

Prehistoric Mining in the Interior Tsantsabane and others

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Tsantsabane / Sibilong / Blinkklipkop / Gatkoppies

- The Korana, who visited the Blinkklipkop Mine regularly, called it the *Goaypa* (Blinkklip River).
- The well-known specularite mines of Tsantsabane/Blinkklipkop/Gatkoppies and Doornfontein 1 (Lichtenstein 1815; Dunn 1931; Campbell 1822: Vol. II; Burchell 1953) near Postmasburg that were quarried extensively over a long period of time have been archaeologically investigated (Beaumont & Boshier 1974; Beaumont & Thackeray 1981; Thackeray et al. 1983; Beaumont & Morris 1990; Mitchell 2002).

Tsantsabane

The Tsantsabane Mine constitutes perhaps the most important prehistoric specularite mine in southern Africa. PJ Truter, Dr William Somerville and Petrus Borchers were taken to the cave in 1801. This locality was subsequently visited by several well-known travellers and missionaries, including William Burchell in 1812 and John Campbell in 1813.



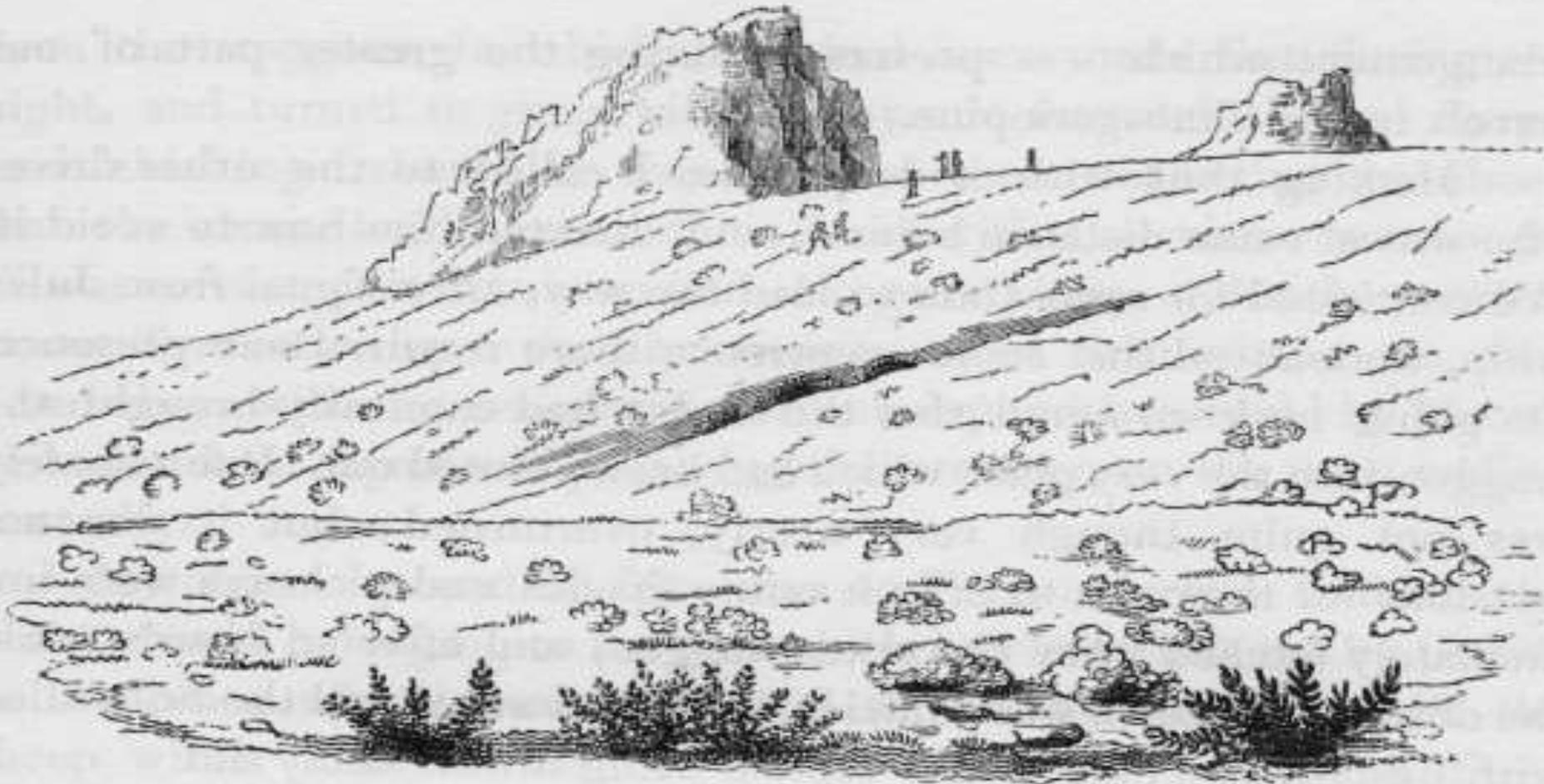
“Hither all the surrounding nations repair for a supply of that ornamental and, in their eyes, valuable substance. It constitutes in some degree an article of barter with the more distant tribes, and even among themselves, so that the use of it extends over at least five degrees of latitude, or among every tribe which I have visited”

