The "Löwengrube" - The End of a Legend or A (Un-) Modern Fairy-tale about a Mythical Mine

1. Necessary Historical Summary and Consideration of the Background

The Tyrolean "Inn"-valley, and especially the so-called "Unterland" (= nickname of the district around the cities of Schwaz and Kufstein) has been a scene of historical importance for which a lot of battles since the early 15th century have been fought. In this historical elucidation it is unimportant from the point of view, dealt with here, which way the battles were fought; whether with weapons, murder and manslaughter, or "only" partly with cunning, malicious and cut-throat financial methods. For the people in this area it did not matter, one kind of fight was as bad as the other.

What was the reason for all this? It was not that everybody wanted to own, the lovely piece of landscape between Kufstein/Wörgl (two beautiful cities at the river Inn) and Innsbruck (the capital city of Tyrol) but rather what was under the earth. Enormous amounts of mineral resources were embodied in the mountains which surround the "Inn"-valley, especially on the right hand side of the river. The richness of ore was already well known in Roman times. Already in the 3rd century the Roman legions and cohorts used the "Inn"-valley as a way through. At different places the Romans founded fortified camps and worked the rich ore deposits (known and documented at "Falkenstein" - a mountain south to the "Inn"-valley near Schwaz, a lovely city founded by miners). The exploitation of the ore deposits by prehistoric inhabitants of that area (quite similar to those of the "Kelchalpe" near Kitzbühel) is not (or not yet) proved. The evidence therefore is either buried by a mighty layer of rubble or was destroyed by the following mining works and is, as a matter of fact, lost forever. There is little documented about the mining works up to the 14th century, as it was all rather unimportant. From that point of time onwards there was a great increase of activity. Ore was worked everywhere and on a grand scale, for the gains were enormous. It is believed that it all began in this way: a bull butted its horns into the grass and exposed a mighty mineral vein. The extracted ore is the "fallow ore" ("Fahlerz" in German) or with the scientific name "Schwazit", consisting of 40 % copper, 6 % mercury and maximal 1 % silver. At some places there should have been silver deposits up to 4 % and even a proportion of gold in smaller amounts.

The Bavarians fought against the people from Salzburg and the Tyroleans in turn for the area because of the richness of the ore. In addition, there were big military expeditions by the French and Bavarians, who wanted to subdue the whole area to own the rich mineral veins. In the course of the 3rd "coalition war" (1805-1806) the openings of the most important mines all over Tyrol were filled up with rubble to disguise them. This was done before the invasion of the French and the "rapacious tribes" of Bavarians (according to the written history!), for there was no home front which could stop the invaders, except one, Andreas Hofer, who was successful at the beginning, but who could not bring about great change. By these means the immediate usurpation and especially the exploitation of the partially quite prosperous mines by the invaders was made more complicated or in certain cases made impossible. Reports (some written) about the richness of different mining areas, which are still passed on today, have their origin in those old times. Authors like Max von Isser, Robert von Srbik, Max Reichsritter von Wolfstrigl-Wolfskron and others refer to some of the old historical reports about the richness of the different mines.

The biggest exploiters of those historical times were the merchants from Augsburg of the Fugger family (even today they are considered honourable). They did not hesitate to include the "Pfennwert" (food as a part of the miner's salary) into account at far too high a price. Wherever they could, they tried to gain maximal profit to the detriment of others. There was a large number of children at work in the Fugger's mines, and these children died in large numbers through illness as a result of permanent undercooling, bad and too few rations and too much hard work during the 12-hour-shifts. The most important thing was that the Fuggers had the biggest profits; they set their conscience at rest by the "Fuggerei" in Augsburg (a social housing project), far away from the place of their scurrilous activities. This did not help those, who were exploited to the quick by them. In the historical reflection of today in schools the hint of the unscrupulous activities of the Fuggers in Tyrol is missing; on the contrary, they are presented as exemplary good people.

