

In search of an appropriate research methodology for investigating traditional African architecture.

Gerald Steyn

Architecture, Pretoria Technikon, Pretoria, South Africa.

E-mail: gerald@techpta.ac.za

Africa's building traditions are under threat. There is a real need to subject them to rigorous scientific investigation to support conservation and explore indigenous knowledge systems. But the taxonomy is still immature and the analytical criteria Eurocentric. In addition, the education of architects generally limits their involvement to measured drawings and does not equip them with suitable interpretive skills in this field. This report attempts to contribute to the issue of appropriate methodologies by reviewing three constituent elements: theory, literature and fieldwork. These are discussed in terms of sources and methodologies exposed to while studying the Swahili and Arab architecture of the East African Coast and during appurtenant excursions to Kenya and Tanzania. The report does not suggest a strict methodologist approach and it is emphasized that research must be interdisciplinary. It does recommend, however, that further work on typology would allow architects to trace the evolution of traditional architecture and anticipate future development. This would be a unique contribution.

An interest in vernacular building, including that of Africa, only emerged among architects in the middle 1960s – an interest arguably stimulated by work such as Rudofski's *Architecture without architects* (1964) and his subsequent *The Prodigious Builders* (1977).

His photographs and succinct descriptions of the traditional buildings and towns of Africa, the Mediterranean, Middle East and other ancient and medieval settlements reminded the profession of the richness of form, texture and types at its disposal.

This awareness should have been accompanied by a revision of the definition of architecture. Pevsner's "A bicycle shed is a building, Lincoln Cathedral is a piece of architecture" (1963:15), is simply too elitist and exclusive. A more appropriate definition would include everything built by man and "possibly also by his precursors" (Egenter 1992:77). Even Vitruvius recognized mud huts as part of the genealogy of architecture.

For the purpose of this report, traditional architecture is defined as the pre-colonial buildings and settlement

indigenous to the people of a specific area, and built by the people themselves. Terms like "vernacular" and "indigenous" are used interchangeably.

Having recognized traditional African architecture as an intrinsic part of the continent's cultural and technological legacy, it is essential also to recognize that it is being threatened by war, neglect, urban sprawl and ignorance. The motivation for researching traditional African architecture is, therefore, simple: first, it must be determined what should and could realistically be preserved, and record what is under threat and might face destruction in the near future. Second, it is an indigenous knowledge system that should be explored for concepts and technologies that could again be broadly applicable.

Investigations within this framework commenced at Pretoria Technikon in 1999. A grant from the National Research Foundation (NRF) enabled the author to visit Dar es Salaam and Zanzibar in 2000, and Lamu and

Malindi/Gedi in 2001 and 2002, respectively.

These excursions provided a commendable overview, but with hindsight it is clear that there is a thin line between a mere familiarization visit and scientifically accountable fieldwork. The difference is time, focus and ... method.

When studying the history of the built environment, architects should consider who built what, where, when, why and how. This broad-based approach has the potential to relate the buildings under study to both the physical and cultural landscape.

But the choice of a suitable methodology is obviously critical to avoid problems with substantiation.

This report focuses – from an architect’s point of view – on the three areas of concern that underpin a methodology in this field, namely (1) theory, (2) literature and (3) fieldwork. These are discussed in terms of obstacles experienced, with thoughts on possible solutions.

Architecture, as a discipline involved with both art and science, provides settings for all the activities of human life – settings shaped by rational, symbolic and psychological factors. For that reason, architectural research often culminates in value judgement and speculation, and lacks the hard scientific edge of, say, archaeology and physical anthropology. Empirical and formal methods of verification, such as phenomenological description, are simply not embedded in architectural inquiry. As a matter of fact, even the use of the terms “typology” or “morphology” in architectural discourse tends to require clarification!

The subjective nature of much that has been written, the inaccuracies and contradictions and the alarmingly small pool of original research must also be considered.

Fieldwork in architecture is mostly limited to surveys required for

measured drawings of buildings in order to record, restore or recycle them. An architect’s formal training simply does not provide the same competence in interpretation as that of an archaeologist.

This report aims to explore these issues of concern by discussing the available sources and methodologies in terms of research on the traditional Swahili and Arab architecture of the East African coast. There are two reasons for basing this report on work done on the Swahili Coast (figure 1).