Burchell 1812 (1953, Vol. II: 182)

“Blink Mountain is a kind of Mecca to the nations around, who are constantly making pilgrimages to it, to obtain fresh supplies of the blue shining powder and the red stone”

Campbell 1813 (1815:113)

Burchell's sketch 1813: Tsantsabane



Tsantsabane



Tsantsabane



“//hára sparkles; therefore, our heads shimmer, on account of it; while they feel that they sparkle, they shimmer. Therefore the Bushmen are wont to say, when the old women are talking there: ‘That man, he is a handsome young man, on account of his head, which is surpassingly beautiful with the //hára’s blackness’.”

Bleek & Lloyd (1911:377-9)

“The mode of preparation and using it is simply grinding it together with grease, and smearing it generally over the body, but chiefly on the head, and the hair is often so much loaded and clotted with an accumulation of it, that the clots exhibit the appearances of lumps of mineral.

A Bachapin whose head is thus covered, considers himself as most admirably adorned, and in full dress....”

(Burchell 1822)



Tsantsabane:

- Estimated 80 000 tonnes of specularite removed.
- Great cave-like working 100 yards in length...from the main working a number of tortuous inclined tunnels radiate, the bottom of the working resembling a huge rabbit warren. These tunnels are said to extend to a depth of nearly 200 feet measured in the incline, but as the lower part of the working has fallen in, it is impossible to check the figures ...
Wagner (1928)

Tsantsabane: History

- Excavated in 1980s by Beaumont & the Thackerays and dated to at least 1200 BP.
- Provided one of the earliest dates for ceramics, goats and sheep in the Northern Cape.
- Extensively mined from the Stone Age to historical times by Bushmen, Griqua and the Tswana .

Prehistoric mine localities in the region

- Tsantsabane/Blinkklipkop, on the Postmasburg Townlands, 5 km north-east of Postmasburg: underground workings and pits.
- Doornfontein 12 km north-north-west of Postmasburg: underground workings and pits.
- Paling 16 km north-north-west of Postmasburg: underground workings and pits.
- Gloucester 13.24 km north of Postmasburg: pits.
- Mount Huxley, 15.30 km north of Postmasburg: pits.
- Kapsteviel 10 km west of Postmasburg: open working.
- Nauga near the Orange River: underground workings and pits.

Unfortunately many ancient mining localities have been completely destroyed by modern mining.

Prehistoric Mining

- Specular haematite was extensively mined during the Middle Stone Age by at least 40 000 BP at Ngwenya, Swaziland.
- Utilized and unmodified nodules of haematite and specular haematite occur in virtually all Stone Age assemblages. Ochre is especially prevalent in deposits dating to more than 250 000 years ago.
- Pigments were also used widely in the production of rock paintings, in burials and other symbolic applications, including healing practices. In one /Xam account specularite, being a powerful substance, was used to draw a baboon (Hollmann 2005:8).

