Vernacular Architecture: A Culturally Motivated and Interdisciplinary Literature Review

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Abstract

This study undertakes a critical literature review of purposively selected seminal publications on Kenyan culture as well as vernacular architecture in Kenya and South Africa. Content from other humanities disciplines like art, philosophy, history and literature are used to enrich architectural discourse, as interdisciplinary support which promotes hermeneutic interpretation. Cumulative hermeneutic explications will eventually yield the semiology of vernacular built forms through inter-subjectivity. The review highlights the focus, study approaches, achievements and positions of scholars on pertinent issues, and identifies lacunae for possible future investigations. A qualitative eco-systemic method is adopted together with a dialogic presentation method in the form of short direct quotes from the scrutinised publications. These quotes and the page numbers for citations are employed to portray the literature review as an ongoing verifiable debate within contemporary theoretical discourse. Though subjective, the critique in the study will hopefully generate or sustain debate on vernacular (and regional) architecture. This will yield more studies on the cultures of Kenyan indigenous communities in order to enhance scholarship on Kenyan vernacular architecture.

Keywords: **Kenyan Culture; Vernacular Architecture; Interdisciplinary Research, Eco-Systemic Method**

Introduction

This paper provides an eco-systemic literature review of seminal publications on cultural and vernacular architecture studies in Kenya and South Africa, from an interdisciplinary perspective and at the author's discretion, on the basis of their internal content in relation to the study topic. Studies focusing on Kenyan culture are multiple and extensive, encompassing disciplines such as anthropology, architecture, art, philosophy, history and literature. The existing corpus provides relevant material that may be employed in secondary research when conducting future studies on Kenyan vernacular architecture. This study perceives a community as an ethnic group "with a shared language, shared norms and values, and shared material culture" (Lekson, 1990: 143). The Luo, Kikuyu, Swahili and other Kenyan communities embody "the appropriate scale" for vernacular architecture studies (ibid: 122). Paul Oliver (2000:116) defines vernacular architecture as "buildings of the people, built by the people". These built forms are transformative, sustainable, adaptive and time-tested, and are consistent with the dynamics of both environment and community (Oliver, 2006: 265). However, Marcel Vellinga (2006: 88, 90), argues for a definition that emerges from a synthesis of modern and vernacular traditions. For Vellinga, hybrid architecture responds to contemporary individual and community requirements, while exhibiting a distinctly local (regional) architectural dialect. Both definitions are relevant to this study and they support the works that have been selected for inclusion herein. Various approaches have been employed in vernacular architecture research, with different outcomes. Some of these approaches are described and analysed herein. The critical review of the selected studies is imperative, in order to highlight achievements, positions on pertinent issues, and to identify *lacunae* where applicable. Such *lacunae* can be taken up for investigation in future studies.

Research Methods

The desk study adopts qualitative methodology in critical literature review of seminal publications, as secondary descriptive research, on purposively identified works on vernacular architecture and Kenyan culture. Reviewed sources are sampled only from Kenya and South Africa because the study was completed in both countries. Except for the distinguished Asenath Odaga, all reviewed sources were authored by scholars with doctorates (five on interdisciplinary, seven on Kenyan vernacular and five on South African vernacular works). A dialogic presentation method is employed in the form of short direct quotes which represent the voices in the seminal publications under scrutiny. This multi-vocality portrays the literature review herein as an ongoing conversation or debate within contemporary discourse. By using citations that include page numbers, the study seeks to promote reproducibility through enabling accurate verification by readers of the article.

Literature Review

Interdisciplinary studies that complement vernacular architecture

Henry Odera Oruka (1944-1995), a distinguished Kenyan philosopher, developed the concept of philosophical sagacity which evolved into *Sage Philosophy* (1990), an approach that corroborates African Philosophy as an equally valid intellectual activity and area of inquiry. Samuel Oluoch Imbo was mentored by Oruka, and argues that "the best and most authoritative critics are the participants in the culture" under investigation (2002: 133). Imbo's proclamation justifies the undertaking by Kenyan architects in the exposition of their community culture to explicate their community vernacular architecture. The proclamation seeks to avoid translation conflicts that arise from the use of incompatible cultural codes between the researcher and the community under investigation, when non-participants in a community culture attempt to explicate its vernacular architecture.

Oruka (1990: 5) categorised African Philosophy as Ethno-philosophy (an approach that is utilised in anthropology and sociology (see Khapagawani, 1990: 182); Professional philosophy (practiced by trained African philosophers including Odera Oruka, Oluoch Imbo, Kwasi Wiredu (Ghana) and Paulin Hountondji (Benin)); Nationalist-ideological philosophy (espoused by African Nationalists and freedom fighters such as Kwame Nkrumah, Leopold Senghor, Jomo Kenyatta and Julius Nyerere); Sage philosophy (Oruka); Hermeneutic philosophy (focusing on theories of interpretation and semiology) and Artistic and literary philosophy (premised in the West by Michel Foccault and Jacques Derrida and in Africa by Chinua Achebe, Wole Soyinka, Ngugi wa Thiong'o, Okot p'Bitek and Taban Lo Liyong (ibid)). When Oruka (ibid) declares that "there is philosophy in everything" and "almost every subject" he provides validation for the inclusion of aspects of phenomenology and philosophical sagacity in vernacular architecture studies. With regard to philosophical interpretation, Oruka (ibid) places philosophers at the apex of the hierarchy, arguing that only "professional philosophers" are "best equipped to help explicate the philosophical underpinnings in the texts and sayings of non-professional philosophers". This position is debatable with regard to subjective and speculative hermeneutic interpretation, which is broad and inclusive. However, studies on vernacular architecture may utilise the 'professional' philosophical analysis in Imbo (2002), as a basis of comprehending the works of distinguished academics such as Okot p'Bitek and his contributions in *Oral traditions as philosophy* (ibid), and in primary research such as interviews with professional philosophers as key informants, sages and thinkers, to obtain intellectual perspectives on the traditional African way of life.

