



FLUX: Design Education in a Changing World

DEFSA International Design Education Conference 2007

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Learning From Synergies Between the Intersections of the Indigenous and Modern in Settlement Planning Concepts and Traditions in Africa:

ABSTRACT

The study of *indigenous knowledge systems* (IKS) in the built-environment disciplines has for a long time been limited and trapped in the idyllic discourses of 'exotic' or 'primitive' architecture, and the 'organic' nature of the development and planning of such built forms and settlements, by emphasizing the essentially transient nature of these built forms. There was, for a long time persistent negative perceptions that, until the coming of Europeans, Africans had lived in universal chaos and stagnation; and that, 'for countless centuries, while all the pageant of history swept by, the African remained unmoved, in primitive savagery' (Amankwah-Ayeh, 1994; p 105). While these myths and legends have been challenged (Davidson, 1959), there is still inadequate appreciation of the value of IKS in the built environment disciplines.

Significantly missing in these debates is how the synergies between the intersection of the 'indigenous' and the 'modern' could be contrasted and tapped in order derive deeper learnings from their functional, symbolic and creative meanings. The works of Hassan Fathy (1973), Susan Denyer (1982), Anita Larsson (1984; 1996), among other researchers, began to grapple with analyzing and situating the study of African indigenous architecture and systems of planning within their political economies and ecologies of resource utilization, production and consumption. This marked a welcome break from the sensationalist traditions steeped in colonial anthropological and ethnographic orientations of 'vernacular architecture' and organic planning research. These and other researchers began to move away from research aimed at the ideological justification for 'difference' and therefore separation; towards a more inclusive discourse which recognizes that pre-colonial African settlements and cities were built on sustainable development principles, where town planning, settlement design and architectural principles articulated existing modes and relations of production of those social formations' (Amankwah-Ayeh, 1994; Mabogunje, 1962; Tapela, 1988).

The paper explores the apparent similarities in conceptions of space utilization, security and sustainability, deriving from the nature of dwelling and settlement design, how these articulated the existing modes of production of space, society and the economy - and therefore could be reproduced sustainably. The paper explores the planning principles, design concepts, standards and norms used in the planning and building of indigenous African settlements and dwellings and suggests that, by tapping into rich traditions of indigenous planning systems, the organic link between sustainable resource utilization and livelihood sustenance can be enriched.

KEYWORDS: indigenous knowledge systems; planning systems; circularity; adaptability; sustainability.

Introduction.

Indigenous Knowledge Systems in Context.

Academic interest in Indigenous Knowledge Systems (IKS) dates back centuries. In fact, our curiosity with the past has been an important element of how human societies have sought to understand the present and possible futures with the overall goal to gain and retain mastery of their environment. Among others, the disciplines of archaeology, history and anthropology grew out of this curiosity. The study and usage of indigenous knowledge systems has also been linked with the quest by some societies or nations to gain the necessary inside 'intelligence' information in order to dominate and take control of the so-called indigenous cultures and their resources. Anthropological, geographical and scientific 'research' in the colonial project for instance, was used to facilitate European subjugation of indigenous peoples and their resource bases. These are some of the real and potential dangers and abuse of IKS 'research' and its funding.

In the 'labour reserve economies' of Southern Africa there was a concerted campaign to destroy indigenous cultures in order to create a settler capitalist economy and society. In this process all forms of indigenous knowledge, enterprise and livelihood generation and sustenance practices were ruthlessly suppressed, while those that survived were relegated to an illegal or 'informal' status (Tapela, 1999; Mkandawire, 1985). The rich and wide variety of food resources, architectural heritage and other economic activities were virtually obliterated and replaced by narrow and mass-marketable foods, building materials, technology and those economic activities that benefited the unfolding settler capitalist agriculture and industry (Cooper, 1983).

Labour control and racial segregation became the central principles in the creation of the colonial settlement structure and the ubiquitous architectural forms and layouts of the hostel, mine compound, farm labour camp and Native Township were the outcome of this social engineering project of settler colonialism. The result was the creation of a dual space economy comprising the economic hubs of European commercial and industrial urban centres, mining and commercial agricultural areas on the one hand; and, on the other, the impoverished economic wastelands - the native reserves or homelands - where black labour was reproduced.

The 'Re-Awakening' of IKS Research in Development Studies.

