

## On the way along the itineraries of the Park



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#### Leonardo da ;azzale The location is of historical $\eta_{c}$ note because it was used by Leonardo Da Vinci as a "launch pad" to test its Flying Machine in 1506. The Machine managed to glide for about a thousand meters, landing in Regresso (Fiesole) on the road that today is known as " Largo Leonardo da Vinci ". Rest area and unforgettable view over Florence

Piazzale

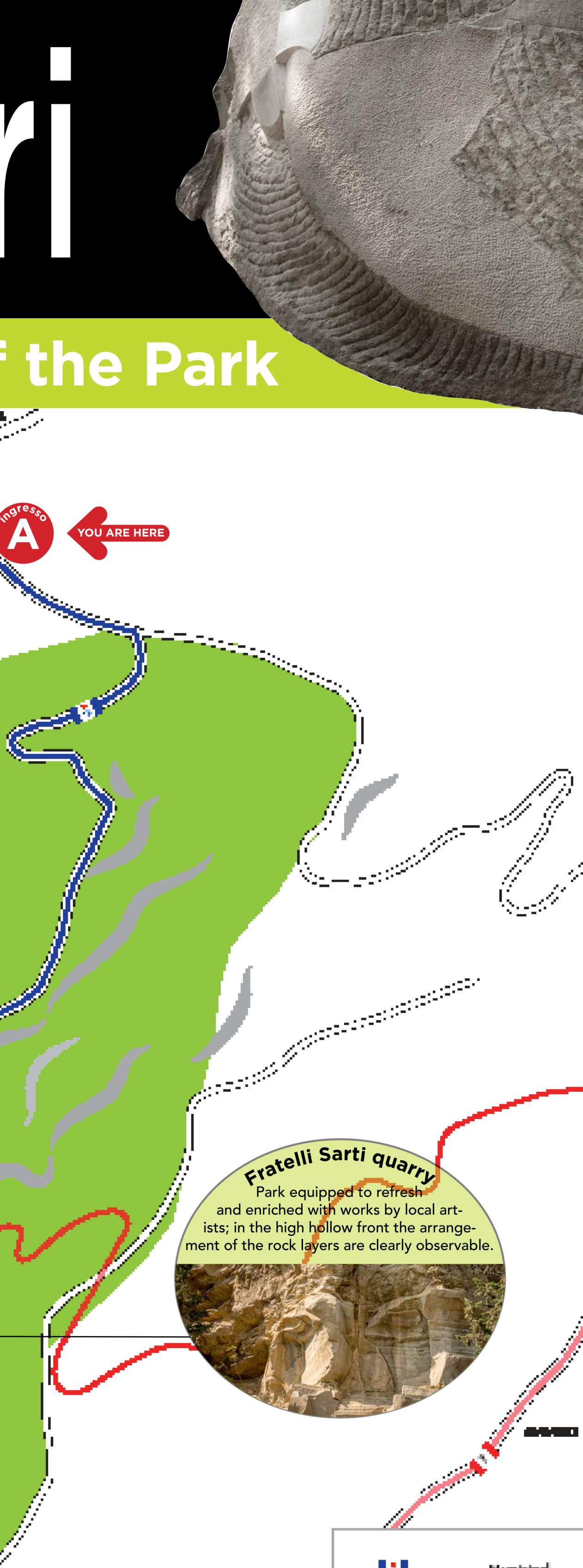
eonardo da Vinci

Mente Cecari

Parto si Fisi

Braschi quarry

Though it cannot be entered, for safety reasons, it still offers a striking view of its enormous size due to the open-cast technique with which it was excavated



Municipal competence path 7 Italian Alpine Club Quarry front Park Ansa 100m

Cave di Malano

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# Useful Information

The Monte Ceceri Park is large, the well-marked communal trails are the safest and provide better accessibility, they are marked by signs giving information on the local environment and historic quarries.

#### Sites worth the visit:

Piazzale Leonardo and Sarti quarry: 25 min. (500 mt and 50 mt uphill climb) are easily reached from entrances A and B;

Braschi quarry 20 min (650 mt and 100 mt uphill climb) from entrance C; 15 min. from entrance B (300 mt and 10 mt difference in altitude); 20 mins (400mt and 50m downhill) from Sarti quarry - Piazzale Leonardo

**Entrances to trails:** 

A Piazzale Don Alvaro Ferri, already Prato al Pini **B** Via degli Scalpellini; • Via Doccia (Regresso curve) Bus no. 7;

We recommend: entering the park from entrance A or B and exiting from entrance B or C.

