Drawing Matter
Journal —
architecture and
representation

No 1 The geological imagination

Dialogues between Architecture and Granite in Punta Sardegna — Alberto Ponis

The stones are also premonitions, and the trails chart a course through nature that is both sign and path, direction and culture. The human journey and the mystery of the eternal, chance and intervention. Thus, the pre-existing stones are added and mingle with those put in later, and vice versa, until they lose themselves in each other and become, all together, symbol and necessity. They are a message, and a silent declaration, of time as the sovereign builder. An architecture that includes us, foresees us, in the infinitesimal fragment of time we share with it: stones, nature, space overwhelm and include us. We are always grains of a larger edifice. And every single stone takes it upon itself to remind us of this. Memory of the cosmos.

Stefano Salis, January 2022

The stones that the Sardinian journalist Stefano Salis wrote about have inspired my imagination for 60 years. The windswept, rose-hued granite formations of Costa Paradiso to the west, and Punta Sardegna to the north, raise associations and analogies. We imagine a dinosaur, a bear on three legs with a fourth eroded by the weather and the sea, a pyramid. We find a fossilised root in the rocks formed 541 million years past, during the early Palaeozoic period. The rocks connect us to prehistoric nature. Covered in lichen, they are eroded by winds in a uniform direction, which renders them homogeneous. Fragments of feldspar confer a greyish tone to the rose-hued granite of Punta Sardegna, which the sunset sets ablaze to red on Costa Paradiso.

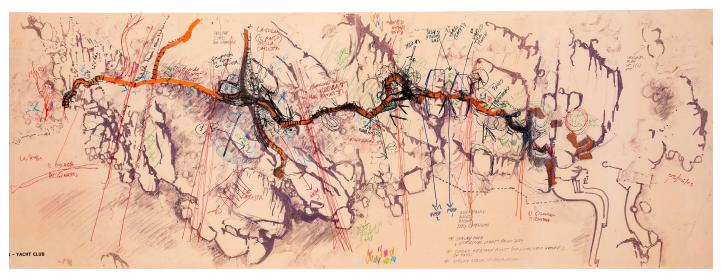
The sentient landscape, and geology, of Sardinia surpass words and representation. Untameable shrubs scent the air: rosemary, wild olive, cistus, juniper, myrtle, lavender, strawberry tree, ilatro, holm oak, mastic tree, phillyrea, cyclamen. Mediterranean botanical nobility, as distinguished in the Italian language. They cut one's hands when clearing, guide our footsteps among the rocks. From the first step one feels diurnal rhythms, the angle of the slope, views and inherent geometries, strong light and dense shadows. Carrying a sandwich, snoozing on the site, on a rock hewn by the wind into the shape of an armchair, still warm from the sun or cool at day's end: the weather, the season, the time of day, form impressions too complex or too mundane to put into words.

This is why I have always felt reticent about translating my drawings and architecture, my geological imaginary of Sardinia, into words. My impressions of the landscape and environment are sensory and intuitive,



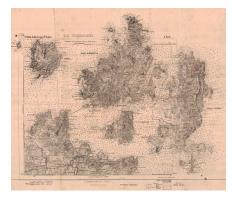
physical and tangible. I do not like the word 'automatic' to describe the process through which I draw as if by walking, bringing the landscape, on paper, into building. I have worked in the landscape of Punta Sardegna since 1963. The houses I built there have become part of my geological imaginary.¹ This trajectory is presented here with a series of images, starting with the montage of photographs taken from the ferry to La Maddalena – a first survey, in 1963–64, of the built area now known as 'Yachting' (Fig.1). It continues with recently rediscovered drawings, presented here for the first time, of the path on Punta Stropello and Casa Rook on its shoulder; it finishes with the five houses designed on Lotto 139 (Plot 139) in 1986.

The drawings of the Yacht Club Path and the Rook, Scalesciani, Heintzschel and Giaculli houses – the last one being the first of the five on Lotto 139 – illustrate my early drawing practice. I use 'early' both in terms of my career in Sardinia, and of the stage in the design process. Sensations and observations too numerous, and at times too fleeting, to describe in words have led to the necessity for invention, both in representation and in building.



2-

When I began working on the island in 1963, only a few synthetic geological studies existed and most areas were mapped only in the 1970s.² Our 1963 survey, walking every step of Punta Sardegna, was first drawn in the landscape, together with land surveyors, by *paletti* and *punti capisaldi* – cement mixed with granite aggregate, placed as if they are sculptures, on the rocks. Only later did I transfer the survey to paper (Fig.2). It forms the vision for a lifetime of work, crystallising geology and architecture in the act of drawing. In these morphological drawings, the inland path of the Yacht Club assumes the sinuous form of the Punta Stropello coastline,



3-



4-



5-



6—

formed through orogenesis millions of years ago. The five houses of Lotto 139 appear almost as the islands of La Maddalena Archipelago, as captured in the plan produced by the Istituto geografico militare in 1884 (Fig.3). Casa Scalesciani responds to, and is poised on, a fault line between granite and sandstone; like those of Lotto 139, it recalls the fossil of a Palaeozoic echinoderm. Plans crystallise in geological formations. In this place, I was fortunate enough to discover and explore the discreet equilibrium between the built and the natural (Fig.4).

