

Architecture and Temporality

Saint Pierre: The forgotten museum city

vestiges
 connexion
 héritage
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 ville tropicale
ruins
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tropical city

Le 8 Mai 1902, à 7h52, Saint-Pierre, l'ancienne capitale économique et culturelle de l'île de la Martinique, n'est plus, ravagée par l'éruption péleénne de sa Montagne. En quelques secondes, l'une des plus importantes villes de la Caraïbes est rayée. Plus d'un siècle plus tard, la vie continue, laissant les ruines en témoin d'un passé qu'on ne veut surtout pas oublier. Mais cette ancienne capitale, vidée de ses 30 000 habitants à la veille de l'éruption, peine encore aujourd'hui à retrouver son dynamisme et sa gloire d'antan.

Pourtant, niché au creux d'une ravine, dans les hauteurs de la ville, le Domaine DIKI propose une architecture qui mêle histoire, culture et modernité dans un but de créer un lieu plein de sensibilité. Avec ses grands débords de toitures aux couleurs des habitations tropicales, la réhabilitation des ruines de cette ancienne habitation résonne de nouveau comme une touche d'espoir et de renaissance.

Malgré la menace du risque qui plane, le projet trouve sa place et s'épanouit au côté de la nature qui l'entoure nous rappelant peut-être que l'architecture c'est d'abord accepter de ne pas tout maîtriser et que le risque est une raison suffisante pour que cela vaille la peine d'exister même un instant.

On 8 May 1902, at 7:52 a.m., Saint-Pierre, the former economic and cultural capital of the island of Martinique, was no more, ravaged by the Pelean eruption of its Montagne. In a matter of seconds, one of the Caribbean's most important cities was wiped out. More than a century later, life goes on, leaving the ruins as a reminder of a past not to be forgotten. But this former capital, emptied of its 30,000 inhabitants on the eve of the eruption, is still struggling to regain its former dynamism and glory.

And yet, nestled in a gully high above the city, Domaine DIKI's architecture blends history, culture and modernity to create a sensitive setting. With its large overhanging roofs in the colours of tropical dwellings, the rehabilitation of the ruins of this former dwelling once again resonates as a touch of hope and rebirth.

Despite the looming threat of risk, the project finds its place and flourishes alongside the surrounding nature, reminding us perhaps that architecture is first and foremost about accepting that not everything can be mastered, and that risk is reason enough to make it worthwhile to exist even for a moment.

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INTRODUCTION

I've been wondering how best to tell the story of Saint-Pierre. I don't pretend to be able to tell the story that historians and enthusiasts know, nor the one vaguely heard by a lot of curious Martiniquais...

This story, like a travel diary, is the one I learned and lived on my island:

Although the commune's location gives it the air of a town where you just pass through without necessarily stopping, I often got into the habit of staying there in my mind's eye as I watched it pass by through the back window of the family car.

I remember always asking to pass along the path that runs along the island's coastline to see Saint-Pierre, its ruins around every corner, its theatre, its life...

How does the architecture of the town of Saint-Pierre in Martinique, emerging from the remains of the terrible volcanic eruption of 1902, embody and reveal the dynamic relationship between past, present and future, while balancing the imperatives of rapid reconstruction and cultural preservation, in an environment marked by constant volcanic activity?

Between vulnerability and resilience, we are invited to question the behaviour of a territory subject to natural hazards, a highly topical issue given climate disruption. It also highlights the importance of understanding how architecture can serve as a living testimony to the way a community interacts with time, culture and nature.

1. THE NOTION OF TEMPORALITY

First of all, I think it's important to define Temporality according to LaRousse's French dictionary:

Temporality / feminine noun: Character of something that takes place in time.

In other words, we're talking here about something that is situated in

time and therefore has a limited, ephemeral duration.

It's a notion that can vary according to the cultures, civilizations and lifestyles that take it more or less into consideration - as in the case of certain grammars of isolated languages, such as Vietnamese, which ignore the conjugation of verbs in the future or past tense.

If I take the example of Western culture, which is more familiar to me, time is considered to be one of nature's "non-renewable" resources. Here, temporality rhymes with sustainability, and that's what we're going to look at below.

