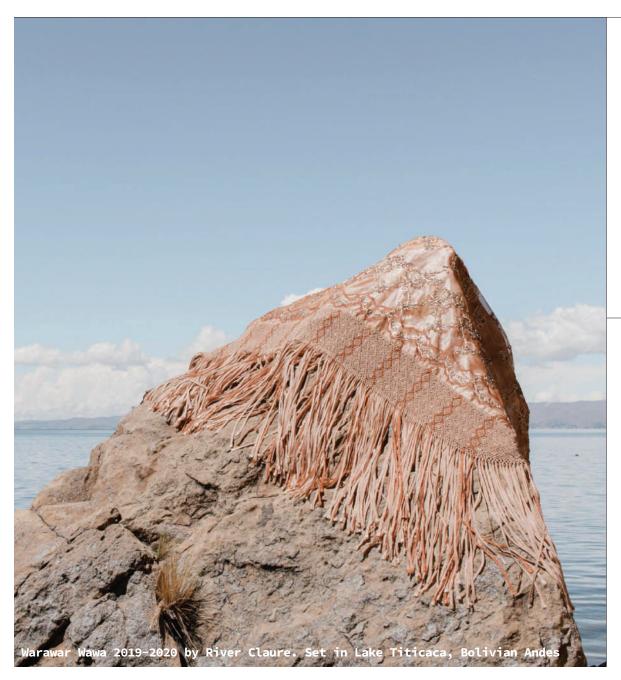
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Metal Narratives

Research Booklet

Research

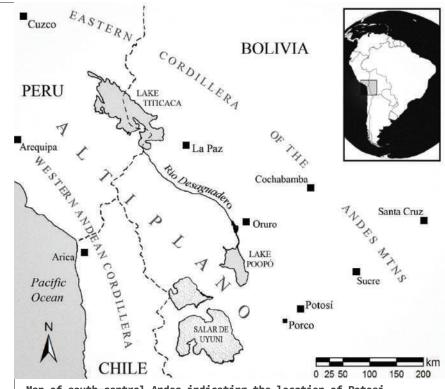




Historical Analysis Boivian Heritage Material Archives

How can physical craft objects uncover material histories?





Map of south-central Andes indicating the location of Potosi, Bolivia

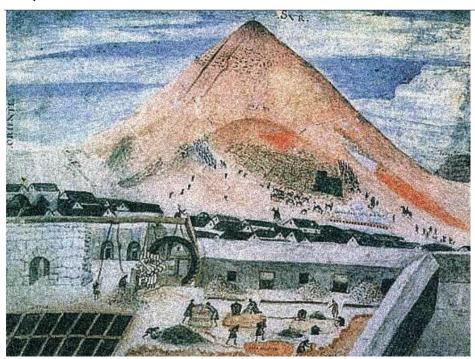
South American Andean Region, wealthy in metals in native and mined states. Metals range from copper, silver, zinc, lead, etc.

Cerros (Mountains) for Metal Mining around Potosi, Bolivia (Photo by Brendan J.M. Weaver, 2006)

