CHAPTER 3

An urban vision of "Rurban" place making

3.1

1960, pg 48

HANS STRYDOM BOTH AN EDGE AND A PATHWAY

"Districts are structured with nodes, defined by edges, penetrated by paths and sprinkled with landmarks." (Lynch K, 1960).

According to Kevin Lynch, cities are characterised with certain elements, together these elements or the parts create a whole, namely: Paths, districts, edges. landmarks and nodes.

In context of this dissertation Mamelodi Township, a developing city do consist of these parts; however they are not prevalent and or hierarchical and developed

For the purpose of this dissertation there will only be focus on the Mamelodi East region, the area in which the proposed intervention requires itself to be found, as seen in figure 5 & 7

As a whole Mamelodi East consists of two districts: a further developed district and node and a underdeveloped sprawling district and node.

Mamelodi East is linked and surrounded by pivotal pathways; these are: Hans Stijdom road, Tamaya road, Hinterland, N4 and the circle route railway. The problem which is faced, comes in the form of a mass housing fabric dominating the city, see figure 7. The lack of higher order facilities strengthen this precept and points out the subsequent lack of hierarchy nodes and districts and social civic functionality.

Mamelodi East in particular lacks civic and retail facilities, it does support the informal development of nodal interchanged and hence it leads an informal development of districts divided by edges that currently also serves as paths as noted by Kevin Lynch. The clear definition of edge and path is lost in the greater definition of a district, and one is lead to believe that Mamelodi is currently faced with the major problem of not having defined districts if one uses the definition of Lynch:

"Examples of definition of districts: texture, space, form, detail, symbol, building type, activity, inhabitants etc.

Then it is apparent that there are 2 districts in Mamelodi East, they do not differ in function, but they differ in economic and social class, hence they are clearly indicated as the formal developed housing units and the informal shack housing. Thus the roadways becomes the edges, paths and even a district with the housing fabric becoming the backdrop. See figure 7 & 8

"Disorganisation of districts can been seen by divides"

This raises the concern that the lower order facilities such as housing now overpowers the higher order facilities creating this very apparent unbalanced community and township city.

Thus the statement: Hans Stydom Both and edge and pathway becomes more aparant

K. Lynch

"A large street could be both an edge and path, thus ambiguous intentions".

As noted by Lynch this is not an unfamiliar situation, however he states it tends to ambiguity, this ambiguity leads to lack of identity and presence of place but more important hierarchy of areas, places and spaces.

Therefore it becomes important that the intervention and development along these paths are carefully organised and by policy appropriate decisions on high. low and middle order facilities placement are defined. Figure 8. By this it is envisioned that the Community Engagement facility could intervene and start a catalyst of development.

♦ W.S.W. Lim

"the magnitude of urban problems are often in direct proportion to economic growth rate, population and rural density"

This will in turn develop the current undefined path into hierarchical nodes with edges defining districts and subsequently leading to distinctive spatial experiences along the edge and path. Figure 9.

♦ W.S.W. Lim

"By adding identity one avoids dehumanisation."

Thus the plausible deduction one can make, is that the Mamelodi East town, has two districs, it is divided by a single cause way, currently dividing these to districs. However, this current seemingly negative situation emits great positive light. It allows for the development of a nodal pathway. Is has the opportunity to stitch the two districts together and provide the formal retail and civic amenities that is required for a rapid growing town. In turn if one steps out of Mamelodi East and view the entirety of Mamelodi one can then start formalising the two major districts. Each serving a nodal centre, a commerce development, see figure 9 & 11b . Thus the thoughts of Kevin Lynch:

★ K. Lynch

"Districts are large areas of city that the user can mentally go into"

Hans Strydom road is earmarked for future development and economic density as per Tswhane IDP framework plan. Emphasising the future linear development and urban catalytic density resulting thereof.

The possibility for successful development does have a reality, as the two parts could provide individual identities, but more importantly they each have a centre that emanates and radiates social and economic growth.