Together with the decline of the mining from the end of the 17th century many memories of the period grew bigger than they had really been; also, the trade-unions, which were established at many places as followers of the Fuggers, exhausted the last utilizable rests of ore in the mines up to the beginning of the 19th century. From that point of time onwards the mining of fallow ore was finished except for some insignificant rests; all former important ore mines were totally exhausted. Most of the mine openings went to ruin, partly because of atmospheric influences (damage done by frost), partly because of the usual rubble, in as much as the openings were not already closed when the mines were exhausted.

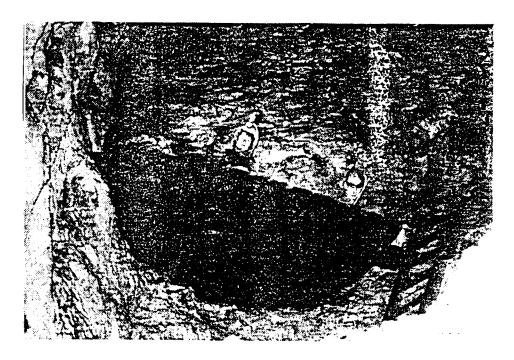


Photo 1: The once working area with an accessible platform with ladder, which shows few vestiges of ore, ahead the ashlar wall cavern

After this long preface about the different background information we come now to the intrinsic theme of this report:

2. Investigation of the Legend

The legend tells of a very rich mine of the area of the mining region "Großkogel" near Brixlegg, known by the name "Lebengrube" (= life mine) or, more recently, "Löwengrube" (= lion mine). Both names sound the same in the dialect of the population in this region. After the opening of the mine deteriorated

and was buried by a mighty layer of rubble, access became impossible. I knew where the mine's entrance was situated to within 1 to 2 metres (east-west-direction); the backs were buried by a 2 metres thick layer of rubble. Profes-



Photo 2: Transverse smaller tunnel near the entrance; walls with wonderful hand-worked surface

sional mineral searchers and others have been trying to get into the mythical mine in order to exploit the supposed richness of minerals for years. None of those stonebreakers succeeded. My friend Robert S., my family and I tried to reach the "Löwengrube" from the inside by investigating the neighbouring "Schmiedenzeche" (= smith mine) metre by metre. In the latter we investigated systematically all tunnels and stalls leading towards the "Löwengrube" or surveyed the places we reached respectively and mapped our advances. We spiked "Spit" by "Spit" ("Spits" are dowels used in caving) over polished vertical surfaces ("Harnischflächen" in German) 12 metres higher and small digged up passages to stalls, which had become delapidated and which led us towards the "Löwengrube". On the outside we worked with a theodolite from the Armed Forces (from a World-War-2 anti-aircraft-gun) and measured the latitude and altitude differences between the two openings. Finally we were about 5 metres higher than the bottom of the "Löwengrube" and 10 metres to the east of it. No connection, not even a small slip through to the legendary mine "Löwengrube" was found. It was almost unbelievable. In return however we