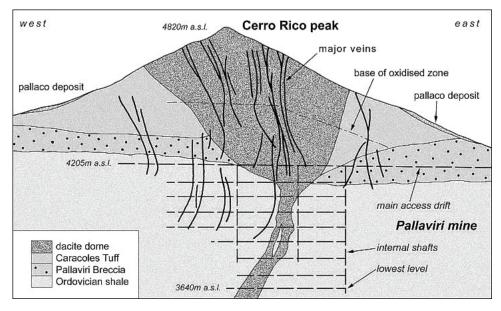


Metal-rich Andes

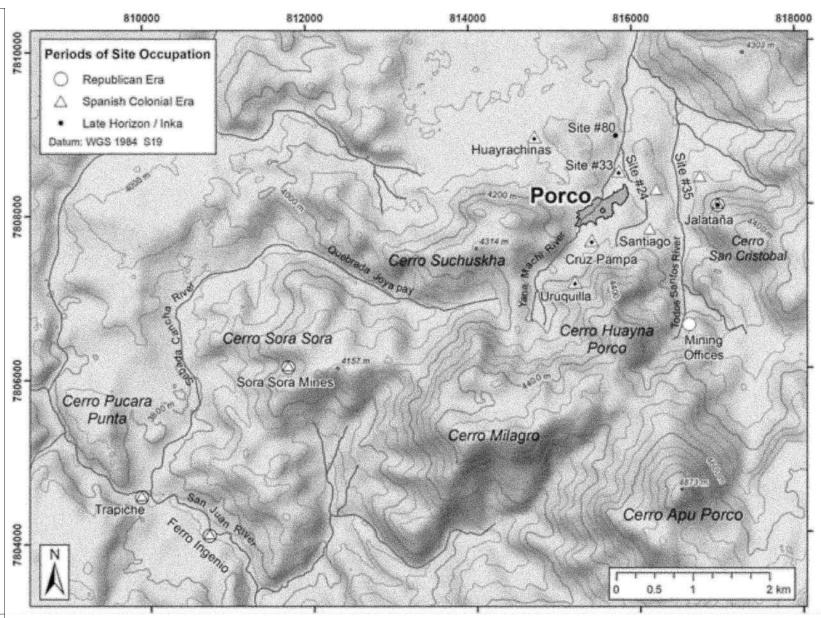
Potosi was the wealthiest city in the New World through riches of the spanish mining from mountain "Cerro Rico"



Cerro Rico & Potosi City showing Mining Operations during Spanish Era in 16th century. By Anonymous Painter, 18th century. Casa de a Moneda, Bolivia



Mine veins of Cerro Rico, that in 2024 account for 113 large mining veins, structurally causing the Cerro Rico to fall in itself. By Brendan J. Weaver



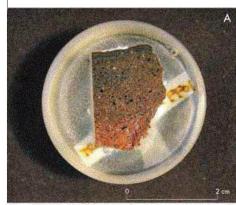
Map of Porco (near Potosi) and it's Surrounding Archeological & Mine Sites. Divided into periods of late Inca, Spanish Colonial Era, to Republican Era. By Brendan J. Weaver

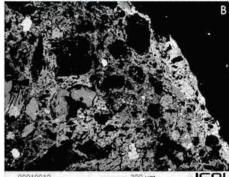
Archive

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Native Copper.
Pre-columbian.

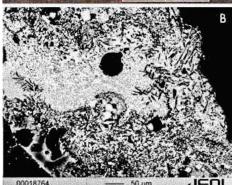
Occurs naturally as mineral through large Andean Deposits. Where earliest copper work is dated in 1432 BCE together with smelting copper technologies.

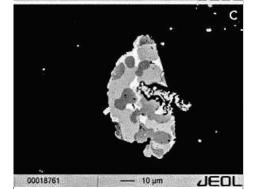




Sample mounted lead-bearing slag. (Photos by P. Tropper)





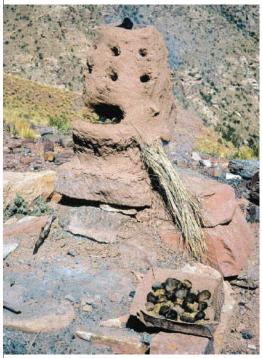


Sample mounted lead-rich slag with droplets of metal. Copper (light grey) iron (dark grey) tin (interwoven). Photos by P. Tropper)

Silver, Zinc, Iron, Tin. Spanish Era.

Spanish conquest of Bolivia also brought technologies for mining andean mountains. Where metals, were also processed n siver mints, making Potosi one of the wealthiest cities in the New World of the 16th century.

Traditional Smelting of the Andes



Modern Huayrachina used by Carlos Cuiza forlead metal.



Possible Tocochimbo located in excavation of an early colonial structure.



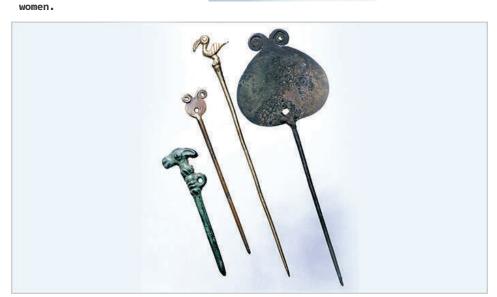
Modern cupellation hearth used by Carlos Cuiza to refine silver.

