

REVIEW OF CHANGES IN CERAMIC TILE INSTALLATION IN SOUTH AFRICA



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1. INTRODUCTION

The intention of this study is to review a variety of ceramic installations found in South African architecture. A discussion of tradition, progress and design standards will be followed by an examination of environmental concerns and different design approaches. The study will focus on the coexistence of both so-called 'first' world and 'third' world production and installation methods represented in South Africa.

The interpretation of ceramic materials and composition may serve as a form of 'reconnection' that emphasises the role of public opinion and a society's potential for acceptance. Interior and architectural design may help to accept, accommodate and approach different kinds of memories and stories and portray them in public art. This combination promotes global coexistence and cooperation between varieties of partners – which leads to the inclusion of the 'underdeveloped' in the 'developed'.

Ceramic installations will be reviewed as the material expression of different cultures where interreliance could evolve by pooling different skills and knowledge. Specific environmentally friendly architectural interiors and architecture from various socio-cultural and cross-cultural backgrounds will be included in this study. The idea behind this approach is to follow the changing nature of ceramic materials as well as different installation techniques and executions and to pay tribute to a variety of contributors with regard to their specific contexts and environments. The question to be is how to address our concerns individually in many different regions to make us stronger and allow us to enhance well-rooted identities.

2. THE COEXISTANCE OF THE SO-CALLED 'THIRD' AND 'FIRST' WORLD - THE INCLUSION OF THE 'UNDERDEVELOPED' IN 'DEVELOPED' TECHNOLOGIES IN SOUTH AFRICAN ARCHITECTURE

The architecture of so-called 'first' and 'third' world countries reflect their different characteristics and dynamics, their economical, political, social and cultural dispensations as well as their patterns of collection, production, and consumption. But do 'developed' and 'underdeveloped' technologies have to conflict? The inclusion of the 'underdeveloped' in 'developed' technologies can often be seen in South African architecture. The power of this combination could be promoted in order to enrich the way we view our global coexistence and to move away from dividing communities into winners and losers and to move towards cooperation between partners. Instead of imposing foreign polices and technologies on local practice, processes of mutual inspiration and reliance could evolve which would pool different skills and knowledge. However, good ideas and intentions can be fail if they are poorly or thoughtlessly implemented; disregarded people will not share their culture with those who disregard them.

Architecture is viewed as the material expression of different cultures whose coexistence is encouraged by making positive contributions, balancing global development, and uplifting local communities. Minorities should not be excluded because of their relative powerlessness and standard of living since they have developed their own identities and have different skills in their approach to design and development solutions. They can therefore enrich global standards and simultaneously promote regionalism. Regionalism is the combined interaction of climate, culture, technology and craft as well as myth. The reconciliation between a rich, formal and cultural preoccupation with the wealth of technical local knowledge and material is the application of creativity brought to rooted architecture [1]. There are rooted and universal cultures. Sustaining any kind of authentic regionalism depends on our capacity to generate vital models of regional architecture and ideas while appropriating global influences at the level of culture and civilisation [2].

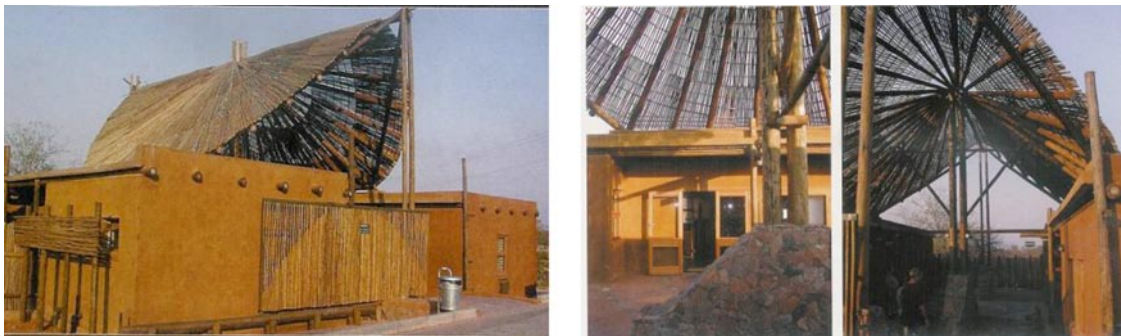


Figure 1. Regionalism of 'cooperation' and 'coexistence', Mapungubwe
(*Architecture South Africa*, Sep/Oct 2006, pp36-39).

The fundamental problem of regional architecture lies in the relation between building technology and design. In the South African context this relation could be cultivated through a regionalism of 'cooperation' and 'coexistence' between the so-called 'first' and the 'third' world or between the 'developed' and the 'underdeveloped' (figure 1). This combination could complement regional trends, illustrating the concept of lived reality. Nowadays, when globalisation is a reality, regionalism has to be consciously cultivated. It is important to understand the regional culture in order to create architecture that has cultural roots, functions well and is long-lasting. Architecture is a statement not only of the patterns of privilege and power but also of established relationships between humans and resources. When developing the arguments of understanding and responding to a context in order to protect regional identities and culture, we are faced with the issue of applying technologies transferred from one region to another, particularly when the move is from a more 'developed' country to a less 'developed' one.



Figure 2. Concrete blocks (representing 'developed' technology) used to build traditional Zulu oval forms) and gum poles (the 'underdeveloped'), applied to columns, the tower and signage (author's collection).