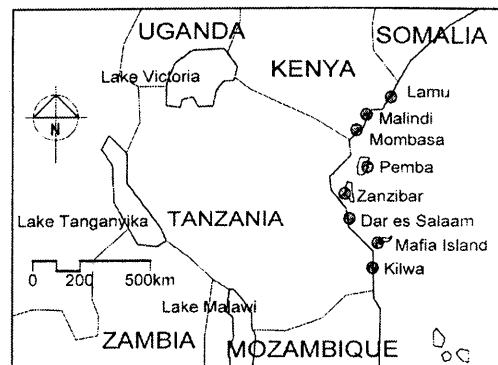


Figure 1

Map of the Swahili Coast (Steyn).

First, while much of the tropical interior of sub-equatorial Africa remained isolated until the middle of the 19th century, trade from the Indian Ocean “opened up” parts of the East Coast comparatively early. Apart from leaving no written record, the people of the interior used perishable natural materials such as mud, wood and grass, and the tangible manifestations of most early cultures have simply vanished. References in ancient literature (including *Periplus maris Erythraei*, written c. 60 C.E., Al Mas’udi in 916 C.E. Chinese descriptions from c. 1 100, Al Idrisi in c. 1150, Ibn Battuta in 1331 and Álvares in 1540) and the archaeological remains of the stone houses of the East Coast, on the other hand, indicate the forms of early settlements and buildings.

Second, the Swahili tradition constitutes the only surviving urbanized indigenous culture in the south-eastern and eastern African region (Kenya, Tanzania, Malawi, Zambia, Zimbabwe, Mozambique and South Africa). The sites visited all originated between 1100 and 1400 C.E. and represent a full spectrum of settlement conditions – Lamu and Zanzibar, both functioning towns and World Heritage Sites, are subject to intense efforts to conserve their respective 19th century Swahili and Omani character. Malindi, also a functioning town, seems to be responding well to the demands of commerce and tourism without losing its distinctly tropical African atmosphere and appearance. Gedi is a ruined and abandoned Swahili settlement, now a Kenyan National Monument.

Problems related to theory

Apart from the purely historical value, what we hope to achieve by studying traditional architecture is insight into ideas and formative concepts. Robert Maguire stated at a RIBA conference in 1976 that “Vernacular is not a style ... it can't be copied. The significance of the vernacular is as a learning tool” (quoted in Jencks 1997:172-173). Important lessons include the use of appropriate materials and a straightforward approach to achieve both architectural complexity and human scale.

The nature of traditional African architecture is subject to controversy. There is no *urcorpus* – no body of knowledge that is accepted as infallibly correct to rely on. Two examples illustrate this point:

- While Rapoport suggests that climate is a modifying rather than form-determining factor (1969), Talib argues that climate, rather than culture, was the dominating influence in both Arab and African settlement (1984).

- Some authors believe technology spread from Egypt through Nubia and along the Sahel corridor (McEvedy 1980:30; Oliver 1999:74). Others propagate a trans-Saharan transfer of technology (Reader 1999:187; Bahn 2000:150).

The tools for analysing traditional architecture also remain contentious. Guidoni rejects what he calls the “over-used and abused typological method of classification”, which he maintains cannot reflect the “internal complexity” or history of a culture (1975:17). Much of the published work, however, seems to be on the assumed anthropomorphic and cosmological aspects of African homesteads, while there is still not a consistent – and generally accepted – typology for African settlements.

Susan Denyer's taxonomy of 26 house forms (1978:133-142) is admittedly very clearly typologically oriented – and probably the most comprehensive to date. But what is needed is a broader system of classification to describe the distribution of both homestead and settlement forms and to allow comparison with examples outside Africa. Denyer's classification of styles has not been seriously challenged to date. They are (1) Sudanese, (2) Impluvial, (3) Hill and (4) Beehive (1978:159-168). These terms are simply too loose and certainly not parallel.

Current analytical processes generally rely on Eurocentric and Euclidean parameters for evaluation, such as organising and axial lines, zones, grids and systems of proportion (Leupen *et al.* 1997:25). These are the criteria for evaluating formal aesthetics. But they are often totally inappropriate to the African situation – many African types are based on anthropomorphic and zoomorphic mysticism. The Swahili and Omani stone houses, on the other hand, are very similar to the “typical” Islamic home, characterized by its organising

courtyard and privacy for women (Hakim 1990:70).

When dealing with such issues, two crucial questions emerge: how does one validate such data and how does one analyse it? Validation requires the convergence of evidence, and in literature that means the corroboration of facts by a number of independent researchers.