Traditional Smelting techniques native to Andean Region that would be located in homes. Before Spanish silver ore refinement through mercury algmation in 1572 through advanced technologies.





Metal, was a privledged means of indicating status, communication hierarchies, ideologies & rituals. Similarly to that of textiles.



Hair Accessories for Females of Pre-precolumbian society.

Hair, metal, & textiles main forms of indicating staus for

> Copper used in ornaments & adornment, valued as status objects and for ceremonial practices from rituals to burials. Most elaborate metallurgical styles and technologies were reserved for the production of ornaments on the body.



Pleated Cherus (Vessel) not used for drinking but as a wealth object

Half-Moon Ceremonial Knife



Copper Masks used for Burial Ceremony





Bell Shapes for Ceremonies.

Metallurgists prived the governing classes through material manidestations that perpetuated their dominant place in society.





Adornement from Earrings, Arm Cuffs, used by men and women.





"Mine that Eats Men"



Indigenous people working in the silver mine at Potosí, New Spain (present day Bolivia). Line Engraving by Theodor De Bry, 1590. Depicting the Exploitation of People During Spanish Era.

Research





Depiction of The Virgin from Spanish Christianity as Cerro Rico of Potosi, with subtle hints and motifs of pre/columbian belief system of La Pachamama (Mother Earth). By Anonymous Painter, 18th century.

Christianity of the Spanish and native Bolivan belief systems of Mother Earth, subtlely merge through Mining & Wealth Imageries.



Crossovers

Christianity of the Spanish and native Bolivan belief systems of Mother Earth, subtlely merge through Mining & Wealth Imageries.



Warawara. 2019-2020. Photograph by River Claure. Modern Take of crossover. Pachamama and Cerro Rico still very active pillars of society and culture in Bolivia to this day.

Research









Traditional Bull-horn used in Pre-columbian rituals.



Silver Ornamented Bull Horn for Spanish use in ceremonies. 17th century. Casa de La Moneda Potosi, Bolivia.

Objects in natural forms used for ceremonial purpose, were recreated in more elaborate forms of metal processing techniques, to exaggerate displays of wealth. Advancements in any objects created in silver, was primarily due to the technology brought to Potosi, through the Spanish Empire & Mint.

Crossovers

Siver & Zinc used for status objects as well as Wearable Armour for Ceremonial Occasions. Christian motifs & symbols are explicit in engravings. Most elaborate technologies were used in Spanish Era, such as metal spinning.







"El Pavo" Vessel.



Virgin Mary Triptych.



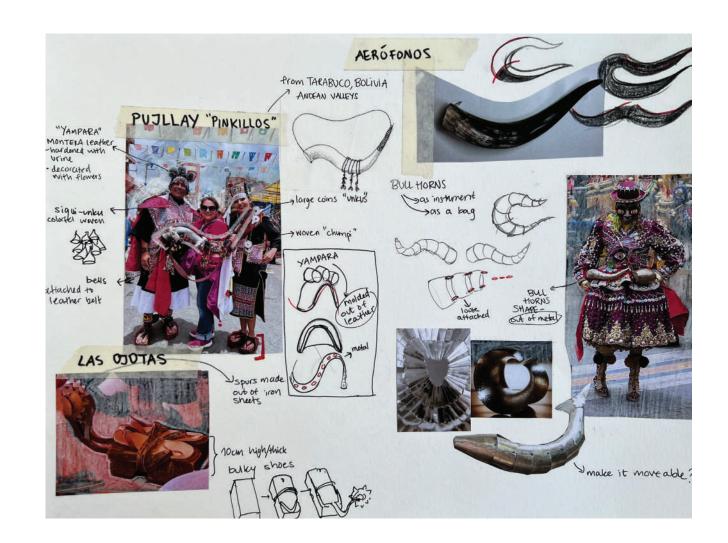
Folkloric Metal Mask of the Devil Deity.

Only subtle hints of pre-columbian zoomorphic motifs created by native Bolivian craftsmen, as they were banned from expressing bold claims of their own culture as minorities to the Spanish.