#### Poetry quotations about stone

Of that stone that is said to be serene (it originates from Monte Céceri in large quantities) A plain stone, tending toward slightly blue, as the rain water where the glastro leaf is cooked.

Gabriele D'Annunzio Alcyone The works and the days, vv. 20-24

But that ungrateful malicious people, who descended from Fiesole in ancient times, and still holds the mountain and the boulder.

Dante, Inferno XV 61-63

Description of Fiesole, from which according to Dante descend the Florentines, still preserving the roughness of the mountaineers and these places of exertion.





## The Park of Monte Ceceri in Pills

Grafica e fotografie: Arts & Altro PROJECT di Fabrizio Dar

By the Etruscan era there was already a dry stone wall, some funer-

The first scientists studying the sedimentary sequences of the Northern Apennines in the 1950s recognised in these outcrops the results of ancient underwater currents. The sedimentary properties of these formations and a study of the microfossils present dates them from the lower myocene, or Aquitaine age (about 20 million years ago).

ary slabs carved with scenes of daily life, and the majestic Roman theatre act as a permanent reminder of the excavation of the hill.

Latomia, clearly showing the rock strata with

the powerful bank of Macigno.

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Vitruvio in "De Architectura" details the professional technique in a kind of manual; Leon Battista Alberti, in his treatise "De Re Architectura", illustrates techniques, machines for lifting and fixing blocks, measurements, and procedures. In the Renaissance the most famous artists Brunelleschi, Michelangelo and Vasari commissioned quarries of Serene stone, characteristic of the new Florentine architectural style.

Leonardo da Vinc

ave Fratelli Sart

was the stone.

**\Cave Braschi** 

Inside of the quarry: in the ceiling and in the footings supporting the ceiling, the signs of the blocks progressively extracted from the bank of Macigno are clearly visible.

> this stone all Durable Stone, Sereno ordinario, Sereno gentile, Moatstone or Column Stone, Bigia Stone, Bandite Stone, Dead Stone, Granite, Cicerchina, Tramezzuolo, Mortar, Verga, Cerro Stone and Sassocorno; these are the common names of the various types of stone. They were used for different things depending on their specific characteristics: building and architecture (monoliths, columns architraves, capitals - column heads, jambs, trabeations), civil and sacred furnishings (fonts, pulpits, parapets, altars, frames, friezes, coatsof-arms), urban furnishings (slabs, culverts, benches, cornice tops, fountains), embellished frames, window ledges, capitals and various compositions.

It is ancient technique and, in the Florentine Renaissance, nobody thought to document the techniques of scavengers, sculptors and stonecutters because they now belonged to Florentine culture. The techniques were passed on via the yard and the workshop, their products clearly visible to all: the streets, the churches, the grand mansions. The sophistication and ornate quality of the work reached new heights not seen before... The craft developed through: quarrymen, masons, refiners, stonecutters, sculptors and artists.

he craft of the stone.

Tagliata: an open-cast quarry. The geological shape of the mountain and the quality and quantity of the stone ayers remain visible in vertical crosssection. (eg cave Fratelli Sarti)

Construction used above all as a deposit for tools.

The required knowledge involved both the types of tools used and how to treat them in the forge and as elementary geological notions expressed in the traditional language of the trade: chocks, lifts, bush hammers, rollers, thread, straw, grooved chisels, sledge hammer, Bigia stone, Dead stone Serena stone, piles, punches, mallets, chisels, lathe chisels, ulivella (a type of container), rasps and files.

In Florentine culture, essentially closed and conservative, the craft was passed on through the generations even past the advent of advanced industrialism, not for extraction but at least in terms of processing (a rare case a technology surviving industrialisation)

<sup>Ntra</sup> color del cielo" - 2001 testi di Carlo Salvianti e Mauru

The women left mid-morning with the lunch parcel to take to the men in the quarry. Most of them were from Borgunto, the medie-

The stonecutter to

val centre attached to the Etruscan walls, where people still live traditionally. On the way were the Pelaghi, public baths, protected by canopies, built on a spring where the women would always meet.

