at the same time for image projections. This lamps are attached to a secondart structure that hangs from the main existing structure.
The Sound Therapy is the first multi-sensorial experience. When the visitors enter they are immersed in an acoustic experience achieved by panels placed on the walls and on the ceiling. The design of the panels takes inspiration from one of the interior textures of Villa Arconati. The puffs and benches allow a free distribution of the space. The therapies can be guided by a sound therapist or with recorded audio.
Herbal Therapy

The second one of the experiences - the herbal therapy is the one where visitors get immersed in a scented fog made of freshly extracted oils. The materials in this area are odorless to enhance the aromatic experience. The fogged glass window with plants in the back supports the idea that the main substance of this space is the herbal steam. The self-cleaning concrete floor purifies the air with the absorption of sunlight. The bench in the middle surrounds the steam generator, which is as well inside the fogged glass.

- Installation and storage room cover in fogged glass and plants
- Enhanced concrete coated wall
- Hanging chairs made of hemp fabric
- Steam generator inside the fogged glass
- Recycled glass surface
- Self-cleaning concrete
Light&Color Therapy

Light&Color therapy is the third from the multi-sensory experiences. It also represents the ending of the Enfilade that crosses the Green House. In this neutrally set space, visitors can feel at ease while they benefit from the properties of chrono-therapy. The windows of the reclaimed existing structure consist of smart glass technology which allows the regulation of the interior light. The hexagonally shaped lamps change color continuously and serve as projection screens to show mnemonic images.

- Enhanced concrete coated wall
- Color changing lamp and projection screen
- Nettle curtain
- Reclaimed Existing Structure
- Smart Glass to regulate the lighting in the interior
- End of Enfilade with a Door-Window
- Swinging lounger
- Hexagonal recycled glass tiles
Conclusions
As in many European countries, also in Italy, the majority of the population is aging at fast speed. The Baby Boomer generation is already enjoying their retirement years. Thanks to the economic development, they have been part of creating the society as we know nowadays and they have also been able to enjoy the benefits of the boom. In consequence, this generation wants to hold on the lifestyle and still keep up to date, by learning and experiencing things which they were not able to do during their working years.

In the context of Villa Arconati, a prestigious leisure historic building, the project aims at revaluing its heritage and giving the area a new meaning which is in line with the splendor it once had and with the demands of contemporary society. The proposal achieves a respectful recovery of old buildings and reinterprets their meaning in a contemporary fashion.

The project addresses the need to provide spaces for older generations to age not only with dignity but with pride, in a community which gives them the opportunities to take advantage of their golden years. The Villa Plus program uses a formula which incorporates all generations into the activities to combat the recurrent problem of isolation and loneliness which happens in many retirement homes and provokes a greater decay of the inhabitants. The Villa Plus promotes in its core the relationship with families and especially with grandchildren.

The project, inserted in a present context, takes on concepts that address current needs and values of people such as empowerment and the importance of achieving wellness through the body, the mind, and the sociality aspect.

In the current market, buying a product is not enough. People want to have customized experiences and services which are above the line. The Green House, one of the venues proposed in the Villa Plus project, achieves this demand by providing personalized activities. It inserts itself in the Wellness Industry, one of the fastest growing industries nowadays. The care and wellness venues represent an attractive market opportunity which attracts younger generations and is more than suitable for older adults. The Green House is strategically positioned in the Villa Gardens so that it can benefit from the existing flow of people who visit Villa Arconati.

Furthermore, the Green House responds to sustainable demands which can not be overlooked, by proposing an auto-sufficient model which can serve as inspiration for other venues. In a broader angle, it aims at contributing to building future generations who are more aware and in contact with nature.
Bibliography