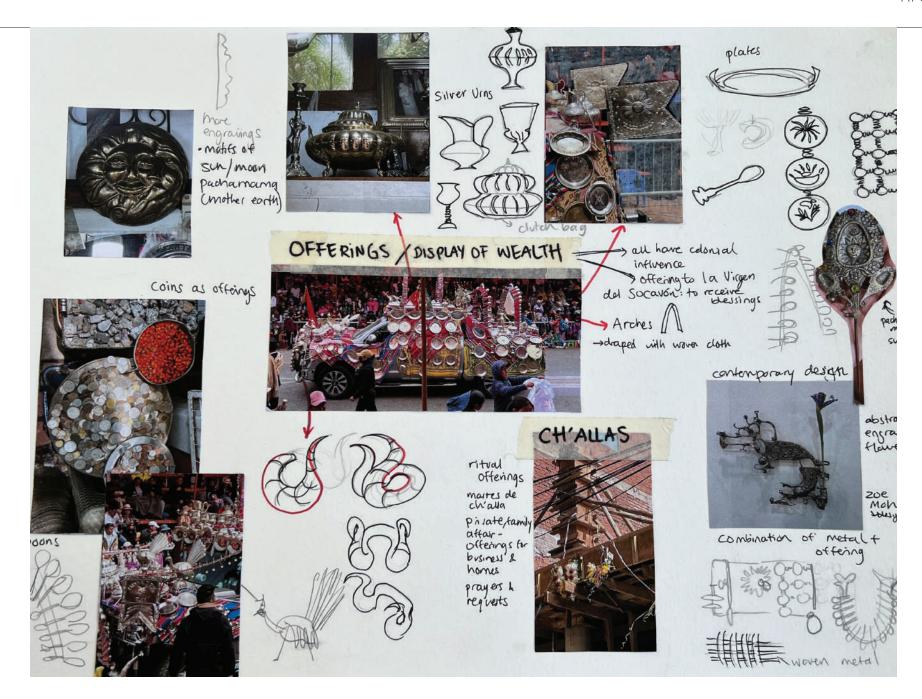


Dance of the Miners. Metal masks, instruments.

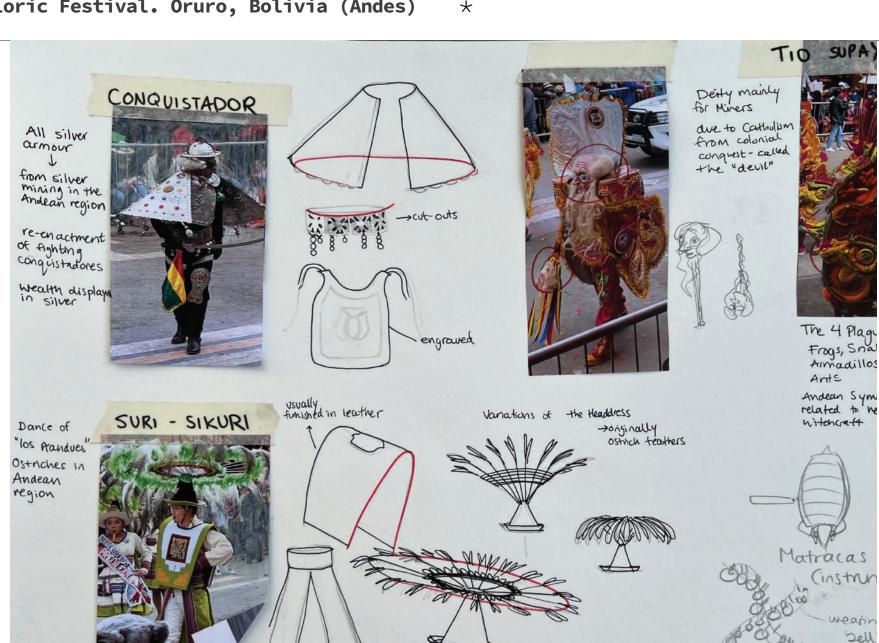
Folkoric Festival exaggerate their forms of expressing wealth through metal masks, shoes, instruments, embellishments, bags and more adornement. Emphasizing the deep rooted value system with metals.