A geological imaginary

The geological elements form the stage sets where actions unfold. The imagination and invention of the project, in the light of day and night, frame the show. The starting point is when I put my foot on the site. Drawing is like a written poem or a piece of music – it cannot be fixed. If I must, I use drawing to record a million impressions, the only way I may speak. After a first interview with the future inhabitants, to note their tastes and preferences, wishes and recommendations, I go to the site by myself and look around. I seat myself at the points that most attract me, to observe and sometimes even sleep, on a rock in the shape of a comfortable armchair. For a few hours and days, I don't do anything else, I don't think about the programme or project.

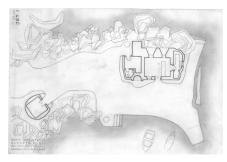
We are fortunate to have, in this region, the oldest rock formations in the Mediterranean, in Europe, like the wrinkled skin of a prehistoric animal. For me these rocks are not abstract, but real figures, like the houses I design. Look at that one, for example – it is the skull of a goat; and that one – it has the beak of an owl. I incorporate rocks into the walls as if I were looking for a kind of kinship, a sort of attestation of the old belonging to the place. The house must avoid that feeling of having just arrived ... a bit of an intruder. So, the rocks become part of the house (Fig.5).

The stones in the photograph are part of the path that leads from the road to Casa Giaculli and, past it, to the sea along the lot, a maritime strip in concession to the Giacullis themselves (Fig.6). These echo my first projects in Gallura on Punta Sardegna – those of the Yacht Club Path, a series of drawings I have not looked at since 1963. The stones are also those I created – the *punti capisaldi* placed on the rocks when I first surveyed the landscape in 1963.

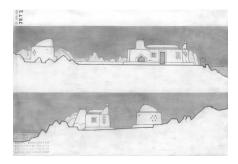
I unconsciously let a few years pass, sometimes decades, before reviewing a built house. We visited Casa Giaculli at the request of friends and architects, intrigued by the drawings and photographs. A welcome surprise: the house is intact; still with its original inhabitants.

Lotto 139 is in the extreme north-east of Sardinia: Punta Sardegna, Porto Rafael, in the Gallura. It is a small granite promontory with three bays, overlooking the sea, across from the La Maddalena archipelago. The prevailing west wind seldom abates. Geology is intensely present, alongside noble Mediterranean scrub, still intact. Here I designed in 1986 five houses, for a group of friends with a common passion for sailing. The Yacht Club Path runs along the same promontory, just below Lotto 139, along the Punta Stropello and beginning at the Cala Inglese.

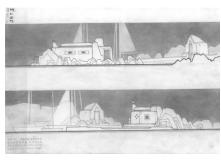
I often draw from the mountains looking towards the sea, and people tend to turn the drawing as if it were a horizontal landscape – which lends a false impression of a west–east direction. In fact, the path runs south to north inwards from the coastline, as echoed in my drawings, until one reaches the Yacht Club. The drawings, like the path, should be read vertically, turned to a northerly direction.



7a-



7b-



7c—

At the end of the 18th century, the Kingdom of Piedmont-Sardinia occupied the archipelago and built many military posts. La Maddalena became an important strategic base in the waters of northern Sardinia, a defence post against smugglers, pirates, even the neighbouring French, and - later still - against the Germans in World War II. The bunker of the Yachting defended the north coast towards Corsica. A large existing rock camouflaged the bunker. As can be seen in the plan of the project, all these pre-existing walls have been preserved, protected and are still visible. The trapezoidal section of the openings to the north allowed for maximum visibility (Fig.7). It is this sense of history that, like the rocks, I try to preserve when designing. I could not have known that Sardinia would be declared the first Geo-mining Park by UNESCO in 1998. But since my arrival in 1963, a premonition influenced my approach to the design. As I later wrote in the 1986 technical report that was required for building permission (for Lotto 139): 'The houses have irregular forms and are articulated according to the morphology of the ground, of the rocks, and of the vegetation ... the external colour chosen from the range of landscape, in harmony with the surrounding environment.' When I described the five houses, over 20 years had passed since I had started designing in Sardinia. The certainty that every site is different means that the houses will also have to be. It takes imagination to predict a new shape in balance with geology, the green of the vegetation, the blue of the sea, the straight line of the horizon.

Archive

In recent years I have spent a lot of time in my studio in order to record the story of my work, my life and painting through images – an archive of memory, illustrated in drawing and photomontages. Whilst reviewing these drawings and images, memories – and aspects long forgotten – resurface in the details.

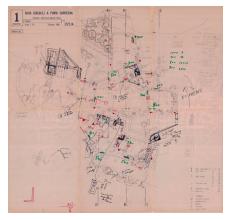
Rather than talk about my work, I invite people to come to Sardinia and see in person what is impossible to describe completely with words and images. Writing cannot fully convey the sensations and emotions fostered by the natural environment. The light, the sea, the rocks, the Mediterranean scrub, and the houses – we can describe them at any given moment, but with every moment they change.

One can take notes, and of course, photographs. But photographs are not as deliberate as hand drawings; they are half-automatic. If you sit in front of a person and draw them slowly, the operation of drawing fixes your attention on all elements, which you then remember in detail. The day after there is a strength that is exclusive to drawings.

