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## Towards contextualising mixed-use in South Africa

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### 1 ABSTRACT

The development of mixed-use precincts is an age old idea in the context of Europe and America, but a reasonably new notion in the developing country of South Africa. In this country with a history of both segregated as well as large open spatial arrangements, compact mixed-use developments pose a different range of challenges.

In addition, the rich cultural assemblage of this so-called “Rainbow Nation”, respond to the built environment in unique ways. The appropriation of public and private space consequently varies from culture to culture.

This paper juxta poses the notion of mixed-use between two different contexts, one being the informal survivalist approach found in Warwick Junction (Durban) against the recently constructed mixed-use development, Umhlanga Ridge (Durban).

The paper questions the application of universal design principles and their applicability in the culturally diverse context of South Africa. With this in mind, conceptual alternatives are investigated towards designing for appropriate mixed-use in this vibrant African context.

### 2 INTRODUCTION

The development of mixed-use precincts is an age old idea, but a reasonably new notion in the developing country of South Africa. In this country with a history of both segregated as well as large open spatial arrangements, compact mixed-use developments pose a different range of challenges.

The South African built environment is under continuous construction. This ever-changing urban fabric is by and large financed by private developers aiming to make as much possible profit in the quickest way possible.

During this process, contextually sensitive design and user friendly public spaces are neglected. Designers, architects and planners are pressed for time and these issues aren’t addressed appropriately. The international models such as New Urbanism are applied as an urban design language and consequently results in de-contextualised characterless environments.

### 3 BACKGROUND

South Africa has 11 official languages and a multicultural population of 50, 5 million people, consisting of four dominant population groups with a variety of religious beliefs. The rich cultural assemblage of this so-called “Rainbow Nation”, respond to the built environment in unique ways. The appropriation of public and private space consequently varies from culture to culture, the different economic sectors and climatic responses.

This melting pot of people poses different design challenges and exciting opportunities when designing the urban and architectural environment for these specific markets.

Although South Africa’s infamous Apartheid regime represented a model of segregation, it remains undeniable that different cultures have different living preferences and patterns. This diversity complicates the development of the shared built environment.

Different approaches to design solutions for each context should be considered and examined. If the design process and methodology is too generic, it results in bland characterless, dissociated environments.

## 4 CASE STUDIES

The selected case studies are both located in the resilient and vibrant coastal city of Durban, South Africa.



Fig. 1: Umhlanga Ridge is located approximately 15km from the Durban CBD.

The informal survivalist approach found in Warwick Junction (Durban) is juxtaposed against the recently constructed formalised mixed-use development, Umhlanga Ridge (Durban). These contrasts are illustrated to contextualise recent development in South Africa, and specifically Durban.

### 4.1 Formalising the informal

**Warwick Junction** is the primary public transport node in Durban South Africa. Approximately 460 000 people walk from the station building through the market every day (Dobson et al, 2009:5).