In the accounts of stonecutter life, there were always the quarry boys: employed to carry out small services and jobs and so begin their apprenticeship. Work was distributed solely within family networks, which is why even today the quarries are referred to by family names.

Giovanni Targioni Tozzetti, a natural historian and scholarly physician of the seventeenth century, whose work will be intimately linked to the scientific and economic development of Tuscany, states: "When the stonecutters need to break the boulders using chisels and the wedges, they warn to always pour water in the fissure where they force the wedges: some believe that this helps the operation; but others say it's necessary to use this precaution because otherwise they would create a very fine dust that would irritate their lungs".

Hundreds of stone workers died of silicosis (a form of occupational lung disease).

stone-masters (many of whom became Communists) were opposed to Fascism and expressed this in many ways, one more original form of protest was their almost complete withdrawal from society to live in the quarry throughout the day avoiding any direct contact with the center of the village, filled with black shirts.

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The tools of the ston.

### Nonte Ceceri Piazzale Leonardo da Vinci

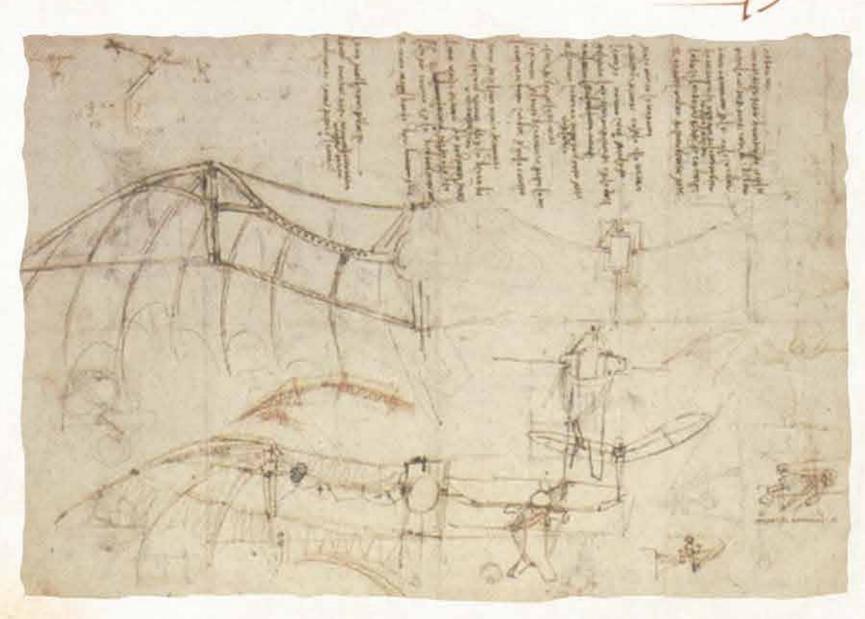
#### With a beating of wings, Leonardo's greatest dream

Graphics by Arts & Altro PROJECT - Fabrizio Darmanin



Monte Ceceri has gone down in legend as the launch site for the "testing" of the "flying machine" conceived by Leonardo. More of a hill than a mountain, it so named because in the past it was frequented by swans; which, thanks to the protuberance on their beaks, Florentines called "ceceri" (from cece - meaning chickpeas). Tommaso Masini, also known as Zorastro da Peretola, was the courageous collaborator who, in 1505 agreed to pilot the device designed by his friend. Leonardo's fundamental insight was that air is compressible and thus exerts a resistance that can support a weight: "for these reasons man with his great, mechanical wings will be able to press against the resistance of the air and winning he will be able to subjugate and rise above her."

There are many drawings by Leonardo of the flight of birds and schematics of mechanical wings capable of supporting a man's weight. Among the texts and drawings of his Codex "hides" the design of Leonardo's most advanced flying machine, consisting of two large skin-covered wings to be operated with pedals and levers named after the bird which he describes having observed: the "Red Kite": "a bird of prey I saw on my way to Fiesole".



"For once you have tasted flight, you will walk the earth with your eyes turned skywards, for there you have been and there you will long to return."

"The human bird shall take his first flight, filling the world with amazement, all writings with his fame, and bringing eternal glory to the nest whence he sprang." The machine, according to legend, seemed to glide for 1000 meters before landing abruptly in the area today called Largo Leonardo da Vinci near the curve of the Regresso. It was the first flight experiment to have been documented (by Leonardo himself) in the "Codex of Flight", a manuscript that can be considered as the sum of Leonardo's thoughts, not only on flight.

