





10. CONCLUSIONS AND RECOMMENDATIONS

The hypothesis stated that the fragmented nature of the Hospital Hill Precinct could be unified through the application of a hierarchical network of open spaces. A development framework was compiled by using urban planning principles. The open space hierarchy was incorporated. Through the evaluation of literature an argument for open spaces that benefit public health was compiled. Consequently a design proposal was made for Dr. Savage Plaza.

The subjective nature of restorative theory and theories of the experiential landscape makes it difficult to prove that a space in isolation would be beneficial to an individual, but it can be proven that it will be beneficial to public health in general. Similarly it cannot be claimed that an open space framework is in essence a restorative open space framework. However, the efficacy of open spaces for public health is dependant on the context of a particular space within a larger network of spaces. Although some small interventions were proposed that would intensify the experience of the Hospital Hill for the user, the experience will be substantially increased if each intervention is linked in a logical way to the next. Without doubt there exists scope for application of open space frameworks for public health within the context of South Africa.







11. BIBLIOGRAPHY

ABELHO, H. (2007). Urban Green File, 12 (4):10-15.

ASENSIO, P. (2005). Ultimate Landscape Design. Te Neues Publishing Company, New York. (p.25, 125-127)

BERTO, R (2005). Exposure to restorative environments helps restore attentional capacity. Journal of Environmental Psychology, 25:249-259.

BAUMEESTER, N. (2007). New Landscape Architecture. Verslaghaus Braun, Berlin, p. 328-340

CULLEN.G (1996) The Concise Townscape. Architectural Press, London.

DEWAR, D. & UYTENBOOGAARDT, R. S. (1991). South African Cities: A Manifesto for Change. Urban Problems Research Unit, University of Cape Town, Cape Town.

EICKER, K (2007). Urban Green File, 12 (6):12-18.

FORMAN, R. T. T. (1995). Land Mosaics: The Ecology of Landscapes and Regions. Cambridge University Press, Cambridge.

GRAHAM, A., ANTHONY, I. (2007). Training for Township Renewal Initiative, Case Study 3: Public Transport

Interchange Management. City of Cape Town, South Africa. Available at http://www.treasury.gov.za/divisions/bo/ndp/TTRI. Last visited on 3 November 2008.

GRIFFEN, T. (1990). The Physical Environment of the College Classroom and its Affects on Students. Campus Ecologist, Ohio State University, 8 (1).

HARTIG, T. (2004). Toward understanding the restorative environment as a health resource. Institute for housing and urban research. Uppsala University, Gavle, Sweden.

HELLEUR, E. (2001) Restorative Public Urban Landscape. Unpublished master's dissertation in Landscape Architecture, Leeds Metropolitan University, Leeds.

HOLM, JORDAAN & PARTNERS. (1999). Apies River Urban Design Framework: Final Report.

HERLIN, I. S. (2004). New challenges in the field of spatial planning: landscapes. Landscape Research, 29:399 – 411.

HUANG, C. (1995). The relationships between environment preferences and restorative perceptions of the environment: A case of mountainscape. Master's dissertation for the department of tourism, Providence University, China. HUNZIKER, M., BUCHECKER, M., HARTIG, T., (2007). Space and Place – two aspects of the human-landscape relationship. In: F. Kienast, S. Ghosh & O. Wildi (Eds): A changing world – challenges for landscape re-search. Landscape Series Springer, p. 47-62.

JOFFE, P. (2001). Creative gardening with indigenous plants. Briza Publishers, Pretoria.

KAPLAN R. AND KAPLAN S. (1989). The experience of nature. A psychological perspective. Cambridge University Press, Cambridge, pp. 340.

KAPLAN S. (1995). The restorative benefits of nature – towards an integrative framework. Journal of Environmental Psychology, 15, 241-248.

KUMAR, P. (2007). The Value of Design: A Study of Pedestrian Perception in New Delhi, India. Master's dissertation in urban & regional planning, Queens University, Ontario.

LYNCH, K. (1981). A Theory of Good City Form. The MIT Press, Massachusetts Institute of Technology, Cambridge, Massachussets. (p. 2-3)

LYNCH, K. (1960). The Image of the City. The MIT Press, Massachusetts Institute of Technology, Cambridge, Massachussets.



MASLOW, A. H. (1943). A Theory of Human Motivation. Psychological Review, 50:370-396.