Oruka (1990: 2) defends Sage Philosophy as "one of the most important trends in the development of philosophical thought in Africa" because the thoughts of these sages "express and defend themselves as philosophical counsellings [sic] on various issues of nature and human life", including

culture as an architectural informant. He further observes that these thoughts "form significant raw data for technical philosophical reflections" and vital "advice on fundamental moral and metaphysical questions" (ibid). This is the basis for the argument on adoption of oral traditions, myths, legends, proverbs, norms and taboos, as valid sources for comprehending vernacular architecture because the intangible culture was developed by indigenous sages in the past. Although the sages are now part of the ancestors, their intellectual thoughts were propagated through successive generations by oral traditions. The question of authenticity is however addressed by Okot p'Bitek as discussed below.

The seminal publications of Okot p'Bitek (1931-1982) include *Song of Lawino* (1969), *Song of Ocol* (1970), *Africa's Cultural Revolution* (1973), *Religion of the Central Luo* (1978) and *Artist, the Ruler* (1986), to mention only but a few. Okot p'Bitek may be described as a cultural romantic because of his persistent quest to expose the culture of the Acholi, a Ugandan Luo-speaking people, through multiple discourses on African traditions and the pressures arising from the onslaught of modernity. p'Bitek was at the forefront "in challenging Western conceptions as well as in rethinking what constituted an African "philosophy of life"", which was inseparable from the daily existence of the people (Imbo, 2002: xii, xvii). As a cultural purist, p'Bitek condemned the analysis of African culture by 'outsiders' who could not provide an unbiased and authentic critical evaluation and appreciate the rich content embodied therein.

Consequently, he sought to expose the incongruence between Western perceptions of modernity and "traditional modes of being" (ibid: xiii, xiv, 44). The desire to restore African pride by privileging African culture that was previously disparaged and marginalised by colonialism is commendable. However, it is inappropriate for contemporary Kenyan architecture because a purist approach is idealist as it entails an 'inward' cultural focus that seeks to ignore modernisation because it perceives inevitable cross-cultural influences and cultural fusion as insignificant. This notwithstanding, p'Bitek's publications and other similar works are still relevant to future vernacular architecture studies due to similarity of cultural practices of the various communities. Oral traditions and narratives are vital sources for comprehension of the semiology of Kenyan vernacular architecture.

In *Educational values of "sigendini Luo": the Kenya Luo oral narratives* (1980), Asenath Bole Odaga (ibid: vi) argues for and utilises a broadened definition of Literature to include "sung, spoken, danced or acted literature which is oral in nature", whose key function is to "transmit certain educational values to younger members of society". *Sigendini* originate from the "experiences of the people, emanating from issues which are social, economic, political and religious in kind" (ibid). The *sigendni* have architectural relevance as they can be used in architectural reconstruction processes, as one can deduce "philosophical thoughts, ideals and beliefs" from them (ibid), to comprehend both material and intangible culture. However, Odaga (ibid) never attempted any

architectural interpretation as she does not consider *sigendini* in relation to built form. By observing that the language forms in *sigendini* are "often quite ordinary" and "similar to that which people employ in their daily talk and interactions", Odaga (ibid: 100) implies that this simplicity should be reflected in vernacular architecture through use of ordinary forms and locally available materials. Since *sigendini* "appeal to a person's sense of beauty" (ibid: 105), their analysis can lead to a re-definition of beauty with regard to vernacular architecture. With regard to modernisation, Odaga (ibid: 119) declares that "the school as an institution has taken over the role of informal instructors", and this indicates the necessity of comparative analyses that will identify traditional institutions and built forms that are no longer tenable in their original context in order to enable their transition and sensitive integration into the contemporary setting to prevent their extinction.

Bethwell Ogot, a distinguished Kenyan academic, and a leading historian, has published extensively on the history of the peoples of Kenya and East Africa at large. His seminal texts include *A history of the Luo-speaking peoples of East Africa* (2009) and *History as destiny and history as knowledge: Being reflections on the problems of historicity and historiography* (2005). Ogot (2009: 417) observes that the Kenyan Luo are not a 'pure' community due to intermarriages as a result of inter-community trade and the 'great migration' into their present ancestral land coupled with the integration of 'weaker' communities in past conquests. Regarding methodology, Ogot (ibid; 755) deduces that researchers

(African historians) have demonstrated "that a verifiable past for Africa could be reconstructed by using oral traditions as primary sources". This proclamation validates the adoption of reconstruction in vernacular architecture studies. Recourse to history is premised on the argument that "the Luo…have always thought about the past as reflected in the present and as a basis for predicting the future" (ibid: 737). Historicity must then be distinguished from historiography, Ogot (2005: 8, 9) argues, as historiography is based on experimentation and can therefore never be complete as new destinies (historical accounts) emerge continuously. The application of subjective interpretation (or philosophical hermeneutics) to a historical context is a historiographic exercise since it cannot establish an undisputable truth as demanded by historicity. This limitation of historiography will be evident in vernacular architecture studies.