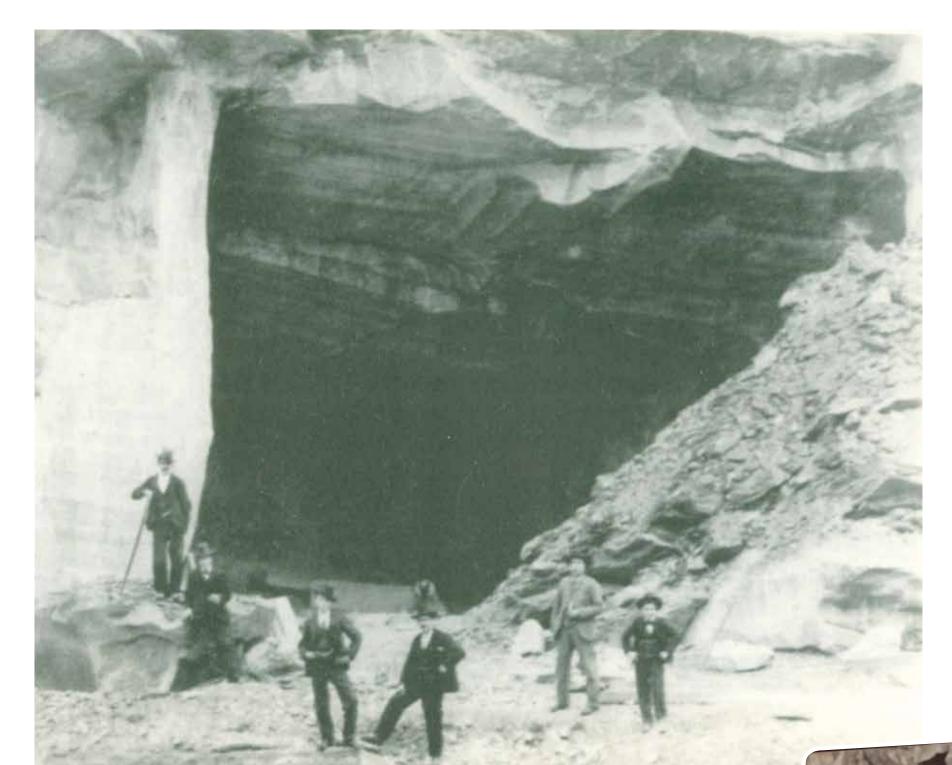


These are the two most famous quotes from Leonardo Da Vinci, on his greatest dream: flight.

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#### The quarries, the history, the landscape

Graphics by Arts & Altro PROJECT - Fabrizio Darmanin



On a timescale calculated by geologists in millions of years, a length of time inconceivable from a human perspective, a marine environment was the raw material for distant civilisations to come. Form, density, composition, colour, sedimentary layers interlaced, then fractured, bent, almost coiled, sometimes inclined, tell in their own, precise way a history before history. For those who know how to read the signs they speak of the fascinating motions of earth and water, almost myths of the creation of the world.

Excerpt from "Il verde è di tutti " text by Carlo Salvianti and Andrea Poggesi

The quarries in Monte Ceceri are of two types:

- Latomia, a cave-like quarry (for example, Braschi and Canara).
- Tagliata: an open-cast quarry. The geological shape of the mountain and the quality and quantity of the stone layers remain visible in vertical cross-section (eg cave Fratelli Sarti).

Municipal Archives of Fiesole, Ranfagni Fund

Latomia 1890 – Settignano Library

#### Landscape transformations

The landscape is the result of the natural evolution of human activity on the environment, the case of secular historical mining activity is a good example of this, with over 40 quarries active at one time. In the picture from 1929, the hill appears visibly bare; reforestation has taken place since 1970 and was only suspended during times of war.