The granite crystals and the shapes of the rocks they form have influenced me. I tried to make a synthesis. I see myself as a painter of architecture, for the infinitude of sensations is better embodied in form and colour. Painting came before drawing. I started when I was six or seven because my father was doing watercolours, and I copied them positioned behind him. But not only chronologically – in the architecture, painting and drawing are tied together. I am sure that without the experience of painting, drawing would not have become a way to see. Later in Sardinia, painting allowed me to articulate, with colour, the complex sensations I experienced from the surroundings. I couldn't separate these sensations, nor could I describe them otherwise.

The Five Houses of Lotto 139

Over time, I have started enjoying more and more the designs on difficult and impracticable terrain. All depends on the configurations on-site and the condition of the ground. In the case of Casa Giaculli, the complexity



8-



9_



10—

arose from the presence of several pre-existing buildings, which is a different kind of condition (Figs 8, 9). The sites on Lot 139 were challenging enough. The first time, on the site that would become Casa Giaculli, I thought: 'You could never build on a site such as this one.' Tall grass and bushes made it unpleasant to walk through. The branches scraped and cut our hands when we tried to clear the way. We could take photographs, but it was difficult to walk and draw and think simultaneously. So our responses were somewhat reactive, dictated by the landscape, as we found our way among the rocks.

Just to the south of Lotto 139 is Casa Codrington, one of the early projects designed in 1969. Casa Codrington and Casa Scalesciani, on Costa Paradiso, designed two years apart, are both similar and different, each responding to its own site. Codrington is situated in a small valley. The clients were among the first to settle in Punta Sardegna and could choose the best lot, closest to the sea. Their staircase to the sea's edge is the longest I have designed, of over 100 steps (Fig.10). The two small rectangular buildings below are military outposts from World War I, strategically located on the seafront, where one cannot build today. In contrast, when we began working on Costa Paradiso, there was nothing there. Casa Scalesciani responded to the geology of its location on a shoulder, where the pink granite running towards the sea meets the white sandstone facing towards the mountains. The front of the house is pink and the back is white, according to the colour of the two different stones. It is a fault line unique to that place. Scalesciani is one of the first houses I designed where the form was determined by the morphology. The granite starts exactly where the house is (Figs 11-16).

The five houses on Lotto 139 were designed according to their position in the landscape, urban and environmental relation, typological characteristics and distribution. The volumes follow the slope, both with the walking surfaces and with the shape and the inclination of the roof pitch. The daily living area is the centre of gravity with respect to each house. It extends in three different directions, respectively forming a study, the kitchen, and the main bedroom. A second room and service room are situated in the basement space under the main terrace. The roof follows the irregular form of the plan and extends points beyond the perimeter to form shaded loggias. A rare and more formal plan names the vegetation, which defines the landscape. The clients did not want to cultivate or alter the plants, which, together with the rocks, inform the definition and shape of the architectural plans, creating the outdoor spaces, terraces and loggias.

Topography and Plans

When I see a larger number of house plans grouped together, at first sight I am taken aback by the great diversity of forms. I am surprised because I remember the plans as being similar to each other, in terms of character and sets of relationship to the topography. They appear, even to me, as bizarre, not to say gratuitous, forms – even more so to those who do not know them. In reality, this continuous variety is precisely the element that unites them. Their close adherence to a natural, morphological, varied environment predisposes them to forms that are coherently and harmoniously varied.

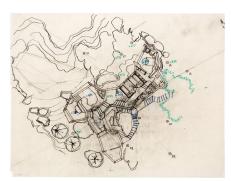
At the same time, two constructive elements guarantee their typological continuity. On the one hand is the original cell of the vernacular stazzo (peasant household) of Gallura. The initial cell of the stazzo is a simple cube, some four metres deep, wide and tall. In time, as their families grow, people add more cells. The simplicity of this incremental solution guarantees a certain order and rhythm to the most diverse combinations that derive from it. But they also share a materiality: a regular but rough plaster, similar to granite, for all the external walls, the roofs covered with traditional terracotta tiles, when not covered with stone.



11—



12-



13—

Finally, the last element of continuity lies in the houses themselves. It is a familiarity, less perceptible at first sight but unmistakable when you approach them, or better still, as you enter them. I try to use these elements each time I have the opportunity.

Thus, juxtaposed and grouped together, these characteristics seem to fall into two distinct categories: those applied to the treatment of matter (the walls, the rocks, the excavations, etc.) and those concerning the abstract aspects (visuals, openings, light, etc.). However, all of them in some way converge towards a single aim, namely creating the closest possible relation between the house and its natural environment. I follow the ground with the plan, and then, with the roof, the slope. The terraces are the passage from the house to nature.

When I draw a plan, I already have an embryo in mind. I acquire visual impressions first in a random sequence and then, gradually, I order them by drawing the plan. For each house I design, I define triangulations marked on the ground with stakes, to individualise the future rooms. In retrospect, it could be seen as a subliminal recreation of granite structure. Observing the geometry of my triangulations, in the form of infinitesimal strips, it could be considered continuous with that of the granite below.

