

CHAPTER

10

CONCLUSION

This study attempted to address the issue of fragmentation caused by the neglected river system bisecting Mamelodi. The author noted the lack of positive contribution by Pienaar's River to a safer, cleaner and productive environment that could possibly link and unite the community of Mamelodi. The significance of this study is nestled in the historical meaning of rivers in being a thread that connects communities and inspire activities that add to a sense of togetherness. This study therefore explored the re/claiming and use of a river not only as a functional space but also as a traditionally and/or spiritually enriching place. The hypothesis for this study stated that the reclaiming of the river edge in Mamelodi as urban space can inspire meaningful, healthy and productive human environments. It suggested that by respecting the spirit, identity, values and cultural practices of an area, a landscape intervention can add to a shared sense of community.

The study put more emphasis on the natural setting, interpretation and meaning, users and site activities as well as photographs and drawings to better understand the site and inform design. Precedents and case studies assisted the author to determine a list of design principles; community design, safety, connection and linkage, integration of uses, robustness and sustainability, to be applied in the design of the focus site was to follow. A theoretical study on community design explored the creation of a sense of community, place making and how the two can create community places. In designing these places, the author established a normative position based on the use of a meaningful design that highlights local values and ideas about nature, site, identity and the interaction between people and their environment. The landscape is seen as perceived settings that frame people's senses of place and community. This project aims to highlight these settings (Stewart & Strathern in Muller, 2009: 34). Other theories, concepts and themes like greenways and urban design were explored in the development a local framework. The author introduced and dealt with the context at four different scales that resulted in different proposals that together form part of a systemic environment whereby one affects the other:

- Study area: how Pienaar's River sits in the larger Mamelodi Township. The study presented rehabilitation guidelines for the river system while introducing new uses that will bring people to this space by using the concept of greenways. The catchment management plan proposed sustainable strategies for the rehabilitation of the river system by introducing wetlands and vegetation to manage excess floodwater, clean stormwater and nurture wildlife habitats. A cross-country track going along Pienaar's River linking Eerste Fabrieke and HM Pitje Stadium was proposed while other pedestrian orientated pathways lined with street planting link the community to the river and Mamelodi West to Mamelodi East.
- Framework area: how the northern end of the river relates to other community spaces and facilities. A local framework was designed concentrating on community nodes, cultural heritage and the ecological aspects of the area. It also employed the use of urban design planning elements from Kevin Lynch's book, *The Image of the City* (Lynch: 1960), to develop some hierarchy and identity for the area.
- Masterplan area: how the park area fits and relate to its immediate context.

The masterplan presented systems that makeup the park: activity nodes, access and circulation, urban agriculture as well as water and open space systems. Urban agriculture was introduced as a possible solution for the economical development of the community. These are seen as elements of a community building landscape which according to Hall and Porterfield (2001: 19), 's community design theory, can be perceived as positive, productive, planned, and functionally supportive spaces. The project presented the river as meaningful and active place with smaller outdoor rooms for social activities and play.

- Focus Site: how the detail design area fits into the Masterplan. According to Hall and Porterfield (2001: 19), if the viewer can perceive open space as a part of a larger composition, one that heightens the relationship of the other elements in that composition, then that space has been successfully designed. Given this, the author successfully presented the pilot project as the engine that's inspires the spirit of togetherness by bringing together communities on both sides to the river and across the river to an node comprised of multiple socio-economic activities, multifunctional public facilities in spaces that respect both the historical and ecological fabric. Safety of the space has been improved by ensuring visibility during the day and at night when the area is lit up.

The study has also attempted to prove that meaningful community design can provide insights on pathways to sustainability acceptable communities. The choice of sustainable materials is correlated with their significance in community life whether it's the choice of medicinal plants or recycling materials in the landscape in a way that will be educational to the users.

Practical implications of this study are influenced by and depend on the special characteristics of different sites or areas along the river system. Although most of the activities proposed are general, finding the 'perfect' site to match them and the community needs has been a daunting exercise. There are limitations that could affect application of this project mostly due to the fact that the river system has been used as the main channel for servitudes. The author acknowledges that the information collected was limited to only a few sources. Legislation could also be a major hurdle in the project but the study assumed that the interventions would be approved.