Two centres growing towards one another. As seen in figures 11a-c, one can assume that the Hans Strvdom nodal development will be the core centre for the Mamelodi East as Mamelodi East is bound by a Freeway, the N4 and the Magaliesberg mountain range and terminates into the first shopping complex in Mamelodi East. Restricting further growth. As seen in figure 10

K. Lynch

K. Lynch



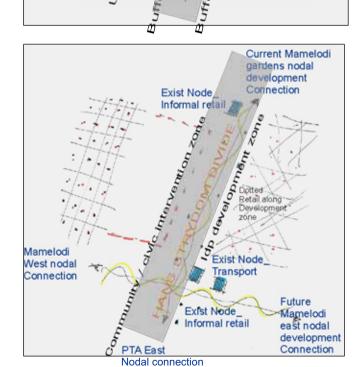
Figure. 7. Mamelodi site context



development diagram

Figure 8.









_Roadways, development corridor



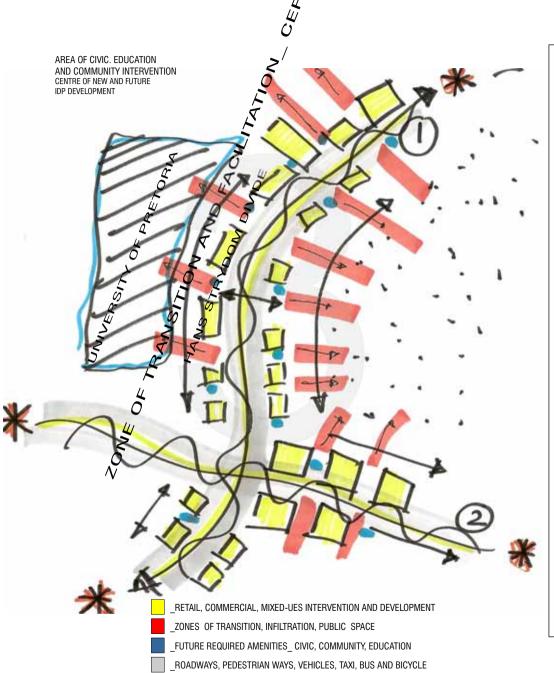
_Railway, commuter transport connection



_vision_for_Rurban_place_making

Figure 10. Urban development

Figure 11a. Urban minor centre development



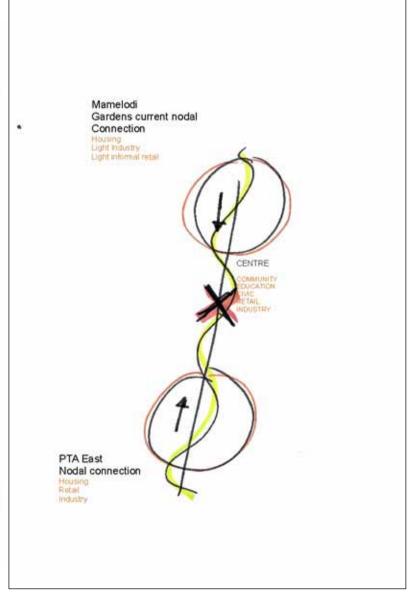




Figure 11b. Urban major centre Development

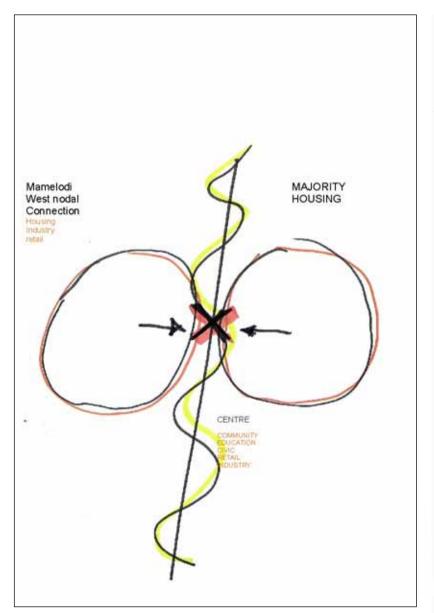
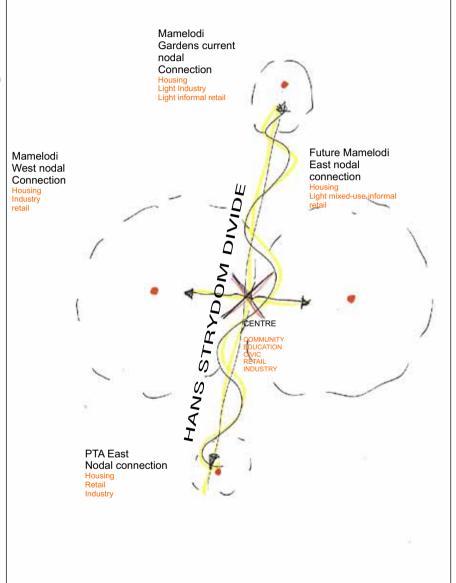


Figure 11c. Urban total centre developmen t





3.2

"RURBAN"_ A PERI RURAL PERI URBAN CONCENTRATION

The term RURBAN, is coined by Professor Baker of the University of Pretoria as a place that has both urban and rural qualities This dissertation defines it is a place that finds itself in between rural and urban development with an identity of its own. Mamelodi is believed to be a prime example of a RURBAN environment. As noted above the focus area is Mamelodi East. A brief description of these unique rurban qualities will lead to the apparent and required intervention with a sustainable future urban vision. See figure 3 &12 .

The major transport carriage way: Hans Strijdom road seperates the developing and informal development of Mamelodi East, the rural and urban edges of Mamelodi East.

However the carriage way has been transformed into one of three of Mamelodi East major edges, pathways and nodes. The formation of cores, areas of high order facility and community activity also known as concentrated nodes, are derived out of need in a natural progression of development. In Mamelodi as a result of pAst regime policy and zoning, this natural development has been hindered and thus has not evolved.

We find that the University of Pretoria Mamelodi Campus is and could become a concentrated node, by this I refer to a Kevin Lynches description.

"Which their influence radiates and of which they stand as a symbol, "called cores"

The prominent position of the University along Hans Strijdom and Hinterland roads respectively advocates this future image. See image 11 b.c.

