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THE SANDTON STATION SYNOPSIS

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JUBILEE LINE EXTENSION, CANARY WHARF, LONDON, GREAT BRITAIN
TGV STATIONS, PROVENCE, FRANCE
MILLENNIUM RAIL, BRENTWOOD SKY STATION, VANCOUVER, CANADA
DEUTSCHE BAHN, BONATZ ZERO ENERGY STATION, STUTTGART, GERMANY
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METRO METAMORPHOSES

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FORMULATING THE DESIGN TASK

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The idea of building underground is fascinating. From a designer’s perspective the creation of architectural spaces beneath the earth’s surface is a great accomplishment. Without building facades and a predetermined exterior shell it seems to be the ultimate interior and engineering challenge. Despite the enigma hereof, many people are startled by this concept as underground spaces are commonly associated with uncertainty; depicted by dark and confined passages. Many metro stations, especially older, more traditional ones, are detached from their external context. It is this disconnection that generates confusion and results in fear. Subterranean spaces have a unique atmosphere and the experience of being underground is quite different to that of being in a building or structure above ground level.

When one enters a subterranean space you are confronted with a change in light quality and intensity. Artificial light, though used as the primary illumination source in most building structures, visibly play a more significant role due to the deficiency of natural light. The prominence of artificial light simultaneously enhances an awareness of the shadows and contrasts it produces. It is this “play” of light and dark that creates a mood and atmosphere different to that of other spaces. Furthermore, one becomes dependent on the provision of information, which can manifest in various forms such as signage, to orientate and direct oneself. Textures and finishes act as narrative tools that direct users safely to their destination. The scale and size of the space and the elements placed within it, is also experienced more intensely by users because of the contained nature of the space. Scale is therefore fundamental as the spaces can easily become uncomfortable and cramped.

Though the subterranean experience is different, it does not imply that it is superior. It simply means that those differences should be acknowledged, which necessitates that underground spaces require a unique approach in their design in order to allow them to be appreciated and functionally utilised.

The underground metro has become the most common occupant of subterranean space across the world. Thus it’s also the most obvious choice for an investigation and a design with a subterranean nature. In the South African context the Gautrain Rapid Rail Link presents the perfect opportunity to introduce the novel concept of travelling underground.

This dissertation will investigate the functioning and progression of the metro with the intention of creating a design methodology aimed at initiating an underground culture fit for the contemporary South African society. It aspires to produce a station that would enhance the commuting experience, firstly by presenting a pleasant, safe and legible station and secondly, by offering retail and catering options to add