Regional communities can adapt developed technologies and create a distinctive regional statement (figure 2). It is evident that, despite strong globalisation trends, regional identities have not disappeared and that the 'first' and 'third' worlds' coexistence shapes an architecture of expression. The images (figures 1,2,3&4) illustrate architecture incorporating 'developed' and 'underdeveloped' elements in selected samples and details.

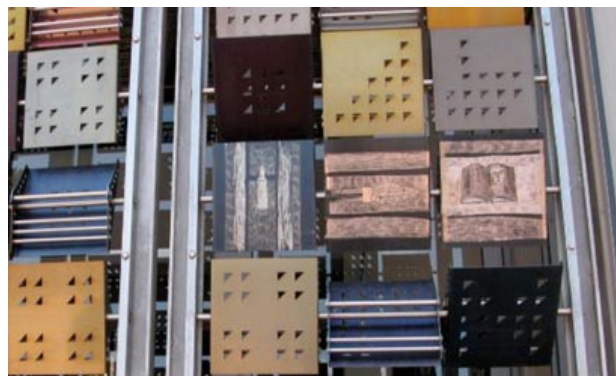


Figure 3. Mixture of screens ('developed' technology and local artistic interpretation), Jhb (author's collection).



Figure 4. Column base (coexistence of different materials & technologies), PE (author's collection).

Design should not seek to impose a foreign and pre-established system – regardless of whether it is an architectural style or an architectural language. The way in which materials are applied should be fully integrated with the functioning existing order and the values associated with it. If the global impetus is to turn

what is there into something else and transform it into a 'nobler' version of itself, this has to be done without alienating the local community. The additions should become a completely connected, fully integrated part of the functioning organism, but should also be a distinguishing part of the design.

'Developed' technology is a canvas for the use of powerful 'underdeveloped' technology, which has recently been applied thoughtfully, vigorously and creatively in many places in South Africa. Its colourful diversity and vibrancy illustrate its cross-cultural force (figure 5). Layer upon layer and experience upon experience have been accumulated and incorporated into designs which, in turn, influence the future.



Figure 5. Traditional African ceramic pots (small projected elements form characteristic texture) and the reinterpretation of the vernacular by artist Jeremy Wafer (author's collection).

3. GENESES, PREFERENCES AND SKILLS

Many buildings and public places function not only as symbolic landmarks, but also appear to reflect the legacy of different geneses, preferences and skills. Architectural ceramic installations are tactile and evident illustration of specific skills. Bridging past and present resources allows for new solutions and accomplishments.

In extreme cases we may deal with perfect or imperfect materials as well as skilled or unskilled workers. We may limit our communication to technical drawing and instruction when relying on perfect material and skilled workers, but we have to spend more time on design and supervision when operating with imperfect materials and unskilled workers to insure the success of the final execution. Success is possible in both cases (figure 6), but the specific circumstances must be taken into account from the beginning of the design and installation processes.



Figure 6. Perfect ceramics and perfect installation versus broken ceramics and extensive supervision (author's collection).

When progress appears to be fleeting most societies are deprived of the benefits of present-day input, which could have ensured an improved quality of installations. Ideas may be either developed or received. Innovation and creativity are necessary for these processes to be successful. Regional cultures can influence global culture and simultaneously be manifestations of world culture (figure 7).



Figure 7. Ceramic façade providing environmental control - inspired by African and Islamic traditions, (author's collection).

Global competition can patronise egalitarian solutions [3] but geneses, preferences and skills must be comprehensible and managed accurately according to specific contexts. A brief summary cannot capture the analysis and the richness of observations. The idea of regional identity may have to be redefined as the progress of globalisation spreads and stimulates design farther afield. Some ideas have travelled successfully between regions and samples of generic principles have become specific solutions.

The characteristics of Islamic traditional patterns are completely different from African patterns which represent 'irregularities in regularity' (figures 8&9). It is worth remembering that human, social and cultural assumptions as well as irrational factors may limit technological advances and accomplishments. Regional culture plays a crucial role in the success of the process of exchanging, adapting and implementing standards in the build environment.

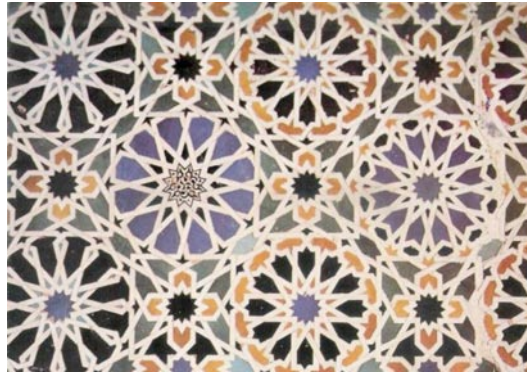


Figure 8. Islamic patterns - the perfection is the 'beauty', (author's collection).



Figure 9. African patterns - the irregularity is the 'beauty', (author's collection).