Prehistoric Mining

- Mining 'is the 'removal of minerals from their natural geological environment and their transport to the point of processing or use'(Hammel et al. 2000:49). Mining accordingly provided raw materials to prehistoric and historical societies for many thousands of years.

- Fe (Iron)
- Cu (Copper)
- Au (Gold)
- Sn (Tin)
- C (Graphite)
- NaCl (Salt)
- Clays



Prehistoric Mining



Mining process:



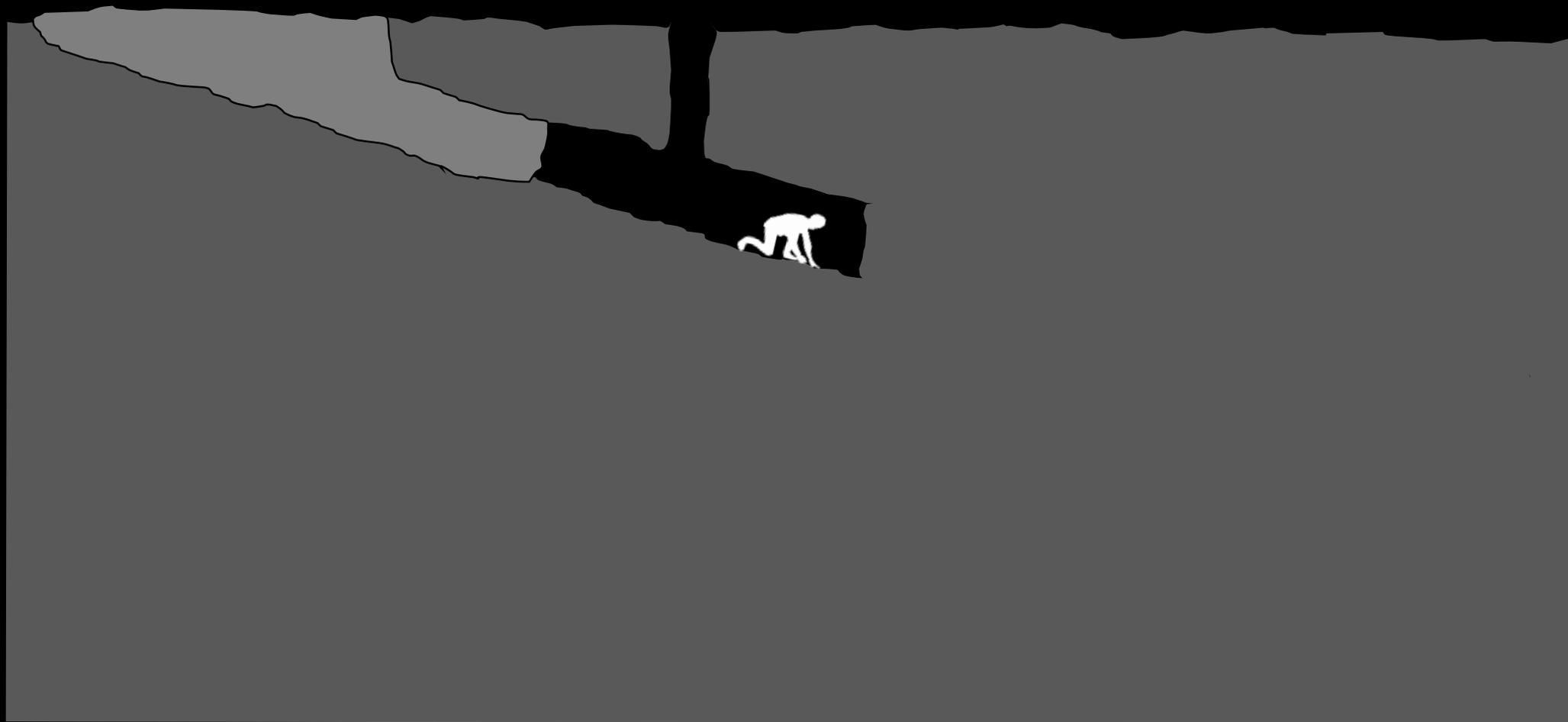
Mining process: Open-cast following seam or vein