Since Amos Rapoport published a theoretical framework for the study of vernacular architecture in 1969 (*House form and culture*), the theme has been relatively popular. However, even a cursory scrutiny of bibliographies in existing literature is revealing: references to Bourdier, Chittick, Gardi, Phillipson, Davidson, Fraser, Garlake, Kirkman, Lewcock, Oliver (Paul), Prussin and Rudofski (the list is obviously not complete) appear to be alarmingly common. It seems as if a large number of contemporary authors rely on a relatively small pool of primary evidence – actual site reports – making multiple referencing to the same root source a very real concern.

The real authoritative sources are unquestionably in-depth regional investigations based on many years of in situ surveys and observations. In this category, Bourdier's (1996) work in West Africa and Frescura's on southern Africa (1985, 1981) are benchmark methodological examples. Ghaidan's *Lamu: A study of the Swahili town* (1975) and Kirkman's *Gedi* (1975) offer valuable information, but Garlake's *Early Islamic architecture of the East African Coast* (1966) remains the standard reference. In addition, Garlake personifies the changing attitude. Initially he stated scathingly (1966:12):

[The Swahili] position on the perimeter of the Islamic world and the basic inability of the culture that evolved on the coast to respond with initiative, or to originate its own individual solutions to its problems ... help to explain the static quality of the architectural style".

Recently he offered a drastically revised view (2002:184):

The initial impetuses that stimulated the coastal architecture became incorporated in a single coherent, living and evolving, secure and established local architectural tradition.

Contemporary architects often confuse contextualism with visual formalism, rather than associating it with the environmental, climatic, social and economic aspects of a place.

A researcher undoubtedly needs a good theoretical background on the roots and socio-economic development of the inhabitants of the traditional architecture under study. More references probably exist for East Africa than for any other sub-Saharan region. Commendable sources include Allen (*Swahili origins*, 1993), Mazrui and Shariff (*The Swahili: Idiom and identity of an African people*, 1994) and Middleton (*The world of the Swahili*, 1992).

What protocols are available for analysis? Lawrence lists seven "explanations" for vernacular architecture (1987:17). Thematically they are (1) aesthetic/formalist, (2) evolutionary, (3) social and geographical "diffusionism", (4) physical, such as technology, site and climate, (5) social such as defence, economy and household structure, (6) socio-cultural including religion and "collective spatial images" and finally (7) typology.

Papanek lists six explanations (1995: 118-135): (1) methodological, (2) dispersion and convergence, (3) evolutionary, (4) socio-environmental, (5) cultural and (6) formal aesthetic.

An in spite of what Guidoni suggests, the typology of vernacular settlements seems to have been neglected, while that of Denyer is much too simplistic and iconic. The whole issue of typology needs to be reviewed.

It is puzzling that, of all the scholarly disciplines, only architecture

found it necessary to elevate *typology* to a highly debated philosophy. In archaeology, for instance, typology is simply defined as “The arrangement of similar artefacts into sequences spanning space and time” (Bahn, 2000:8). An earlier definition is just as unambiguous: “Typology is the study of the forms and functions of archaeological objects and their relationship with other objects” (McKern *et al.* 1974:178). The issue of ordering is inherent to scientific investigation. Researchers must be able to name things according to a convention and classify data according to frameworks appropriate to the field of inquiry. A common typological protocol obviously facilitates communication.

Considering only the built environment, a study of African architecture should differentiate between at least three typological layers or strata. The first constitutes the elements that seem to make up an African homestead, such as lapas or courtyards, building envelopes (whether separate huts or under one roof), transitional elements (verandahs, canopies, gazebos and loggias) and all forms of perimeter definition. The second is the individual homestead, made manifest by combining some of the elements into a whole. The third is the settlement, composed by aggregating a number of homesteads.

An architectural *type* should then be a description of a *class* of homestead or settlement in plan, section and three-dimensional form, ideally also with reference to place and period. Terms like “model”, “type”, “archetype”, “stereotype” and “prototype” could be used in discourse, but one should beware of vague abstractions. One should also avoid the straightjacket of two-dimensional thinking. In fact, Norberg-Schulz laments, “Today, the typology of settlements is generally

studied exclusively in terms of spatial organization ...” (1985:45).

The final obstacle is that of interpretation. And the biggest problem here is that Western scholars tend to view African traditional architecture as a representation of some distant past. As Clark wrote: “It is inconceivable that even the remotest and apparently most primitive communities can have preserved their culture intact since an early period of the Stone Age” (1957:171). We have to remember that typological development could also be characterized by devolution or degeneration.