SIMONIC, T. (2006). Urban landscape as a restorative environment: preferences and design considerations. Acta agriculturae Slovenica, 87:325-332.

THWAITES. K., HELLEUR.E, SIMKINS.I.M. (2005). Restorative Urban Landscape Settings: exploring the Spatial Dimensions of Human Emotional Fulfilment in Urban Open Space. Landscape Research, 30:525-547.

THWAITES, K; SIMKINS, I. (2007). Experiential Landscape: An approach to people, place and space. Routledge, London & New York.

ULRICH, R.S. (1979). Visual Landscapes and Psychological Well-being. Landscape Research, 4:17–23.

ULRICH.R.S (1984) View through a window may influence recovery from surgery. Science, 224:420-421.



Journey 1 and 2; Theory and Guidelines

ANNEXURE A:



Rose Street

a acrectional space culminently in Dr. Saverge Rel and Voorbeckers Rol intraction. Interesting continuition between Recognitional the b (vertorative centre) and densely built skylike (social imageobility) the round lucks or focal point or serve of destination which will amounted arrival at the Hospital Hill proconct

unidelihes

- Incrementally announce orrival at the Hospital Hill presidet by entircing vistas Provide a tocal point while the rol is leadily towards



Dr Savage / Vocitrekkersway

Major interection between Voustrelikes Rd and Dr. Savage Ed. Lacks odge detailin and barrow werte revibrance characteristics! the chrimmey acts as an existing landerment, The space is strongly wars it may but fourly atrance lacks roberence and legibility

- Need for entence feature that quick circulation and adds identifiable character and social imagen bility



U. P entrance

a transitional space that is rich in localized - A streetscape intervention centres of restoration; social interaction (trackers, waiting areas), but it lacks coherence. Enforcement of movement control measures might improve legibility The steam pripe network that bisects the entire

avea forms a strong recognizable landmark and should be further exploring. The traffic of traffic is leavily chiradect at this entrare Intersection going north toward P. A. H and South towards the Princhel compas

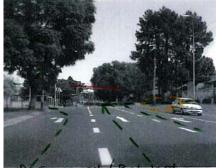
- that quide circulation and accomposate localised centres in a coherent way
- Provide by enterment trace and marking areas
- Measures for reduction of



T. P. H enhance

Continued directional space that is very high in localized rentness but lacks continued the space is intempted by a school transitional space between the two main enhances, where precessions tears, equists and tracks compete for space on the eages. The road is only busy during peak hour ait is fall that the road of our designed esulting in an about the of gradient, to accommodate the human scale. The abundance of space and multitude of uses results in anarchy

A directional and transitional space that is parry enclosed. It have social image at the party as a secondary entropy to the freshot.



Dr Suvage rd / Barrelore

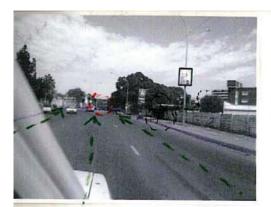


Newly constricted parking areas on to re-claim lost space. The about transition from desc growth in the background to the open, hard spaces should be softened by a gradient.

The force creates a very strong, but ineffective sense of transition, bandary and exclosure

- An intervention that yunder movement by reducing, but optimising actors points.

 The system should be adaptable
- Provide for internal trade
- prox-up and exect of cones leduce traffic larges
- Emphisize approach to T.R.H. etrance through leadscaping and bouleverd
- Move parking encourage walk
- leduce flow speed of road . Safe parking.
- Decomposal night usage
- Provide energery while a
- Controlled access for service at Gate 17
- Empasise stam pipe netwo
- Upgrade public ablution
- Reduce flow speed of vo
- The edge / buce should be sot - Single access
- Accomposate vistas into ex
- Detire a specific directional to be used. This space who localised restorative rentre areas along the axis.



Vehicular journey

a strangly actived conse of direction colminating in the entrance of the P.A.H. Although the approach to the hospital is strongly sequential, it can be enhanced to term a Jaterray into the precincle



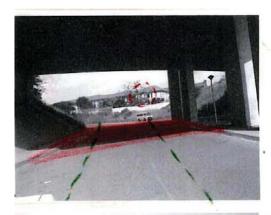
a transitional area that is rich in localised centres, but lacks referents, thence definition, and rentral of different users. The space is vibrant and used by a variety. An existing bon leveral with large trees is maclowhilised due to safety. Differences in level provide opportunities toexploitation of graculent and transition between zones of use, but it is not exploited.