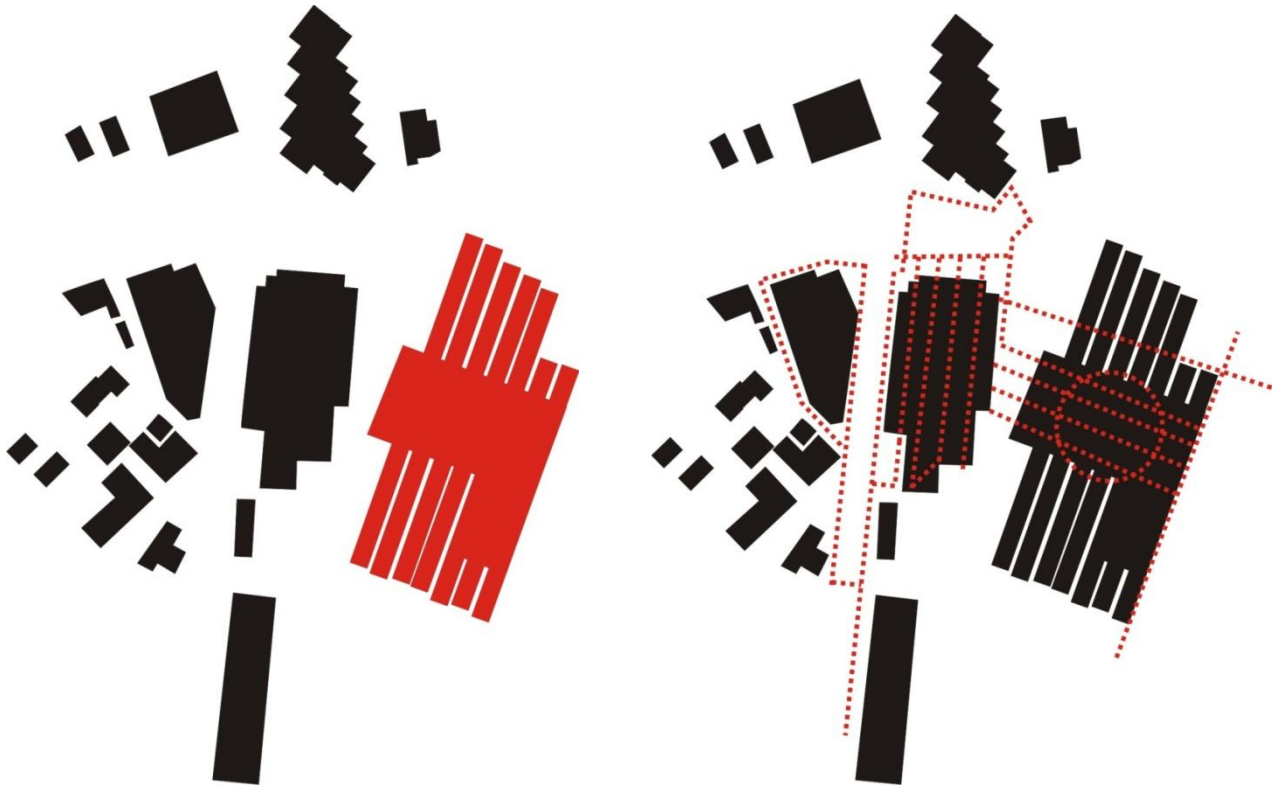


Fig. 2: The railway station at Warwick Junction where commuters access the Durban CBD on a daily basis.

Fig. 3: An estimated 460 000 pedestrians move through Warwick Junction every day, the image above illustrates primary pedestrian routes.

Described as a *'kaleidoscope of colour...of overwhelming sights and sounds'* (Dobson et al, 2009:5), the regeneration project incorporated informal street traders into the formal urban planning. This integration is innovative as local street trading is often regarded as a threat because of its messiness. The planners soon realised that these street traders play an important role in the city life and form a significant part of the local economy.



Fig. 4: Warwick Junction is known as an animated marketplace. (Dobson, 2009: 122)

Anthropologist, Prof Keith Hart compares Warwick Junction to a Jackson Pollock abstract expressionist painting – ‘seemingly a mess, but with a special humanity at its core’. (Le Guern, 2009)

A dedicated team composed of a wide range of local authority officials, street traders and their leaders worked together to embark upon what initially seemed to be overwhelming urban management and design challenges.

The vibrancy of the project is due to the successful amalgamation of the urban and architectural dimension in conjunction with the responsive human elements. An urban transformation of a previous derelict and despised area to a dynamic part of the city’s beating heart.

The in-depth inclusive and consultative approach towards understanding the world of the individual traders rewards the project with unique culture specific opportunities and design interventions towards creating a sustainable urban environment.

The eThekweni Municipality’s direct involvement with the Warwick Junction project is a good example for the approach of the prospective future urban and architectural design of a contemporary South Africa.