Weaknesses in the literature

Research on the built environment obviously relies enormously on drawings, arguably often more so than on data in text. Problems with illustrations, as well as with facts and interpretation, are discussed in the following two sections.

Illustrations and graphics

A quick and cost-effective method has been to scan plans, sections and elevations, store them as Windows Bitmap images and trace them using a South African drawing program called Caddie (www.caddie.co.za). The advantage of using such a program is its analytical ability: dimensions, areas, angles and all sorts of discrepancies are immediately and – because drawings are often enlarged for more detail – glaringly revealed. It also allows manipulation of drawings for comparison and classification. Only rarely, though, could an example simply be traced and filed. More often tracing is being substantiated with comparisons in other literary sources. Fieldwork is the only really credible solution. For example, when drawing settlement layouts, even official survey maps

obviously do not reveal the built fabric on the ground (figures 2 and 3).

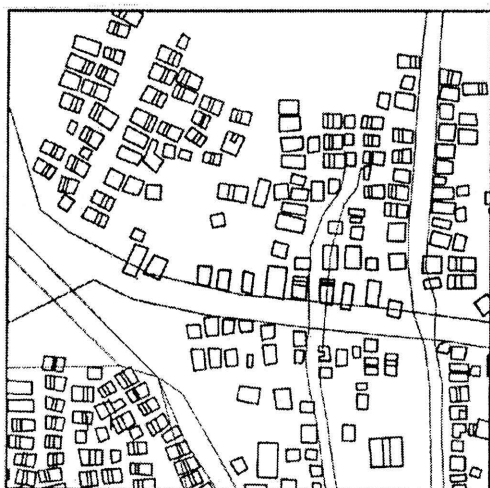
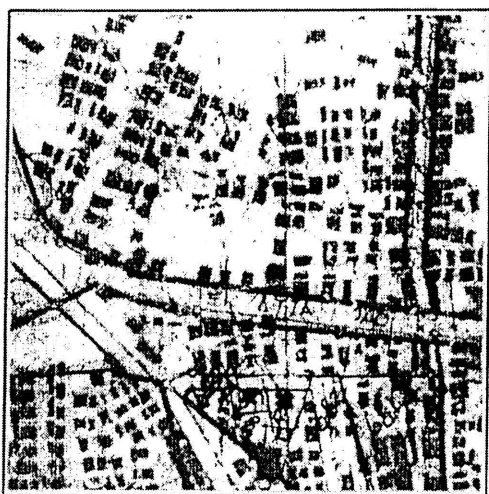


Figure 2
Survey map (top) and trace of old part of Malindi, Kenya (Steyn).

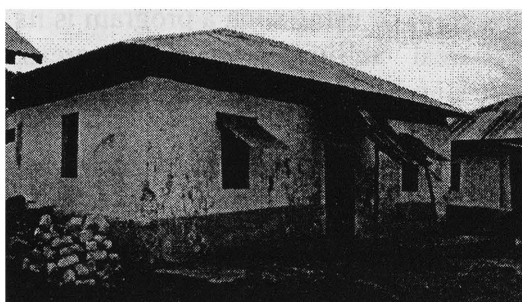


Figure 3
A typical house in the old part of Malindi (Steyn).

Another major problem is the determination of the accuracy of drawings in literature. An obstacle often encountered is the lack of, or incorrect,

scale bars. Figure 4 compares plans of the walled perimeter of the same abandoned Swahili town, that of Takwa on the Lamu Archipelago, by two sources. Even orientation differs!

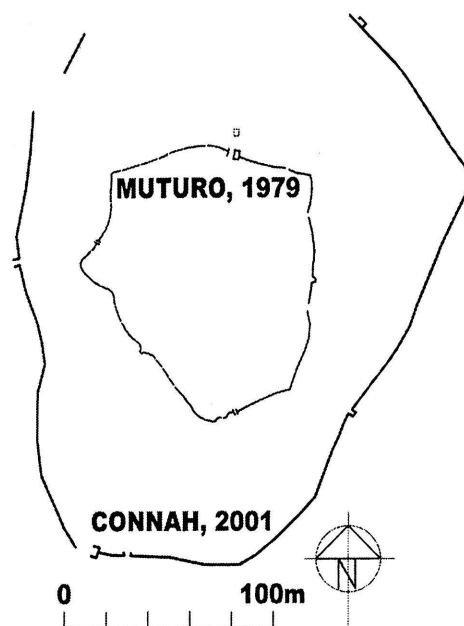


Figure 4
Two versions of the perimeter wall of Takwa, off the Kenya coast (Steyn).