The resurgence of IKS research in the late 1970s initially focused on capacities, skills and rationale of peasant farmers and pastoralists (folk-ecology) and argued for the involvement of local people and the incorporation of their knowledge into processes of technological change and development (Chambers, 1983; Richards, 1985). This phase initially involved consulting earlier social anthropological and ethnographic studies of detailed descriptions of indigenous knowledges and using them to explain cultural, ecological and social relations in relation to the design of development programmes that are adapted to local socio-cultural and, environmental milieus. The disciplinary basis of IKS research was thus broadened to include other social and biophysical scientists embracing new perspectives and analytical tools. In the built-environment disciplines the works of Davidson (1959), Mabogunje, (1969) and Oliver, (1971), among others, represent the initial break from the 'vernacular architecture' research traditions towards more culturally sensitive studies of African settlement systems and built-forms.

A second phase in the development of IKS research was associated with the rise of

internationally coordinated research programmes in the late 1980s and, following AGENDA 21, the formation of a global network of indigenous peoples' organisations whose mandate included:

- promoting policies protecting indigenous property rights to genetic resources; and
- supporting the conservation of indigenous knowledge of biological diversity within the context in which it has developed (Thompson, 1996).

Within this phase, there was an explicit recognition of the potential use of IKS research for exploitative purposes and the marginalisation of indigenous peoples' resource bases and their livelihoods. The touristic nature and benefits of IKS were then challenged by a discourse that put the interests of indigenous peoples at the centre of the IKS agenda. AGENDA 21 can therefore be seen as a global response by indigenous communities as they positioned themselves to resist the more aggressive onslaught of late capitalism - the so-called globalisation.

Within this increasing interdisciplinary dialogue, two approaches to IKS research have emerged. The first - a populist approach - assumes the study of IKS to involve analysing and interpreting the validity of local knowledge systems, socio-cultural beliefs, concepts and practices using the conceptual framework of Western science. This approach assumes that scientists and 'development planners' can only empower local people by using indigenous wisdom seen through the lenses of modern science and the blending IKS with formal science in the research and development process. This approach involves the use of participatory methodologies of household livelihoods (like the Participatory Rural Appraisal) that have gained attention and support from aid agencies and institutions. Some contend that these approaches have sufficiently challenged conventional approaches of research and development practice to the extent that this has been posited as a paradigm shift in development thinking and practice (Chambers, 1997).

The second approach, the political economic approach, challenges the basic conceptual framework of Western science and questions the assumptions of these concepts and methods with regard to the extent to which they influence the construction of reality/knowledge (Chambers, 1997). This approach views the construction of knowledge as a social and political process and positions IKS in terms of a multiplicity of social actors through whom certain kinds of information are communicated and negotiated, and not a single, cohesive structure, stocks or stores (Thompson, 1996:106-7). Knowledge therefore becomes a product of the interaction and dialogue between different actors and network of actors, often with conflicting loyalties and competing interests.

The co-existence of these approaches and the emerging contradictions as they played out in the ways marginalized households and communities eke precarious livelihoods and liveability in rural and urban settings in their struggles to gain access to resource bases in increasingly exclusionary spaces.

Evolving Discourses in IKS and the Built-Environment Disciplines

The IKS discourse in the built-environment disciplines has for a long time been limited to the study of 'exotic or primitive' architecture, and the organic nature of the development of such settlements, emphasizing the essentially transient nature of planning systems that engendered these built forms. These consolidated negative perceptions that, until the coming of Europeans, Africans had lived in universal chaos and stagnation; and that,

'...for countless centuries, while all the pageant of history swept by, the African remained unmoved, in primitive savagery' (Amankwah-Ayeh, 1994; p 105). While these myths and legends have largely silenced (Davidson, 1959), we still heard heated debates, for instance, of strange Phoenicians building the cities of 'Great' Zimbabwean cities! Other variants of Afro-pessimism still pervade contemporary debates on the African condition and her past (Roberts, 2007).