Henry Okello Ayot, a leading historian, conducted primary research into the Luo way of life. His findings are published in *Historical texts of the Lake Region of East Africa* (1977). Departing from a rigorous anthropological method, Ayot focuses on the Kenyan Luo-Abasuba residing in Mfangano and Rusinga Islands of Lake Victoria (ibid: 5). Like Oruka (1990), he interviews Luo sages, thereby validating the sagacity approach. Ayot also locates obelisks, landmarks and significant artefacts (Chief's house, men's houses, women's houses, religious buildings, assembly places, common houses, store-houses, stables, pens, burial places, market places, wells, springs, ditches, defence systems, fortifications, site

preparation, construction process, rituals, consultation of diviner and ancestral spirits, sacrifices, atonement) and many other aspects (ibid: 1, 2). Although Ayot (ibid) deals with the Luo 'philosophy' of life, he does not co-relate built form and spaces to intangible cultural aspects. The research is mostly self-delimited to the focus on pre-colonial setting, and cannot be used extensively to examine transformations that have occurred due to colonial incursions and acculturation. Since the author is not an architect, he tackles architectural issues in a 'disjointed' manner within the text, and does not undertake any cross-referencing, comparisons or semiological interpretation. A key setback is that no physical images, analytical sketches, photographs or drawings are provided to accompany the text. Despite these *lacunae*, this publication is vital in secondary research as it seeks to provide an iconological account of manifestation of material and intangible culture of the Luo community in architecture. The publication can lead to hermeneutic reconstruction and explication, departing from Ayot's iconographic descriptions within it.

In *Traditional African graphic design in Kenya* (1984), Sylvester Maina regrets that indigenous Kenyan communities "have to a great extent abandoned their traditional lifestyles, art forms, dances, dresses" and "any remaining authentic examples are disappearing fast" (ibid: xiii). Consequently, "this necessitates looking for other reliable sources of knowledge" (ibid). Direct anthropological research, such as that which was conducted by Evans Pritchard and Emille Durkheim, is therefore not an option for future studies on vernacular architecture. Use of a broadened secondary research (including oral traditions) is the only means by which an iconological contextual synthesis may be achieved. Through grouping cultural artefacts into categories of "form, content/meaning, material, contextual meaning", Maina seeks to determine the extent to which art forms of the Akamba, Maasai and Swahili, as signs and symbols of communication, have directed the lives of traditional societies (ibid: 15-17). A dualistic or symbiotic perspective would perhaps have achieved a greater synthesis, since the inquired cultural artefacts were derived from these communities and their evolution could be more effectively articulated through their diachronic cultural progression. As an artist, Maina did not provide the requisite architectural interpretation of these artefacts.

A review of selected vernacular architecture studies on Kenyan communities

In *A pattern language as a tool for studying African urbanism using Malindi, Kenya, as a case-study*, Gerald Steyn (2006: 14) investigates urbanism in Malindi based on "three physical levels of human settlement" categorised as "urban and neighbourhood settings", "groups of buildings and the spaces between them" and "individual buildings and their construction" (ibid). Steyn (ibid: 10, 11) describes the 253 patterns that were developed by Christopher Alexander, in the publication *A Pattern Language,* as "timeless", claiming that these patterns offer a practical language for building and planning based on natural considerations (ibid). Steyn (ibid: 11) defines a pattern as "a spatial configuration that resolves prevalent

conflicting requirements in a specific context". However, the argument becomes less convincing when Steyn (ibid: 12) argues that "the same pattern can obviously resolve different sets of conflicting forces in different social and environmental contexts" indicating that these patterns may be visible in completely different cultures simultaneously. Without invalidating the significant contribution of the seminal Alexandrine patterns, it is evident that these patterns alone would be insufficient when explicating the semiology in Kenyan vernacular architecture, despite being "rooted in custom and user needs and preferences" (ibid: 12). The patterns must therefore be complemented by a holistic analysis of the cultural context of built forms, in order to understand why different cultural practices and activities result in identical geometrical or spatial organisation patterns, yielding similar urban morphologies of vernacular architecture. Contradiction emerges when Steyn (ibid: 11) states that "patterns, like languages are in a constant state of flux" implying perpetual modifications and transformations. Steyn observes that "most patterns in vernacular architecture develop over a long time, until a physical configuration provides a good fit with the environment and with behavioural patterns" (ibid). This implies that most patterns in vernacular architecture should culminate in a final static pattern that resolves all contextual issues, which is an impossibility. Future vernacular architecture studies may choose not to adopt a pattern language as a method of inquisition, despite its successful application to Malindi. Any emergent patterns that are observed in the quasi-urban areas that portray indigenous vernacular architecture should be described and interpreted, based on a cultural premise. Congruence with Alexandrine patterns should not be prioritised in such investigations.