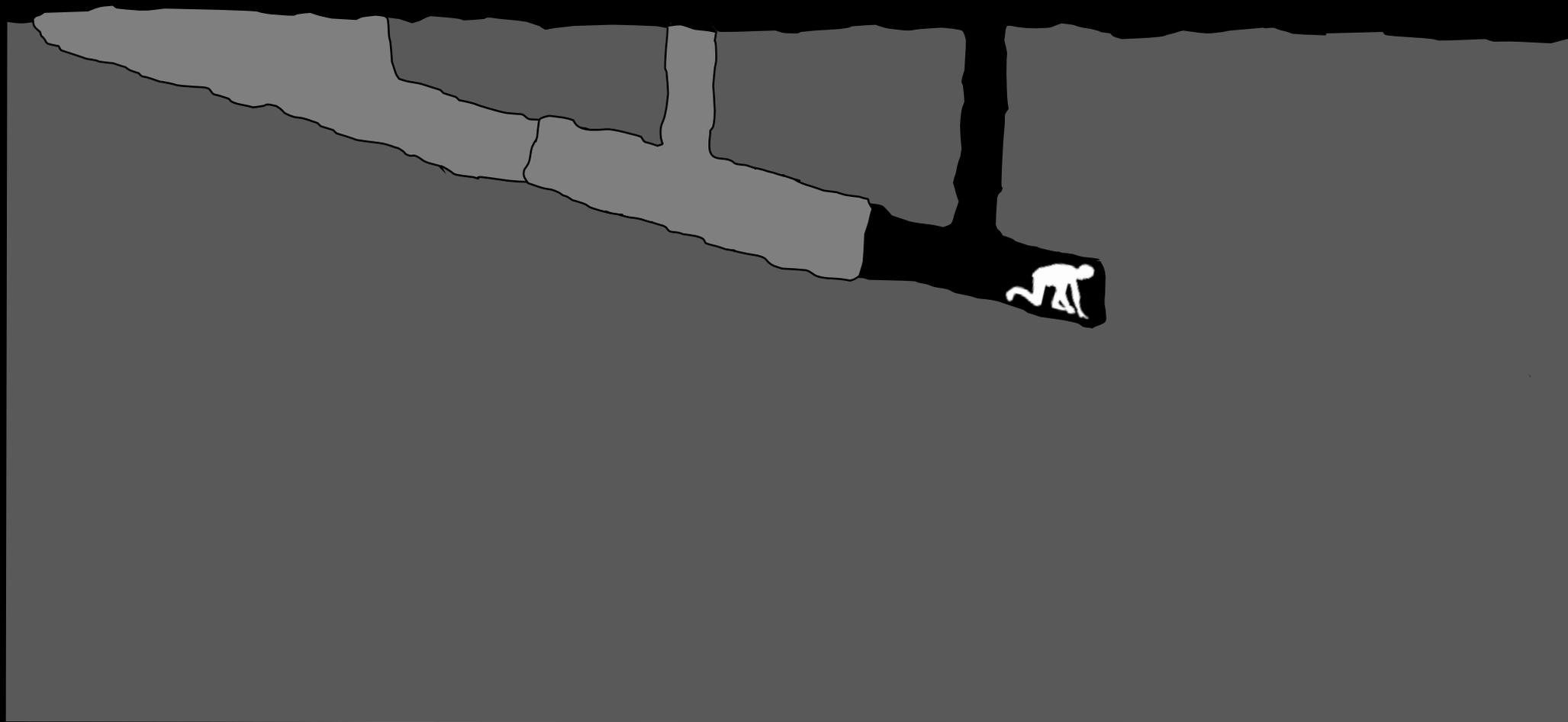
Mining process: Open-cast following seam or vein