The later works of Hassan Fathy (1973), Susan Denyer (1982), Anita Larsson (1984; 1996), among other researchers, began to grapple with analysing and situating the study of African indigenous architecture and systems of planning within the unfolding political economy and ecology of resource utilization. This marked a welcome break from the sensationalist traditions of 'vernacular architecture' and organic planning research. These and other researchers began to move away from research aimed at the ideological justification for 'difference' (and therefore separation) towards more inclusive discourses that recognised that pre-colonial African settlements and cities 'were built on sound town planning, design and architectural principles (Amankwah-Ayeh, 1994; Mabogunje, 1962; Tapela, 1988).

Associated with this emerging research thrust was the increasing acknowledgement of the existence of a vibrant and sophisticated African urbanism that predated European colonialism centred on pre-colonial African nation states and that the ideas of networks, hierarchies and markets were an inherent component of the urban development process. (Coquery-Vidrovitch, 1995). Coquery-Vidrovitch further observes that:

'the break in tradition at the time of colonialisation consisted not so much in the creation of towns as in the replacement of one network [pre-industrial] by another [industrial], giving primacy to coastal towns [industrial resource frontier regions and, sometimes] to the detriment of the interior. (1995: 51).

The three 'universal' preconditions necessary for pre-colonial urban development in Africa as elsewhere were:

- The generation of agricultural surpluses in the proximal hinterland that was tradable to feed non-producers;
- The emergence of commerce that created a merchant class that specialized in the distribution of surpluses (there was never a town without a market);
- All this implied the presence of a ruling class (state) that controlled the use of the surplus by non-producers.

Colonialism thus forged the transition (often violent) from feudal and mercantile capitalist modes of production (and the ensuing social relations associated therewith) to the emerging global industrial capitalism.

Exploring and Learning from Some Indigenous Planning Concepts.

These studies have demonstrated that there exist clear elements of socially sound and environmentally responsive planning principles to be derived from the pre-colonial settlement systems which could inform current planning policy and practice in African urbanism. Some of the salient contributions in this regard have focused on the following hypotheses:

- That indigenous patterns of settlements were firmly rooted in the planning, building, construction and maintenance of towns in Africa before the advent of colonialism (Tapela, 1988);
- That pre-colonial African towns and cities minimized urbanism and the feeling of

congestion while making maximum use of urban space (Coquery-Vidrovitch, 1995; Anderson, 1977);

- That a delicate balance of mass and space that accompanied such spatial intimacy let a feeling of cohesiveness and group control of local spaces and environments within and between cities probably accounting for the environmental sustainability of the per-colonial city (Amankwah-Ayeh, 1994).

These concepts relate to the use of edges, shapes and forms that informed layouts and built forms of indigenous African settlements. The concepts specifically relate to circularity (the circle, the cone and the cylinder), security (walls and ritual symbolism), and streets and passageways. The analysis will focus on how these concepts are related to the particular socio-political, cultural and economic circumstances and the pre-colonial social formation.

Circularity

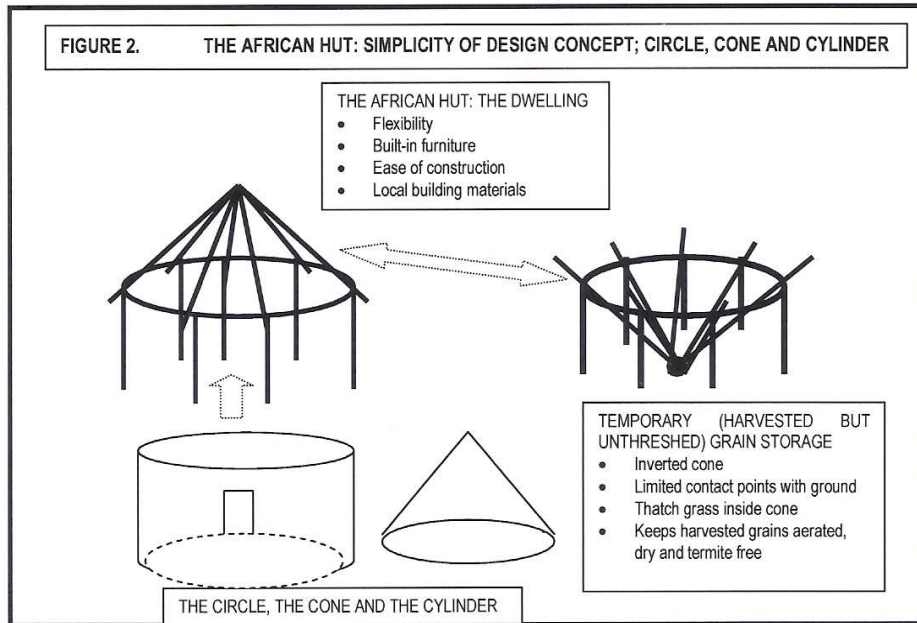
Several researchers have identified the circular form as arguably the most distinctive characteristic and conception of African pattern of spatial organisation (Muller, 1993, Frescura, 1981, Amankwah-Ayeh, 1994). This form can be discerned in the shape and form of the dwelling, storage, roads and passages and the overall spatial layout of settlements. Whether we look at the Zulu settlements like Umgungundlovu, the Ndebele's koBulawayo, the elliptical stone settlements ancient Zimbabwe, or the Yoruba towns among many, the concept of circularity permeates their central order of spatial conception and identity. Amankwah-Ayeh (1994) argues persuasively that:

African settlement patterns are curved, non-rectangular, with a strong sense of enclosure and a fine sense of adaptation to the environment...The stiff social-class formation and authoritarian top-down hierarchy that gets revealed in square and rectangular forms and spaces of Western traditional culture are pre-dominantly non-African in origin and therefore poses several challenges to adaptability, maintainability and sustainability in Africa. They form bases of cultural imposition and forcible displacement of indigenous structures in physical, economic, material, social organisational, and environmental terms (p 107)

The centrality of circular form in the organisation of space in Africa cuts across spatial scale; from the micro-scale design patterns (homestead/dwelling, neighbourhood) to the macro scale (towns, cities and regions). Secondly circularity is also common to both highly centralized societies as in the *Central Cattle Pattern* model of the Southern Bantu (Zulu-Sotho-Tswana) (Drake and Hall, 1993) to the decentralized social systems of the Shona of Zimbabwe and Ibo of eastern Nigeria (Hull, 1976). This form is in stark contrast to grid pattern, initially popularized by the Romans, and subsequently used to create vast wastelands of monotonous built forms. Later 'improvements to the grid pattern and the rise of the industrial revolution and the advent of motorized transport systems lead to the greatest tragedy of the 'modern planning movement - the separation land uses (work and residence, commerce, industry and recreational uses). The suburbia, a direct result of this movement, and the massive and unsustainable settlement sprawl characterized by the dominance of the single-family detached dwelling is perhaps the biggest challenge to the creation of positively performing settlements. We are only beginning to tap into the merits of circularity in order to redefine the structure, density and environmental enhancement possibilities inherent in principles derived therefrom. These relate to security considerations, dispersal of facilities and economic opportunities.

At the micro level in the rural setting the basic spatial patterns and built forms are the circle, the cone and the cylinder. These shapes are repeated in various forms and configurations for most buildings and structures like the dwelling hut, storage buildings

and animal pens. An interesting transformation resulting from outside influences is the adaptation of the simpler circular and triangular shape (and associated forms of cone, cylinder and dome); to the rectangular and cube-type built forms on the indigenous African built-forms. The Indian bungalow and the Western farmhouse built by either indigenous and/or mass-produced industrial building materials are now a common feature of the rural African landscape.



Security and Environmental Quality

Of particular interest is the African grain storage that has successfully transformed from a circular to rectangular form and benefited from the flexibility, variety of grains stored and yet retained the versatility and adaptability to the socio-economic milieu and environmental conditions. Unfortunately the African grain storage structure or granary, a symbol of indigenous rural livelihood sustenance, is becoming extinct even in the most rural areas of the region following the concerted and systematic destruction of indigenous political economy by settler colonial capitalism. As subsistence agriculture and the peasantry disappear from the rural landscape of Southern Africa, what remains are vast unsustainable rural settlements with virtually no economic base and dependent on urban incomes and pensions, where these are available.



Evolution of the granary from spheroid basket resting on raised cone-shaped raft within a hut structure; to raise cylindrical adobe structure also under a conical thatched structure; to a cuboid adobe structure under a 'heaped' thatched roof. The raised raft (on stones) ensures aeration and limited contact to the ground to protect grains from moisture and pests; while the roof protects it from rain and other elements. The space under the raised raft is storage for agricultural implements and a 'pen' for small domestic animals- chickens, beehives, etc.

elements of settlement form. They define the continuing dialogue between built-form and open-space as well as being an element of both. At a macro-level, wide curvilinear and circular streets were used to define the structure of the settlement, for vehicular and pedestrian circulation, communication, commerce, social interaction and recreation purposes. Within these large spaces thus defined, dwellings were constructed close to each other and narrow alleyways that were linked separated 'blocks' to wider avenues in an overall hierarchy of movement systems, integrated land uses and closely-knit communities.