In *The Lamu house—an East African architectural enigma*, Steyn (2002: 158) observes that for most indigenous Kenyan vernacular architecture, tangible cultural manifestations "have simply vanished", due to the use of "perishable natural materials". This has created challenges of reconstruction arising from "no written records" (ibid). However, the Lamu house, as "the stage for Swahili ritual" has an "ancient and climatically uncomfortable plan form that has been retained for nearly a millennium because of its symbolic value" (ibid: 157). This indicates that, for indigenous communities, cultural considerations dominate over climatic responses, justifying the study of vernacular architecture from a cultural rather than a climatic amelioration perspective, consistent with Rapoport (1969: 19). Steyn (2002: 177) further declares that "buildings exist in a physical and cultural landscape" and their 'proper' analysis can only be achieved by becoming "fully acquainted with the life-styles of the relevant society and the way the settlements were and are still being used". This cultural anchor should be discernible in future vernacular architecture studies.

In *An analysis of an Omani house in Stone Town, Zanzibar*, Steyn (2001: 111) proceeds by "visiting as many examples of the dwelling types under study" as deemed necessary, then surveys "selected

representative examples with an electronic measuring device" and thereafter records "significant aspects photographically" (ibid), prior to exploring "the theoretical reconstruction of an Omani house" (ibid). This approach indicates the preference, by Steyn, for 'accurate' and 'verifiable' primary research, whose purpose is mainly documentation, as a significant contribution. However, the use of photographic images to 'physically' reconstruct an 'authentic' Omani house, prior to 'unwanted' modifications by a series of occupants (ibid: 122), is a literal exercise, unlike the speculative interpretive reconstruction of vernacular architecture that is approached in a hermeneutic manner in Ralwala (2017). Steyn (2001: 118-120) thereafter develops scaled plans, elevations and sections of the Omani house; describes their construction technique (ibid: 124), as well as climatic effectiveness (ibid: 123) and compares the Omani house with courtyard typologies from the Middle East and North Africa (ibid: 127), in an attempt to identify commonalities and origins. The successful use of comparative analogy in Steyn (2001) indicates its potential for use as a method of understanding the architecture of Kenyan communities that are also domiciled in other African countries such as the Luo (in Sudan, Kenya, Uganda, Tanzania).

The seminal publication *Traditional architecture: settlement, evolution and built form* (Adebayo & Anyamba, 1993), has been used for research, instruction and reference on Kenyan vernacular architecture. The achievements of the publication include its articulation of "certain traditional architectural elements that have so far been relegated to the background" (ibid: xi). The

publication reclaimed the position of vernacular architecture in theoretical discourse, upon observation that cultural inquiries in Kenya have been "mainly anthropological or historical" and not focused on "architecture of settlements and built forms" (ibid). The communities under investigation were the Kikuyu, Akamba, Mijikenda and Somali, covering only the Eastern part of Kenya. The analytical approach was comparative and based on historical and geographical background; social and economic structure; traditional built forms (settlement patterns, homestead, house typology, construction technology and materials). The publication was anchored on the premise that architecture "evolves over time due to the forces of the environment, technology and culture" (ibid: xi, 88). Its success is evident when it offers the possibility of further comparative analogies, for example between other tribes and the Mijikenda (ibid: 84), in the role of ancestors as manifested in built form. The definition of typology that was adopted was quite restrictive, being limited to the identity of the house occupant as man or woman and to geometrical configuration of the housing unit, for the Somali and Mijikenda (ibid). A linear evolutionary progression was absent. No inquiry into evolution or transformation due to acculturation and modernisation was undertaken. The explication of the semiology of other built forms including shrines and palaces was not done. The link between architecture and intangible culture as embodied in community customs, taboos, rituals, norms, myths and legends was not explored.

Sylvester Maina and Robert Rukwaro's *Transformation of Maasai Art and Architecture* (2006), is a publication that focuses on Maasai culture and traditional artefacts. The analytical construct in the study is based on material and intangible 'cultural elements' exemplified by "land tenure and cattle ownership, religion, rituals, education, socio-psychology, occupation, social organisation, taboo and myth" (ibid: v). However, the study excludes oral traditions such as folk tales, legends, proverbs, wise-sayings, divination and witchcraft, songs, music and dance, except for meat-eating festivals. This is regrettable because the dense interpretation achieved in the study could have been enriched further. The publication provides a synoptic description of Maasai culture (ibid: 2-15); a rich illustration of some elements [artefacts] of Maasai material culture (ibid: 19-52); a detailed description of transhumant Maasai architecture (ibid: 55-84); an outline of transformations of Maasai art and architecture (ibid: 92-116), and a detailed illustration of the construction technology in Maasai architecture (ibid: 117-140). These achievements of the study are commendable. Nevertheless, the separate presentation of culture and architecture denies one the opportunity of direct cross-referencing to expose the cultural manifestation in Maasai architecture. The Maasai artefacts were analysed from an artistic perspective and this restriction prevents the development of a deeper semiology that would have emerged from a broadened architectural theory that accommodates artistic constructs.

Joseph Kamenju (2013: vii) collated "the diverse documentation of Kikuyu traditional architecture", in a narrative anthropological style that progressed from "documentation to analysis" (ibid), premised within the dialectic tradition-modern, to address transformation of Kikuyu vernacular architecture, in the context of Kikuyu traditional "customs and practices" (ibid: 23). However, the study was intentionally limited to the analysis of homestead layouts and housing units only, with a central focus on the impact of commerce, colonialism and Christianity on material culture (ibid: 103). Due to its cultural grounding, a rich interpretation was achieved, despite the dominance of iconography over iconology (Panofsky, 1974 [1955]: 51-81). Kikuyu mythology, oral traditions, narratives, customs and taboos (except prohibitions), were presented separately from their manifestation within domestic architecture. An integration of both aspects would have further enriched the research by enabling direct references and deductions. The synthesis that results from an eco-systemic interpretive framework when "various humanistic disciplines meet on a common plane" (ibid: 65), was limited, as the research did not develop a theoretical semiotic framework in the manner of Osman (2004: 185). Conservation and pedagogical inclusion strategies were not explored. The study recommends multidisciplinary investigation for future analytical research in Kenyan vernacular architecture (Kamenju, 2013: 11).