“In responding with vigour and enthusiasm, Durban’s municipality has added a new and exciting dimension to the city. Warwick is an example of enhancing rather than hindering the livelihoods of street traders and of paying attention to their needs rather than building infrastructure that is inappropriate and, as in other local authorities, often unused.” (Dobson et al, 2009:1)



Fig. 5: The abandoned half constructed off-ramp before it was formalized as the Traditional Medicine Market (Dobson et al, 2009:68)

Fig. 6: An aerial view of the Traditional Medicine Market. A team of consultants from a range of different departments worked together to get a detailed understanding of the trade and what it entailed and would consequently need to be successfully implemented. (Dobson et al, 2009:70)

Fig. 7: Inside the Traditional Medicine Market. The team ensured that all voices be heard through a slow process of collaboration, producing a vibrant and flourishing Traditional Medicine Market. (Dobson et al, 2009:66)



Fig. 8: Inside the Bovine Head Market. The old customs and practices of traditionally cooking cows heads is accommodated in the Bovine Head Market area (Dobson et al, 2009:12)

Fig. 9: Sketch design of the Bovine Head Market. Architect Joanne Lees designed the cooking cubicles, serving tables and drain area to accommodate a previously dangerous trade (heads were boiled on open fires and grease was running directly into the storm water drains) (Dobson et al, 2009:14)



Fig. 10: The mixed trading strip is an excellent example of responding to the needs of customers. Different commodities are sold throughout the day. Depending on the time of day, products range from quick take away snacks on the way to work to more durable products such as hardware and music towards the end of the day when commuters travel back home. (Dobson et al, 2009:17)

Fig. 11: The Brook Street market area is known for its multi-coloured bustle with a whole range of products being sold. (Dobson et al, 2009:35)

Today, this human and political experiment illustrates the possibilities and success that can be reached when working together as interdisciplinary teams and getting to the bottom of the day-to-day reality of the end-

users. This project is an illustration of the beautiful unique cultural environment of South Africa claiming its place and sustainably thriving.<sup>1</sup>



Fig. 12: The pedestrian bridge with a robust permeable balustrade to enhance passive surveillance and increase security. (Dobson et al, 2009:41)

#### 4.2 Build it and they will come, or will they?

**Umhlanga Ridge** is a recently constructed mixed-use development located in Umhlanga, 15 kilometres north of the Durban CBD. The development comprising of 140ha, is planned to facilitate development comprising 150 000m<sup>2</sup> of commercial/mixed use space, 100 000m<sup>2</sup> of offices and 3 000 residential units.

The Gateway shopping centre was designed as catalyst project for the development. The idea was to employ the shopping centre as the core of the development to emit energy towards the rest of the development. This ‘Theatre of shopping’ (Wood, 2008) is regarded as the cornerstone of the development, but currently sucks the energy from the surrounding area, exactly what the developers tried to avoid.

The development is designed with an ethic approach considering the pedestrian’s safety and convenience, accessibility for all and a positively managed environment. Although this is true in essence, the development currently lacks the vibrant mixed-use activity that was envisioned. Pedestrian activity is confined and centred on the shopping centre.



Fig. 13: Retail units on the main boulevard, empty and screened with blinds. The levels were raised to allow natural ventilation of the parking basements underneath. The raised levels give a sense of privacy towards the ground floor units, not necessarily desired in a retail context (28 October 2011).

Fig. 14: Retail units on the ground floor screened with blinds (28 October 2011)

<sup>1</sup> The project was awarded with the Mail and Guardian Green Trust Award for urban renewal, 2000; • KwaZulu-Natal Institute of Architects’ Heritage Award for renovation of the Project Centre, 2000 , • South African Institute of Architects’ President’s Award 2007/2008, • UN Habitat / Dubai International Award for Good Practice for the Brook Street Market, 2008 and nominated for the IBM Innovations in Government Award in 2007) (Dobson, 2009:1)

The diagrams below illustrate the current pedestrian activity in the development, evidently indicating the emphasis on the shopping centre. The centre attracts thousands of shoppers on a daily basis, however the remainder of the development does not yet benefit from these feet.