4. CONTEXTUALISING SOUTH AFRICAN ARCHITECTURAL CERAMICS

Ceramic tiles have roots in architecture and its development may be traced as early as 4000 B.C. Glazed and coloured bricks were used in Ancient Mesopotamia. Mesopotamian skills were imported for the palaces of the Persian Empire. The Persian tradition of building continued, and after the Islamic conquest of Persia, spread to much of the Islamic world. Since the thirteenth century tiles have been used extensively in the Middle East. Islamic buildings were heavily decorated with dense, often massive tiles of astonishing geometric complexity (including floral motifs and calligraphy) that lead to small scale patterns that were perfect to craft into ceramic tiles. Tiles spread to Spain and Portugal (which produced extremely large painted scenes on tiles - usually in blue and white). Ceramic tiles became popular in Italy. Delftware tiles (typically with a painted design covering only one – rather small – tile) were ubiquitous in Holland and widely exported over Northern Europe from the sixteenth century onwards.

Type of tile emerged in the sixteenth century and was used extensively as an external cladding. Ceramic tile technology did not permit mechanically resistant and affordable products for floors and therefore ceramic tiles were used primarily as a wall cladding until the mid-twentieth century (figure 10). It is ironic then, that the historical cladding material for walls has become the primarily floor finish due

to the development of ceramic tile technology over the past fifty years. Despite some technical and aesthetic failures, façade ceramic tiles have been on the verge of becoming the mainstay of a true architectural material used in innovative way to create spaces and forms influencing the essence of architecture.



Figure 10. European industrial tiles (1841-1941) that were imported to South Africa and influenced its ceramics and applications at railway stations, post offices, hospitals etc.

(<http://www.tilesoc.org.uk/news.htm> &

http://lh6.ggpht.com/_Xp2H_ZnojSg/SK8d-U7JpdI/AAAAAAAAAAm0/Zrb7SBAVyLU/IMG0084+copy.JPG).

Southern Africa does not have such an outstanding history (like Islamic tradition or countries such as Spain, Portugal, Italy and the Netherlands), although the earliest ceramics predate the colonial era by more than a millennium. The Khoikhoi (pastoralists) migrated to the south-western and southern parts of the subcontinent and introduced ceramics two thousand years ago [4]. They and Early Iron Age Bantu-speaking farming communities further north made low-fired earthenware. European earthenware and stoneware as well as oriental porcelain were introduced to the Cape in 1652 after the colonial occupation by the Netherlands. Some locally made pottery was available in 1665. Dutch tiles did not feature prominently in the buildings of the almost a century and a half occupation [5]. The importation of ceramics continued after the British assumed control of the Cape in 1806 with isolated attempts to locally produce basic items. The 'mineral revolution' and the discovery of diamond and gold in this region dramatically transformed the economy of the sub-continent. The so-called "white community" provided a substantial market for ceramics manufactured in the northern hemisphere [6]. The products of all the major tile manufactures (Doulton terracotta, Mintons China Works, Maw, Pilkington and Campbell) were exported to a country that was still almost entirely dependent on imported ceramics, but manufactured bricks and roof tiles. In the 1890s a very large deposit of clay at Olifantsfontein ('elephants' spring') – halfway between Johannesburg and Pretoria – was discovered. This led to a financially unsuccessful attempt to produce ceramics although Cullinan, who intended to produce more than just bricks and pipes, sent his son to study ceramic techniques, built a factory, brought skilled workers over from England, and

recruited suitable staff. Among the 30 workers there were tile and mould makers, slip makers and ceramic firemen. Cullinan's development included a hostel for about 80 orphaned South African children who were apprenticed to the English ceramists. Unfortunately, despite tremendous efforts to promote the products of this factory, the venture was short-lived. This was mostly due to consumer prejudice against locally made items as well as inadequate tariff protection from overseas products which resulted in the close of in the factory from 1914 until 1925 when the Ceramic Studio was established by locals trained at the Durban Technical College and the Royal College of Art in London. Dominated by female leaders they came to known as the 'women of Olifantsfontein'. They worked in an unsympathetic and harsh industrial environment producing architectural ceramics of a kind never before seen in the country and enjoying a unique status in the history of South African ceramics.

John Adams, head of the Durban School of Art (1915-1921), introduced ceramics into the curriculum. He worked for a tile manufacturer and in Bernard Moore's studio. In 1921 he moved to England and joined Pooble where the Durban War Memorial (figure 11) - decorated majolica - was completed and shipped out to be assembled on-site in 1926. It was observed that South Africa was developing forms suited to her individual needs and that brilliantly painted Della Robbia tiles were more suited to this environment with its constant sunshine, than the severer architecture of England and Holland [7]. The use of Della Robbia tiles represented a growing demand for decorated tiles, modelled faience and colour-glazed garden ornaments.



Figure 11. Durban War Memorial,
(http://farm4.static.flickr.com/3119/2577656848_27dcf949ef_m.jpg & http://farm4.static.flickr.com/3018/2576825695_192dae99bc.jpg).

Architects soon began to display an interest in ceramic products. 11,000 tiles for the new railway station in Johannesburg were commission from the Ceramic Studio at Olifantsfontein in 1928. The tiles in the tea room had to resemble delftware (the walls and pillars were clad in blue and white individually decorated tiles). The

studio team conducted research in order to produce the pictorial content of the tiles and designs which illustrated a wide variety of South African fauna, flora, historical events (figures 12&13) and copies of Bushmen rock paintings. The massed tiles still create an extraordinary impression, although the station is closed and in a sad state of neglect. In the bar, the tiles were inspired by the Alhambra in Spain consisting of interlocking geometrical shapes glazed in contrasting bright colours which creates an extremely rich and decorative effect. Similar designs were later used for domestic commissions. In the waiting room, panels with Dutch proverbs in Gothic lettering were traced from canvas imported from the Netherlands to decorate the earlier railway station.