Context: Extracts From a Lecture⁵

In 2008 I tried to explain to my son what the word 'context' means, and why it is often associated with architecture. *Contextus* represents a weave of new and old to create continuity. The continuity belongs to the individual entity and to the other identities that surround it: belonging not in the sense of absolute equality, but rather of similarity or harmony or compatibility. It is like the various threads of a fabric, which are of different colours but look good together. Simple, no?

A treasure in extinction

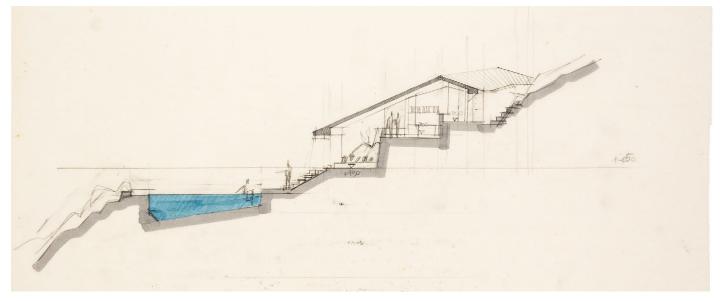
I was born in Liguria, but Sardinia has become my adoptive homeland in my work as architect. In Sardinia I have explored almost every strip of land and landscape; I have visited and studied many testimonies of tradition, which have influenced my projects. The beginning of this relationship with the past was slow, perhaps hindered by the prejudices and dogmas of contemporary architecture absorbed in the studios. Over time, these have dissipated, making everything easier.

Holiday and genius loci

Holidays (*vacanze*) are etymologically related to the idea of vacuum: vacancy, emptiness, the escape from presence. From escape to alienation is only a short step. Sardinia's natural environment, as the rare example of a landscape barely touched by man, offered the pretext to transform an empty holiday (house) into a unique and lasting existential experience. Living in houses discreetly juxtaposed with rocks, trees and bushes, appropriately covered and protected during the work, the seasonal inhabitants of the summer season become passionate about the privileged experience of touching the edges of a landscape that has remained unchanged over millennia. For many, the encounter was a psychological shock, which transformed them, over a short time, from distracted vacationers into careful guardians of the environment.

Nattivi and granite walls

Salvatore Nattivi, craftsman and master mason of Trinità d'Agultu e Vignola, is now an elderly pensioner. He has no sons or young pupils and his ability to build with the mastery of traditions will die with him. His walls and pavements of *opus incertum*, made with the same stone quarried from the construction site, are ageing with the same aristocratic slowness as the



14-



15—



16_

trees and granite boulders. For years, his hands have been the direct and concrete link between the present and tradition, between the houses he built and the context; a medium that has been renewed for centuries from father to son and that will soon no longer exist. It is likely that to fill the resulting void, computerised machines will be born capable of producing building materials of every 'era and tradition', as is already happening in the new urban furnishings of our cities.

A recipe?

My son returns to the question: if a definition of context is difficult, is it possible to have a simple recipe for practice? I tell him that contextual architecture is like a sheet that everyone pulls towards themselves and their work – apart from those who do not think about it and do not create the problem. I realise that I am back on the high seas and resign myself to be carried by the current. My context and imagination have been geological; the rocks and sea, my guide.

Epilogue

An epilogue to my career - the letter from the children of Andreina Vanni, my client for Lotto 139, Punta Sardegna (1986).

'I will come in a few days among these rocks, and I will sit here to imagine the house immersed in the landscape: only then will I begin to draw.' This is how the architect Ponis described to my mother the process that would lead to our most beloved house, the first that both she and we saw emerging from nothing. The idea of a construction that would follow the course of an ancient nature, that would respect the curves, the edges, the spaces that the wind had modelled in a very refined way, silenced all our prior requests. My mother's initial desire was for a house with very square lines, a sort of 'stazzo' built on a single level: she found herself in front of a design with three levels that followed the slope of the land and which, seen from above, looked almost like a fan turned slightly to the right to allow the walls to copy the course of the rocks. It was love at first sight.

As immediate as the love for Punta Sardegna. It all stemmed from an invitation to spend Easter at the publisher's house where my mother worked at the time. This was in 1978, and from that moment on, perhaps also thanks to the landscape, they became lifelong friends. It was, as often happens to those who discover these places,

a thunderbolt: the lavish nature, the entrancing sea, the magical light that changes at every hour of the day.... And then, the group of journalist and editor friends who came here every summer from Milan and Rome, who made Punta Sardegna an even more special place.

The building grew slowly from the initial intention: to keep the house as harmonised as possible with the landscape, a respectful guest among the majestic rocks. The architect Alberto Ponis was the instigator and guarantor of this project. An intense collaboration began with my mother at that time. Overall dimensions, colours, materials, were chosen to harmonise with the surrounding nature. The use of space, the creativity of forms, and the dialogue with the territory that Ponis sought (such as the rocks that became part of the environments, the movements of the roofs that supported the slope of the land) led to the materialisation of a common feeling. From the outside, the house is perfectly set in the landscape. From the inside, the dizzying sensation of being suspended above the rocks, the thrill of being able to launch oneself in a spectacular dive, still surprises us every time.

