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URBAN DESIGN DEVELOPMENT



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"The axis is perhaps the first human manifestation; it is the means of every human act. The toddling child moves along an axis, the man striving in the tempest of life traces for himself an axis. The axis is the regulator of architecture."

Le Corbusier - (Kent, 1990:104)

"Places do not make cities. It is cities that make places."

Hillier - (Hillier, 1996:16)

Introduction

The urban design strategies is explained in broad terms before focusing on the specific vision for the university of Pretoria which was proposed by students working within the study area.

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Urban design strategies

What makes successful cities? According to Uytendogaardt and Dewar (*Dewar and Uytendogaardt, 1991:25*) successful cities have to conform to performance criteria which are listed below and briefly discussed in the pages to follow.

Needs

- Urban generation
- Access
- Promotion of collective activities and contact
- Individual needs

Programme

- Balance
- Freedom
- Equity
- Intensity, diversity and necessary complexity
- Integration and community

Need

As explained by Uytendogaardt and Dewar, the three needs of; "urban generation, access and promotion

of collective activities" deal with the reason why cities exist and why they work or not. The fourth need is based more on the personal needs of people living in the cities.

Although this dissertation is concerned more with the way in which people are affected by - and experience space, it cannot be viewed in isolation and needs to be related to the other needs as specified.

In a very pragmatic way of looking at cities one can say that cities are made up of a collection of buildings, and the spaces and infrastructure which link them.

In other words; a number of physical/formal elements which are the **means** to provide social, economical, cultural and environmental **ends**/functions.

The relation of the physical city (means) and the functional city (ends) is what makes cities successful or not and it is this with which we should be most concerned

when designing cities. (Hillier, 1996:149)

A "two line- logic" (Hillier, 1996:158) of buildings opening into open spaces and open spaces bleeding into buildings is created by the interaction of formal elements (buildings) and functional elements.

The way in which buildings relate to the open spaces surrounding them are closely linked to how people use the system from inside the buildings and from the spaces surrounding them. Similar to how people inside the building relate to people outside the building, people outside the building relate to people passing by the building.

This creates an opportunity to interact with the building or the open space without forcing this interaction.

The physical city however cannot be detached from the functional city and the relationships between them come up when one begins to investigate how humans operate in space.

Natural geometries emerge from these movement patterns:

At its simplest form; people move on lines or axes, (fig. 7.02) but when people stop to converse with others they will collectively define a space in which the people inside the space can all see each other. (fig. 7.03) Now when one looks at figure 7.04, it defines all the people in the space and includes the potential people who could see the people in the space and visa versa. This diagram is called an isovist and is key to understanding how we experience spaces in cities.

The isovist helps us to describe the relationship between the formal description of space and how people use it. Hillier states that the proper way to formulate the relation is to say that: "...space is given to us as a set of potentials, and that we exploit these potentials as individuals and collectives in using space." (Hillier, 1996:154)

This view on how space is transformed by the way people use it is part of the solution to a bigger problem. This is not only concerned with the way people use space currently, but how space will be used after new interventions have been made and a new form is given to existing contexts.

This leads us into a thought process of how to design cities and spaces to provide opportunity for growth without taking away characteristics like legibility and connectivity between centres of the whole.

The physical aspects of cities changes slowly over time while the function changes much quicker. This emphasizes the argument that buildings should not be designed to be contextually responsive only for the current situation, but that great consideration, in this regard, should be given to the entire life span of the building.



fig. 7.02_Line/axis of movement



figure 7.03_Defined space diagram



figure 7.04_Isovist

(Hillier, 1996:154)

