

Revisiting Making: the space in between Africa and Modernism in the work of Norman Eaton (1902 – 1966)

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In *Studies in Tectonic Culture* (1995), Kenneth Frampton repositions the entire modern architectural tradition and traces the history of contemporary form as an evolving poetic of structure and construction. Amongst others, he highlights the primary influence of the tectonic approach of Frank Lloyd Wright (1867 – 1959) and the crucial role played by the structural detail in the work of Carlo Scarpa (1906 – 1978).

In Frampton's words: "With the tectonic in mind it is possible to posit a revised account of the history of modern architecture, for when the entire trajectory is reinterpreted through the lens of *techne* certain patterns emerge and others recede. Seen in this light a tectonic impulse may be traced across the century uniting diverse works irrespective of their different origins". (1990; 1996:525)

Coinciding with Frampton's notion of "an act of construction", this paper attempts to (re)position African traditional craftsmanship and tectonic assembly in relation to contemporary culture. The attempt is an enquiry into African tectonic expression, capable of enhancing the sensual and intellectual experience of architecture, opposing the 'Disneyfied' or simplified formal impositions of African iconography.

The regional approach of South African architect Norman Eaton (1902 – 1966) motivates the arguments as set out above. Within the ambit of Modernism Eaton's work reflected a particular response to the landscape and climate. His approach signified a quest of a timeless architecture rooted in the particularities of place. For Eaton it was Africa that provided the most compelling forms of the natural world. His work expressed his deep understanding of the textural significance and poetics of African making. He searched out forms and artefacts that carried what he saw as a "unique African feel". His reinterpretation of local and industrially produced standardized building materials set his work apart from the machine-aesthetic of modernism. (Harrop-Allin, 1975:24)

Tracing

Eaton's work was located in the *esprit de système* of both Wright's organic architecture and the distilling of Veneto craftsmanship in the work of Scarpa. Both Eaton's and Scarpa's understanding of Wright's work was passive – probably based on an appreciation of photographs and drawings.* Where Scarpa's work was informed by a profound understanding of Veneto craftsmanship; Eaton's work was deeply rooted in Africa. In both cases the result was a modern architecture that was "more than rational structures and functional spaces" (1990; 1996:506).

Architect Marco Frascari analysed Scarpa's use of detail by a comparison between drawing and built objects in "The tell-the-tale detail" (1984). In Eaton's work, the analysis of detail would extend to his keen observation of African art, craft and architecture.

"He loved being in Africa and of Africa. His concept and spaces and proportion and materials were derived from and concerned Africa: light and shade and vast areas of empty space, natural forces of rock and stone and desert plants and trees, a fusion of the elements of a continent and its creative traditions". (Harrop-Allin, 1975:9)

"The patterns, crafts, sculpture, weaving, clay, stone and bone work Eaton found (on his travels through Africa) were all materials and designs that led him to arrive at something that he would describe as the 'beautiful African quality', a quality of the continent he was born to, aspired to live in and to which he contributed so well in his field of endeavour". (Harrop-Allin, 1975:24)

Although Eaton's domestic architecture draws strongly on the African monumental past (Judin *et al* 1998: 115), this paper focuses on his later public work, which signifies both a regional and universal consciousness. Local influences were drawn from diverse sources: Cape Dutch architecture, Great Zimbabwe and the unself-conscious architectural endeavours of the Ndebele.

Eaton also meticulously documented visits to East and Central Africa in a series of sketchbooks, letters and diaries. In turn, Scarpa's drawings explored details with partially coloured sections, elevations and analytical multi-dimensional vignettes, Eaton's drawings were almost working drawings – annotated and dimensioned with precision. Scarpa's drawings actively supported the process of construction; Eaton on the other hand, transformed the measured controlled drawing into built form.

Bird's eye views of places (even ruins) are accompanied by plans and a section of his ship to Kenya plus observations of people he had met are all fastidiously recorded. Eaton studied the configurations of dwelling layouts as seen from the air, the plan and section of a Masai *manyatta*, bamboo partitioning, patterns of weaving, cluster reeds bound with grass, even beehives and the mechanics of a folding knife.

Translation

Instead of superficial translation or embellishment, Eaton's architectural appropriation of his observations led towards a deep understanding of his subject matter. This is illustrated in a theatre complex in Pretoria. At first glance, the original plan of the Little Theatre (completed between the mid-1940's and early 50's), recalls the plan of the Masai *manyatta* as sketched in his 1943 Kenya diary. Similar to the *manyatta*, edges of his building fall away into roundness. The non-loadbearing wall of the *manyatta* acts as spatial divider, screen and container. Its patterning was also carefully documented.

Despite the availability of industrial materials, Eaton used locally manufactured face-brick in most of his work. The brick course work readily emulates the woven enclosure of the *manyatta*. The pedestrian walkway and undulating wall of the Little Theatre forge a connected surface of patterned masonry, complementing the intricate and ever-changing shade patterns cast by the one on the other. (Harrop-Allin, 1975: 99) Brickwork details draw directly from Eaton's sketches (see entry 31/12/43). The structural patterns in traditional Zimbabwean walls also come to mind.

The translation of a pliable material into permanence and the re-interpretation of brick course as a "woven" entity are elaborated by German architect, Gottfried Semper in *The Four Elements of Architecture* (1851). Semper explains that the enclosing membrane (wall) has its origin in weaving. The art of the wall builder had originally been that of weaving of mats and carpets, later the light mat walls were transformed into clay tile, brick, or stone walls. (1851; 1989: 103 – 104) Semper continued to make a distinction between two categories of enclosing membrane: the one being the German *Wand* (a screen-like partition); the other – the *Mauer* – represents mass. Frampton (1990; 1996: 524) points out that both *Wand* and *Mauer* translate in English as "wall". However, when masonry is bonded into coursework, it becomes a form of weaving.