More importantly these winding patterns of streets and passageways facilitated the partial sealing-off of perspective views and thus creating hidden vistas that enhanced the beauty and functionality of these environments. Some of the alleys and passageways within and between buildings were dead-ends or cul-de-sacs and often led to semi-private spaces or entrances to buildings. This seeming 'unplanned' clustering of buildings around the labyrinths of alleys or cul-de-sacs are a result of the nature of 'organic planning' described by Lewis Mumford as a process which:

"... does not begin with a pre-conceived goal; it moves from need to need ... in a series of adaptations which themselves become increasingly coherent and purposeful that they generate a complex final design, hardly less unified than the pre-formed geometric pattern" (1961: 102).

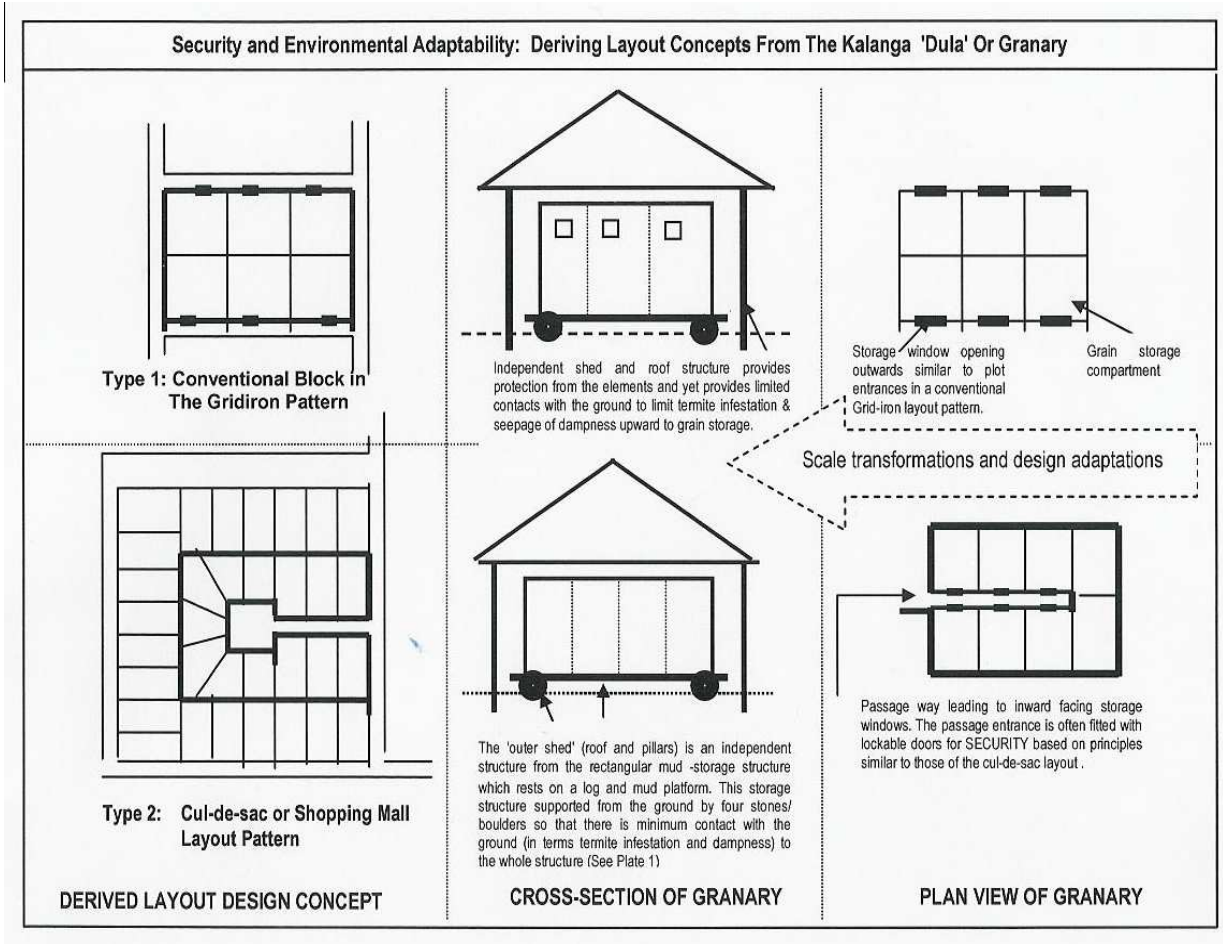
The inherent flexibility in the nature of organic planning underlies its value in informing current planning processes where for instance, the inherent resourcefulness of households and communities that resort to housing themselves in informal settlements is often misconstrued as obstacles to orderly urban development, rather than harnessing this as an opportunity for engaging with community-driven development.