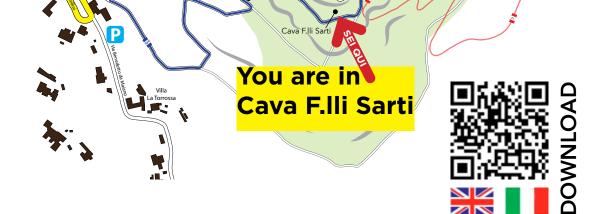
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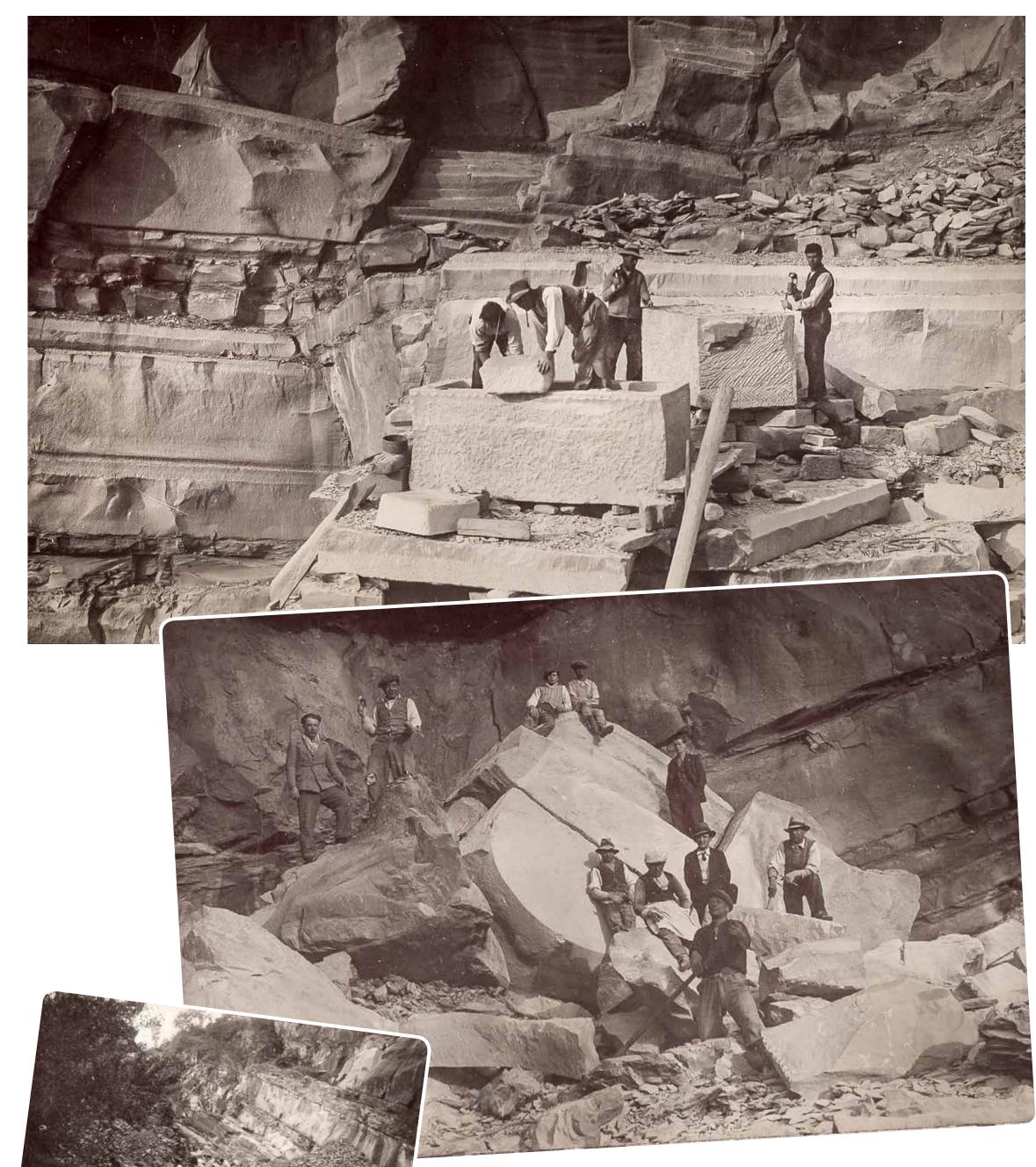
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#### How did a quarry work?