But what about the notion of temporality in architecture?

"The notion of "transmission" is included in that of "heritage". According to a generally accepted definition, heritage is that which is inherited from the past and passed on to future generations. [...] In English, "héritage culturel" translates as "inheritance" according to Michel Melot in *"L'échelle de l'architecture et du patrimoine"*.

Architecture has always left a visible trace on the earth's surface. It's a responsibility that every builder and master builder shoulders. In designing buildings, the architect bears a heavy responsibility that goes far beyond the mere creation of functional structures. They must take into account the long-term visual and ecological impact of their creations.

The architect plays an essential role in creating buildings that contribute to a sustainable environment for future generations. His/her responsibility goes beyond simple construction and is based on a deep understanding of the impact of his/her choices on society and the planet.

2. MARTINIQUE: CONTEXT AND BACKGROUND

Before I begin, I'd like to give a brief introduction to my island,



Fig. 1 – Map of Martinique, context and demography (top); Photograph of Saint-Pierre harbour (left); Photograph of ruins (right).

Martinique, which is located in the heart of the Antilles and bordered by the Caribbean Sea. It has a humid tropical climate, with two distinct seasons: dry and rainy, and trade winds from the east.

The island is roughly divided in two, with a dense, humid, green north and a drier south with white sandy beaches.

2.1. The city of Saint-Pierre

On a city scale, zooming in on the north of the island, between two cliffs, the town of Saint-Pierre opens out like a green amphitheatre onto an open bay dominated by "la Montagne Pelée".

With a population of around 4,000, Saint-Pierre is characterized by a way of life that has been rebuilt from the ruins of the 1902 volcanic eruption. It is located on the north-west coast of Martinique, 31 km north of Fort-de-France - the capital, on the Caribbean coast south-west of "la Montagne Pelée".

My methodology for studying the subject was based on bibliographical and scientific research, on-site architectural analysis and archival documents, half-structured interviews on the well-being of the "Pierrotins" - inhabitants of the town of Saint-Pierre and my own immersive personal experience in the heart of this ruined town (Fig. 1).

2.2. From the town's influence to its oblivion: understanding history

As I wandered around the town of Saint-Pierre, I was quickly won over by the desire to learn more about it. It's also important for me to question the island's way of life in a post-eruption city that wants to show off its extraordinary history.

- Before 1902: At the end of the 19th century, Saint-Pierre was a powerful and radiant city. The economic and cultural capital of Martinique, it attracted visitors with its pleasant lifestyle, theatre, music, beautiful neighbourhoods and more. It's commonly referred to as the "Paris of the Isles" or the "Little Paris", as the Pierrotins like to call it.

The layout hasn't changed much since then. The Mouillage district to the south, bordering the port, was the shopping district with a very modest, even poor, population; the Fort district, at the foot of "la Montagne Pelée", was more residential, and in the middle of the two, the Centre district. Together with the Mouillage district, the latter formed the lower town, populated by the middle and working classes.



Fig. 2 – "Monte-au-ciel" street before the disaster (left); a few days later (center); today (right).

This lively district was also a major cultural centre in Saint-Pierre and the seat of the city's political life.

Two longitudinal streets cross the town from one end to the other. Today, these same streets are known as "la Rue Bouillé" (on the seafront) and "la Rue Victor Hugo" - originally named "La Grande Rue" or "Rue Royale", the high street further inland. It was a town brimming with vitality and a good place to live, with abundant water supplied by canals that fed fountains and gutters at the foot of houses and courtyards.

It had a tramway that took passengers from the south of the city to the Bourse - at that time the center of Saint-Pierre's commercial and port activities, and also allowed goods to be loaded and unloaded on the commercial streets. It was also the world's first rum port, hosting the Saint-James Distillery, which introduced Martinique's agricultural rum to the international market in the 1810s.

Last but not least, it's a place known for its beautiful walks along the banks of the Roxelane -an emblematic river that rises on the southern slopes of Mount Pelée, where it flows for two kilometres before bending its course towards the Caribbean Sea, the Savane du Fort where visitors and Pierrotins used to flock to listen to orchestras

and music, and the mythical Jardin des Plantes, never rebuilt...