During 1920s and 1930s the studio obtained many other public and private commissions. The panels on historical themes for new post offices as well as government buildings and hospitals were the most important. More than 100 patterns of tiles and relief panels (excluding work for private houses) were produced between 1927 and 1941. The individual tile designs appeared in a catalogue offered as part of the studio's standard range two decades later during the Linn ware period. The tiles were used in hotels, banks, nurseries and other buildings for decorating entrance halls, verandas, window-sills, bathrooms, kitchens, fireplaces, and nurseries. The studio offered a range of at least 25 different series, some of which contained up to 28 individual topics. They collaborated with architects and artists to tile and panel hospitals, cinemas, schools and private houses [8]. The images on the tiles and panels were explicitly South African, but the decorative style and ceramic techniques derived from European sources (figures 12&13). Stylistically the designs were influenced by historical sources such as delftware and Moorish tiles from Spain as well as by contemporary trends overseas. They were also influenced by the inevitable political forces of the time. The public commissions in particular reflected many of the concerns of the country's ruling minority at that time and would not justify the use of public funds for decoration.



Figure 12. The tableau of the Great Trek Centenary in the Irene Post Office by Rosa Hope (1939), (<http://www.tatham.org.za/images/rosa-hope-mural.jpg>).



Figure 13. The tableau of animals in the Irene Post Office, (private Fisher's collection).

It is believed that earlier hand-made tiles were slip cast and since the 1940s industrial blanks from Conrand were used. After much initial experimentation the studio developed a satisfactory clay body for the tiles. Because the clay was relatively coarse, it has been suggested that slip imported from England was sometimes included in the clay body. Examples of these tiles show variations in size and thickness as reminders of problems with the slip-cast tiles when they were drying and being fired. The studio dairy (1928-1941) recalls frequent contact with architects as well as problems regarding staff and materials. Glazes, pigments and other chemicals were obtained from overseas (mainly Wengers in England), but the Second World War cut off these supplies. The glazes developed by technical staff to replace the previous glazes were initially inferior, but improved and eventually matched imported glazes.

By the end of the 1950s the close down of the Olifantsfontein Ceramic Studio was inevitable. This was mostly due to the lack of artistic direction; they did very little new work (they mostly continued to reproduce old patterns and designs) and ignored changes in consumer taste as well as the increasing competition from other manufacturers which caused diminishing consumer demand.

The Liebermann Pottery was established in 1952 and manufactured ceramics. They have been collecting interesting examples of functional pottery from around the world, including Asian decor, porcelain from China, Vietnam and Thailand. Their collection of antiques and collectibles, are used to reproduce decorative ceramic and terracotta tiles, clay and clay supplies.

Significant developments in new ceramic tile technology have transformed a relatively unsophisticated clay material into a material that is the conceptual basis for prominent architecture around the world today. The inspiration as well as the enormous possibilities for expression in the ceramic tile and its installation plus innovative design – when taking into account the local context – may add significantly into the tradition of architectural ceramics.

The remainder of this paper is dedicated to an informal chronology of a variety of ceramic tile installations in South Africa. The intention is to illustrate the search for appropriate approaches in specific contexts as well as the struggle for identity

and regional development. The development of ceramic tile art and technology has created vast opportunity to expand design vocabulary.

5. ESIAS BOSCH

Bosh established his studio in 1960 in Transvaal and believes in the exploration of ceramics through a disciplined and meticulously scientific approach. He was particularly impressed by the earthenware tiles of Portugal and Spain, and the Islamic tiles of the Middle East. The size of his first porcelain was limited by his kiln (410 by 325mm). This frustrated him when he envisaged projects on a grander scale than others had done before him. Visiting Germany he passed the new Keramion Museum which was then under construction with walls cladded using large Buchtal tiles in sizes that he had not seen previously. After a long series of negotiations he finalised the transaction for twelve unglazed tiles to be shipped over to South Africa which he was to glaze. When they arrived he found that they were glazed a dark blue and four of them were broken. He spent weeks removing the glazes himself and repeated the process when his results after firing were disastrous; early huge shallow top-loading kilns (1,8m by 1,9m and 240 mm height) did not provide sufficient circulation when firing. He built up the surface glazing to eight layers and fired the tile between each layering. Usually tiles are first fired is at a higher temperature and then at a lower, but he found that copper was reasonable stable and seemed to set into the gold when both liquefied which gave a beautifully integrated appearance to the final product. There was noticeable method in his madness. He successfully exhibited his large tiles in Germany in 1983, but was then hospitalised in a critical condition and faced depression [9].

Bosch abandoned the large tiles and began producing smaller ones. He experimented with techniques that would give similar products at a lower cost. There were certain changes in style (figure 14) and installation following the 'irregularity' of African patterns and style.



Figure 14. Installation of a variety of irregular ceramic tiles and handmade ceramics, (Bosch & De Waal, 1988).

Bosch has been working in earthenware, stoneware and porcelain and executed commissions from leading business companies, and for public building and private houses (figure 15). His individual design and approach were prized when he worked on the main hall at the international Jan Smuts Airport in Johannesburg (the building has since been demolished).



Figure 15. Public commissions by Esias Bosch, (Bosch & De Waal, 1988).

