



HEAVY METAL

EARTH'S MINERALS AND THE FUTURE OF SUSTAINABLE SOCIETIES

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material midway through. At the end of the movement, the activity slackens, and the instrumental lines thin out until only one remains. This is a metaphor for surplus and scarcity, and a call to action for global environmental stewardship.

Platinum

Vuma Levin

The history of mining in South Africa, particularly platinum mining, is intertwined with settler colonialism and apartheid. The industry was built on a continuous supply of inexpensive migrant labor, which formed the backbone of a racist economic system supporting a whites-only social welfare state in South Africa. Over time, mining in South Africa evolved from a disorganized, informal arrangement into the cornerstone of apartheid in the early twentieth century. In the post-apartheid era, the South African political landscape has shifted with the extension of voting rights to people of color. But the economic model and demographics of the mining system have endured: labor remains cheap and racialized. Workers reside in makeshift townships near mines, sending money to their families in the rural periphery. Calls for social justice and racial equality in the sector have been met by state repression, as epitomized by the Marikana massacre on 16 August 2012, where thirty-four miners advocating for improved working conditions were killed by the South African Police Service.

The *Platinum* movement of the *Heavy Metal Suite* seeks to critically engage with issue of historical and contemporary exploitation of Black bodies in service of the South African mining industry. Conceptually, the movement aims to reclaim the narrative and creative space surrounding the future of platinum mining and production. Drawing inspiration from the Kenyan academic and author, Ngũgĩ wa Thiong'o, Black Indigenous forms and practices were employed as a 'liberating perspective', providing a creative lens to reinterpret the essential features of platinum. The movement is also infused with the concept of *conductivity*, drawing on the motif written by Augusta Read Thomas.

The composition incorporates several repeated rhythmic patterns, which are characteristic of African music in general and, in their timbral-pitch-inflected form, Black South African music in particular. Numerical values related to the chemical properties of platinum, such as isotope numbers, thermal conductivity and electrical resistivity, served as the foundation for generating rhythmically accented patterns, which formed the basis of each timeline. A rhythmic exposition at the composition's outset introduces each of these timelines. The intensity of percussive sounds also mirrors the history of violent struggles associated with mining in South Africa. As the piece progresses, various polyphonic techniques from traditional Indigenous vocal music are incorporated, including antiphony, non-simultaneous entry and ending of multiple voices, parallel harmonization, and melodic imitation and counterpoint. The conductivity motif is channeled through the filter of hexatonic scales predominant in certain mining regions of South Africa. Ultimately, the piece aims to give voice to previously marginalized Black African musical cultures and histories, envisioning a future where such acts of empowerment are not only expressed via artistic abstraction, but also through meaningful change to the material circumstances of those most affected.

Aura Tenebris (Radiant Darkness)

Augusta Read Thomas

Music for me is an embrace of the world, a way to open myself to being alive—in my body, in my sounds and in my mind. I care deeply about musicality, imagination, craft, clarity, dimensionality, and I seek to achieve an elegant balance between material and form, while expressing empathy with the performing musicians and all those who make the performance possible. Collaborating with the Axiom Brass Quintet and the University of British Columbia's Future Minerals Working Group has been one of the most exhilarating experiences of my creative life. I am deeply grateful to everyone who nurtured this relationship.