- May 8, 1902 and beyond:

Saint-Pierre, this city, still alive in the morning, is no more! There it lies before us, consumed, lying in its shroud of smoke and ashes, dreary and silent as a necropolis. Our eyes search for the fleeing, distraught inhabitants, or those returning to find their dead! But nothing! Not a living thing appears in this desert of desolation, framed by a frightening solitude!

Extract from a report written by the vicar general the day after the disaster, administrator of the diocese in the bishop's absence, sent to Monseigneur de Cormont, former bishop of Saint-Pierre, who was in Paris.

Saint-Pierre was stripped of its title as the colony's capital and has never regained this predominant status. Today, it is the seat of a sub-prefecture and has a division of the Martinique Chamber of Commerce. For years, the town lay in ruins. Saint-Pierre lost its role as economic capital of the colony to Fort-de-France (Fig. 2).

The law of February 15, 1910 even struck it off the map of French communes. Its management was entrusted to the neighbouring

town of Le Carbet. The 1910 law authorized the receiving commune to sell the assets of the suppressed commune, and to keep the profits from its liquidation. As a result, Saint-Pierre lost a large part of its archaeological heritage.

It wasn't until 1923 that Saint-Pierre rose from the ashes. The town was gradually rebuilt, sometimes in the same way as before - the identically rebuilt Chamber of Commerce is now one of the island's finest architectural achievements, as is the former Cathedral du Mouillage, sometimes in a more modern way - housing or private property.

The population gradually returned to the town, but never reached the 30,000 souls who lived there on the eve of the 1902 eruption. The town's population has grown from 3,000 in 1923 to 4,122 today.

The ruins of the disaster and the town's history are the main tourist attractions. However, despite the town's steady daytime appeal and

its considerable landscape assets, it has not managed to capitalize on its extraordinary background and remains.

2.3. The hunt for ruins

During this immersion of just over ten days, I get to know the city, meet people and immerse myself in life there. I soon left my car parked at Place Bertrand every morning, not far from the covered market and its metal architecture.

My creative process gradually began to take shape. For the first two days, I would wander around in a haphazard, random fashion, without a plan or support, delighted to be surprised by the ruins scattered around every corner. Stopping, drawing, photographing, questioning passers-by.

Then I decided to ask for a map of the city, so I can follow an organized route and make sure I don't miss anything. I subsequently embarked



Fig. 3 – The different types of ruins: decorative ruins (top line); ruin-gardens (bottom line).



Fig. 4 – The different types of ruins: ruin-support structures (left-hand column); sinister ruins (right).

on what I decided to call a "ruin hunt", which enabled me to realize the potential of walking around the city, a veritable open-air museum with tourism that is unfortunately under-exploited and unregulated.

There are four different types of ruins at St-Pierre (Figs. 3 and 4):

- The *decorative ruins* stand out for their monumental appearance. They are regularly maintained - even summarily - to keep them in good condition and create an attraction.
- The *ruin-gardens* are home to the island's northern vegetation. You can take a stroll or simply enjoy the natural surroundings, which seem to be reclaiming their rightful place within the building.
- The *ruin-support structures*, as their name suggests, are used to support a new construction. Depending on the state of the remains, they can be rebuilt identically or used to enclose a new building.
- The *sinister ruins*, often large sections of entire house walls that have never been altered to enhance the ambiance of the town and the wider landscape. Left as they were on the day of the disaster.

Sometimes, certain neighbourhoods reveal a new way of life and living after the eruption. This is what I discovered on Rue Levassor, with its dwellings built on the ashes, an image perfectly illustrated by souvenirs as a foundation.

The first floor reveals the remains of a window or door frame, yet the foundation of the house is on an upper landing, a landing composed of ruins and ash. The story goes that, due to a lack of resources, not all individuals have been able to remove the ashes and have chosen to rebuild on the traces of the past, leaving levels and half-levels planted with dense vegetation that has reclaimed its rights - the ashes fertilize the soil in the north of the island enormously - and act as a sight-breaker, or with staircases that give access to the new construction above often made of very modest, lightweight materials.