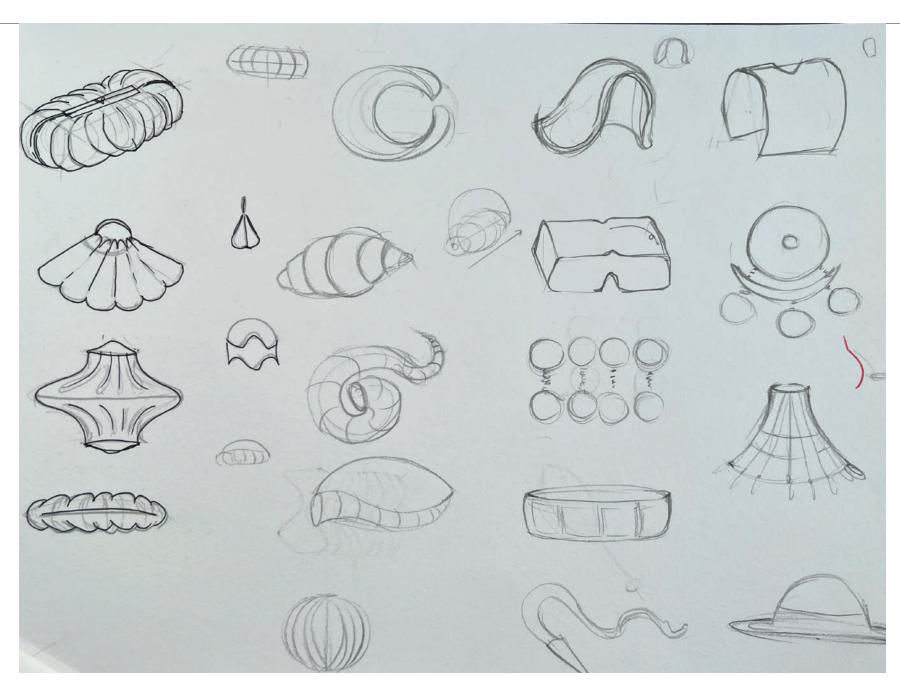




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Archive



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"El Casco del Minero" Miner Helmet Monument in Oruro Bolivia.



Metal Painted Folkloric Masks of Devil Deities native to Bolivia. A deity that was prayed to by miners.

Metal Sculptures, or armoured figures of Bolivian folklore of archangels.



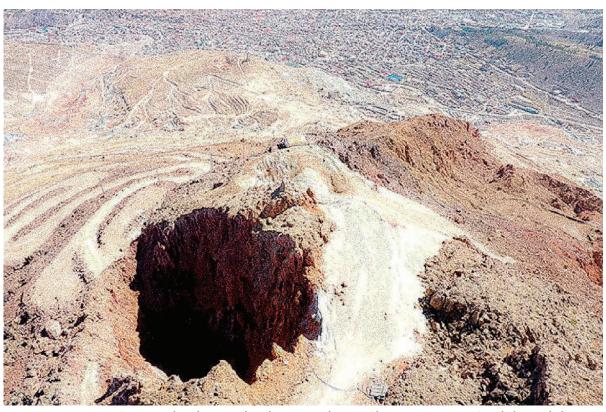
Mining helmet as a symbol of security, resistance and solidarity in the context of the industry. As a historically important object that leads to the discussion of workers' struggle around the world of resource exploitation.



Cerro Rico Mines, depicting from the Inside.

While thousands of native Bolivians died during the harsh forced labour conditions during the Spanish Era. Many still die today due to structurally unsafe ilegal minining, and harsh conditions leading to socolosis (intoxication of dust) or mercury intoxication of using ancient silver refining processes.

Mining of the mountain exist to this day, where livelihoods of generations have been dependent on mining. Lack of government protect of mountain and mining is leading to the Mountain to collapse in itself in the near future, despite being UNES-CO protected.



Crater at the Top of Cerro Rico in Potosi. With 133 veins confirmed bz COMIBOL (Bolivia's Mining Corporation. Photographed in 2022.



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