Crispino Ochieng' (1999: iv) coined the term "open outside" to describe the transition space that was used by the Kenyan Luo, Luhya and Abagusii in rural, peri-urban and urban areas in a comparative analysis within *The Dynamics of culture in an urban setting-*

A study set in Western Kenya. Ochieng' departs from an approach that isolates traditions within the rural set-up and investigates their continuance in urban regions of Kisumu and Kisii, arguing that "cultural issues are best investigated through a qualitative ethnographic research approach" and "best understood by observing activities in a natural setting" (ibid: 2, 4). The natural state is, however, questionable for both Kenyan rural and urban areas due to pressures of acculturation and modernisation. The ethnographic method can be broadened for a more effective explication in future studies. Ochieng' deduces that Kenyans continue to practice their traditions in urban set-ups (ibid: 4), which becomes useful when analysing spatial organisation and manifestations of intangible culture for urban or quasi-urban Kenyan vernacular architecture. However, only a partial treatment of intangible culture is discerned in the study, limited to: gender relationships (ibid: 192); mourning (ibid: 196); celebrating birth (ibid: 101); the Elders' court (ibid: 116) and the concept of home (ibid: 103). Other *lacunae* within the study include the self-restriction to domestic architecture, lack of a theoretical architectural eco-systemic framework, the preference for iconographic analysis over iconological synthesis, and the absence of conservation and pedagogical inclusion strategies to provide continuity for community cultural expressions in order to provide direction for architectural praxis in Kenya.

A review of selected regional and vernacular architecture studies outside Kenya

In Africa, few studies have reviewed, analysed or documented the oeuvre of an individual professional architect whose work is imbued with vernacular inspiration or attributes. Examples include studies on Gerard Moerdijk and Gabriel (Gawie) Fagan from the South African context by Roger Fisher (2003) and Arthur Barker (2012) respectively. Such studies often employ a chronological approach, where emphasis is placed on the childhood upbringing, family background and professional training of the architect in order to uncover or present material that is deemed relevant to comprehending the architect's design approaches, under various circumstances. Evidence is obtained from specific commissions along the progression of the architect's career. The approach is of limited use to vernacular architecture studies as they target the scale of indigenous communities due to the absence of focus on an individual designer. However, aspects of style, ornamentation and typology (Fisher, 2003: 29, 30), regionalism, with its variants (Barker, 2012: 107-118), and phenomenology (Otero-Pailos, 2002: 77, 78, 297) are relevant in the discussion of indigenous Kenyan vernacular architecture and its transformations.

Amira Osman (2004) developed an eco-systemic semiology framework for the comprehension of tangible and intangible cultural expressions in the architecture of the riverain [sic] region in Sudan. However, the framework in the study is incompatible with

the culture of indigenous Kenyan communities due to irreconcilable disparities such as the extensive differences in prevalent cultural codes and signs—see Wittgenstein's theory of language games in Imbo (2002: 52); the fusion of the Sudanese indigenous culture with Funj, Meroe, Islamic, Nubian, Egyptian and Arabic influences due to conquests, extra-territorial trade and pilgrimage (Osman, 2004: 49); nomadic Sudanese culture versus sedentary agricultural, fishing and hunting activities evident in the culture of most indigenous Kenyan communities; geographic and climatic distinctions (barren desert Sudan (Osman, 2004: 64, 66), versus, for example, tropical Lake Victoria basin modified equatorial climate (Ralwala, 2013: 36)). The adoption of an eco-systemic approach in Osman (2004), where methods of analysis of cultural landscapes from philosophy, anthropology, linguistics and other social or humanistic disciplines that are compatible with or complementary to architecture, are critically evaluated before being adopted in analysis of indigenous community vernacular architecture sets the trend for future studies.

Reiterating that "more meaningful interpretations are obtained by interdisciplinary investigation", Osman (2004: 26) observes that "architectural theory, which resonates with the realities of a context" (ibid: 11) must be the "framework for architectural study relevant to the selected region" (ibid). Therefore, the focus must be on interpretive rather than descriptive research (ibid: 13), in which hypotheses are set "according to intuitive analysis and observation" (ibid), within a methodology that "borrows from a wide variety of sources and different schools of thought", positions that resonate with the approach that is recommended herein. Arguing for a methodology that detaches "physical objects and examines them" while including "intangible aspects of a culture such as feelings, beliefs and attitudes" (ibid: 14), Osman (2004) proceeds to identify recurrent themes in the literature of riverain [sic] Sudan region (ibid: 57-60); addresses issues of northern Sudanese identity through selected artefacts (ibid: 70-73; 75-133); describes social, economic and religious systems (ibid: 136-151), knowledge and creative systems (ibid: 155-158), themes and patterns relevant to place making (ibid: 160-162) and the spatial implications of intangible values (ibid: 164-167). Despite these achievements, "the framework for the study of Sudanese architecture" (ibid: 169-186), is developed as the climax of the investigation rather than prior to the actual eco-systemic study. Due to the delineation of the study, the impact of colonialism and the marginalisation of communities by authoritarian political regimes in the Sudan and their influence on Sudanese architecture were not addressed. Voices of other Sudanese architecture academics in Sudanese tertiary institutions, were absent in the study. However, the extension of Maurice Merleau-Ponty's *Phenomenology of Perception* into clothes, shelter and place-making activities (ibid: 16), is a significant contribution that demonstrates how "ideas of [the human] 'body'" determine "forms of cultural expression" (ibid).