The university is seen as core knowledge centre and only tertiary education facility in Mamelodi. It is positioned along what is currently and planned for future the major modal link between Mamelodi East, Pretoria, Northern Province and Mpumalanga. The current informal development of trading, food and other along this "Path" as expressed by Lynch, with intensified informal modal interchanges is earmarked as a major development through way.

This road connects the community with their place of work as well as their homelands to the North. Thus this possible evolution of a centre, core or concentrated node will become the link between the peri Urban and peri Rural state of Mamelodi East. Housing alone will not satisfy the need of a community, cores of development and education develops and sustains a society a community. Therefor it becomes integral that this opportunity development leads to education integration, Figure 11c

"That well educated man has a vital role to play as a citizen in society and not simply as a function in some economic hierarchy"

and resulting in community upliftment is realised.

"Higher education has in-fact served to provide a steadily increasing supply of active minds to the community."

3.3

MAMELODI EAST DEVELOPMENT VISION

Attempted in group format, a phased development scheme was established to address the negative and positive possibilities of Mamelodi East. Incorporating the university and the community, in doing so pulling the community into the university through refocusing the relevant functions and spatial layouts while also pushing the university into the community by proposing future expansion and future links to the internal campus.

The vision provides a platform for development of tertiary skills training combined with the required civic and social requirements of a healthy community, figure 10.

The development earmarked for Hans Strijdom road and subsequent vibrancy and increase of people played a major part in the decision to change the universitie's main entrance from current Hinterland road to the more vibrant Hans Strydom road, making it centre on the future core as noted previously. The deduction was made that the new face of the university would be best promoted on the main archery of Mamelodi. Hans Strydom Rd.. This allows for the Principle of integrated study and living.