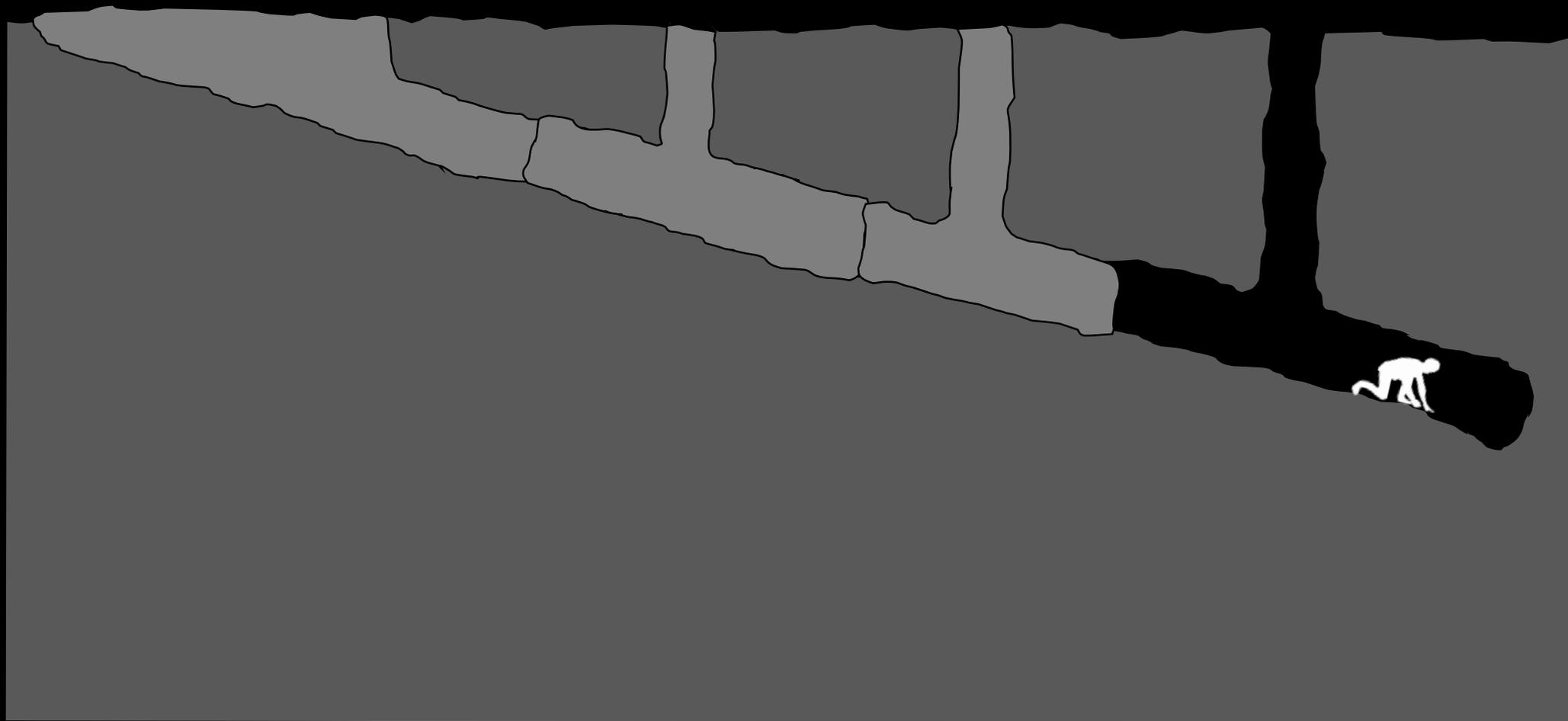
Mining process: Open-cast developing into incline shaft