Also, the "Mont-au-Ciel" street, a true monument that stands the test of time, like the "Pont Roche" spanning the Roxelane River, perpendicular to the Levassor street with its 84 steps that linked the lively neighbouring districts with the heights of the city's north. Its wide, angled stone gutters continue to evacuate sewage and tropical rainwater as they once did.

2.4. Living with risk

The architectural and historical wealth of Saint-Pierre bears witness to the rebuilding of life after the 1902 disaster. But the ruins are also a reminder of the risk that hangs over Saint-Pierre and the north of the island.

The life that has been recreated from the ashes is seen as a sign of resilience and a determination not to forget what happened.

As Martiniquans, we've always lived with risk. The risk of natural disasters like eruptions, earthquakes, landslides, and the risk of climatic disasters like hurricanes, cyclones, tropical storms, rising waters.

Saint-Pierre is a response to the fact that nature decides at all times, and that we have a duty to deal with it. Despite the fact that a new awakening of Montagne Pelée is hovering over the Pierrotins and the north of the island, isn't it precisely an opportunity to question ourselves, to take a step back from our relationship with nature, with

the passage of time, with our way of building, with life? How can we listen to all these elements? How can we respect them and make them merge within the architecture during its lifetime? I realize that the notion of time is omnipresent in this study, and that it would be a good idea to keep it in mind in order to build modestly and frugally.

There's something inspiring about the Pierrotins' mentality. Far from the banal "misfortune only happens to others", it's an awareness of having chosen to live in spite of the risk, following in the footsteps of those who weren't so lucky.

Today, more than ever, Pierrotins believe that life takes precedence over the grim possibility of another eruption, and that Saint-Pierre deserves more than anything to regain its former glory. And if the mountain rumbles, they'll have no trouble leaving until they can do it all over again.

3. A TEMPORAL GATEWAY: THE DOMAIN DIKI

Through my various encounters with Saint-Pierre, I've come to appreciate the richness and diversity of its ruins. At times, they bear witness to places of life, religious or cultural, such as the "Théâtre du Petit Paris", or simply to perspectives framed between land and sea that stand out insolently and tenaciously. With this red thread running naturally through

the points of interest generated by the remains and their enhancement, I see the possibility of an initial response, leading us step by step to the Domaine project, a few metres higher up.

I wanted to take things a step further and condense the information brought back from the town of Saint-Pierre into an architectural project that would, in my view, be a possible response to the problem of temporality.

This is why the choice of site naturally fell on the ruins of the former Saint James distillery, buried under the ashes after the eruption: Domaine Diki, where the remains of this "rum factory", like a jewel case, seem to accompany, even drive, any transition (Fig. 5).

3.1. The site and existing buildings

First of all, why Diki? Diki comes from the Amerindian language. It's a relative name in the language of the Arawaks, so-called Amerindians, meaning "footprints". I chose this word to honour memory and the past, and to establish the cultural and historical importance of my project.

Nine years after being bought out in 1996 to become a sawmill, the establishment closed its doors for good. Since the site's closure the atmosphere is bleak, the access road to the site is no longer as well-maintained despite the few surrounding dwellings.



Fig. 5 – Saint-Pierre city map: Project location.



Fig. 6 – Aerial view of the site of the former Saint-James Distillery in the hills above Saint-Pierre.

It's a very natural, plant-filled site set in a basin created by the slopes of a morne. It has a regular slope that runs all the way down to the Saint-James river. Its location ensures a clean microclimate at all times, with natural ventilation predominantly from the east, reinforced by its orientation within the vat.

Most of the sun's rays come from the south, but its high position means that the use of large, generous roofs could be a first response. Despite the masks created by the nearby trees, solar protection to the east and west needs to be addressed for optimum comfort in the spaces.

The former Saint-James dwelling is a place steeped in history with the many lives and functions that have shaped its current form. It comprises five buildings in varying states of repair, surrounded by dense vegetation (Fig. 6).

Here one would find the villa, currently the only renovated building. The facades are full of character and surround what remains of a slab, which is now overgrown with vegetation.