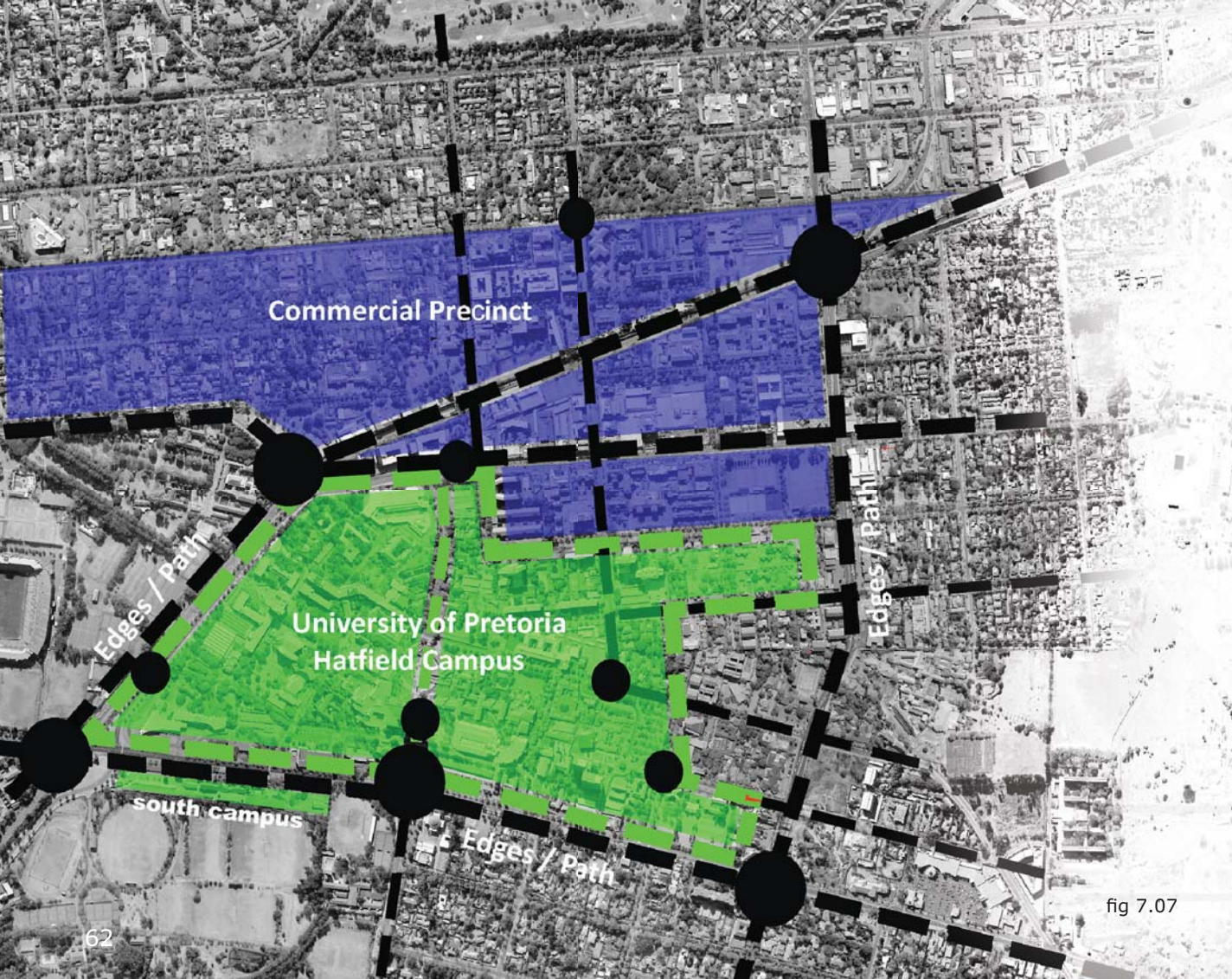


fig 7.07

Pecincts, edges and paths

The investigated area has been divided into various precincts to make sense of the Hatfield area as a whole. Various proposed projects are situated in the areas highlighted in fig7.07. To make a connection between the three highlighted areas, various methods are employed to ensure smooth transitions between these. Educational facilities are included in projects situated on the commercial boundary of the university precinct.

The transition from commercial to university precincts are also strengthened by introducing more commercial functions in the university precinct. These include shops and restaurants in the proposed student centre.

South Campus and Main Campus are linked by crossing the Lynnwood Road edge and establishing an arts precinct by involving all the existing amenities concerned with the arts.

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Gateways, urban doorways and thresholds

A series of urban gateways into the existing university precinct have been recognised. These serve as points around the university campus where the urban fabric starts to change. These transition zones also serve to merge the various precincts.

Figure 7.08 also shows the various doors and side doors into the university and points out the different functions facilitated at the points.

By crossing and merging areas on either side of the illustrated thresholds the university starts merging into the surrounding precincts thereby making it more integrated and contributes to public interaction.

The illustrated paths also serve to activate spaces surrounding them.



fig 7.08