Mining process: Underground with backfilling of stopes



Mining process: Underground with backfilling of stopes



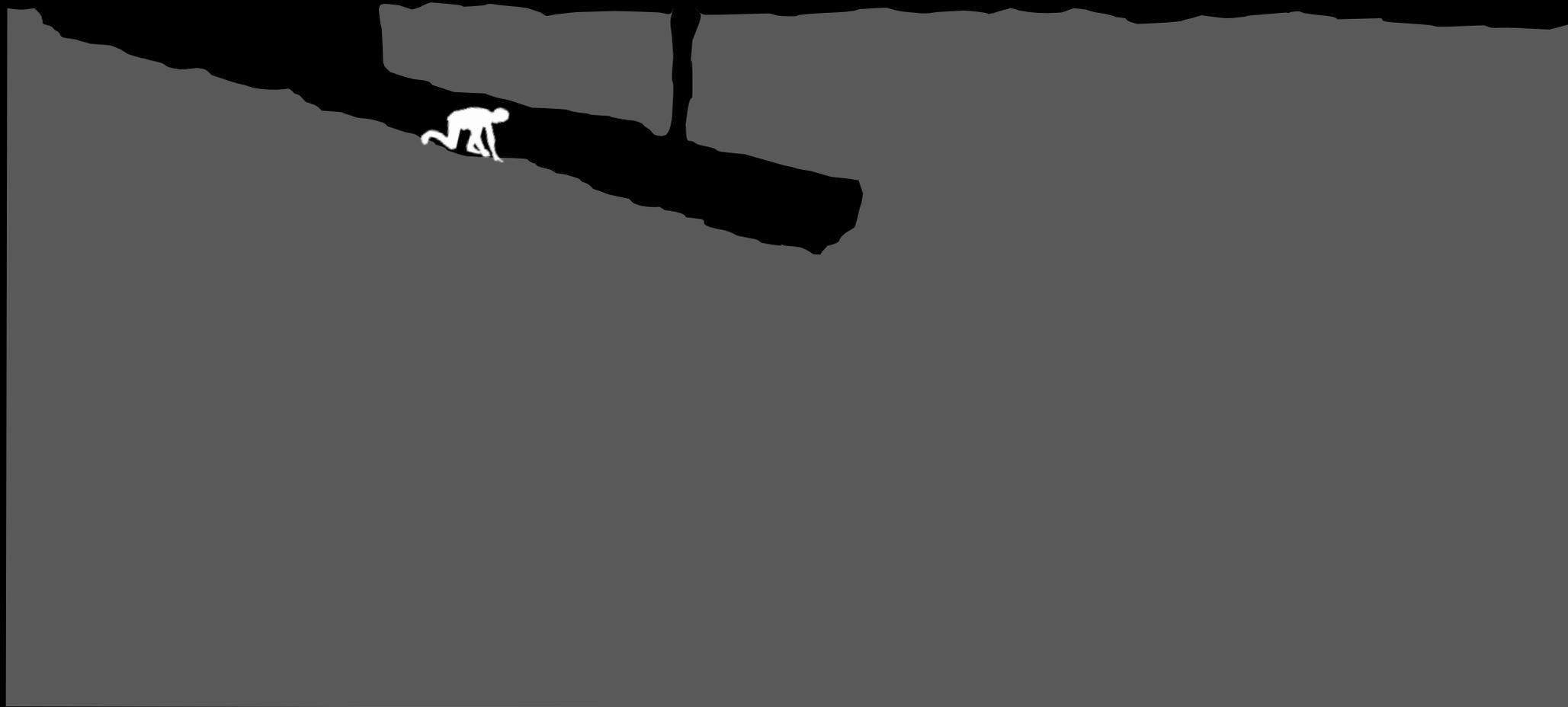
Mining process: Underground with backfilling of stopes