The first depot, completely submerged by vegetation as it no longer has a slab to waterproof its floor, the rhythm of its facade, its high windows and a remnant of its metal framework are still in good condition.

The second depot is in a very poor state of repair. Plant roots have found their way into the fragile slab. It has a very damp lower level with few openings, which may have served as a crawl space. Not counting the separation created by the slab, it's an 8-meter-high volume from its so-called "basement".

In my opinion, the former sawmill has the most original facade on the site, with openings that merge into doors and windows of varying heights and widths. The metal frame is in relatively good condition, unlike the tin roof. Most of the ashlar walls have been coated with plaster and concrete, although in places the original materiality of the stones is still visible.

Finally, the factory, with the upper part in very poor condition. It's a very damp place, as rainwater seeps through the roof and runs over the ground floor of the building.

3.2. A legacy from the past

In summary, there are some 1,800m² of buildings that could be rehabilitated. Some of the gables are visually dominating and of little aesthetic interest - for example, ashlar roughly secured by concrete, or in a poor state of conservation -, but there was also much that was positive and poetic about the former Saint-James dwelling. Most of the original materials have survived the test of time, such as the red brick of the factory ovens and the dressed stone of the majority of the buildings, which have remained in good condition. In addition, some of the façades are very open-ended, allowing the visitor's imagination to hint at past uses. As a result, certain choices could be made to establish an architectural and climatic strategy, such as providing very high ceilings in the second warehouse and promoting natural through-ventilation in the first by removing its gable (Fig. 7).

3.3. The project

After days of wandering around the town of Saint-Pierre, meeting the locals, visiting the sites and

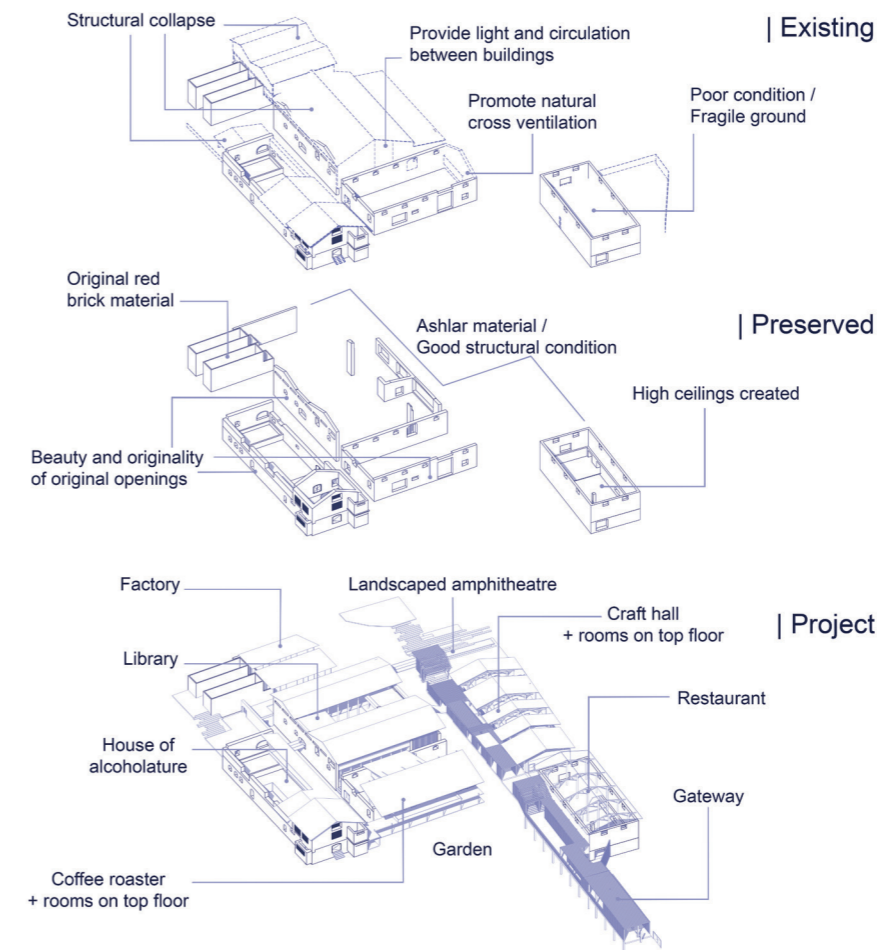


Fig. 7 – Domain Diki: project axonometry and architectural intentions.