This spatial structure also reflects and enhances intrinsic social values like privacy, limited access, defence, security and climatic adaptation. Anderson (1977), in his analysis of the spatial structure of Hausa settlements in Northern Nigeria observes:

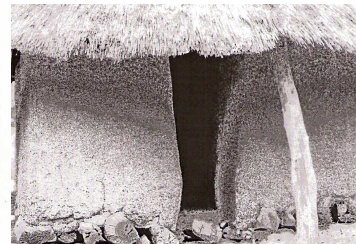
Inside these [Hausa] towns, the [seemingly] disordered arrangement of houses seems to have been a definite defence ploy: a visitor would soon lose his way and unwelcome ones could easily be trapped...Tortuous planning seems to have been deliberate...[and] although the main streets were broad, all others were studiously arranged to admit only one cow [camel or horse] in single-file in between stockades surrounding each household, in order to foil any enemies who managed to enter the town (page 72).

At the physical level, the defence prerogative was enhanced through the use of elaborate walls (Moody, 1967) or through careful physical design of space to create 'defensible space'. At a more operational and subtle level was the close-knit community in the form of extended family or clan based residential wards where self-policing was the norm.

A system of culturally embedded taboos and elaborate rituals bound communities and were used to ensure the security of communities, their property and resources. Zulu settlements for instance, had the cattle kraals at the centre for the physical security of the cattle herd. The baKalanga granaries on the other hand, are situated at the back of the homestead and the animal kraals are some distance in front and outside the homestead. For the latter these two major livelihood-sustaining stocks (granaries and livestock kraals) are secured by the fact that adult female and male burial places are located next to the granaries and in the kraals respectively. This strategic location of adult burial sites provided highly symbolic round-the-clock protection in the form the ever-present spirits of the elders and ancestors in guarding the main resources of their families.



Changing Layout of the baKalanga 'Dula' or granary



Gridiron varieties of the Granary using adobe and wood and concrete blocks

Culdesac concept ensures more secure access to grain through one entrance.

