reflection on a contextual regenerative intervention
10.1 CONTRIBUTION

This dissertation and its resultant design will contribute a new regenerative potential for the Witwaterstrand mining belt as well as other harmed, heritage sites.

At the Urban scale it strengthens networks, unlocks opportunities re-imagines identity and supports ecological and socio-economic resilience in the city of Johannesburg. Through this the metropolitan core and mining belt region are strengthened.

At site level this research proposal offers a new perspective in cohesively addressing heritage, ecological and socio-economic value, utilizing active regeneration to reanimate this lost space. The research acts as a driver that counteracts spatial and social disparities and past injustices. Fragmentation of the city, racial segregation and economic stifling are reversed. Specifically, the intervention generates strange links in the transit network that may empower a spatially disadvantaged southern region, while focusing on public space and functions that encourage interaction across the economic spectrum. Furthermore, targeted skills improvement programmes empower a disadvantaged community and offer opportunities for sustainable growth.

The ecological rehabilitation of water and site provides the setting for reconnection of humans and nature in a healthy dialogue, specifically through the practice of small scale urban farming, and AMD water treatment. An important contribution is an essentially regionalist intervention, with an architecture inspired by and formed from the site conditions and mining heritage, both physical and social. This creates a new lens through which the city can better utilize existing situations and frameworks to tap into the latent potential of the mining belt. This captures the spirit of the place as well as the actual beauty that can derive from such a harmed setting, turning it into concrete, meaningful form.

Finally, Heritage is celebrated through the use of architectural follies that document the historical relevance of the mining belt that connects present Johannesburg to its past. This is an important perspective that could further an understanding of the evolution of events, spatially and socially. It highlights lost layers of significant history.

10.2 CONCLUSION

There is such beauty within the history of the mining belt which makes the act of regeneration important and beneficial. The progression of events led by this targeted regenerative theory has culminated in the mixed-use Phlani junction, which is a multitude of things, a transport node, heritage centre, skills workshop, AMD water processing, market space and restaurant. These all form a cohesive solution under the theme of Active Regeneration and successfully rehabilitates and activates the mining belt.

It is clear from the research that a multi-layered precinct will emerge from the site and allow for a regenerative journey through this introductory intervention. It will lead users through an experiential series of events of that site through regionally suitable practices and engage with the community through a bustling transit node and targeted skills workshop.

At a larger scale this intervention will allow the mining belt to gain traction and momentum for development and potentially translate into significant economic gain not only for the spatially disadvantaged south but also for the city of Johannesburg as a whole. A compact polycentricity which pays respect to its tumultuous past, celebrates its rehabilitation and looks optimistically to its future.
1) Johannesburg’s Spatial Development Framework for 2040 deals with key weak socio-economic areas of the city. It fails to include an in-depth or conceptual solution for the mining belt however it can be argued that this belt is one of the biggest socio-economic and ecological issues in the city.

2) Acid Mine Drainage occurs when pyrites and sulphides infect water on mine dumps and slime dams, percolating into the old mine shafts forming a hazardous by-product.

3) Booysens station is an existing Metro-rail Train station which links The East and West Rand along the mining belt. It presents several problem areas including accessibility and lack of inter-modality.
REFERENCES

Books and Journals


DECLARATION

In accordance with Regulation 4(c) of the General Regulations (G.57) for dissertations and theses, I declare that this thesis, which I hereby submit for the degree Masters of Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

I further state that no part of my thesis has already been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this thesis is substantially my own work. Where reference is made to the works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.

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