Fisher (2003: 31) examines "graphical representations of the boer dwelling by three artists" in terms of the "iconological significance of the user" of such dwellings.

Fisher portrays "the inner psyche" in order to comprehend "taxonomic concerns" in search for cultural identity of the boer (Afrikaner farmer) as expressed in built form and "iconology of landscape" (ibid). The study observes that "simple buildings [such as vernacular built forms] … resonate with the spirit of the people, their makers" (ibid: 40). The study reiterates the fact that an artist's background, in particular his life history, is vital to understanding concepts, ideas and leitmotifs in his work (ibid: 36, 37). This approach is useful when philosophy of life, ethos and world views are presented as relevant background for comprehending Kenyan vernacular architecture. The study demonstrates that "even when the representation is objective, an iconological reading of the art work [boer house] is possible" (ibid: 32). This significant contribution justifies hermeneutic analysis of sketches and photographs in uncovering new knowledge and enlarging architectural interpretation.

Fisher (2004: 38) uses archival material to reveal the exact intentions of the architect, Sir Herbert Baker, regarding his commission, the Union Buildings in Pretoria, South Africa, indicating a preference for "Baker's own writings rather than later interpretations" (ibid). Fisher uses extensive verbatim quotations from written articles by Baker. Fisher focuses on presenting an iconographic first-hand account regarding the choice of site for the project (ibid: 41, 44); the use of local materials and their perceived shortcomings, presented as a post-occupancy evaluation narrative on building performance (ibid: 43); justification for the appropriation of space for an amphitheatre (ibid: 42); climatic

considerations (ibid) and the symbolism of the confluence of Dutch and British cultures (ibid: 45). While the study clarifies any contestations regarding the architect's intentions, it denies alternative semiology, even if it acknowledges that when original sources are not available, for instance in the case of the vernacular architecture of many Kenyan communities, much is left "to the interpretation of the critic" (ibid: 38). The voices of diverse South African cultures were absent in the research, perhaps being overwhelmed by grandeur of monumental architecture (ibid), compared to mundane anthropocentric vernacular structures. Multiple voices are required to provide holistic reading of buildings as cultural artefacts.

In the analysis of "corbelled stone structures of Glenfield Farm" (Fisher & Clarke, 2007), in Salem, Eastern Cape Province, South Africa, the study employs a speculative approach that utilises conjecture to examine and evaluate the "various postulates concerning the origin and purpose of the corbelled structures" (ibid: 24). It addresses genesis and function through comparison of typologies and traditions in each postulate. The analysis presents merits and demerits (ibid: 24), defence structures, lime kilns and Trekboer shelters (ibid: 25). Within the analysis, speculation is perceived as 'intelligent guessing' based on similarities in appearances of form, employed construction technology or cultural practices. Comparative analogy is used in search of corresponding attributes between the artefact in question and other artefacts that are identical to it on the basis of delineated leitmotifs. The study makes a significant

contribution by demonstrating that, in the absence of accurate and relevant literature on the origin of a cultural relic, it is valid to speculate in order to achieve the requisite understanding, despite the limitation of individual subjectivity. Hermeneutic interpretation is useful despite any contestations and interpretive conflicts that it may generate, as exhibited by interpretation of *Thimlich Ohinga* and *Gundni Buche* cultural relics in Ralwala (2017).

Franco Frescura (2013 [1980]; 1985) was pioneering in his broad-based study on vernacular architecture of the entire South African region. Frescura (ibid) uses observation, documentation and interpretation on "the house forms and building methods of Southern Africa's black rural peoples" (ibid: 3). Frescura excludes "the white rural vernacular" due to differences in "economic and technological development" (ibid), perhaps in recognition of incompatible cultural backgrounds of the two communities. Frescura develops a taxonomy of vernacular forms in South Africa, exemplified by categorisations such as "Grass Shelter", "Beehive dome", "Beehive Bilobial", "Beehive cone" and "Cone on cylinder" (ibid: 12). The typological method is based on geometric form and materiality (materials used), as expressed in dwelling units, including modifications of the forms, that are perceived as transformations. However, Frescura (ibid: 163) considers "social and cultural aspects of rural building" very briefly due to divorce of architectural content from anthropological information. This indicates lack of a deep cultural premise in description of vernacular built forms, due to the extensive nature of the

region under investigation. Each community could only be considered briefly. The study would have benefited from using an eco-systemic epistemology derived from interdisciplinary studies to tackle other pertinent and recurrent issues in vernacular architecture, apart from form alone. The lack of other voices from South African architectural academia in Frescura (2013 [1980]), and those of sages (indigenous thinkers), is a *lacuna* which should be addressed in future studies.