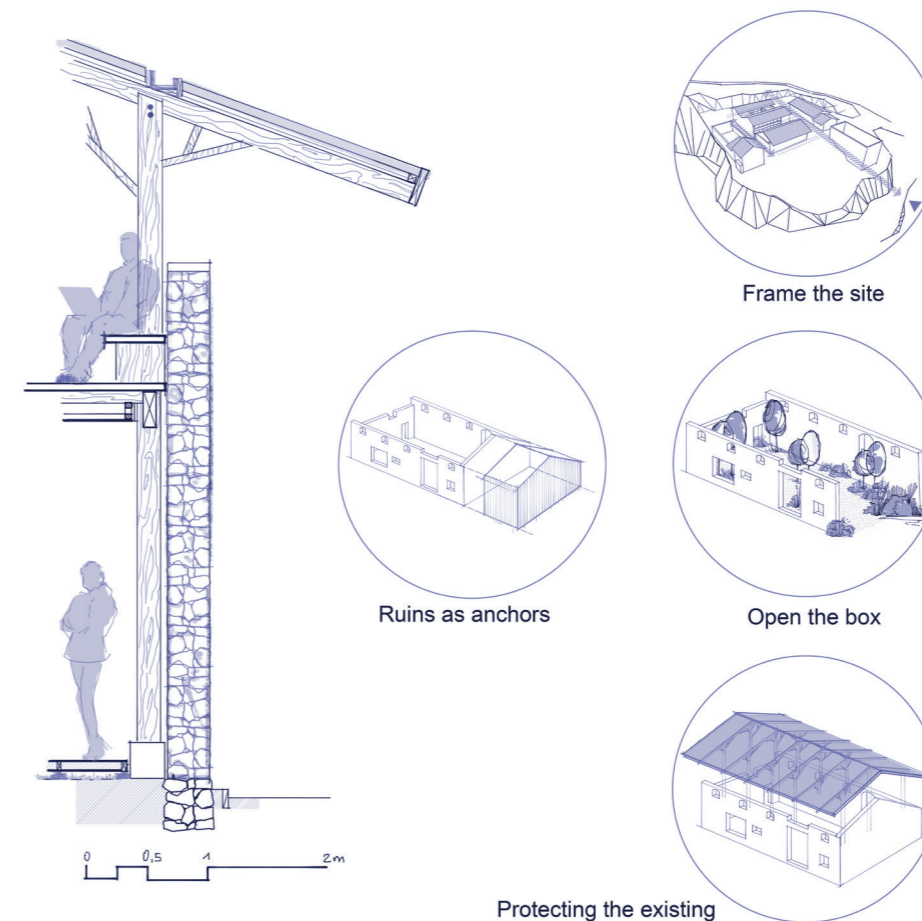


Fig. 8 – Structural cross-section: Ruins and detached roof (left) ; Architectural concepts (bubbles on right).

various ruins, and spending long periods of time exploring the site, I decided to create a place with a program capable of combining a few notes of Saint-Pierre's past, the existing and a mixed program to bring back life and activities. This place is Domaine Diki. It consists of four poles:

- Crafts
- Education and culture
- Health and well-being
- Catering & Accommodation

This project has a commemorative and cultural function, and in order to establish a certain identity, I have drawn inspiration from emblematic landmarks such as:

- The main axes of Saint-Pierre to frame strolling on the site in the image of that in the city and connected by more intimate transversal lanes.
- "Le Jardin des Plantes", the Caribbean islands' first botanical garden, a mythical place for a certain social class to meet and stroll among lush tropical plants. The Saint-James river connects the Domaine Diki with the waterfall of "Le jardin des plantes", which is still in ruins today.
- The "Mont-au-ciel" Street, perpendicular to Levassor Street, with its steps connecting the upper and lower parts of the Port district.