Paola and Mauro Giaculli, March 2022

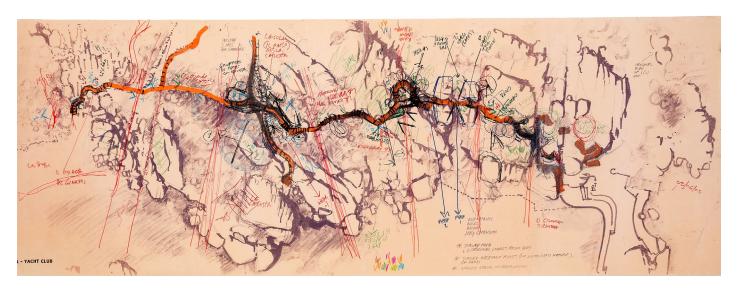
Acknowledgments

This paper was written collaboratively over many months in the winter and spring of 2021–22. It is the result of conversations, writings and walks, book recommendations, trips and recordings of sites, all coordinated and assembled by my wife AnnaRita. Because of its conglomerate nature, the text is meant to be read at the various speeds of conversation, or as if when walking on a pathway. We are both grateful to Mauro Aresu, Irina Davidovici, Sandro De Muro, Tiziano Demuro, Tommaso Gamboni, Paola e Mauro Giaculli, Michele Serra, Valeria Serra, Stefano Salis, Andreina Vanni, and above all our family, Marta and Mario Ponis and Antoine van den Oever.

- 1 Ponis's first projects began with English clients, who at the time were described as wanting the discretion yet quality Palau offered: 'Girls in Chanel suits, escargots in grocers' shops, an excellent menu in the restaurant run by Baron Gallotti, in the village of Palau, and some houses with television sets but no baths these are some of the characteristics of the Sardinia that is becoming a second home to English people...'. 'Travel: a villa in Sardinia', *Time and Tide: The British News Magazine* (11-17 March 1975).
- 2 In 1982, for the Centenary of the Società Geologica Italiana, a field trip to Sardinia took place and the first edited *Guida del Paleozoico Sardo* was published. A new guidebook was republished and edited in 1986, largely based on that *Guide*. See Luigi Carmignani and Pier Carlo Pertussti, eds, *Guide-Book to the Excursion on the Paleozoic Basement of Sardinia*, IGCP Project N. 5 Correlation of Varsican and Pre-Varsican Events of the Alpine-Mediterranean Mountain Belt (1986).
- 3 The first geological survey of Sardinia was by A.F. La Marmora, 1856.
- 4 Casa Giaculli, 'Relazione tecnica' (1986).
- 5 Modified excerpts from the lecture 'Buoni e cattivi pensieri di Alberto Ponis', Bolzano, 20 October 2006. Published in Architektur und Kontext, Architettura e contesto (Bolzano: Autonome Provinz Bozen-Südtirol / Provincia Autonoma Bolzano-Alto Adige, 2008), 24-29.

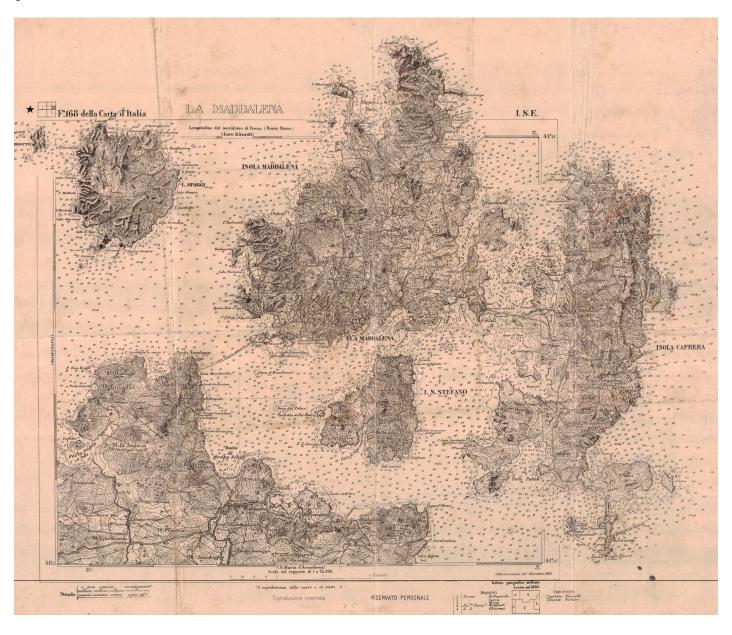


2-

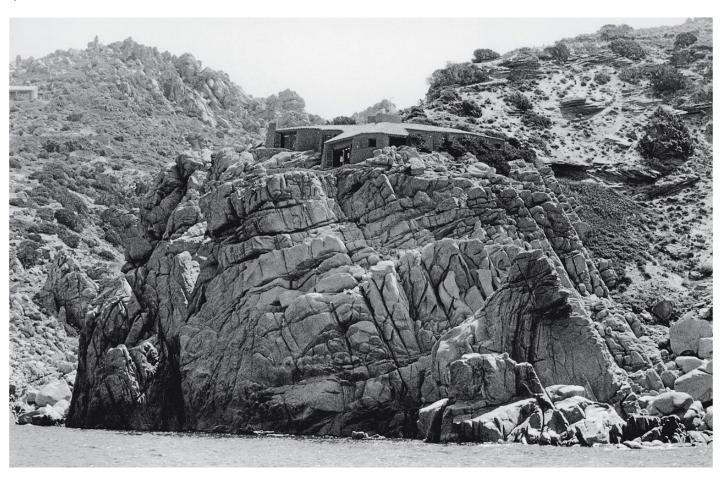


^{1—} Alberto Ponis, Panorama of Punta Sardegna photographed from the ferry to La Maddalena, 1963. Courtesy of the author.