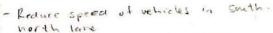
A amagemention of functions, users and methods of movement result in a routusing transitional space that connot accomposate the amount of activity. minor interventions to provide for organized industrial and waiting areas ran improve the space significantly

- sage definition on be improved with a transitional some between built terry and vehicular unevenent. This are should provide for pedestrian movement and should exploit apportunities for localised reities of interaction
- The approach to the P.A.H can be strength ly entering sequential transitional space visually focused on with a rhythm th culminates in an atomice fective
- Provision for pick-up and drop off.
- Weiting wrests
- Turnaround aners,
- Incorporate existing restorative bouler

- Provide drop-off and turn-around ever
- Improve month tements
- Use of materials on road surfaces con guide a hierarchy of movement
- Make specific prodision for movement of peckes trians
- Clearly depict directions for perhing, everyery, drop-off and through vointes



an exceptionally strong sense of transition the lack of space and poorty defined informathy of movement in (3) results in the road surface being used for drop-off, waiting areas and raterial track, blocking the ring-road system and country further congestion



- Provide deep-off and waiting areas in north-south lare

- Create places for social interaction and restorative spaces

- Clearly demarrable podostrian lives of movement



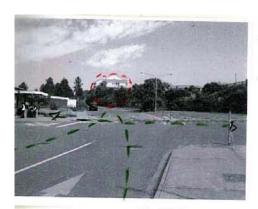
Ramped directional space connecting enterine to P.A.H with the T.E.H enterine in Dr. Savage Rd. The vamp is steep and spatially divides: the area. Large open and material spaces occur.

The open spaces should be a relationship between provision for natural habitat/restorative spaces, additional parking, and space for the control of avenuating



A space that is directionally so strong that it does makes very little provision for social intracting restorative potential, as it is rich in landmarks of social imageobility, and, when not congested by brottic and blocked by parked care, it reads will

- Provide alternative and accessible parting so that flow of maserver on the ramp on be improved
- Make specific provision for peaks brian movement



Vehicular Journey (Verioly)

Transitional movement between enhances
to Medical Campus on P.A.H.

This near is strong in social
imageability, but lacks in localized
centres for restoration an interacting
becomes movement is mainly directinal.

- Reduce perhang at Modifical Compon envence to provide a centre for social interaction and restorate



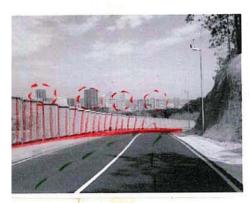
Memby constructed ring rol on a steep slope results in a strong transitional space. It is agid in the sense that it does not provides

for novement of pecestrians along the road, as well as down the hill into the existing fabris



In some parts the ring read system is enclosed by the hill and tall live trees. This results in a strong perceived area, and banding

- Improve accessibility and sately into lowerlying areas - Provide sate pedestrian journey



When the trees open up, an exceptionally strong vista onto the CBD of Pretovia is revealed

The boundary fence reads very strongly as transitional and distracts a little from the vist;

- A gradient between the boundary tence and road can be achieved by - creepers and low plantly

- painting the tence a darke colour

- providing attractional interface to pedestrian nevernet.



View onto the newly constructed perking lots. The space is very strong in social imageability, but lacks of the the T.R.H and medical compus built fabric. The area is large, start, emply

- a strongly need axis of movement should guide the use towards existing facilities.

- This movement like should:

- exploit vistes.

- se sate

- provide opportunities for waiting and social interaction.

- well lit for night use.

- Trees should be planted in parting lot to reclude microchimate.

- sotten the expanse of party.

- quick movement.



Precinct Journey menty achieved when says

Enioraline

Waster spaces are already used for social interaction and tracting, but it could be improved by formalisation of peakstrian routes



Voca trekkessing divides into 3-lane, one way streets.
Aligh in social imageability and lacinaries that sense as visual anchess

6: Inyrowe transitional gradient betweent built fabric and road surface by exploiting localised centres atomoral interaction and restoration along a detired like of movement



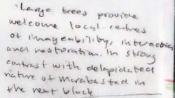
Intersection of pre Hospital Hill Precinct with Governmental Precint. Lacks visual anchor to draw attention to entrance and exit of precinct.

a traffic circle with etrance feature to alleviate inovement contustion and quick inovement. Should feature should expande character