Frescura (1985), *Major developments in the rural indigenous architecture of Southern Africa of the Post-Difaqane period*, departs from socio-politico-economic upheavals in the "period of Difaqane, 1822-1837" which led to "displacement of whole communities", to create "extensive repercussions in the habitat of the region" (ibid: v). The study relies upon "data of a historical and archaeological" nature (ibid), to develop a tripartite approach that describes "the physical and social context" of rural South African architecture, including a relevant background of socio-cultural perceptions to provide a "history of the South African dwelling form" (ibid). The study builds upon the work of Frescura (2013 [1980]) to present a vernacular narrative that is embedded in "people's social hierarchies, economic systems, ritual practices and cosmological beliefs" (ibid). Though it is a survey rather than an in-depth cultural investigation due to lack of focus on an individual community, the study confirms the recognition of centrality of culture to architectural discourse. Frescura (1985: 284) clarifies his methodology further when he argues that "in the field of research, the architect has available to him, the best of

both worlds: the objective methodology of the scientist coupled with the irrational intuition of the artist", confirming the art-science dialectic that permeates architecture. Intuition is a key part of the speculative research approach when employed to study and analyse vernacular architecture.

Frescura (1985: 71-90) interprets South African vernacular architecture regionally, an approach complemented by description of physical characteristics of climate, vegetation and soil types. The architecture is further categorised into different technology types, validating construction technology as a basis for architectural typological distinctions and regional differentiations. Extension of typology beyond form considerations is a bold contribution which should be explored in future studies. Frescura (ibid: 301-360) employs "comparative analysis of South African settlement patterns" using criteria such as settlement form, axiality, direction aspect, social hierarchies, location of dwelling units in homesteads and privacy (ibid). However, the absence of oral traditions such as proverbs, riddles, myths, legends and folktales indicates that the study limited itself only to material culture. Architectural response to intangible culture remains a significant *lacuna*. Frescura (ibid) highlights the tendency of comparative analogy to "break down architecture into component elements rather than dealing with them as integral parts of a larger socio-economic whole", further claiming that the approach leads to a preoccupation with "the aesthetics of product as against the mechanisms of the process", creating "styles of architecture" known as "stereotypes" (ibid). However, this is double-speak by

Frescura (1985) because geometric and technological typologies of the dwelling units that he developed also portray stereotypical tendencies. Aesthetics and styles are relevant when discussing process-product oppositions in vernacular architecture. Frescura (ibid: 272) admits that the study was unable to resolve the question of "ethnic identity" versus "regional stereotype". Due to the 'lower' craft technology that is widespread in the construction of vernacular dwellings, exact stereotypes are rare even if geometric forms of dwelling units remain the same. Such is the case in Kenyan vernacular architecture.

In *Reciprocity in the evolution of self through the making of homes-as-artefacts: a phenomenological study of the BaSotho female in her vernacular architecture*, Heinrich Kammeyer (2010: 290) describes buildings and settlement patterns of the *BaSotho* "as metaphors of social values" and community cosmological perceptions. The buildings are imbued with "their symbolic form of language" that results in "a reward in innovation" for the *BaSotho* female, expressed as gratitude by other community members (ibid: 294). For Kammeyer (ibid: 7), "the production of vernacular space and forms" including "accurate recording as measured drawings" of homesteads and settlements was not vital to the formulation of analysis and interpretation, which was essentially "a strategy of subjectivity" (ibid: 10), that was based on "direct observation" (ibid: 15). The approach should be adopted in future studies which choose not to produce accurate scaled drawings of forms and artefacts of indigenous Kenyan communities. Kammeyer (ibid: 15) analyses buildings and

artefacts from photographs, films and videos as well as archival records coupled with "data from discussions collected on site" (ibid), justifying the extension of hermeneutic interpretation to visual images, sketches and drawings. Kammeyer (2010: 16, 65, 289) uses "non-academic sources" like legends, myths, jokes, songs, proverbs and "anthropological findings" (ibid: 16), commonly described as oral traditions. African philosophy is presented as *Botho* phenomenology (ibid: 65). Gender roles, *Litema* (decoration of dwellings using earth) and the importance of the African life cycle for *BaSotho* females (ibid: 273) are considered key to comprehension of their vernacular dwellings. The study demonstrates the efficacy of philosophy in anchoring interdisciplinary architecture studies, providing a rigorous in-depth analysis of the motivations of the *BaSotho* vernacular architecture, from a theoretical framework structured in phenomenology. The framework emphasises variants such as Existential (ibid: 29), Hermeneutic (ibid: 36), Ontological (ibid: 44), Haptic (ibid: 50) and Aesthetic phenomenology (ibid: 54). However, the study does not extend to traditional institutions and other typologies in vernacular architecture, including market places and shrines. Transformations and modifications due to acculturation were not considered.

Steyn (2003: 181) notes that "architectural research often culminates in value judgement and speculation" justifying critical approaches in reviewing built forms. Such critique should inform the development of a synthesised research methodology as research strategy. Steyn (ibid) further

reiterates that architecture needs to be redefined in order to include "everything built by man", as current definitions are "too elitist and exclusive" (ibid), a recognition that broadened disciplinary boundaries will expand existing theoretical discourse.

In the publication *In search of an appropriate research methodology for investigating traditional African architecture,* Steyn (2003: 191) declares that vernacular architecture research "must unquestionably be an interdisciplinary study" that is "tightly focused" and "geographically delimited" (ibid), criteria that are consistent with eco-systemic epistemology. The extreme diversity within vernacular settings implies that "a common methodology or theoretical approach is unfeasible" (ibid), and this indicates that each study must develop its own methodology or adapt existing ones. Steyn (ibid: 192) further states that the "chaotic and fuzzy nature of African history" indicates that a "strict methodologist approach" cannot be sustained in vernacular architecture research. Although the chaotic and fuzzy descriptions of African history are inaccurate and contestable, Steyn's assessment implies that flexibility and critical self-reflections are necessary in investigations on vernacular architecture.