found other connections, which rendered possible a crossing through the whole "Großkogel" and "Kleinkogel" with an altitude difference of 300 metres and a latitude difference of 2 kilometres (all inside the mountain!). Still no access to the "Löwengrube" could be found. Since then, somebody succeeded in exposing the entry to the entrance tunnel. I got this information from two young men (Klaus-Peter M. and Thilo A.), who have occupied themselves with the history of the mines in the area for some years; whereby they descended into the old mines (that means the tunnels and the working areas belonging to the mines) and provided themselves with minerals, photos and self-mapped plans. They reported a manhole several metres deep in the scree, which leads to a workingcleft (partly natural-cleft), which has got a connection to the tunnel. The entrance of the "Löwengrube" is still blocked up to today. A topical mine map and the photos, which had been shown to me so far, led very fast to an air of disillusionment concerning the great "expectations" of the "Löwengrube". This was intensified by a joint descent of the mine the following weekend (88-10-22). In a length of the tunnel of altogether about 450 metres only 4 workings with minor ore deposits could be found. Compared with the size of the workings the profit can only have been minor, the costs must have been excessively high compared with the gain. The mineral collector, who had opened this tunnel, hoping to find "great treasures", working for quite a few weeks, had left hardly any marks. So, this tunnel can seemingly also be classified for mineral' collectors as the most uninteresting one in the whole mining area. Mineral richness and "superb specimen" - nothing of the kind, that the legend and the literature promised (see also the illustration with the reproduction of a page of a book). Well, there seemed to be nothing "true about" the legend of the legendarily rich "Löwengrube". Probably this fairy-tale about this very rich mine had been made up only for the purpose of decoying the French and Bavarians away from the very rich mines at that time and also to make them search for this mine. The last person to leave the mine has written the number "1819" with a chip of pine-wood. Well, the legend has been kept for another 170 years, before it had been disproved by a lot of work and costs (people have been trying to dig it up for many generations) as wrong and unjustified. Still we had fun.

146 mit den Seitenflüchen der sechsseiligen Baule an den KALK, Randecken abgestumpft; die Scheitel fach - dreifitchig-(kohlensaurer.) ragespitzt. Die Skalenoeder mit gemeinschaftlicher Hauptschre als Zwillinge. Beide Individues um 60 Grade Syn: Rhomboodrisches Kalkhaloid, M., Kalnif, Kohlengegen einander verdreht. saurer Kalk. Calca carbonala. Sehr vollkommen spaltbar nach den Flächen der Kristellsystem : Aesagonal. Kernform, Bruch: muschelig. Sprode. Durchsichtig bis Kernform: slumpfes Rhombosder. durchscheinend. Ausgezeichnete doppelte Strahlenbro-H.-3,0. G.-2,5-2,8. chung. Glas-, auf den Blätterdurchgungen Perimutterglanz. Wasserhell, weiss, gelblichweiss, auch von Kupfer-Arten: 1, Kalkepalk. 2. faseriger-, 8. körniger. exyden blau, gran, und von Eisenoxyden braun gelarbt. 4. dichter Kalkelein. (Hicker der opalisirende Muschelmarmor und der lithographi-eche Blein.) S. Rogenstein. G. Kalktuff. Strich : weles. Mit Sauren brausend. Diese schonen weissen, ins Spargelgrane zichenden 7. Kreide, B. Bergmilch. 9. Stinkelein. 10. Drusen geben den englischen nichts nach; es ist nur erdiger, gemeiner und verhärteter Alergel. Gu bedauern, dass dieses ausgezeichnete Vorkommen, welches auch ofters wunderschon und ahnlich dem El-I. Kalkspath. (Doppelspath.) baner Eisenglanze mit gelben, rothen, violetten und grunen Farben angelaufen war, als eine Augenweide Der Kalkspalk ist in den Kalkgebirgen Tirols eben nicht mehr zu haben ist, da diese Grube verlassen so haung, als such in fast jeder andern Gebirgs- und Gangart yorkommend, dass unzählige Fundorte hieves wurde. Mit diesem Kalkspathe brachen zugleich die ohne besonderes Interesso aufgeführt werden mussten: hristallisirten prachtvollen Fahlerze ein. Auch andere Kupferoxyde begleiteten sie nebst schaligem Baryte. daber hielt man es für genügend, hier bloss die wichtigeren Erscheinungen dieses Fossils zu beschreiben. Unter diesen hat man daher folgende gewählt: . 2. Enneberg, zu Colfosc, und bei St. Cassian. 1. Brixlek, an Bergbaue Grosskoget, die Lo-Skalenoeder von bedeutender Grosse am erstgenannten, wengrube. kleinere am zweiten Fundorte. Letztere im mergeligen Kristalle: Skalenoeder von 1/2 bls i Zoll Lange, par-Kalketeine. thicenweise Drusenhohlen auskleidend. Das Skalenoeder 10*

Illustration: An outline of the "Löwengrube" (adapted from: see /4/)

Nevertheless, we did not have fun when we discovered that, as soon as the mine "Löwengrube" and its tunnel were accessible, somebody has examined everything closely with a metal detector. He must have found something in at least four places. These prodigies are now in all probability lost for the "Bergwerksmuseum Brixlegg" (= mining museum, which is going to be built). The "Bergwerksund Museumsverein Brixlegg" (= mining' and museum's union, which my family and myself are members) is bearing the costs for the museum.