The proposal (Figures. 3 & 16) includes the leasing of certain portions of property on the north western edge to housing developers such as SHIFT as part of the sub visions of developing a housing development unit at the campus. Other parts of property are to be used for community park space and sport facilities. There is a small portion on the southern edge that is to be leased for multipurpose facility whiles the remaining edges on the east along Hans Strydom road and south along Hinterland road is to be sold of for retail and commercial development. See figure

It is believed that the apartheid policies of buffer zones, so evidently placed around the university needs to be demolished, re-zoned and developed.

R. Transick

"The enclosure of space determines your opinion and perception of space: called structured urban rooms"

Thus expanding the university into these zones and creating a more "structured urban rooms" of living, selling and teaching one can address the problems of the past. According to Roger Transick one needs to design the spaces between buildings not only for the public but for the people who inhabit these buildings, one requires buildings to be integrated and not stand alone post stamps. Through The images of urban space one set backgrounds that creates moods and experiences.

♦ W.S.W. Lim

"One requires a mix in space of intimacy and vibrancy"

R. Transick

"Squares result from carving of building"

★ K. Lynch 1960, pg 48

★ M. Broady
1968 ng 57

M. Broady 1968 pg

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Figure. 12. Peri urban peri rural diagram

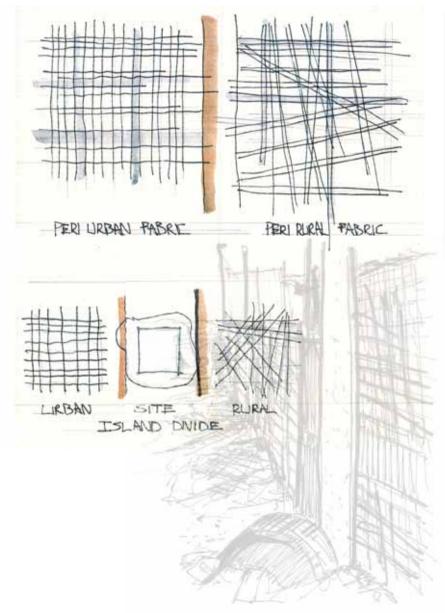


Figure. 3 Mamelodi_ A housing fabric



We do realise that this vision will not appear overnight and hence the development that is proposed under the sub-visions, will spark the increase in number of people and awareness among the people of the intension of the institution, thus increasing student numbers. The municipal IDP development plans linked to the macro Tshwane vision of new Mamelodi city aims at increasing work opportunities and social functions. As mentioned the sub-visions included intervention of 4 masters student initiatives:

- Civic, social and educational community engagement facility
- A housing development facility
- Skills teaching and mix used commercial and living development
- Integrated community educational park of public space landscape development.

See proposed urban plan figure 16

We believe that the vision for University Pretoria Mamelodi campus needs to be for the people, bettering the people and uplifting the people, while also creating and maintaining a high level of tertiary education and research.

According to William S W Lim, there are three cultural identities that one needs to take into account: "universal, ethnical and national"

In doing so one creates a cultural sustainable society that is impartial and non ethnical.

To realise this cultural sustainable society one needs to be environmental responsive to both the urban/rural fabric and the people that inhabit this fabric, this is possible according to William S W Lim if one creates an environment that communicates subconsciously with the user through symbolism and responds to the user at human level of scale that is contextual to his own environment.

Mamelodi has a rich vibrant but also a sad history to be discussed in chapter 5, but it is our history that shapes us, it does not limit or restrict us but shapes us. The environment we live in, the people we share it with, determine the experience we receive in it. Architecture according to Roger Transic consists of these same two parts; he believes that history and environment are the two faces of architecture. Thus moving into the future we take with us the past and the people, we added the technology of today and provide for the needs of the users and the result we believe is the most appropriate architecture and urban response for Mamelodi and possibly peri-rural, peri-urban communities in South Africa. Figure 12.

