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Smarter cities: appropriating educational facilities in dense city spaces

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SMARTER CITIES;
Appropriating educational facilities in dense city spaces

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ABSTRACT

I aim to explore the solutions to designing spaces that not only function as quality learning environments but also as a programmatic model for achieving a low impact on the environment, affordable in construction and accessible to both low, middle and high income earning communities. It is with great interest and passion for education, spatial planning and architecture that I begin my research into understanding the spatial implications of growing populations, dense city landscapes and limited opportunities for sufficient school architecture amongst the sprawl of construction and housing in and around Johannesburg. This is an effort to redress the frameworks of school building typologies that have been previously set by the legacy of apartheid city planning.

Our city, originally planned into segregated zones, still experiences vast numbers of poor socio-economic and living conditions for the urban user. The absence of affordable housing amidst our growing economy and population has resulted in our new government being faced with great resource and capacity constraints. The biggest implication facing our youth as a result thereof, is access to quality education. Johannesburg is a city in transition and finds itself in a phase of rapid change. Take areas such as Yeoville, Berea and Hillbrow into account.

These are considered Johannesburg's fastest growing and densely populated neighbourhoods. They have increasingly less land available, and more built form (commercial spaces, libraries, clinics, community centres) in efforts to facilitate and enrich the daily activities of human life. However, not all efforts are being sufficiently met or appropriated to a growing communities needs. School environments have suffered with the growth of cities. Original apartheid city planning schemes have not been improved with the growing numbers of residents. Learners are, in turn, having to deal with crowded and poor learning environments.

In short;

- neighbourhoods are growing
- land is sparse
- schools are confined

It is therefore apparent that there is a necessity to develop a new typology or model of school building (based on condense urban international precedences) and develop this new program for school building in Johannesburg and surrounds. “One can only benefit from exposure to other societies. It is a shared belief that learning and development through exchange is vital to the future of a city”*Tilman, H. 1996 . The Housing Generator Competition For South African Cities, NAi publishers Rotterdam*