

Second Floor

The mine: spaces, men and techniques in the '20s



Past the tent an exhibition space that anticipates the short reconstruction of the mine and is characterized by a graphic panel divided into three parts. The first, entitled "Explosion", with drawings illustrating the main phase of the work of the miner, i.e. the mine explosion. The second, entitled "The spaces and the work" graphically reproduces the complex space of the mine, both on the surface and underground, allowing the visitor to identify the key areas through an electronic push-button panel: the different types of tunnels, the main work phases of and the work tools. The third part entitled "Wood coal and geological culture in the first half of the twentieth century", displays the different sizes of wood coal and their names. The text used throughout the panel is mostly of the miners themselves. Opposite to it, the exhibition space on

the right is characterized by a graphic panel with a monitor showing a continuous loop video on the life of a miner. Beside the monitor some written testimonies of the miners.

MINE WORK

I) Explosion

First part of the panel. The group of miners formed by three people (head miner, miner and charger) moving in the excavation of wood coal. The miners drill the bench to set the explosives. The head-miner places the dynamite and ignites the fuse. The three miners are waiting for the explosion. Then load a cart with the shattered wood coal: "the same ritual every day, always the same and always equally full of tension, fatigue, and danger. Interlocking. Dynamite. Ignition. Explosion." (M. Bonaccini, op. cit.).

II) Spaces and work

Second part of the panel. A great design depicts the spaces, the tools and the organization of the work in the mine. On the right the outside of the

mine with the weighbridge (it weighs the carts loaded with wood coal), workshops and railroad tracks. On the left the underground view of the mine. The mine is entered through the “decline”, the main tunnel that follows the vein in depth, with a 5% slope. The inclined shaft ends at the bottom with wider tunnels that serve as “deposit”. From the decline start the vertical shafts called “dirette a tetto” (literally “direct to the roof” because they are dug downwards into the so called roof of the ore body), from where horizontal tunnels are dug through the ore body. The area between them is called pillar. The pillar is divided with tunnels (called “rinquarti”), that run perpendicular to the horizontal tunnels. From the rinquarti, other tunnels are dug called “a colonna giusta”, from here more tunnels called “galleriozzi” or “nicchi” are dug. A 2 metres by 2 metres pillar is created and then extracted in order to form a first cultivation room. At this point the roof of the cultivation room is raised extracting the wood coal turning it into a “demolition room”. Once the first room is exhausted, the second pillar is extracted in order to create a second cultivation room, and so on. Under the last cultivation level



lies another level called “tracing level” under the latter a water reservoir in which the water drained from the mine is collected and pumped outside. The air required for the workers enters through the decline, flows through all the levels and is sucked out by an external extractor fan. In all mines there are at least two exits, because in case one should collapse the workers can exit through the other. The secondary exits are often used for air flow.

THE LIFE OF A MINER

A series of photographs, some touched up with special care to give depth and movement, showing the



route followed by a miner inside the mine, his work and a few moments of break for lunch. This way, one crosses all the spaces from the entrance to the mine through the decline, to the small tunnels where the team extracted wood coal, which was then loaded on the carts.

To learn more

M. Bonaccini, *Profumo di lignite*, Editori Del Grifo, Montepulciano 1995.
 G. Billi, *Racconti della miniera*, Arca Toscana, S. I. 2002.
 Comune di Cavriglia (a cura di), *Storia di una terra di minatori. Gli archivi raccontati*, Grafica 10, Città di Castello, 2009.
 G. Sacchetti, *Ligniti per la patria. Collaborazione, conflittualità, compromesso. Le relazioni sindacali nelle miniere del Valdarno superiore (1915-1958)*, Ediesse, Roma 2002.
 Società Mineraria del Valdarno, *Tecnologia mineraria, corso di qualificazione addestramento maestranze, 1942-1943*.