Based on all this information and analysis, the architectural approach is as follows:

- *Frame the site* to create a new building to frame the plan and materialize an interior commercial Street as Saint-Pierre's main seaside thoroughfare.
- *Open the box* to flirt with the outside-in boundary by creating porosity, views and perspectives. From a highly enclosed professional space, with high walls and small windows, we move towards an architecture that opens up to the wider landscape and leaves plenty of room for vegetation.



Fig. 9 - Cross-section to reveal the elevation of the Domain's terrain: tropical identity and connection with surrounding nature.



Fig. 10 - Perspective view from the wooden gateway: Gradual immersion into the heart of the Domain.

- *Protecting the existing*, inspired by the large, generous roofs of tropical houses, which are designed to protect from the elements and the sun, while preserving the principle of openness, a large roof detached from its wall, on a free-standing wooden structure.

- *Ruins as anchors*, from a solid existing structure, create a lightweight extension that can be dismantled more or less quickly, depending on the need - cyclones, storms, earthquakes. Time-tested ruins as a historical anchor, a witness to the passage of time and a structural element that, in contrast, accommodates a lightweight structure within it or as an extension (Fig. 8).

Finally, the main element is the wooden footbridge, the backbone of the project, which offers a view of the existing landscape and nature at all times and on different scales, as it progresses with the site's topography. This element connects all the poles and activities of the Domaine Diki. It is both a remarkable witness to time and a means of raising visitors' awareness of the reality of the concept of temporality, its impact on the living and the material, the legacy of the past and the possible evolution that results from the choices we make (Figs. 9 and 10).