His works went through various stages of evolution and his outstanding panels and installations have been protected in places which maintained a right understanding of the uniqueness of these types of ceramics (figure 16).

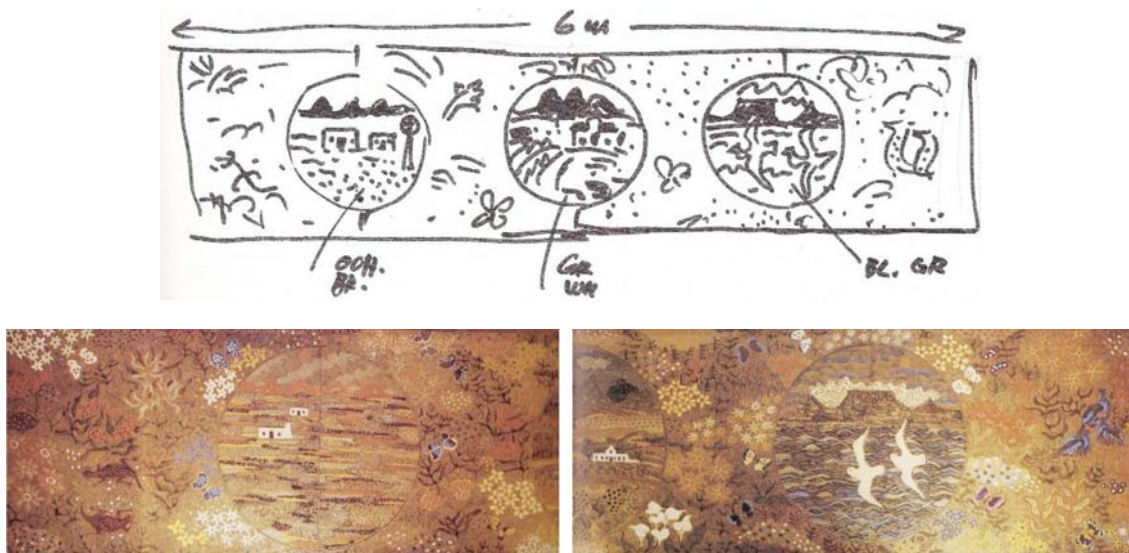


Figure 16. Conceptual sketches and huge tiles covered with layers of glazes, (Bosch & De Waal, 1988).

6. ANDREW WALFORD

In 1969 Walford opened his studio at Shongweni in Natal and worked on applying Anglo-Oriental practice in the African context. He follows the reduced stoneware

and porcelain tradition, firing in an oil-fuelled kiln with a maximum temperature of 1 380°C (figure 17). He achieved his style through years of practice and dedication, but without an obsessive desire to strive towards an ideal of beauty. This achievement and these qualities are unattainable without the sensitivity of the practised artist to his materials[10]. He installs murals made from his huge ceramic panels and tiles as well as smaller patterns designed individually for specific installations (figures 18, 19 &20).



Figure 17. Walford holding his large ceramic tile and installation of uneven ceramic tile, ICC Dbn (<http://www.andrewwalford.co.za/Pages/wall04.html> & <http://www.andrewwalford.co.za/Pages/wall17.html>).



Figure 18. Wall installation – squared big tiles, (<http://www.andrewwalford.co.za/Pages/wall.html>).



Figure 19. Wall installation – huge tiles, (<http://www.andrewwalford.co.za/Pages/wall01.html>).



Figure 20. Wall installation – different sizes of ceramic tiles and patterns
(<http://www.andrewwalford.co.za/Pages/wall03.html> & <http://www.andrewwalford.co.za/Pages/wall17.html>).

7. JANE DU RAND

Du Rand started running her mosaic studio in 1998. Most of her projects call for community participation and so the studio is frequently full of participants from a wide range of backgrounds (figure 21) learning and training in the art of ceramic and mosaic murals which are mainly linked to buildings integrating her interest in art and architecture.



Figure 21. Jane du Rand and her team for one of her projects
(<http://www.durandmosaic.co.za/Staff.htm> & <http://www.durandmosaic.co.za/Stadium%20Progress%20037.jpg>).

Her community-based commissions include the participation and training of local artists and workers, mostly from disadvantaged communities and sometimes including disabled people. Selected projects with the involvement of local communities in St Lucia, Durban and Baragwaneth as well as highly commercial projects like the Constitutional Court and Melrose Arch development in Johannesburg, the ICC in Durban and prestigious hotels and casinos form the remainder of this section on her ceramic installation.

Greater St Lucia Wetlands Park, North Coast.

The most important aspect of this floor mural project (figure 22) was the training of crafters from the local community (the Duku Duku Forest) in mosaic

techniques. Teaching them new skills and leaving them with the necessary supplies and tools allowed them to continue developing their skill and to undertake projects of their own. The project achieved stunning results with very enthusiastic and fulfilled participants [11].



Figure 22. Community participation project, Wetlands Park
([http://www.durandmosaic.co.za/St%20Lucia%20\(7\).JPG](http://www.durandmosaic.co.za/St%20Lucia%20(7).JPG) & [http://www.durandmosaic.co.za/St%20Lucia%20\(17\).JPG](http://www.durandmosaic.co.za/St%20Lucia%20(17).JPG)).

West Street Pilot Project, Durban CBD.