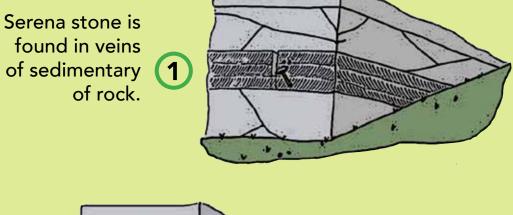
Graphics by Arts & Altro PROJECT - Fabrizio Darmanin

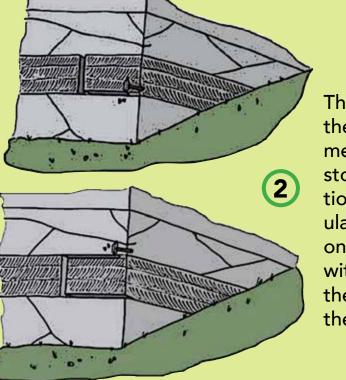
The opening of a quarry began with the removal, using shovels and pickaxes, of the surface material that had accumulated on the layers of good, workable stone... The stones that were suitable for use in construction (of a good size and strong enough) were recovered and refined to give them roughly the required characteristics ... The dead stone, a yellowish floury sandstone that crumbles with a slight tap, was commonly used as a refractory material (for use at high temperatures)... Another type of stone used for slabs was the liscioni, that were pieces of stone strung with a layer of galestro (a shale-like rock)... The rest of the material had to be removed from the worksite ... away from the rock face, taking care to leave enough space for the carts to transport it away. The layout consisted of: the large square, the loading floor, the heaps, the stores, the cut or the dense, the well and the forge.

Excerpt from "La pietra color del cielo " – 2001 text by Carlo Salvianti and Mauro Latini



#### How a block was extracted

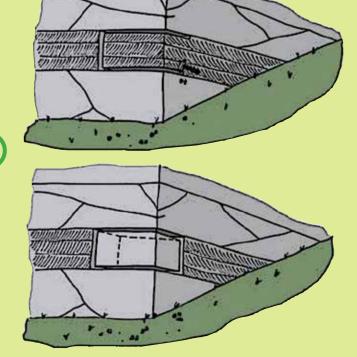


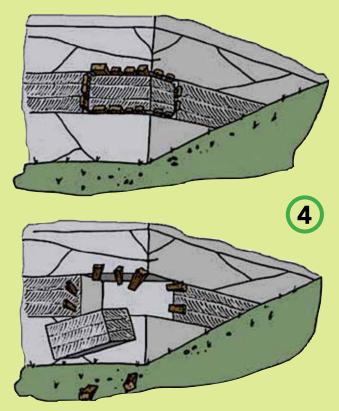


The cut is one of the three fundamental lines of stone; the direction is perpendicular to the surface on the SO side with respect to the alignment of the run.



To pull out a block, a "cut" was made in the mountain using a hammer and a special type of chisel. Using increasingly long chisels, it was possible to get into the stone.





The block, held at the base, was detached by means of wood wedges that were forced around the block. These wedges were then drenched in water, causing them to expand and allowing the block to be extracted.

From "Convenzione con Università degli studi di Firenze, Dipartimento di scienze della Terra, responsabile Prof. Geol. Massimo Coli. Anno 2001.