The topic of community design and the relationship between the creation of a sense of community and landscape design still needs to be investigated further. The disappearing (historical) meaning of rivers (and other natural settings) to a society that results in neglected and hazardous spaces needs to be recaptured. Folk culture could provide a starting point for this but blindly copying and unfamiliar elements into peoples' places could lead to further disregard. Sometimes what people need is a comfortable and pleasurable place to work, play, learn and live. It seems then that by respecting the history, culture and tradition associated with a place and designing enjoyable spaces that encourage socialisation could lead to meaningful community places that people can feel proud of and own up, becoming a part of their daily lives, and have an attachment to, seeing themselves in nature and nature in them.

REFERENCES

BOOKS

- BEHRENS, R. & Watson, V. 1996. *Making Urban Places: principles and guidelines for layout planning*. Cape Town: Urban Problems Research Unit, University of Cape Town.
- BENSON, J. F. & Roe, M. (eds) 2007. *Landscape and Sustainability*. 2nd edition. Washington: Routledge.
- BOULTS, E. & Sullivan, C. 2010. *Illustrated History of Landscape Design*. New Jersey: John Wiley & Sons, Inc.
- CONAN, M. (ed). 2000. *Environmentalism in Landscape Architecture*. Washington: Dumbarton Oaks.
- DEE, C. 2001. *Form and Fabric in Landscape Architecture: A visual introduction*. London: Spon Press.
- DENBOW, J. & Phenyoo, C. T. 2006. *Culture and Customs of Botswana*. London: Greenwood press.
- FARINA, A. 2010. *Ecology, Cognition and Landscape: Linking Natural and Social Systems*. New York: Springer.
- GIBBERD, J. 2008. *The Sustainable Building Assessment Tool: integrating sustainability into current design and building processes*. Pretoria: CSIR
- GRANT, E. and Grant, S. 1995. *Decorated homes in Botswana*. Gaborone: Bay Publishing (Pty) Ltd.
- GROAT, L. & Wang, D. 2002. *Architectural research methods*. New York: John Wiley & sons.
- HALL, K. B. & Porterfield, G. A. 2001. *Community by design: new urbanism for suburbs and small communities*. New York: McGraw-Hill.
- JOFFE, P. 2001. *Creative Gardening with Indigenous Plants: A South African Guide*. Pretoria: Briza.
- MORAN, E. F. 2006. *People and nature: an introduction to human ecological relations*. Oxford: Blackwell publishing
- MURPHY, M.D. 2005. *Landscape architecture theory: an evolving body of thought*. Long Grove: Waveland Press Inc.
- NEWMAN, P. & Jennings, I. 2008. *Cities as Sustainable Ecosystems*. Washington: Island Press.
- SILITSHENA, R. & Mcleod, G. 1992. *Botswana: A physical, social and economic geography*. Gaborone: Longman Botswana.
- SWAFFIELD, S. (ed). 2002. *Theory in Landscape Architecture: a reader*. Philadelphia: University of Pennsylvania Press.
- THOMPSON, I. H. 1999. *Ecology, Community and Delight: sources of values in landscape architecture*. New York: Spon Press.
- TRANCIK, R. 1986. *Finding Lost Space*. New York: Van Nostrand Reinhold Company Inc.

JOURNALS

- COOKE, J. 2011. The violence prevention through urban upgrading (VPUU) programme – Khayelitsha. *Architecture South Africa*, May/ June: 18-23.
- PREZZA, M. Amici, M. Roberti, T. & Tedeschi, G. 2001. Sense of community referred to the whole town: its relations with neighbouring, loneliness, life satisfaction, and area of residence. *Journal of Community Psychology*, 29 (1): 29–52.
- MCMILLAN, D. W. 1996. Sense of Community. *Journal of Community Psychology*, 24 (4): 315–325.
- WILKINS, B. 2011. City visit: Soweto Gems, *Urban Green File*, 16 (2): 13-21.
- Mc Inns, J. 2008. Public sculpture goes underground at the Irene Mall, *Designing ways*, : 64-67.