The West Street pilot project was intended to upgrade facilities for informal traders in Durban. This project included young emerging artists (who had recently graduated from the Durban Institute of Technology) as well as interested unskilled participants (from previously disadvantaged backgrounds) who were trained as part of the project (figure 23). The intention was to use the project as an empowerment exercise so that participants could gain from their involvement and learn how to turn their art and design skills into viable careers from which they could afterwards make a living [12].

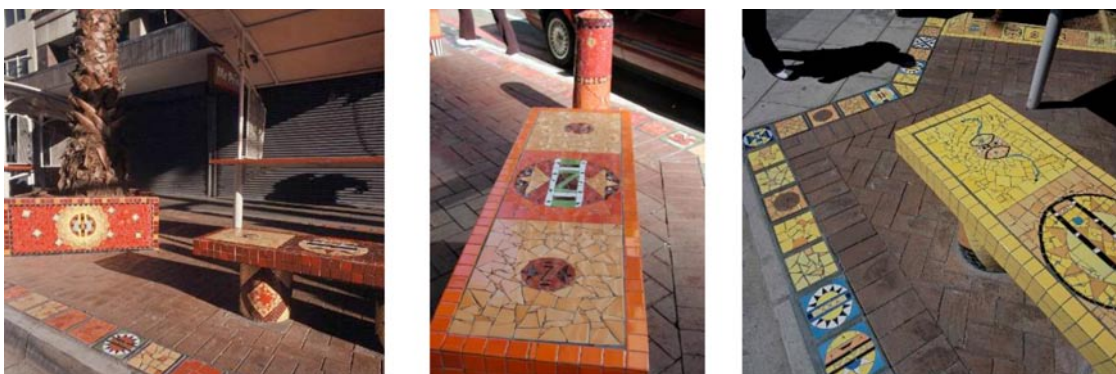


Figure 23. Upgrading facilities for informal traders, Dbn
([http://www.durandmosaic.co.za/West%20Street%20\(19\).JPG](http://www.durandmosaic.co.za/West%20Street%20(19).JPG)).

Baragwaneth Taxi Rank, Johannesburg.

This project was designed from scratch for a big taxi rank for many commuters in Soweto. The idea behind the undertaking was to communicate with marginalised people coming from previously disadvantaged areas of Johannesburg (figure 24).

The intention was to apply languages and an aesthetic that is understood by this community to create an opportunity for self-expression.



Figure 24. Baragwaneth Taxi Rank - overview
(<http://joburgnews.co.za/2004/sep/bara1.jpg> & [http://www.durandmosaic.co.za/West%20Street%20\(19\).JPG](http://www.durandmosaic.co.za/West%20Street%20(19).JPG)).

The design is made up of both detailed and plain strips. The designs on the detailed strips are composed of images depicting goods sold in market places around taxi ranks such as plates of fruits and vegetables, hats and bags, clothing and sweets (figure 25).



Figure 25. Baragwaneth Taxi Rank - details of industrial (perfect and rejected) handmade tiles
([http://www.durandmosaic.co.za/St%20Lucia%20\(7\).JPG](http://www.durandmosaic.co.za/St%20Lucia%20(7).JPG)).

Participants learnt mosaic-tile techniques in the 'hands-on' workshop and developed enough confidence to teach their newly acquired skills to others.

ICC - Red Carpet, Durba.

The brief from the eThekweni Municipality was to create a "welcoming" red carpet (figure 26) for all the people of the city leading to the entrance of the ICC building. The focus was on texture and detail with an "African feel". The intention was that ordinary people should be able to identify with the carpet [13].

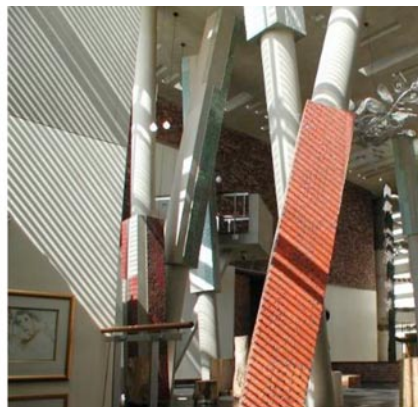


*Fig.26 A welcoming 'red carpet' – coexistence of two worlds, ICC Dbn
(<http://www.durandmosaic.co.za/Public%20Spaces.htm>)*

Foyer Columns for the Constitutional Court, Johannesburg.

The Constitutional Court in Johannesburg is the biggest government building commissioned just after the first free election in 1994. The theme of this building "Justice under a Tree" refers to the idea of holding court under the shady branches of a tree. The space can be described as a "forest of columns" with 18 slanting columns stretching up towards the ceiling (figure 27).

Du Rand used actual indigenous South African trees as a point of departure for the design. Parts of these trees, such as seedpods, thorn shapes and leaf shapes influenced the models that were produced in the ceramics and bits of tile. The patterns on the lower parts are mostly seedpod and thorn shapes are all made up of terracotta, reds, browns and ochres. The upper parts are mostly leaf and pod shapes and are made up of grey greens, turquoise and blue greens.



*Figure 27. 'Justice under a Tree'- the concept of a 'forest of columns', Jhb
(<http://www.durandmosaic.co.za/Public%20Spaces.htm>).*

Small ceramic pieces were cut out, pressed or moulded in clay, fired and glazed. Various glazes were experimented with and colours decided on (figure 28). All the rectangular strips for each column were laid on tables and on the floor in her studio in Durban. This process took two to three months. All the strips were held

together with brown paper and netting and transported to Johannesburg where a team of six people took two weeks to install the mosaic on the columns.