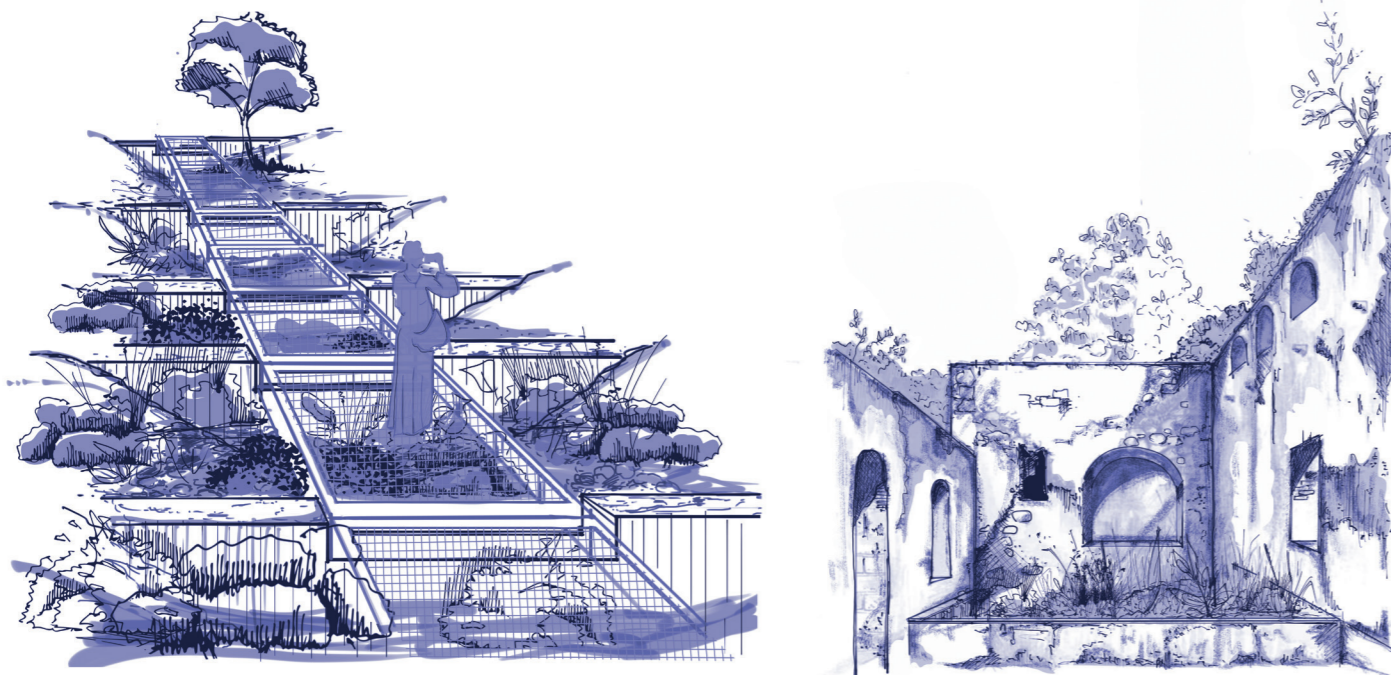


Fig. 11 - Sketch of the terraces and latticed walkways to allow rainwater to drain away naturally (left); Atmospheric sketch of the Villa's backyard today (right).

3.4. The landscape project

As far as the landscaping is concerned, I chose to keep the site as natural and planted as possible. The main paths are laid out on gridded slabs, allowing the site to be raised off the ground, allowing vegetation to grow and water to infiltrate into the natural soil. I was able to observe that water flows naturally from the higher slopes down to the river, a phenomenon accentuated by the initial materiality of the site, which is half-paved and half-concreted on the axis between the villa and the former sawmill.

In order to remove the few areas of stagnant water, I chose to create planted valleys to accompany the two main paths, allowing the water to gradually infiltrate the soil without clogging it.

These valleys and water paths are visually appreciable thanks to the grids in the slabs, which form walkways above them so as not to impede drainage. By raising the pathways with open-work walkways, you can admire the run-off from above and let it follow its course to the various gardens or the river that surrounds the site.

The rest of the ground and the access path are paved with interlocking paving to allow vegetation to pass through, and with stabilized soil for more delicate junctions (Fig. 11).

3.5. Materiality

As the Diki domain is intended to be "light/modular/dismantlable", the choice of materials allows for rapid action in the event of a need - volcanic eruption, for example - to dismantle the whole, while at the same time being culturally and contextually anchored.

- The dated Stone, anchoring point for the lightweight structure.
- Douglas-fir Wood associated with a Japanese burnt-wood technique to commemorate the 1902 disaster.
- CLT Wood, quick to assemble,

it allows the "box within a box" principle to be established, with its smooth materiality contrasting with the project's existing and new textures).

- Corrugated iron, recycled and/or new, is the main roofing material in the West Indies. Its red color allows the possibility to create, from certain angles, a trompe l'oeil aimed at recreating the red clay tile roofing that existed before the 1902 disaster.
- Concrete for anchoring, foundation, consolidation of existing structure.
- Vegetation, which at times becomes new ground, new facades depending on the point of view.

To be an architect is, in a way, to know how to accept, with humility, the idea that it's not always possible to master everything.

Domaine Diki is a resilient architecture that raises awareness of this acceptance of risk, while at the same time proposing a way of coping with it.

In no way does this project wish to thwart nature, but rather to enhance it, to create the necessary conditions to accompany it rather than channel it. And just because a place is said to be at risk doesn't mean it doesn't deserve to be considered. Don't we have the right to have places that are dear to us and in which we'd like to blossom with full knowledge of the facts?

The architecture of Domaine Diki aims to address and connect history with the existing through a site deliberately left to nature to magnify the whole.

CONCLUSION

In conclusion, I'd like to return to the notion of risk, clearly evoked at the start of this presentation with the 1902 disaster that devastated the town of Saint-Pierre.

In Western models, architecture tends to oppose nature by protecting itself from it, rather than dealing with it. Looking back, I

realize that I have lived most of my life in areas that are subject to all kinds of risks.

If I take the example of my native island, Martinique, there are seismic, cyclonic, volcanic, climatic and other risks. It's an island that is "used to" unpleasant weather, that has always lived with this sword of Damocles "hovering" over it. Yet when I walk around Saint-Pierre, I'm serene, at ease and amazed at every moment.

If you ask a Pierrotin what he thinks of Montagne Pelée, he'll tell you that this "Grande Dame" is beautiful, and that he loves waking up and seeing it through his window in the early hours of the morning.

Isn't this, in the end, an opportunity to raise awareness of a new approach, an architectural vision totally in tune with the natural context, taking risk and therefore temporality into account?

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