Livelihood Sustainability

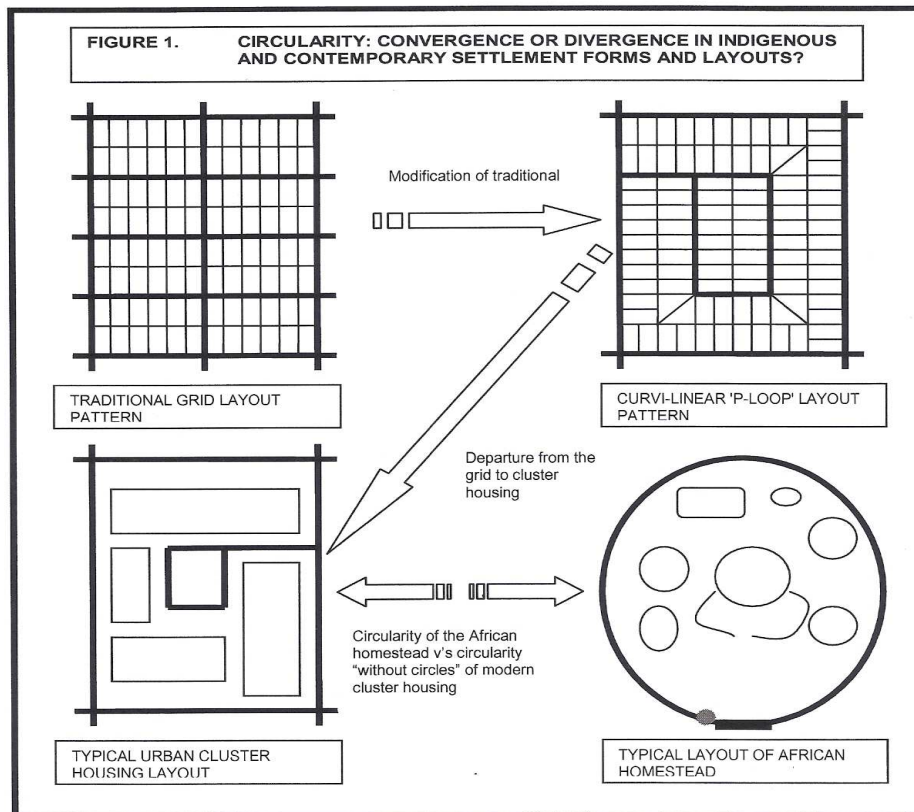
Some of the dramatic consequences of the penetration of colonial and later, global capitalism are the extents to which disparities in standards of living between urban and rural areas and within each of these spatial units. This has been occasioned by, and associated with, the inability of this new economy to adapt and articulate local needs and resource milieu to enable local and regional communities to derive, generate and sustain their livelihoods from within the limits of their hinterlands. While indigenous communities had an organic relationship with their environment, the globalization of the world economy has meant that common property resources, including land, have been commodified into marketable commodities based on a single international pricing system. The net result is that dwellings that use concrete, zinc/iron or wood have, increasingly superseded the indigenous, culturally and environmentally adaptable dwelling forms that use local materials.

The separation of land and building uses, an unintended result of the modernization influences in settlement planning, has created unsustainable and unproductive residential landscapes in both urban and rural settlements, increased cost and time to travel to work places and mono-functional settlements. Because of the very low-density nature of these settlements, extensive settlement sprawl, shaky economic bases and high unemployment rates characterize them. Many new settlements established to facilitate the extraction of resources required for the colonial industrialization project had narrow economic bases, and the logic of profit maximization that informed their existence meant that sustainability prerogatives (for households, the settlement and regions) were often disregarded. On the exhaustion of the resource and closure of primary plants, the settlements often suffer depression.

Lessons for Urban Liveability.

The impact of settler colonialism has virtually destroyed the socio-economic rhythm, environmental and political bases for indigenous livelihood generation and capacity for the sustenance of indigenous community lifestyles world-wide. In the process the settlements thus created are not embedded within the local and regional milieu and resource base configuration for sustainable livelihood sustenance. Rural and regional development frameworks in the sub-region continue to be based less on local and regional needs and more on the fundamentals of global market demands. Local development has given way to what global competitiveness demands and/or prescribes.

The simplicity of design of the African hut and other built forms (including storage buildings), their environmental and climatic adaptability have made the hut a popular built form (the so-called 'lapa') for the eco-tourism and holiday resorts industry (Anyumba, 2001). The word *lapa* is probably an adulteration of the Tswana/Sotho 'lolwapa' which is the generic term for the combination of buildings and spaces defining an indigenous family homestead courtyard. The indigenous homestead is a place for both residence (social reproduction) and livelihood generation (production) and represents a useful concept for sustainable settlement planning. The full potential of this concept has not been fully explored except for its marketing as a tourism product where craft products and holiday chalets provide lucrative returns for eco-tourism entrepreneurs. The benefits of mixed-use developments are however increasingly being apparent in terms of local economic opportunities in current urban precincts planning.



In the advent of globalisation, the dominance of markets and hierarchies over the state and networks in the governance repertoires has tended to shift the balance of forces that shape the design and form of settlements and built-forms resulting in the 'resurgence' of indigenous forms and processes as merely symbolic and marketing metaphors whose bottom-line is less to do with social inclusiveness and environmental sustainability; but more to do with profitability. The functional simplicity of indigenous planning principles and built-forms, while instructive and relevant to current settlement planning problems, re-emerge in a historical context that does not sufficiently exploit the potential benefits and power of these concepts in the quest for sustainable development.