The need to use only information from original site surveys is adequately illustrated in figure 5. Of the three versions of this 15th century Swahili house at Songo Mnara, only the one below was actually measured by the author, the eminent Peter Garlake (1966:192). The one in the middle appears in Denyer's *African traditional architecture*, still a standard reference in schools of architecture (1978:198). One can clearly see a number of fundamental differences; a clear indication that copies are suspect because they are recycled and become increasingly distorted. Hodd's interpretation is simply an abstract reduction (1997:357).

Sometimes diagrams are confused with site plans. Using Lamu, a Swahili town off the Kenya Coast, as an example, figure 6 illustrates the difference between a relatively

convincing tourist-oriented diagram and a copy based on surveyed drawings.

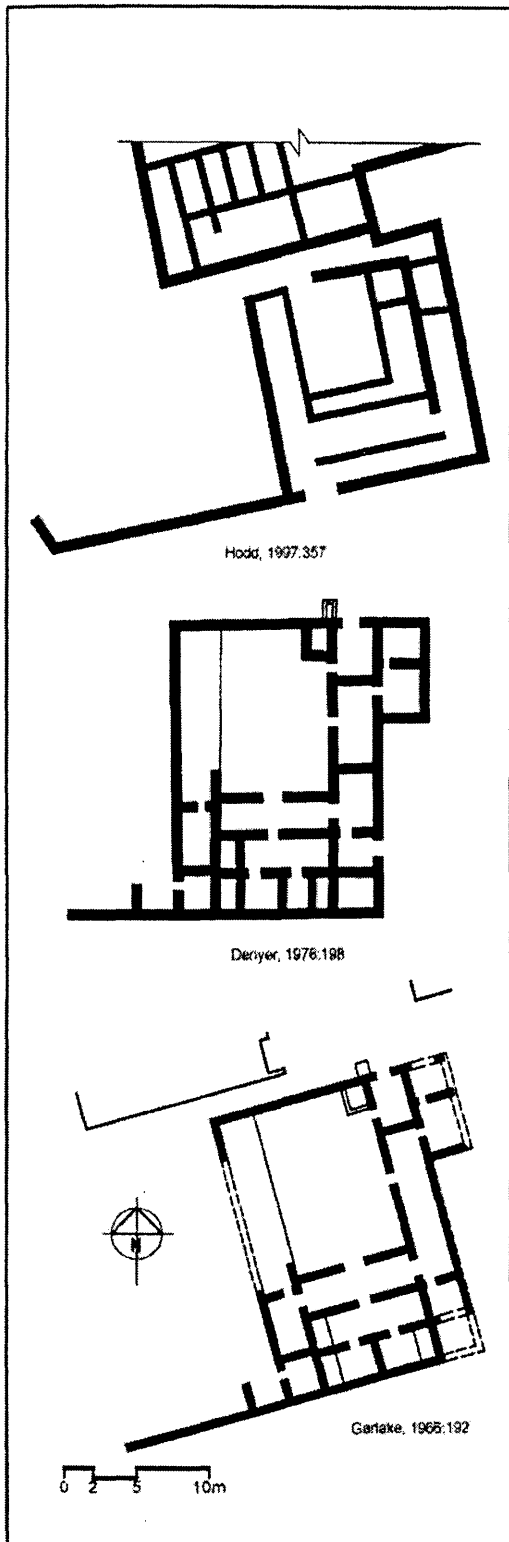


Figure 5
Different interpretations of the same house in Songo Mnara, Tanzania (see references for sources).

The alleys with their neat parallel edges, which scale two to three metres wide, could cause serious embarrassment when used for analysis.