The underground mine "Löwengrube" has more to offer to someone who is interested in mining history, as can be learnt from the following description.

Note: It should be mentioned here as well that access to the "Löwengrube" was already dangerous in late autumn 1988 and would not be possible at present.

3. A short Description of the Mine

See also the attached plan of the mine.

You clamber through the cleft, which extends itself close to the tunnel, to its other end on that floor. Through a point of breakthrough, which looks like a window (quite similar to the cave "Polterschacht" at the mountain "Rauschberg" near Ruhpolding in the south of Bavaria - this time only in the other direction, from the "cave" to the mine) you get to the main tunnel, which is rough-hewed by scaring. After passing the sharp bend the tunnel is wide and

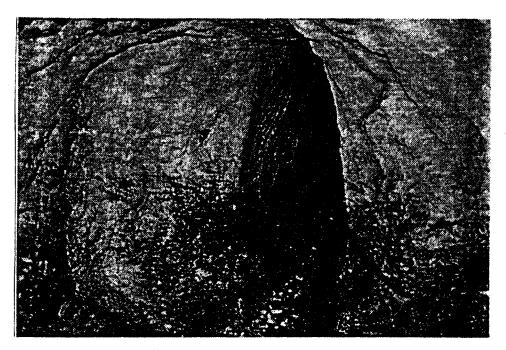


Photo 3: View from blasted tunnel to manual worked tunnel (to mouth hole)

blasted (borehole diameter of the blasthole about 20 millimetres, black-powder explosions). Altogether three water-filled areas of working of about 3 to 4 metres depth exist. A small hall is partly filled with rubble behind an ashlar wall, built without mortar; above the wall there is in addition a small cavern with a working area (above a still existing and also perfectly accessible platform with a ladder, which stands in front of it and is in good condition). The working area shows few vestiges of ore. On the top of the ashlar wall we discovered a small wooden ore-trough in the rubble (unfortunately it was not transportable, because the wood was totally wet). The end of the tunnel forward thrust is not accessible for it was seemingly used as a "dead man" (= one-to-one translation from German, it means a dead end, filled up with rubble). A little bit behind the beginning of the blasted part of the tunnel the "Löwengrube" underpasses the "Grünwiesbach" (a small brooklet with its groove) and close in front of it the "Schieferstollen" ("schist" mine), which is placed above. At no place in the "Löwengrube" were encountered any big ore deposits. In this way the legend is disproved as sheer phantasy. It should be mentioned as an interesting fact that in the "Schieferstollen" a schist stratum was encountered (where else should the name come from?). Referring to different books about stratification science, schist contains sometimes gold; was the fairy-tale of the "Löwengrube" perhaps thought out as a red-herring because of this? I think, this can no longer be proved today.

One thing is sure, anyway: Due to the work to accomplish the forward thrust in what was mostly manual work using only iron tool and striking hammer, honour should be accorded to them. Therefore, but not only for this reason, a "mining good luck" - or in German "GLÜCK AUF" - to the unknown workers of the mine in remembrance and to all those who are interested in mining.