A "RURBAN" PLACE MAKING POLICY, FIGURES 13: 14 & 15

From the proposed development vision a constraints and design principles guideline have been formulated to address and assist in making this proposal a reality. However it must be said, that for any development scheme, it is the implementation and monitoring thereof that governs the success of the scheme.

In short analysing Mamelodi East; University Pretoria Mamelodi campus interaction:

3.4.1 Vision:

University engaging with the community

Interventions must empower people as far as possible

Permeable society focussing on community interaction

Place-making, linkages and connections

Redefine the relevance of the education system in Mamelodi

3.4.2 Constraints

Education system not really appropriate...

No legibility no landmarks, fragmented

No sense of place / identity

No hierarchy of spaces and circulation patterns

University isolated, segregated acts as a buffer zone empty, under utilised spaces, sterile, barren and negative sensory perception

3.4.3 Problems:

Little provision has been made for cyclists and pedestrians along the roadways.

Unemployment (majority 17-25 year olds) due to: a lack of information

and

3.4.4

awareness of what they can do; a lack of opportunity for employment Crime due to a lack of employment which leads to poverty, and a Lack of passive surveillance

Lack of public interaction due to a lack of organised public space (streets are not well designed)

Lack of transport routes and designed modal interchanges

Lack of sport facilities no focus on recreational activities no student life

No student housing / localised residences

Principles: (Source: guidance by principles of R. Transic, Dewar etc. And personal visions)

Building height no more than 12m (4 storeys), for development along Hans Strydom road with a high density erf Coverage of 70%, and

majority zoning: Mixed use land-use policy

Complete relaxation of the building line along the edges of the University property

University to engage in lease and share development

Utilise grey water and storm water as far as possible on site for irrigation, rejuvenation of ground water, recreation and education

Proposed length of new town blocks 20-40m with allowance for permeability, roads every 100m

♦ W.S.W. Lim 1990

3.4_



Pedestrian walkways, cyclist paths and street trees (indigenous) + street furniture

Increasing Hans Strydom road to double carriage way with pedestrian crossings and centre islands

Provision for informal trading with stalls and required public ablution and service facilities

Promote passive surveillance, by the mix-use principle of high density with living and work combined

Community engagement and involvement

Public space creation

Systematic process of opening up the University to the public/community with the end goal to be completely permeable by all, students and community.

Across the board densification proposal of study area as well as the remaining development vision node including people and commercial activities

Sustainable principles: water, electricity, waste recycling (collect and separate and use on or near to site)

Figure. 13. Height & scale diagrams

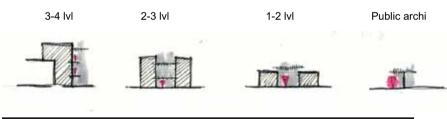


Figure. 14.
Community engagement facility site section, pedestrian
Friendly proposal

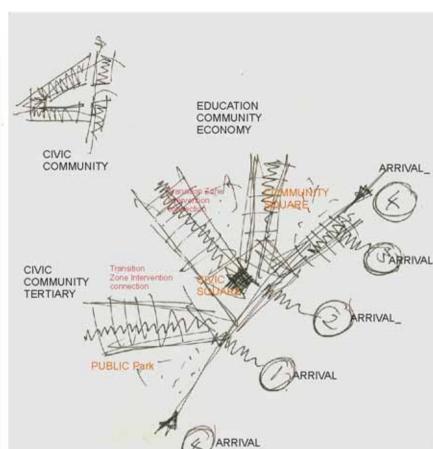


Figure. 15.

engagement

facility site

Movement diagram



Adendum

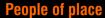
Group urban proposal and document to be presented and submitted prior to students' presentation.

To be added as an addendum to each students' thesis document









A social predicament an informal settlement A melody once found now lost in r.d.p low cost In silence I pray, I pray for that day, that my worries can go away, my family stay

Down the bottle he looks,
for the answers of his way.
How can I judge, he only tries it's his way;
I feel resent In senseless in depend
This is me I am now,
What I feel, what I am, who I know what it brings

In time I shall find
The sweetness that grew that vine

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