Mining process: Underground with backfilling of stopes



Mining process: Underground incline shafts



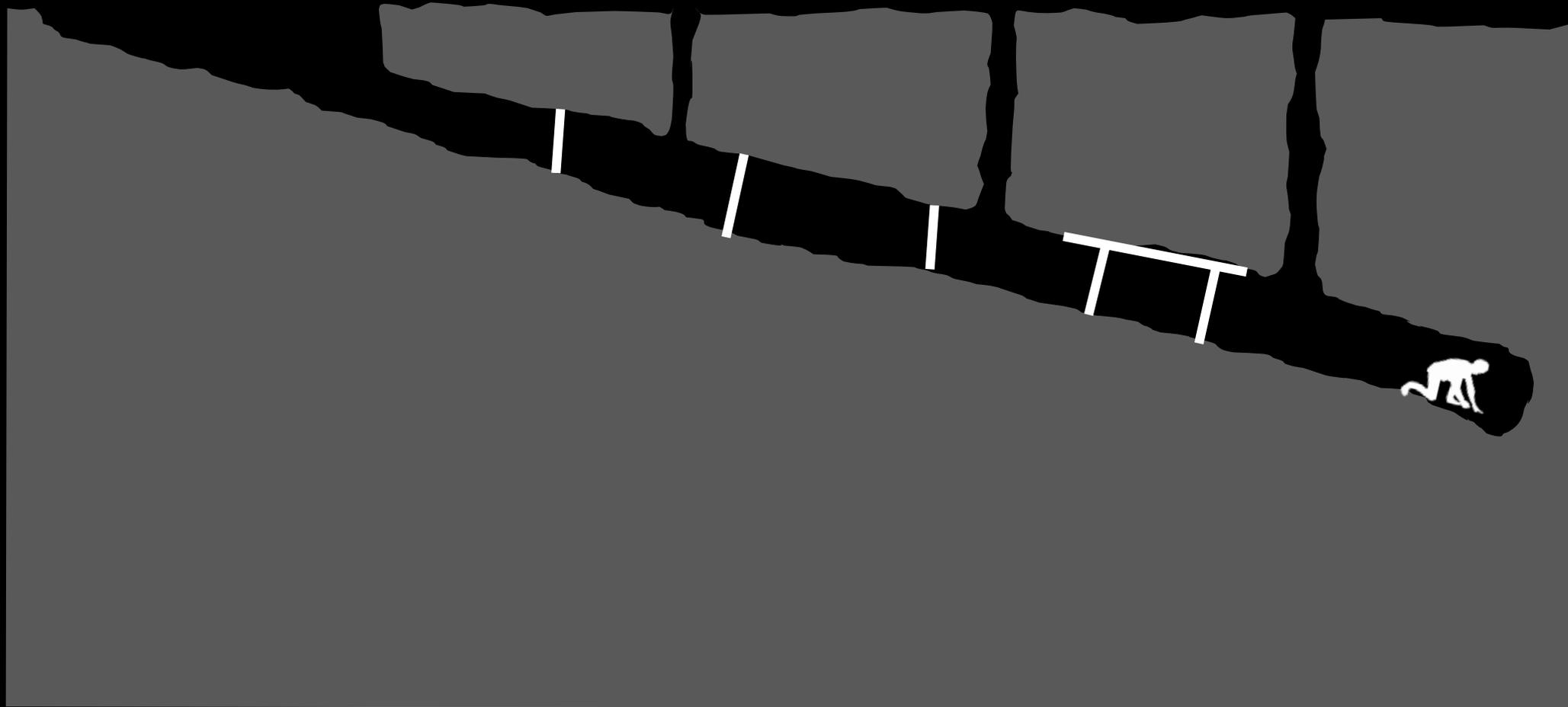
Mining process: Underground incline shafts