Central to Semper's later thinking was the idea of "dressing" or *Bekleidung*. With the need for permanence, because of climatic requirements and more stable existence, the hanging woven carpet as spatial divider was reduced to the "dressing" of a wall instead. In all cases the motive and spatial essence of the wall were enacted by the dressing – not by the load-bearing wall behind it.

Traditional Southern African surface dressing is described by James Walton in "Art and Magic in Southern Bantu Vernacular Architecture" (1975: 117 - 134). Walton makes a distinction between naturalistic painting and structural, material and surface patterns in traditional surface treatment.

Structural patterns result from the arrangement of monotone bricks (or stones), or by leaving gaps in walls. Material patterns result from using stones of different geological character in horizontal bands or geometrical configurations (1975: 126). Surface patterns comprise of "chevrons, triangles, rectangles, diamonds and a variety of curved shapes". (1975:117) Originally African wall patterns attributed cultural significance or symbolical values of e.g. chieftaincy, protection or to ensure fertility. A particular form of low-relief decoration, – common among the Sotho, – is a finger or fork engraving in the soft clay cladding of the wall. Such patterns are called *litema* – the name given to the furrows of a ploughed field.

Techne

The details of Eaton's buildings are markedly of African origin. Details take on several forms, most notably differentiated by objects (door handles, furniture, bowls) and surfaces (floors and walls) – which compliment the modernist structure of space. The objects however, lose their sense of curios, of being objects, and the texture becomes like a continuous, planar expression or field. He reconciles things through the way he uses and flattens them.

A carpet of mosaic (an extension of the floor of the city) lines the interior of the pedestrian arcade of the *Wachthuis* – an office block for the South African Police (1955-60), Pretoria. The arcade connects the streets on both sides of the building. Constructional elements are subjected to the horizontal field. The mosaic of marble off-cuts was laid in continuous strips with patterns of chevrons and short pieces laid at right angles to the pavement at intervals. Visual unity is afforded by the long parallel bands following the direction of the arcade, despite the seeming randomness of patterning. (Harrop-Allin, 1975: 104)

The central oval pattern shape was evidently inspired by designs of an African tribal shield. The parallel bands recall *Litema* patterns, the mosaic patterns remind of Ndebele wall paintings, weaving patterning and pottery shards.

Small-scale repetitive 'fagoting' tiles create a seamless interior in the Netherlands' Bank, Pretoria (1946 – 53). These terra-cotta tiles were made to Eaton's specifications with fine corrugations running along the outer surfaces. Placed vertically, the corrugations of the tiles are reminiscent of "African tribal grass". (Harrop-Allin, 1975: 43) Narrow earth-coloured tightly-fitting face-bricks make up the exterior skin of the Bank. These bricks were carefully laid in alternating horizontal and vertical bands in different courses, creating a delicate and rich texture.

Eaton's sketches of woven African screens come to mind. Both the use of materials and the detailing evoke what has been described as an 'African quality'. According to Harrop-Allin, the designs for the bronze heraldic panels in the entrance portal were the result of a conscious effort to this end. (Harrop-Allin, 1975: 97) Benin figurines embellish the door handles of the entrance portal, while the bronze water-spout of the fountain on the sidewalk is a "purely African shape". (*ibid.*)

The modular rectangular shell of the bank holds a courtyard where a meandering brick mosaic winds around a series of circular and semi-circular plant pockets, linked with a low undulating wall. The configuration of the plan – together with that of the Little Theatre – is reminiscent of Eaton's sketches of bird's eye views of African settlements.

Eaton's Netherlands' Bank in Durban, on the sub-tropical Kwazulu-Natal coastline, is recognized as his masterpiece. According to Tony Morphet, the "central strategy of the building(s) is to recontextualize urban modernism within the natural built conditions of the Natal coast". (1998:153) A green glazed sunscreen wraps around three sides of the building. The hollow bricks of the screen were made to special measurement and individually glazed to a colour determined by Eaton himself through a long process of experimentation. The bricks were threaded vertically onto steel rods – the entire construction suspended from the flat roof. The screen was woven from the bottom up, the first course bedded in plaster of paris on levelled scaffolding. (1994: 36)

The woven screen wall has now truly become *the container of space* – likened to a tree providing cool shade in the city. (1998: 155) Details are repeated on various scales in his buildings, which might be why they lose their sense of curios and the texture becomes like a continuous field. "The aquamarine mosaic on the pillars and across the back wall of the hall echoes in miniature form the pattern of the screen; the curved line of the marble skirting that tracks down the edges of the stairwell repeats a curve in the external podium edge where it rises to secure the glass sheets which form the outer wall...Detail is in conversation with detail; space with structure; line with volume, surface with masses; aesthetics with functions". (1998: 156)

The act of making in Eaton's work recalls African traditions of gathering, marking, shaping, knotting, binding, dressing and weaving. Eaton (re)interpreted the poetics of African making; and the space(s) in between an African tradition and a universal culture. His approach to detailing layers cultural and historical expression towards ephemeral place-making – well worth revaluation.

*As a young man, Eaton had worked for Gordon Leith, one of the most important architects of the pre-modern era in the old Transvaal. Leith agreed with Wright's organic doctrine and passed these ideas on to his young trainee.

***faggot": bundle of sticks or grass for burning

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