The Cortabbio-Primaluna barite mine (Valsassina, Lc): emotion, experience and disability

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The Alps have long been a major mining area, with a large diversity of ore deposits and mining activities, related to the complex geologic history of these mountains. The increasing interest for the preservation and divulgation of the mine geoheritage of this area has led in the last decades to rehabilitation and re-opening, as geotouristic sites, of several old mines. The Cortabbio-Primaluna mine, on the eastern slope of Mount Grigna, in the Southalpine tectonic domain, has just been added to this diversified offer as a unique geoheritage site, both for its geologic and mining peculiarities and the novelty of geotouristic approach developed.

The main barite body is related to a system of hydrothermal veins extending for 1200 m in length and up to 200 m in width, with a maximus thickness of 8 m. They cut the paragneiss and micaschists of the Southalpine Paleozoic basement, very close to its contact with Permian porphyries.

At Cortabbio-Primaluna, a small outcrop of barite was discovered in 1860. Open stope underground exploitation of the barite ore, that started soon after, lasted till June 2012. The surviving of the mining activity till very recent, a very rare occurrence in the Alps, allowed to very efficiently set up a plan for re-opening as a geotouristic site of a mine that did not undergo the degradation typical of long time abandoned sites

The location within the Northern Grigna Natural Park and the collaboration with several more public Authorities, among which the Primaluna Municipality and the Lombardy Region, together with the geotouristic private enterprise "Miniere Turistiche del Lago di Como", favoured the works for securing and opening to the public. Since its opening, in August 2015, the mine has seen an increasing number of visitors and, as far, is the only geotouristic barite mine in Italy.

The presence of a never abandoned, perfectly preserved mine offers visitors the unique possibility to observe a state of the art mining site where mining operations stopped just few years ago. Recently Miniere Turistiche del Lago di Como, in collaboration with Primaluna Municipality and Legambiente, has started a pilot project for the preparation of routes especially designed for people with motion and visual disabilities. The routes, expanding both inside and outside the tunnels, are developed as sensorial and emotional experiences, that, involving different senses, enrich the visitor with a deeper insight into geoheritage. They are also supported by virtual reality routes that cover the portions of the mine not accessible to motion disabled visitors, while visual disabled visitors tour is integrated by specially designed sensorial experiences.

The opening to the public of the Cortabbio-Primaluna mine makes the Valsassina mining district, comprising also the geotouristic lead and zinc mines at Pian dei Resinelli, a valid candidate either for a UNESCO Geopark or a Mining Park application.

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