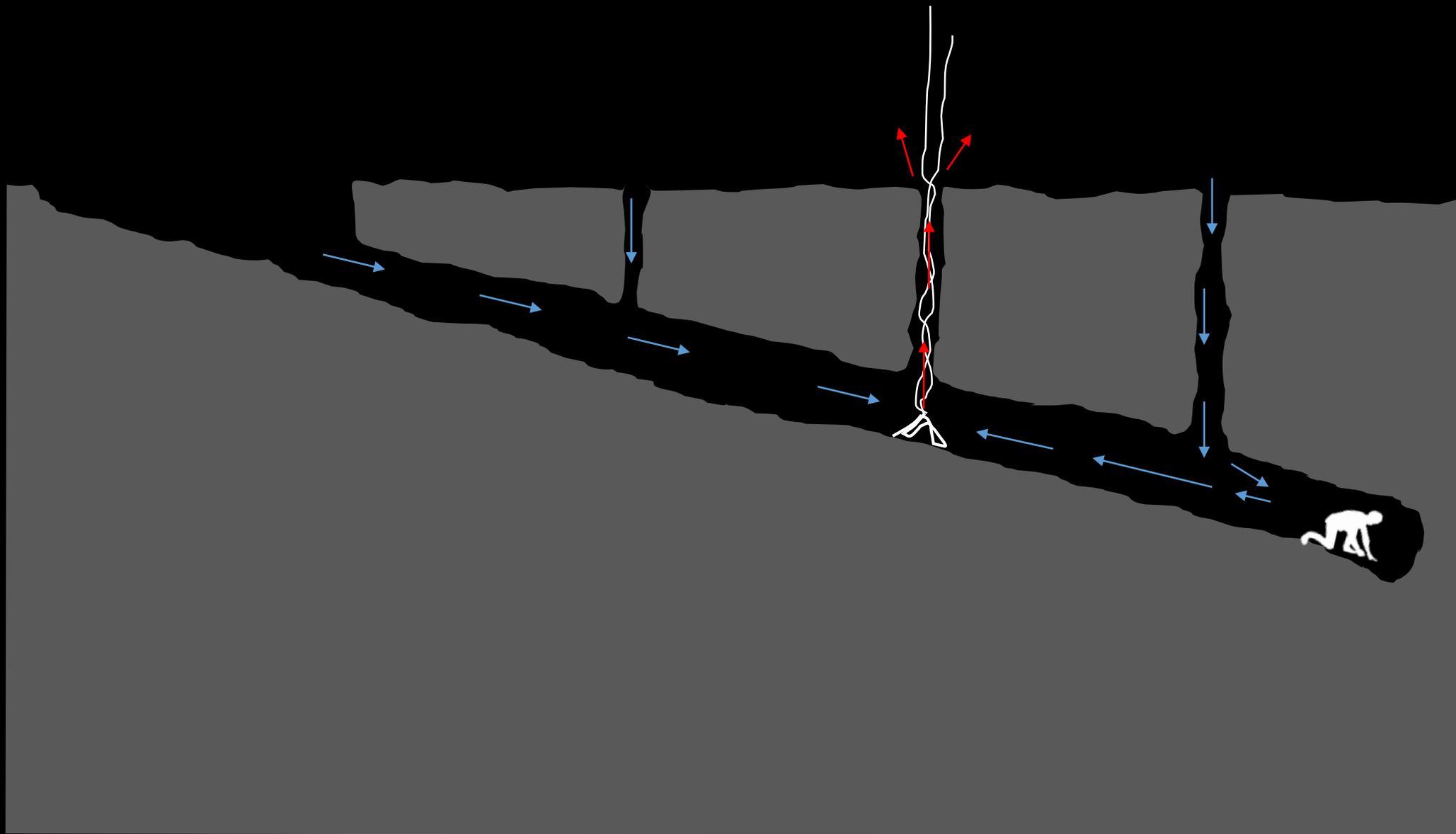
Mining process: Underground incline shafts



Mining process: Underground incline shafts



Mining process: props and supports - mostly wood some rock packing



Mining process: Underground air circulation



Mining process: Very limited options for dealing with the water table

Prehistoric Mining



Prehistoric Mining



Prehistoric Mining



Prehistoric Mining



Pre-colonial Mining Tools

- Stone hammers/pounders and chisels were used to break rock and split ores. Stone hammers were also used with iron gads to split ore.
- Firesetting: Rock cracking by heating and then cooling rapidly with water.



Questions?