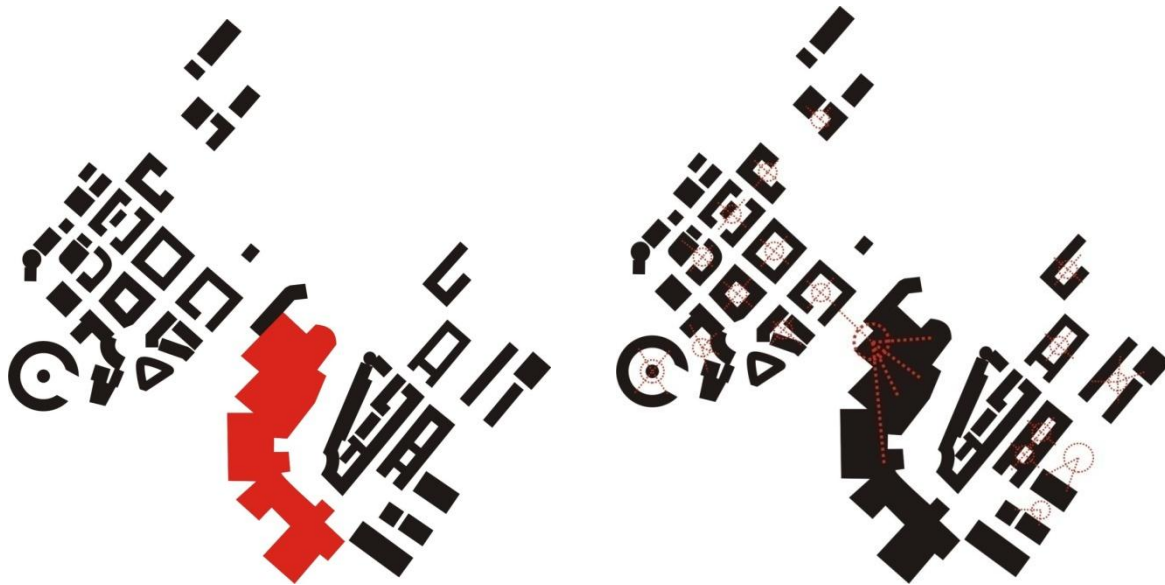


Fig. 15: Figure ground study of Umhlanga Ridge Town Centre. The Gateway shopping centre is highlighted in red.

Fig. 16: Figure ground study of Umhlanga Ridge Town Centre indicating pedestrian traffic patterns. Pedestrian movement throughout the development is determined by the proximity of parking areas to the desired destinations. Parking courtyards reduce the pedestrian travel distances.

Although the building opens up towards Palm Boulevard, advocating pedestrian permeability, it turns its back on the remainder of the development from Twilight Street. Before the development of the Gateway Hotel, the street was infamous for car-theft due to the lack of passive surveillance.



Fig. 17: The Gateway Shopping Centre's relationship to Twilight Street. The parking structure is located on this edge and in turn affects the interface with the street edge. The traffic is predominantly vehicle oriented.

Fig. 18: A typical parking courtyard. Management of these courtyards is compromised due to the different owners. Furthermore security is compromised in these areas especially at night when surveillance is limited due to private ownership.

Parking courtyards create pockets for vehicles all over the development, resulting in a vehicular response to travel rather than a layer of pedestrian movement. The specific economic sector does not use public transport, which consequently results in empty bus stops and a transport framework dedicated towards the private vehicle.

In addition, the distribution of amenities is sparse, resulting in limited pedestrian movement. There are not enough businesses to promote pedestrian activity during lunch breaks for example.

Furthermore, the formal language of the development is meticulously planned and clinical. The uniform design approach pays no particular attention to the climatic or environmental context. The understanding and

sense of place is lacking and there is no sensitivity regarding material application. Residents respond to sidewalks with palisade fences and burglar bars, generating a sense of fear and segregation.



Fig. 19: The typical street interface of residential units located on the ground floor.



Fig. 20: The typical formal language of buildings in the development.



Fig. 21: The conventional response to landscape transfer zones in the development. Criminals climb down the trees into the basements to break into the vehicles.



Fig. 22: The architectural language employed throughout the development.