O rectional space that is strong in localised contres. Whiltitude of users and movement patterns result in a vibrant but somethic unsafe space

- upo race taxi rante
- Provide waiting wes
- Incorporate Apres Rivier open space with exity oreen space to form of a restorative network that

within the precinct





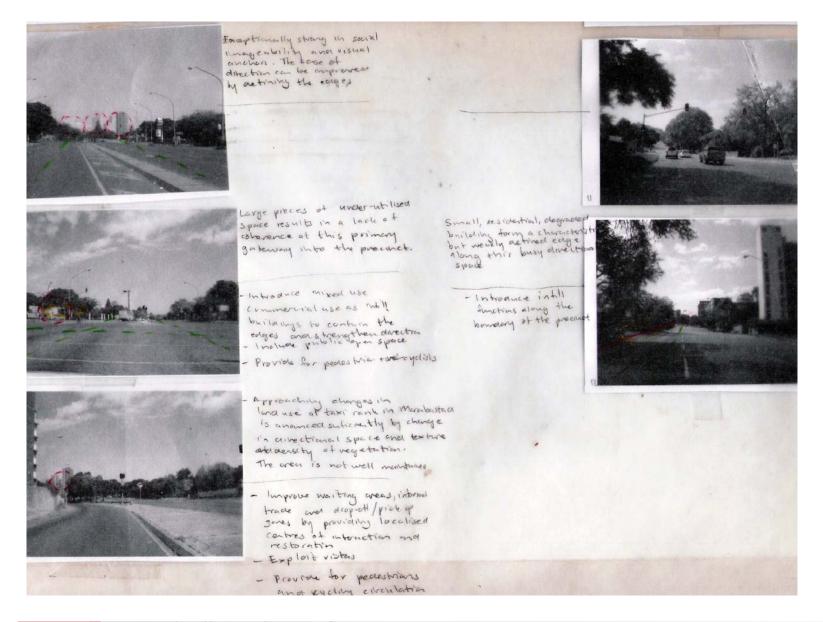


Intersection between upgraced Nelson Womeneton Or an Prinslow Street and Hour's Print crossing of April Einer

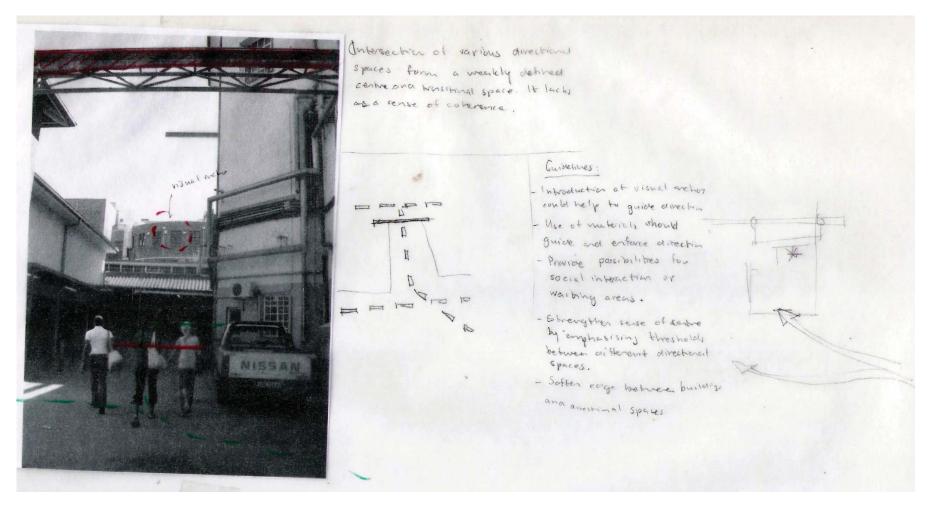
- Extend Welson Mandela Dr.
- Remove detry idated buildry it island and new lace with gateway fee ture or landwark buildry fee ture or landwark
- provide access to Apres new



10











spaces. Lised Moun activity uses and areas at the T.E.H used by a various of was and methods of movement.

Guidelikes.

- Improve legibility by introducing hallowing with this will improve continuity - Provide opportunities for waiting, social interaction and transitional spaces that lead to restorative
- animetrian, be partured and ensy to mountain - the whigh of bandery treatment should to transferred + lecentrimal spread to transferred + lecentrimal spread to the intrinsical but allow for reactions?

flocustope should be breaken

homogenously: guive

rhyting + bandery

trentment