REPORTS

- African EPA, 2007. *Pienaar's River Rehabilitation Framework. Final Report*. Pretoria
- BERGSTAN SA: 2011 Mamelodi/Nellmapius Master plan Study (Sewer, Water, Stormwater). Pretoria
- CITY OF TSHWANE, 2010. **Moretele Park Resort**. Pretoria
- CITY OF TSHWANE, 2006. *Tshwane Open Space Framework*. Pretoria
- CITY OF TSHWANE, 2004. *Mamelodi Rondavels: Heritage Report*. Pretoria
- INSITE, 2005. *Landscape Masterplan Report and Development Guidelines for Moretele Park Resort, Mamelodi*. Pretoria
- GAPP, 2010. *Tsosoloso Programme: Mamelodi/ Nellmapius Masterplan*. Revision 1. Pretoria
- LE ROUX & LAUW ARGITEKTE, 1980. *Mamelodi Guide Plan*. Pretoria

- LOOTS, A. 2007. *Mamelodi West Local Open Space Framework*. Pretoria
- WALKER, J. & Van Der Waal, G. M. 1991. *A working history of Mamelodi*. Pretoria: Human Sciences Research Council
- WALKER, J. & Van Der Waal, G. M. 1993. *Guide to Mamelodi* (draft). Pretoria: Human Sciences Research Council

WEBSITES

- BEKA, 2011. Lighting [online] <<http://www.beka.co.za/>> (Accessed 25 October 2011)
- CLINTON, R. 2011. Stanza Bopape Community Centre. [online] <http://blogs.up.ac.za/jcp2010/index.php?blog=222> (Accessed 30 September 2011)
- DARKEY, D. 2000. *Water pollution and community perceptions in Mamelodi*, Pretoria. [online] <http://www.ewisa.co.za/literature/files/104darkey.pdf> (Accessed 25 October 2011)
- PROJECT FOR PUBLIC SPACES, 2003. *The Benefits of Place*
- PROJECT FOR PUBLIC SPACES, 2011. *Approach*. . [online] <<http://www.pps.org/parks/approach/>> (accessed 19 April 2011)
- NLA. 2010. *Dlamini Wetland Park*. [online] <http://www.newla.co.za/LandscapeDesign/UrbanParks/DhlaminiWetlandPark/tabid/205/Default.aspx> (Accessed 28 March 2011)
- NLA, 2008. "Moroka Park Precinct 2005 Ilasa Merit Awards." . [online] <http://www.newla.co.za/LandscapeDesign/UrbanParks/MorokaDamPrecinct/tabid/137/AlbumID/590-127/Page/0/Default.aspx> (Accessed 22 October 2011)
- Open Architecture Network, 2010. *Field Studies, Shenyang Architectural University*. Created 21 May 2010. [online] <http://openarchitecturenetwork.org/node/7386/oanattachments> [Accessed 10 July 2011]
- SCHMIDT, A. 2006. Earthship Biotectures: Sustainability and the Built Environment. [online] <<http://www.docstoc.com/docs/9985169/Earthship-Slides>> (Accessed 25 October 2011)
- SEIDMAN, A. 1982. Solomon Mahlangu poster. [online] <<http://www.sahistory.org.za/content/solomon-mahlangu-poster?size=slideshow>> (Accessed 25 October 2011)
- READ, . 2011. Stanza Bopape Community Centre. [online] <<http://blogs.up.ac.za/jcp2010/index.php?blog=222>> [Accessed 30 September 2011]

LEGISLATION

- The National Water Act (Act No 36 of 1998)

PRESENTATIONS

- KLITZNER, T. 2010. Development of public spaces in Khayelitsha Cape Town. Presented at the *ILASA 2010 Conference*, 13 – 14 May 2010, Johannesburg.
- YOUNG, G. 2008. Wetland development in terms of recreation and ecological Stability. Department of Architecture, University of Pretoria. *Class lecturer*

INTERVIEWS

- Mr Maina, Old VISTA University occupant (elder) interviewed 05 March 2011
- Mr Manyama, Programme Manager, Office of the City Manager. CoT. Interviewed 08 June 2011

THESIS

- JASON GRIMM, 2009. Food Urbanism; a sustainable design option for growing urban communities. 146 College of Design. Iowa State University. Ames, IA 50010
- KERRIN, A. 2005. Confronting Invisibility: Unearthing identity in the changing landscape. ML (Prof) dissertation, University of Pretoria, Pretoria.

MUSIC

- VUSI MAHLASELA, 1994. *When you come back*. [online] <<http://vusimahlasela.com/discography/when-you-come-back/>> (accessed 16 Oct. 11)