Figure 28. Seedpods, thorn shapes and leaf shapes formed the models for handmade tiles, Jhb (author's collection).

Melrose Arch, Johannesburg.

This highly prestigious development involved the installation of mosaic tiles. Commercial tiles as well as self-produced ceramic tiles and patterns plus rejected plates and broken tiles were used to compose varied installations (figure 29).



Figure 29. Local industrial and handmade ceramics installed as cladding, Jhb (<http://www.durandmosaic.co.za/Public%20Spaces.htm>).

When working on façades (figure 30&31) the conventional tiles and table plates were used and an individual variety of handmade tiles were bought to compose the installations.



Figure 30. Local industrial and handmade ceramics installed as cladding – façade details, Jhb
(<http://www.durandmosaic.co.za/Public%20Spaces.htm>).

This prestigious place and architecture has a lot of typical industrial tile installation that will be replaced and upgraded following new trends, but this will definitely not be applicable to the ceramics and the ceramic installations executed by Jane du Rand.



Figure 31. Local industrial and handmade ceramics mosaics details, Jhb
(<http://www.durandmosaic.co.za/Public%20Spaces.htm>).

Beverly Hills Hotel, Durban, South Africa.

Some of Du Rand's other installations are part of the new installations and upgrades in hotels (figure 32).



Figure 32. Handmade and rejected broken tiles, Dbn
(<http://www.durandmosaic.co.za/Public%20Spaces.htm>).

Meropa Casino, Pietersburg, South Africa.

In addition to the previous samples Du Rand has also done installations for places of entertainment. The fun of her work has been became the fun of viewers.

She has been highly recognised for her work and has established her position between artists obtaining the most prestigious applications for ceramics. She provides employment and training to disadvantage people and communities and uses local resources in the best manner by mixing ceramics with recycled and rejected materials (figure 33).



Figure 33. Local rejected industrial and handmade ceramics mosaics mixed with recycling materials, (<http://www.durandmosaic.co.za/Public%20Spaces.htm>).

Similar ideas of providing training and skills development have been implemented by the ORT International Cooperation (IC) established in 1960 that runs more than 350 projects in nearly 100 countries. They work with international agencies (such as the World Bank, African Development Bank, Inter-American Development Bank, and the European Commission), national governments, local communities and private companies. The IC has earned a reputation for excellence in providing technical assistance, training and capacity building services in a wide variety of sectors, including technical and vocational education and training, skills development, and information technology, but they have not managed to obtain similar standards to Jane du Rand who does not have such a good network and resources.

8. ITALTILE and TILE AFRICA - SYSTEMATIC COMMERCIAL APPROACH

Today more than ever, the world's ceramic tile community rightly insists that its products be considered as an installed system. They fully recognise that tiles do not serve their purpose or demonstrate their capabilities until they are not only properly manufactured but also properly installed. This effort should also be extremely important to retailers or contractors who deal in tiles to fully grasp the technical basis for a successful job, and to understand the critical properties of ceramic tiles and the environment in which the tile will be installed. The leading company between the top quality resellers is a tie between Italtile and the affordable Tile Africa.

The journey through the world of ceramic tiles does not end with the choice of the most suitable type of tile for the consumer's requirements. Choosing coloured,

glazed or decorated tiles does not guarantee a successful covering of surfaces. It is at this point that the ability to know how to combine aesthetics and appearance, technique, design and execution, and request and result, comes into play. Interior designers and architects, as well as tile layers and consumers, must therefore prepare a project which, besides giving indications of appearance, must also contain rules to follow during the laying operation; rules which change according to the particular character that is desired for the floor or wall. This ability and professionalism will allow the determining of the correct width for joints and the best tile laying technique.

A Taste of Italy and top ceramic tiles.

South Africans do not have to go all the way to Italy to see the latest in tile products. Italtile is the leader in quality and sophistication and is celebrating 40 years on the South African market. There are many outstanding offers on display at the Italtile showrooms which mostly offer Italian and Spanish tiles. They perform accurate trend spotting and imbibe an intense dose of design inspiration. Innovative chromatic combinations, three-dimensional textured pattern tiles and a double-elongated format for horizontal and vertical laying are offered. This season's ceramic tiles have been remarkable for their ability to mimic natural materials such as metal, pebbles, wood, bamboo, rattan, textiles and leather (figure 34&35). There are successful simulations of a variety of textiles offering elegance and simplicity in products that mimic canvas, wool and cashmere.



Figure 34. Tiles from the Italtile mimicking textile, (author's collection).

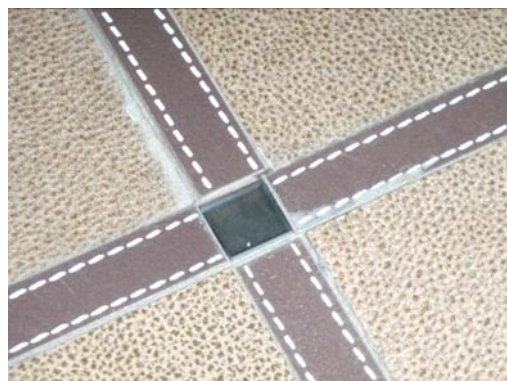


Figure 35. Tiles from the Italtile mimicking leather, (author's collection).