^{2—} Alberto Ponis, Yacht Club Path, survey undertaken in 1963, drawing dated 2003. Coloured inks over print base on pink paper, 36.3 x 101.5cm. DMC 2921.1, Drawing Matter Collections.

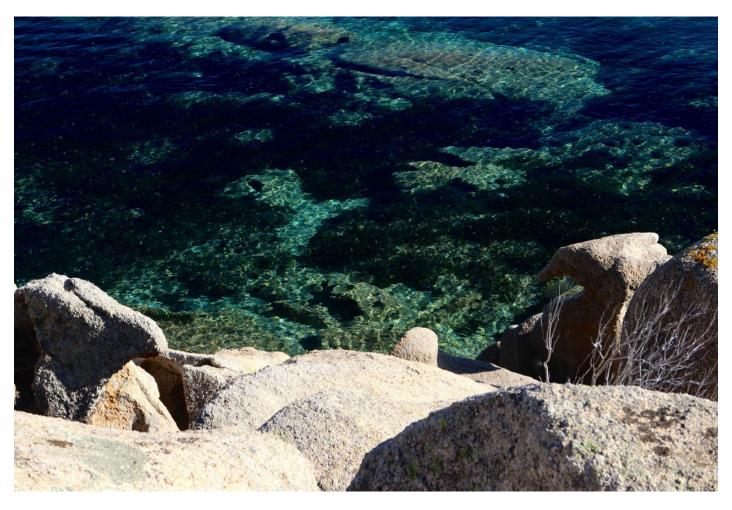


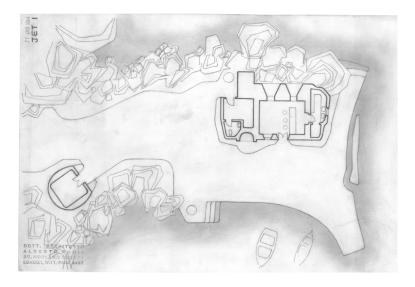
Military plan of the archipelago of La Maddalena produced by the Istituto Geografico Militare, 1884. Courtesy of the author.



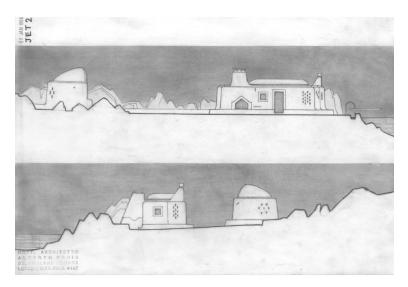


Alberto Ponis, Presentation plan for Casa Heintzschel, 1986. Black ink, felt pen and white crayon on trace, 62.8×63 cm. DMC 2837.4, Drawing Matter Collections.