The closure of streets at night in the suburbs of South African cities, use of massive walls and electronic security gadgetry, and neighbourhood Watch Committees have turned residential areas into huge fortresses where residents are virtual prisoners. The residential suburb or townships are predominantly dormitories with no economic opportunities save for domestic work; and only becoming lively for short periods in the evenings, mornings and weekends. The economic activity centres (industrial, shopping and business areas) on the other hand, attract large daytime populations but become ghost towns at night, despite having excellent infrastructure investment therein. This separation of land uses and duplication of services is repeated at the micro level of the dwelling unit where single use spaces (day and night-time uses) are created. The massive duplication of occasional-use facilities for each dwelling (swimming pools, recreational open spaces, tennis courts, etc.) and the large residential plot sizes comprising single family detached dwellings has resulted in unsustainable high infrastructure and maintenance costs.

Security has become an important consideration not only in the planning of human settlements but also assuring that communities and individuals in them have sustainable livelihoods in terms of shelter, food and importantly the means for ensuring that these can be sustainably reproduced. The increasing lack of resources and livelihood security has created various forms of vulnerabilities that threaten the very physical, emotional and existential bases of whole communities.

The stark juxtaposition of affluence and poverty in our cities and towns in the form of booming property markets in the 'suburbs' and the dysfunctional markets and socio-toxic environments of the 'townships' and informal settlements increasingly foreground real threats to urban liveability and political sustainability. In seeking solutions to the heightened contestations for access to the city, current planning frameworks and practice may need to dig deeper and draw from the past, and be cautioned by Evans' observation that:

Confronting urban liveability requires broaching fundamental debates on the dynamics of the contemporary global political economy. First, there is the question of markets. Triumphalist fantasies in which unfettered markets deliver generalized welfare do little for slum communities... [Nor is] (P)ostmodern romanticism, in which virtuous peasants, as yet uncorrupted by Western culture, cut themselves off from global markets, makes even less sense in mega-cities. Markets have a contribution to make to urban liveability but their contribution is not automatic...Analyzing liveability also means transposing political debates about sustainability and social justice from fields and forests to the streets, factories, and sewers of the built environment (Evans, 2002: p 3).

Lastly, it is important to note and acknowledge that research in general, and IKS research in particular is part of a larger political project which questions some basic tenets of globalization. This has led to tensions among researchers in this field regarding funding of aspects of IKS associated with the potential exploitative use of IKS against the interests of indigenous peoples. The Kuhnian thesis that the emergence, crystallization and eventual shifts in scientific and research paradigms is based on the levels of agreement among a community of scientists (Kuhn, 1969) did not take into account the politics of research funding. Research thrusts, the paradigms that sustain them and subsequent paradigm shifts are embedded within competing economic and political agenda at local, regional and global levels. The availability of, and access to, IKS research funding is also influenced by these factors and measured by the potential profitability to be gained from research output. The more lucrative the funding for IKS the more likely intricate the strings attached to corporate interests.

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Academic and Career History:

Obtained a B.Sc. degree (Hons) in Geography and Regional Planning at the University of Calabar (Nigeria) in 1981 and a Masters degree in Urban Planning at McGill University, Montreal in 1986. Nigel has worked as a planner in government and local authorities in Zimbabwe and Botswana in the 1980s and early 1990s as well as with the University of Zimbabwe as a research fellow. He then joined the University of Venda (South Africa) as a lecturer in Geography and Planning where he was involved in setting up a new planning school. This was followed by a two and a half year stint as a manager with the Development Action Group, an urban development advocacy NGO in Cape Town before joining the Cape Peninsula University of Technology as head of the town planning department in 2006.

Teaching and Research Interests:

Teaching and research interests include planning history and theory, local economic development, community planning & facilitation and sustainable local development planning in resource-based settlements and regions. I am currently doing research towards a doctorate in local development in mining towns in Southern Africa.

Selected Publications and Conference Presentations include:

- 2002 *Planning for Economic Diversification and Sustainable Communities in Mining Towns: Towards a Development Planning Framework*, Paper Presented at **Planning Africa 2002 Conference**: 18-20 September 2002, ICC- Durban. <http://saplanners.org.za>
- 2003 *Housing Miners and Its Influences on the Evolution of Colonial Housing Policy in Southern Africa*. **Proceedings of the South African Planning History Group Symposium**, 15-16 May, 2003 University of the Free State; Bloemfontein.
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