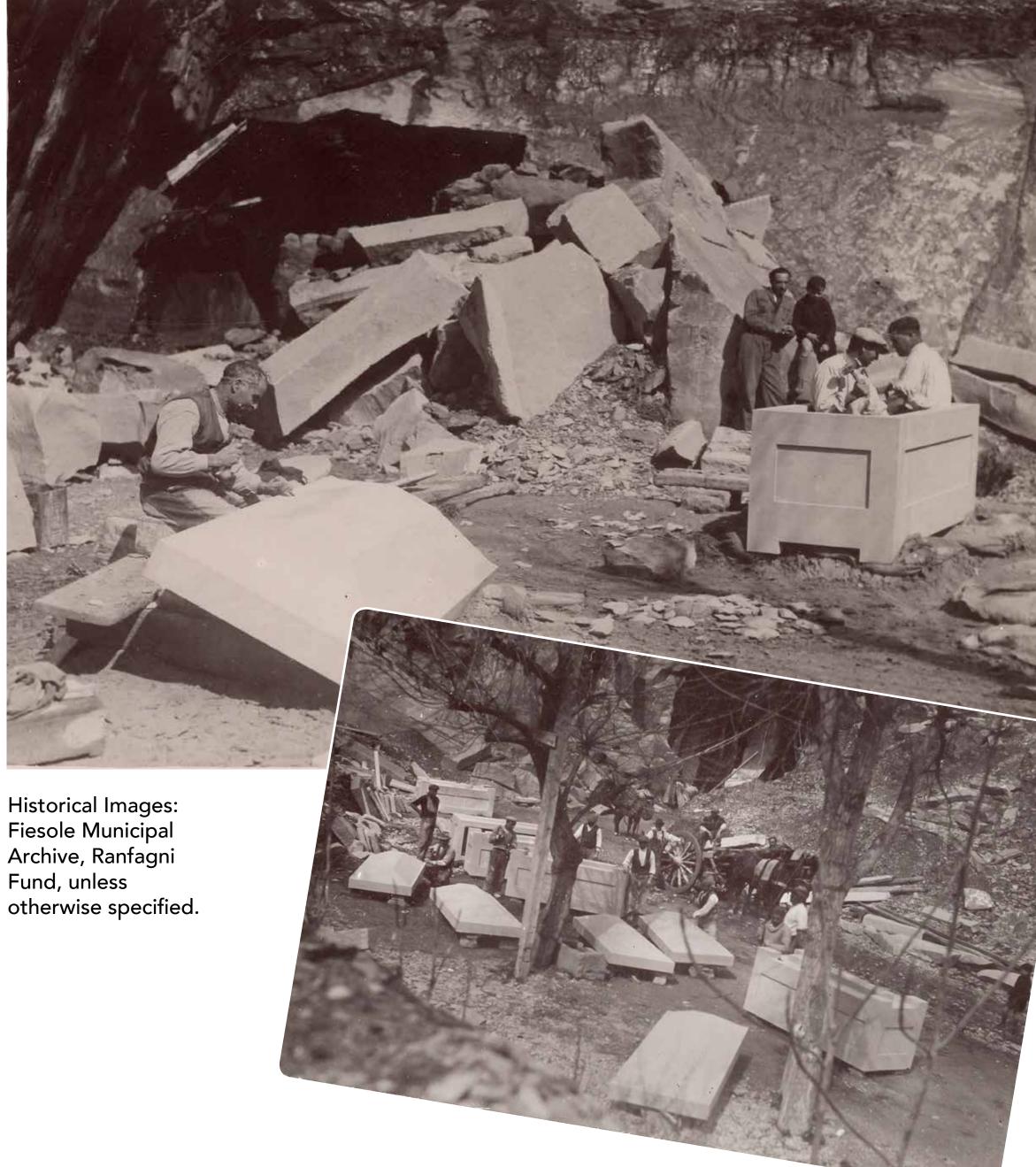


Historical Images Municipal Archive of Fiesole, Ranfagni Fund.

## Nonte Cecer \*

#### Life in the quarry

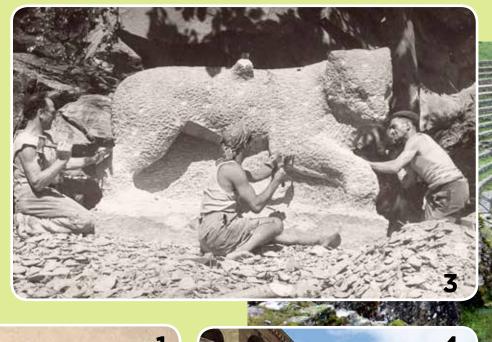
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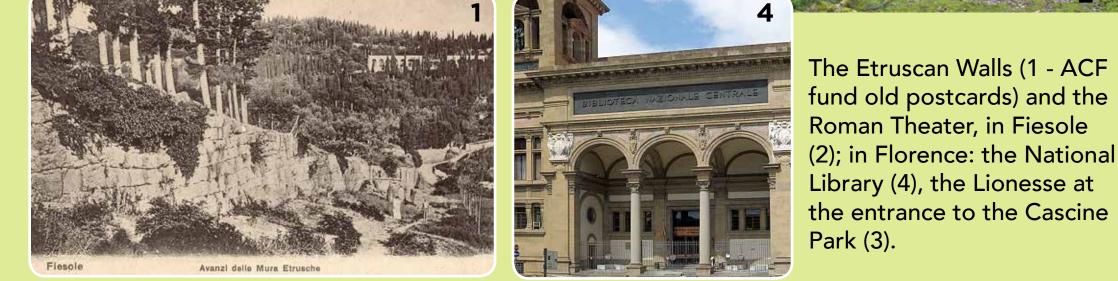