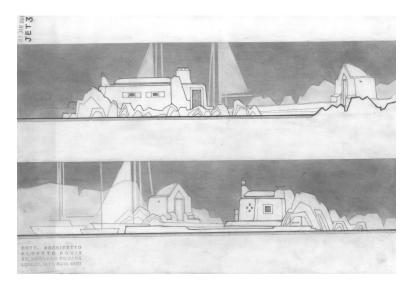


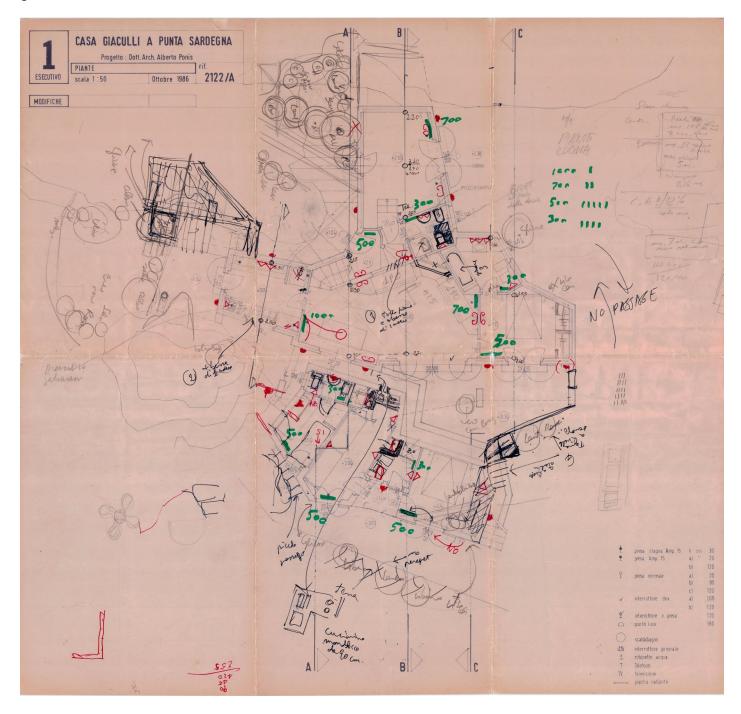


7b—

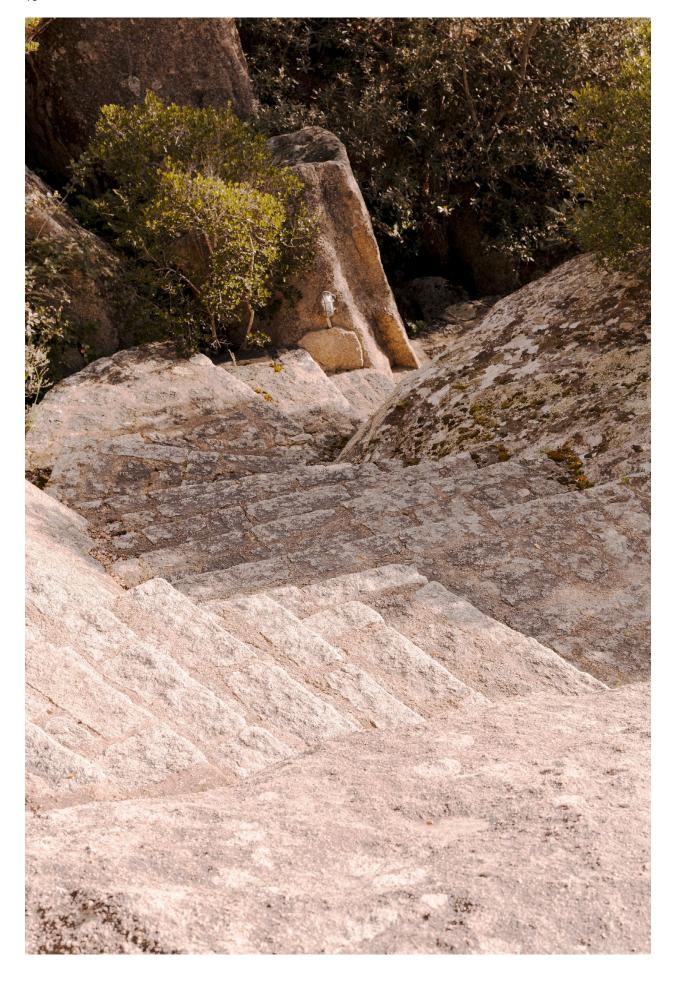


7c—

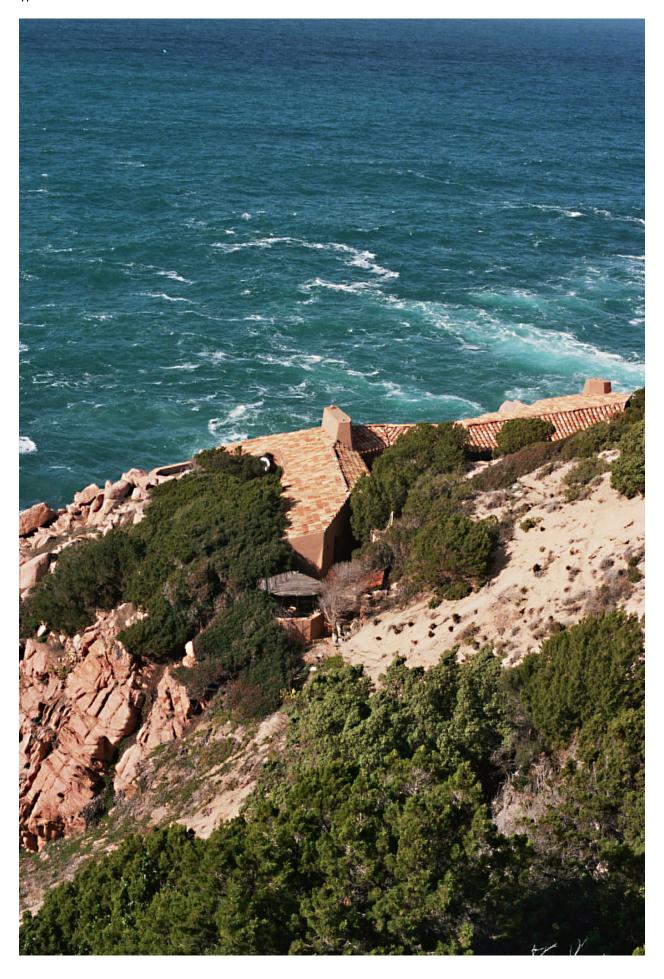








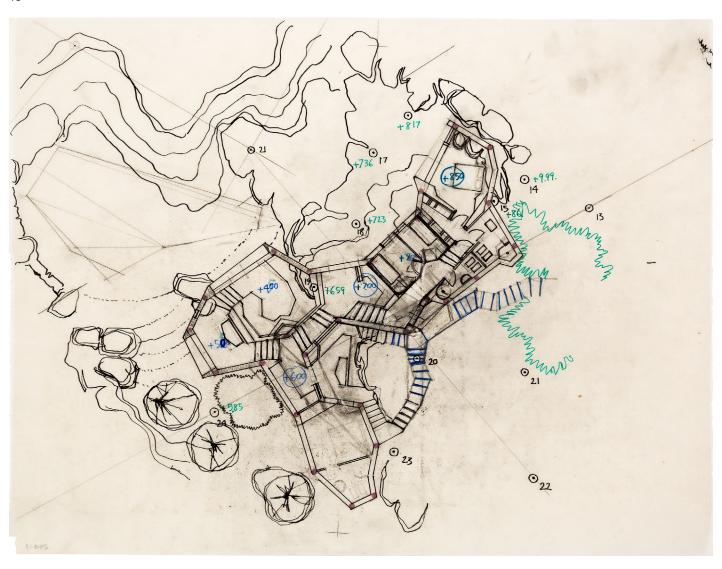
Steps to the sea at Casa Codrington. Photograph by Tiziano Demuro.