Mosaics (with a new twist – micro-mosaics) which range from the opulent to the unexpectedly plain to the mod paisley continue to be popular. Whether matte or polished, texture plays a big part on curved surfaces.



Figure 36. Tiles installation at the Italtile demonstration of the Waterjet Art varieties, Jhb (author's collection).

This year, playing with mixed textures and scales plus the introduction of larger tiles allows the achievement of a more seamless, monolithic look. In some cases, the grout is an integral design element. No matter what smart and trendy tile you are looking for, the Italtile in South Africa seems to have it as well as unlimited design opportunities with Waterjet Art producing any kind of delicate line art or graphics (figure 36&37).

In general, the quality of ceramic tiles leads to the quality of the installation, but tiles can be spoiled when the installation is not done by skilful workers. It seems to be a problem in the South African market to get well-trained people to install the available top quality ceramic tiles. It even seems to be a problem in the show room (figure 35).



Figure 37. Waterjet Art varieties, (http://www.jet-presssol.co.za/waterjet_cutting.html).

Flow Waterjet cutting systems are in use in over 45 countries providing customers with world class expertise and precisely designed solutions. Through successful and innovative design and the implementation of total solutions they add value to top quality tiles making any design layout and idea possible (figure 37).

Tile Africa

Tile Africa is a national retailer of ceramic tiles who is committed to providing quality products and strives for excellence in customer service. They sell local South African ceramic tiles as well as tiles from China and Brazil. Their trained staff is always on hand to offer advice on every aspect of your remodelling or makeover project. They provide strategic projects with full service from specifically manufactured tiles that are backed by their 15 year guarantee, as well offering the fitting and installation of these tiles to big shopping companies and car salons. As part of this service, a project manager and trained technician are intimately involved in the process from concept to completion, ensuring design continuity and the project success of these stores (figure 38). Tile Africa's Contracts Division offers an invaluable service to architects, contractors and specifiers as a result of their expertise and their access to a wide variety of products.

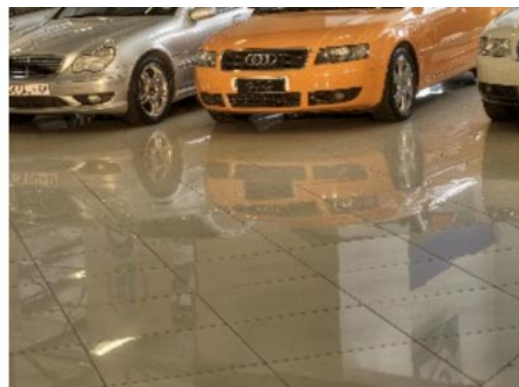


Figure 38. Prioritised installations by Tile Africa, (<http://www.tileafrica.co.za>).

Good installation can enhance the quality of high quality ceramic tiles or even of imperfect tiles, but unprofessional installation ruins the best quality of any type of ceramic material (figure 39).

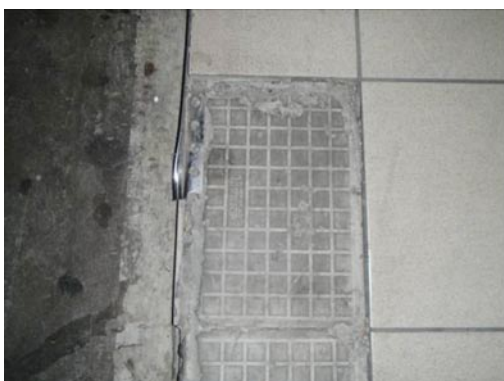


Figure 39. Failures of installation and maintenance, Jhb, (author's collection).

9. CONCLUSION

South African spaces and places remind and teach us about the potential for the creative application of architectural materials and technologies representing the 'developed' and 'underdeveloped'. This mix of simplicity and sophistication of expression can be found in the convergence of the so-called 'first' and 'third' world.

Design and composition should express different cultures pooling different skills and knowledge that should not be imposed on each other, but should be shared. It is important to address our concerns individually in many different regions to make us stronger and allow us to integrate with specific clients and create an enhanced identity, well-rooted in its environment. Nothing imitative is equal to that which is imitated. Instead of imitating, we should search for the principles that made the imitative original and come forward with individual yet contextualised designs. There is a demand for producers and designers who tackle today's requirements and problems with today's solutions and an understanding of resources. Well-executed architectural ceramic installations can make a positive contribution to the regional and global development of ceramics.

There is conflict between regionally appropriate environmental building processes and an increasingly global technical and economic culture. The fabric of architecture is not an art of imposing, but of discerning potentials and bringing them into play. Many people acknowledge the limits of the human intellect and stress the importance of instinct and intuition. Architectural design requires a harmony between head and heart, experience and memory. Instead of the unthinkingly applying global tendencies, the individual application should grow naturally from the design task and be well-rooted in the region and its resources. Sharply varying interpretations based on exchanging information, skills and technologies may lead to developing contextualised and progressive ceramic installations which communicate with different cultures. The 'developed' and 'underdeveloped' can cooperate creatively. Cross-cultural transfer is possible, but can be problematic when we do not know why and how to tackle it. The selected sample of architectural ceramics installations illustrate, however, that such transfer is worth trying. It can help us to integrate better, become happier humans, and enrich societies culturally. Such installations based on international design standards are present in South Africa.

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