



The stone of Moltrasio

In the past, the ancient region known as *Insubria*, which corresponded with the present Provinces of Como, Varese and the Canton of Ticino in Switzerland, was characterized by the presence of numerous stone quarries, among others, the stone of Moltrasio's ones. It is a flinty limestone dark grey coloring, tending to clear in sunny areas. The stratigraphy of the stone of Moltrasio - and therefore the quarries - extends from Como, following the versant, Mount Bisbino side, passing through Moltrasio and Carate Urio, until Argegno and Val d'Intelvi; while, on the east versant, continues until Lezzeno. Despite is widespread in the territory, it seems that the stone took its name from Moltrasio because of the reputation

that the village had in Lombardy and the presence of stone slabs (in the local dialect, *pioda*) there. Another version says that, probably, in Moltrasio began the quarrying.

The activity in the stone quarries began during the Roman settlement in the lake area, which was facilitated due to the construction of bridges and routes. The activity continued in the Middle Ages and during the Renaissance, until the early 20th century. The most important stone quarries were located in Moltrasio, Carate, Urio, Faggeto - still in operation -, Pognana and Careno. Today, because of the lack of manpower and the high uncompetitive costs, the demand is very low.





In Moltrasio, there were 13 stone quarries in operation (from the south, bordering Cernobbio, to the north, bordering Urio): Pizzo's stone quarry, Roncaccio's stone quarry (in the local dialect, *Runcasc*), *Tarunin's* stone quarry (or Stone quarry at the two roads), *Cepp Cativ's* stone quarry (or Taroni's stone quarry) and Stucchi/Della Rocca's stone quarry; above this one, continuing vertically, were located the well-known *Niasc's* stone quarry (meaning nest in the local dialect) and the nearby *Umbrelin's* stone quarry (meaning umbrella in the local dialect), the lasts to be abandoned in Moltrasio, in the first half of the 20th century. Moreover, there were Crotti's stone quarry, Vignola's stone quarry, Pizzallo's stone quarry, Marianna's stone quarry, Dosello's stone quarry and Linera's stone quarry. Additionally, there were small familiar stone quarries used for extracting sto-

nes for building their house and abandoned afterwards.

The extraction of stone was one of the economic activities that most provided livelihood to the local families, even if the process involved great physical effort.

The stone of Moltrasio is well known because of the work of the *Maestri Comacini* (Masters of Como) and it was available for them thanks to the great competence of humbles diggers and stonemasons. On a daily basis, they would climb up to the quarries to extract the stone. In addition, they worked to secure and to keep the territory neat. This can be seen, for example, on the tall dry-stone walls that are located in the Niasc area. They were built with the arising waste produced during the extraction of the rocks, therefore, their construction and the extraction were done concomitantly.



The extraction process had several steps. The first one was the dig verification with a deep sensor. This step allowed diggers to determine the quantity of the material, the width of the rock and the possibility of cutting it in horizontal sections. Among the characteristics of the rock course, were observed also the cracks (lithoclase) that ran parallel to the mountain and facilitated the extraction to the surface, where they were larger.

If the characteristics were accurate, it was possible to continue with the second step: to remove the soil and the damaged top layer of bedrock, before beginning the extractions.

There were different extraction techniques to cut the stone in blocks or slabs.

The main techniques were three:

- the first one consisted in cutting the block

and processing the stone at the level in the stone quarry area;

- the second one, the riskiest, consisted in collapsing the wall of rock, hoping that the material remained intact;

- the third one, was to partly process the block of stone in place, without bring it down at the level.

In the most important stone quarries in Moltrasio, *Niasc's* stone quarry and *Umbrellin's* stone quarry, was practiced the manual digging, with the technique called "puntata" (pointed). In-line holes were drilled on the stratum that had to be divided, an iron wedge (in the local dialect, *puncitt*) with two side section bars was insert in each hole and, hitting the wedges, got off the rock stratum that would be sectioned on the basis of the usage.



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The holes were manually obtained by the use of a profiled octagonal-section mould, with a diameter of 3 centimeters, and a sledgehammer to hit. The part of the mould that had to scratch the rock was shaped like a rounded chisel. During this step were needed 3 or 4 people; one, seated, called "supporter", kept the mould in a vertical position, the others, called "beaters", hit with a regular alternated rhythm the top of the mould. After each hit, the person keeping the mould had to lift and to rotate it slightly

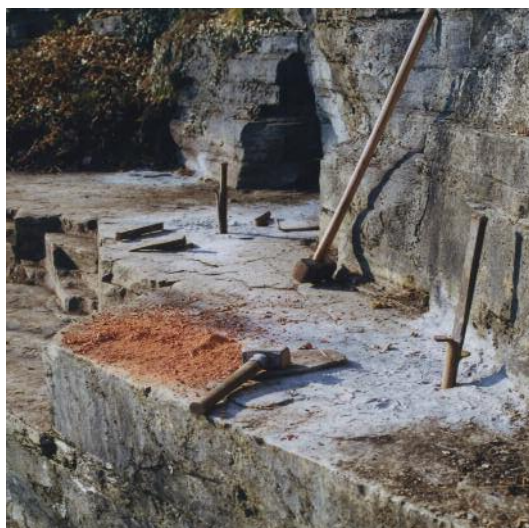
in order to create a regular circular section. In the hole which was forming was poured some water.

The "supporter", when there was so much accumulated dust in the hole that the hitting was not working, stopped the "beaters" by lifting his index finger, holding the mould in position. He used, therefore, to clean the hole, a utensil called "brush" (in the local dialect, *spazeta*) composed of a thin iron bar and with a sort of spoon on the top.



Then the hole was filled by the “man of the fire” (in the local dialect, *fughin*, that means literally “little fire”) with explosive material: together with the black powder, was inserted a fuse with a knot at the end and then black powder again. Every layer was pressed with a utensil, called in the local dialect *calcun*, made of iron and brass – the brass prevented the formation of sparks.

This step called “*calconatura*” (from *calcun*) was really important to ensure that was not released the explosive power through the hole (in the local dialect it was told “to make *canun*”), nullifying the whole work. Brick dust was inserted to fill in the last part of the hole, forming a cap (in the local dialect, *busciun*). Before and after the explosion, the population was alerted with the sound of a trumpet.



Consequently, the material was given to the *picapreda* (meaning stonecutters in the local dialect). They knew how to identify the defects of the stone – such as the *peli*, white minute cracks of various length – and chose the blocks to process, usually right in the stone quarry area. The choice was made on the basis of the type of manufacture they would do: dry-stone walls, walls with mortar,

internal and external pavings, roof coverings, wallcoverings, curbs, slabs for balconies and tables, windowsills, stairs or others.

On the territory there are numerous buildings constructed using the stone of Moltrasio. Besides St. Agatha's church and St. Martin's church in Moltrasio, an example is Como Cathedral.



Lastly, the stones were transported to the main lake on heavy wooden sledges, called *carei* (meaning bogies in the local dialect), down the steep stony streets specially constructed with this purpose.

Some of these ones are still used as foot-paths and they connect the upper part of Moltrasio with the lower one. An example, the street so-called "*dei carei*" (of bogies)

which connected Niasc's stone quarry to the disembarkation area called "small bank".

Therefore, the stone was transported by lake and loaded on a "*comballo*" (in the local dialect, *cumball*), which is a boat intended for the carriage of heavy goods, with a large rectangular sail to move exploiting the Brega and Tivano winds.