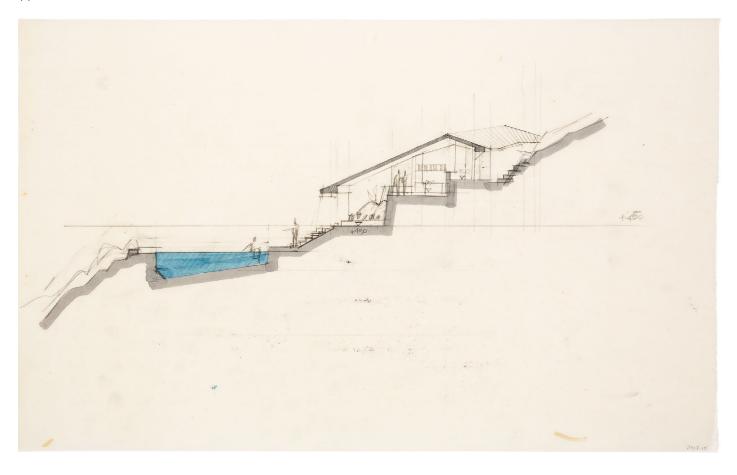


Casa Scalesciani. Photograph by Tiziano Demuro.

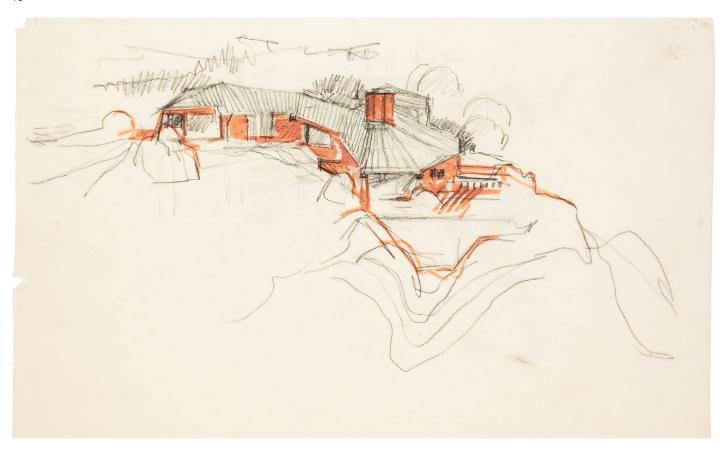


Alberto Ponis, Casa Scalesciani, 1977. Pencil, black and red ink over office print on pink paper, 61 x 83.5cm. DMC 2918.1, Drawing Matter Collections.

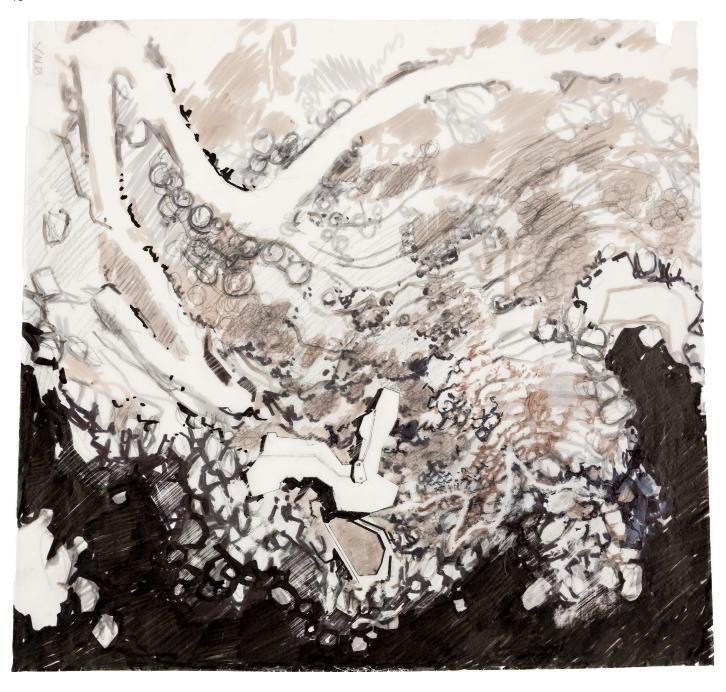




Alberto Ponis, Casa Scalesciani, 1977. Pencil and felt pen on trace, 33 x 54cm. DMC 2918.15, Drawing Matter Collections.



Alberto Ponis, Casa Scalesciani, 1977. Pencil and felt pen on trace, 33 x 50.8cm. DMC 2918.24, Drawing Matter Collections.



Alberto Ponis, Plan for presentation, Casa Scalesciani, 1977. Pencil, felt pen and black ink on trace, $46.3 \times 49.8 \text{cm}$. DMC 2918.2, Drawing Matter Collections.