The above architectural response may be regarded as an attempt to organise potential complexity associated with the African city, as guidelines often aim to do. South Africa as a colourful and vibrant country is in essence messy and developer could learn valuable lessons from the informal sector to embrace the quality and potential offered by this unique African context.



Fig. 23: The Umhlanga Ridge Town Centre approach towards the edge. Confined and restricted. (28 October 2011)

Fig. 24: The Warwick Junction approach towards the edge. Displayed merchandise activates the retail edge (Dobson, 2009:4)

Part of the problem with Umhlanga Ridge is the market for which it is designed. The middle-to-high end income group is familiar with gated communities and single dwellings on large stands. Where this development would present a first class opportunity to explore the vernacular architecture of the South East Coast of Africa, design guidelines inhibit rather than inspire and a conservative response of nondescript peripheral building blocks is presented.

## 5 APPROACH

The Umhlanga Ridge development is used as a case study to highlight certain consequences of the generic development process and in turn, Warwick Junction acts as precedent for learning lessons from the successful facilitation of the informal trading sector in Durban.



Fig. 25: A response to the street in Umhlanga Ridge Town Centre. (28 October 2011)

Fig. 26: The Warwick Junction approach towards the edge. Displayed merchandise activates the retail edge (Dobson, 2009)

Urban design should be employed as an enabling layer, granting opportunities for individual interpretation and layering of culture specific as well as appropriate climatically responsive architecture. Architecture built to meet the specific needs, accommodate the values, economies and ways of life of the cultures that produce and live in it.





Fig. 27: Trading stalls in Warwick Junction has a layered awareness and sense of community where neighbours contribute to each other's businesses. The design intervention as illustrated above contributes towards neighbourliness and passive surveillance. (Dobson, 2009:63)



Fig. 28: The Umhlanga Ridge development resembles privatized, enclosed and segregated spaces in stark contrast with Warwick Junction's vibrant and friendly retail spaces.

Where the design approach is usually one from the top down, Warwick Junction took the experimental approach of bottom-up. Anthropological research methods such as participant observation and stakeholder engagement were employed where the people using the space on a daily basis were consulted and involved in the planning process, resulting in a sustainable design solution optimally integrating infrastructure and the people representing the informal sector. Although this interdisciplinary approach and research methodology is more complicated with new developments, alternative design approaches should be investigated to integrate and comprehend the end-users and ultimately allow room for design and interpretation on a smaller human scale.

Valuable lessons can be learned from Warwick Junction and the African market in general. In essence, a new mixed-use development is intended to be another interpretation of the market place with pulsating energy and crowding of pedestrians. The secret lies in the translation of the African market for a higher income class without creating segregated pockets of isolated land but instead rather to develop a context sensitive architecture which responds in every way to their lifestyle. It should also be noted that growth takes time, and the organic process of inhabiting spaces should be permitted as a layer fusing the human with the physical.

## 6 CONCLUSION

The sustainability of the built environment is dependent on the accessibility and usability of the created space to the public. Architects and urban designers need to understand who they are designing for in order to create sustainable user friendly public spaces. Within the developing context of South Africa, the medium to higher income market has scope for research into appropriate urban design and mixed-use developments. In addition, the designer's role in the development process should be renegotiated and designers in turn should take responsibility to contribute their talents towards designing context sensitive appropriate African architecture within the contemporary development climate.

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### Interviews:

- Rob Anderson from ROB ANDERSON & ASSOCIATES cc, CONSULTING SECURITY AND ELECTRICAL ENGINEERS who is involved with the Umhlanga Ridge Development was interviewed on 27 October 2011.
- Keith Pearson, an architect involved with Umhlanga Ridge Development was interviewed on 27 and 28 October 2011.

## 8 ACKNOWLEDGMENTS

This research endeavour was made possible by Holm Jordaan Architects and Urban Planners. I would particularly like to thank Marguerite Pienaar for her dedication, enthusiastic support and valuable input towards the research project and Gerrit Jordaan's constructive critical insights into the text.