Comparative analysis is employed in *Two traditional African settlements—context and configuration* (Steyn & Rodt, 2003), when a Tonga compound in Southern Zambia is compared with a Banoka village, in Okavango Delta, in Botswana (ibid: 196). In recognition of Rapoport's position that change in vernacular settings depends on culture, the availability of resources and "the

level of technology", "rather than on chronology" (Rapoport, 1969: 14), the analogy proceeds via "a brief historical overview of the people concerned" (Steyn & Rodt, 2003: 196). This is followed by observations of the Tonga and the Banoka, who are described in terms of origin, economic activities, family organisation, material culture, "settlement form and construction, with special emphasis on the impact of external influences" (ibid). Such an approach can be taken up in the study of indigenous vernacular architecture in its cultural context, without emphasis on chronological evolution. However, 'accurate' primary research through CAD drawings (ibid: 197), to facilitate 'reproducible' comparisons and 'verify' information from secondary sources (ibid), may not be needed for studies focusing on interpretation, particularly when the requisite documentation has already been undertaken in previous studies.

In *Types and typologies of African urbanism*, Steyn (2007: 50) adopts Julia Robinson's "four ways to classify an environment" (ibid), based on "physical properties": the physical context; "how environments are made": process versus product oppositions; "how environments are used": function, cultural practices and activities; and "how environments are understood" (ibid: 51): meaning, interpretation, semiology and hermeneutics. Steyn (ibid) "focuses on Timbuktu and Zaria in the West African Sahel", "Oyo and Kumasi in the West African forest zone" and "Lamu on the East African coast" (ibid), departing from 'accurate' CAD redrawn plans to achieve comparative "analysis of form" (ibid; 52, 59),

executed on "three urban scales" (ibid: 52). The analysis draws inspiration from Christian Norberg-Schulz in *The concept of dwelling: On the way to figurative architecture* (1985). The analysis includes "spatial organisation and typology" on a micro scale to identify "shape, size, edges, paths and nodes" (Steyn, 2007: 52, 54); "synthesis of built form and organised space" (ibid: 52, 59), at the neighbourhood level; and the "urban fabric" at a macro scale of "building blocks" (ibid: 52, 58). It is doubtful as to whether such a structured analysis of urbanism would be applicable to the quasi-urban regions in Kenya, exemplifying vernacular architecture. However, significant contributions of Steyn (2007) include creation of awareness about pre-colonial existence of urbanism in Africa, South of the Sahara Desert (ibid), contrary to popular belief, and exposure of "rich diversity" within "indigenous urban forms" (ibid: 49).

In *The spatial patterns of Tswana stone-walled towns in perspective*, Steyn (2011: 104) laments that "architects are not trained to interpret these ruins". Nevertheless, architects must attempt such interpretations, in a hermeneutic manner, using architectural epistemology in the absence of interdisciplinary collaboration or methodology. Such interpretation will generate material content that can be employed in architectural pedagogy, exemplified by the interpretation of Luo cultural relics like *Thimlich Ohinga* and *Gundni Buche* in Ralwala (2017). Steyn (2011), once again, "relies mostly on the analysis of drawings", employing an 'accurate' CAD method to re-draw "selected settlement layout plans" to portray "spatial

organisation and land use intensities" (ibid: 104). This allows verification in the form of "scale and size to be checked against data found in literature" (ibid: 114). Steyn's persistent tendency towards accurate documentation is commendable in the historico-iconographic analysis of "Tswana homestead patterns" (ibid: 108), with case studies on Litakun (ibid: 104), Buffelshoek and Klipriviersberg (ibid: 107) and Kadithswene (ibid: 110). Steyn (2011) employs speculative reconstructive approach in his inference below, with the author's own italicised emphasis: "*It could be* that later homesteads accommodated not only one extended family, *but became* an extended household with unrelated families *who were most probably* followers of the headman" (ibid: 108). Such deductions validate speculation as a means to generating hermeneutic explication of vernacular architecture.

Conclusions and Recommendations

A hermeneutic critical review of selected seminal publications on Kenyan culture and vernacular architecture in Kenya and South Africa was undertaken in an eco-systemic manner in this study. The approaches, research *situs*, achievements and pertinent positions in these publications were highlighted and *lacunae* (research gaps) identified for uptake in future studies. The dialogic method of presentation which employs direct quotations coupled with citations that include page numbers for easy verification was adopted to demonstrate multi-vocality and enhance research reproducibility. Issues of translation conflicts that arise from incompatible cultural codes were discussed. Noting that extensive primary research on Kenyan culture has already been conducted by interdisciplinary scholars, the study recommends that secondary integrative and interpretive research be conducted to propel vernacular architecture studies to a higher ratiocinative stage. Kenyan architects should transcend the impediments of cultural romanticisation, taking cue from historians, to use oral traditions as sage philosophy in reconstructing an authentic vernacular architecture of indigenous Kenyan communities. The author hopes that the critique herein will initiate and sustain debate on vernacular (and regional) architecture, resulting in more local studies focusing on Kenyan communities to enhance scholarship in this research field.

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