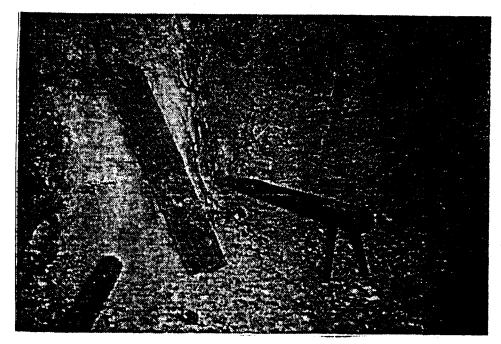
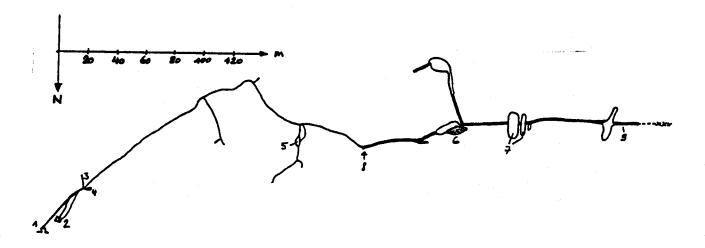


Photo 4: Working bench of a miner very well maintained

4. Map of the mine "Lowengrube"



Explanations to the plan of the mine:

- 1: filled up mouth hole of the mine "Löwengrube"
- 2: natural/working cleft as alternative possibility of access
- 3: unfinished transverse smaller tunnel (see
 photo 2)
- 4: mine's water flowing off cleft
- 5: submerged working area (depth of 4 metres)
- 6: ashlar wall, above working platform (see photo 1)
- 7: submerged working area (depth of 3 metres)
- 8: from mouth hole up to here manual worked tunnel, onwards blasted tunnel (see photo 3)
- 9: place of inscription "1819" (see photo 5)

Illustration: Plan of the mine "Löwengrube" in the mining area "Großkogel"

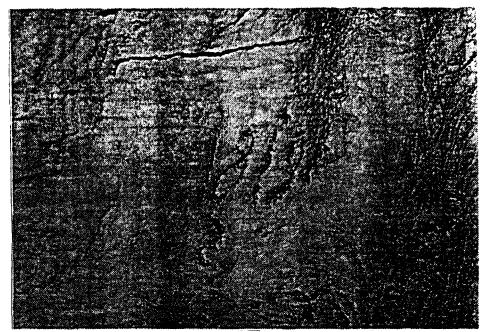


Photo 5: The year number "1819" drawn on the wall of the tunnel with a chip of pine-wood (charcoal) was dated most probably by the last miner's before they all left the mine and before it was finally closed down.

Bibliography (for interested parties for deeper understanding):

- /1/ Max von Isser: Die Montanwerke und Schurfbaue Tirols der Vergangenheit und Gegenwart (Berg- und Hüttenmännisches Jahrbuch 1888)
- /2/ Robert von Srbik, Dr.: Bergbau in Tirol und Vorarlberg in Vergangenheit und Gegenwart (1929)
- /3/ Max Reichsritter von Wolfstrigl-Wolfskron: Die Tiroler Erzbergbaue von 1301 bis 1665 (1903)
- /4/ L. Liebener, J. Vorhauser: Die Mineralien Tirols nach ihren eigenthümlichen Vorkommen in den verschiedenen Fundorten beschrieben (1852)
- /5/ Georg Mutschlechner, Dr.: Erzbergbaue und Bergwesen im Berggericht Rattenberg (1984)
- /6/ Stadtbuch Schwaz (1986)
- /7/ Stadtbuch Kitzbühel, Band 2 (1968)
- /8/ Brixlegg-Buch (1988) (added to this list after finishing the article)

Translated from German by Renate Brack, support given by Richard Hughes and Christian Brack. Article published originally in the "Schlaz" No. 57. Schlaz is the official periodical of the "Verein für Höhlenkunde in München e.V." (= society for speleological science in Munich, registered society).

The author is member in the following societies:

Verein für Höhlenkunde in München e.V. (W. Germany) Tiroler Bergbau- und Hüttenmuseumsverein in Brixlegg e.V. (Austria) Höhlenverein Kubach e.V. (W. Germany)