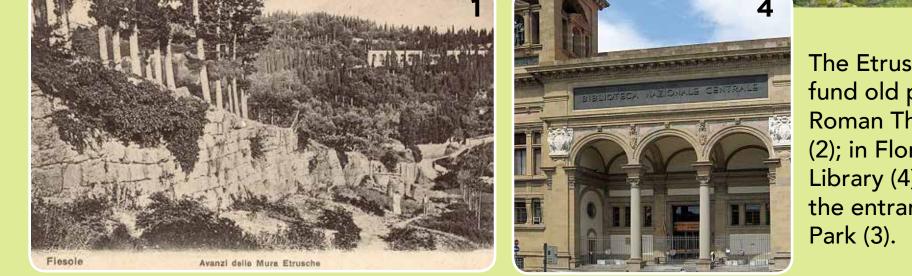
A stonecutter worked from dawn to dusk and in the summer slept in the store house. Their water was provided by the well, dug into the quarry to recover the water held within the rock formation: a fine water that is often found in this type of environment. The water also served to wash and temper the irons. This is why the "pila" was used, a rectangular basin carved from a single block of stone that was also common in small blacksmiths shops and even in shoemakers. It is said that at the end of work, in winter, the stonecutters used the water, hot from tempering, to wash their feet. Also a tree was usually grown near a quarry to give shade

#### The stone of Monte Ceceri in history

From the Etruscans to the Romans, in the "De Architectura" of Vitruvio, Brunelleschi in San Lorenzo and Santo Spirito, Michelangelo in the Biblioteca Medicea di San Lorenzo, there are innumerable descriptions and works made with Pietra Serena extracted from Mount Ceceri.







The Etruscan Walls (1 - ACF fund old postcards) and the Roman Theater, in Fiesole

#### during the heat of the of summer.

Excerpt from " Il verde è di tutti " text by Carlo Salvianti and Andrea Poggesi



Settignano Library Archive



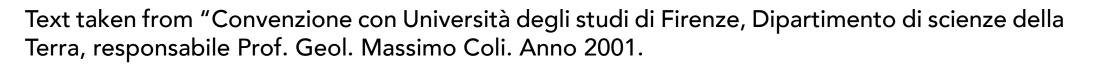


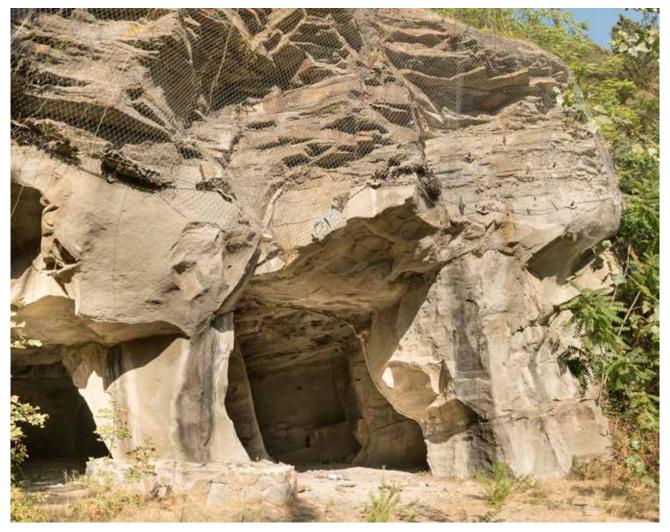
## Nonte Ceceri Cava Braschi

#### Cava Fratelli Braschi, a Latomia.

Graphics by Arts & Altro PROJECT - Fabrizio Darmanin

On the walls and in the vaults of the numerous and beautiful Latomie of Monte Ceceri it is easy to read the history and methods of cultivation, executed by thick and progressive cuts that opened up the vault of the quarry and then successively produced slabs according to the rock strata. In the presence of the main fractures, called "fine", a pillar was left to support the vault, both on one side and the other on the fracture; once the work was completed, these supports were the cornerstones of the vault. The vault was made strong and stable, taking care not to take upper part of the Serena stone, a layer of about 60 cm was always left to form a sealed roof at the base of the galestro and scrap marl levels. In some quarries, over time, this supporting slab dropped, causing either partial collapse of the vault or a total collapse of the entire underground quarry, resulting in cave-ins and landslides.





Latomia, clearly showing the rock strata with the powerful bank of Macigno



Inside of the quarry: in the ceiling and in the footings supporting the ceiling, the signs of the blocks progressively extracted from the bank of Macigno are clearly visible.