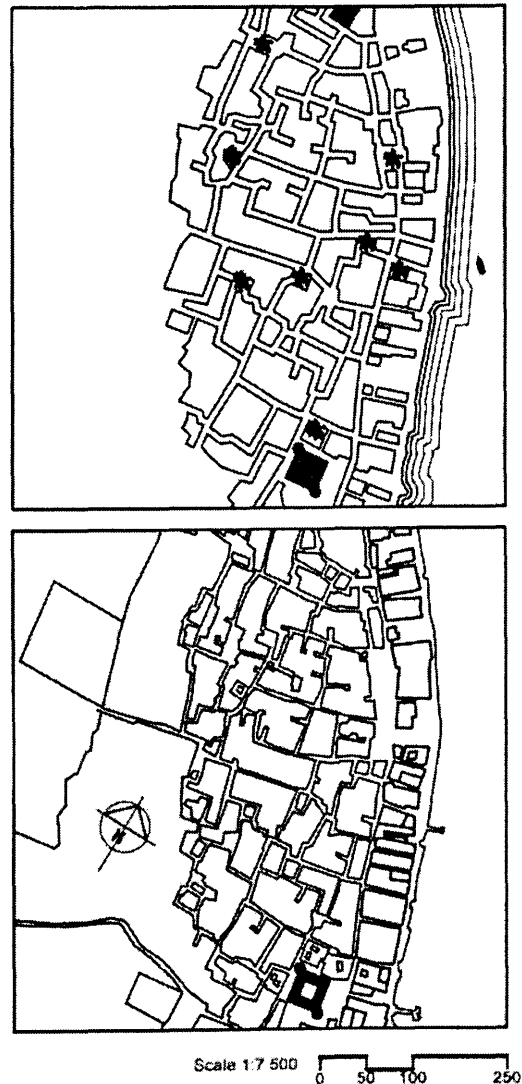


Figure 6
The difference between site diagrams and plans. A tourist map of Lamu above, and a drawing based on a surveyed map below (after Ghaidan, 1976:Fig. 3-1).

Text

Scholarship is made manifest in the literature – the ability to write up conclusions in words, which is also the format in which scientific knowledge is disseminated. The uninitiated naturally tends to accept the established authorities without question. The ability to read critically about a theme obviously takes a long time to develop.

The following critique of aspects of the literature related to Swahili and Omani architecture in East Africa was only possible because field trips allowed considerably more informed reading.

Nnamdi Elleh's *African architecture: evolution and transformation* (1997) is an important and recent book. His theme is the so-called "triple-heritage theory" (traditional, Islamic and Western influences on African architecture) and he propagates the view of Egypt as a major influence on sub-Saharan architecture. This is an example of the school of thought that sub-Saharan Africa was incapable of indigenous innovation.

His views on the development of Swahili architecture, on the other hand, favour Africa. The same is true of his description of Lamu (1997:149): "The narrow winding streets of Lamu are also indicative of a traditional culture influenced by surrounding villages". This is a bold claim without any evidence – one would have expected some comparative analysis. Lamu displays most of the characteristics of a small Arab town, and only the surrounding thatch and mud huts betray its African locality. But while such a claim is probably academically careless, other statements show ignorance (1997:165-166): "The islands of Zanzibar and Pemba have some of the best preserved classic architecture of Swahili middle ages ...". There is certainly no preserved "classic architecture of Swahili middle ages" in either Zanzibar or Pemba (Garlake, 1966:7). There are hardly any surviving ruins!

Elleh's theme is African architecture and the impact of external influences – but he fails to mention the rise of Omani power in the Indian Ocean in the mid 18th century, the resulting transfer of the Muscat-type Omani house to East African shores and the subsequent prominence of this type in, especially,

Stone Town, Zanzibar City, which is also a World Heritage Site.

LaNier and McQuillan's topic is the Omani houses of Stone Town, but they are clearly describing a typical early Swahili house (1983:7.1-7.2) with its

oblong rooms ... arranged parallel to the main façade of the building". They also state "the impact of Arab culture and Islamic religion had a decisive influence on the development of the built form between 1830 and 1880

This is misleading. Omani occupation did not result in any development of form – in rare instances the early Swahili houses were modified, but more often they were simply demolished and the Omani houses built right over the site.

Another popular source is Ronald Lewcock's *Zanj, the East African coast* (1971). Lewcock's description of the "great houses" of "the trading port" of Zanzibar – obviously the Omani houses – is deceptive. No mention is made of an Omani origin. In fact, when describing the plan and roof configurations of an Omani house, he also alludes to the early Swahili house (1971:92):

From a central courtyard, with clear water splashing in a raised pool, the wide staircase led up to the main living quarters on the first floor, which had the typical long narrow rooms of the coastal plan. Open terraces on the flat concrete roofs were reached up wooden staircases, and often low arched openings were pierced below the balustradings so that women could look out while preserving their privacy.

The following issues are contentious:

- The "clear water splashing in a raised pool" sounds attractive, but is not typical. According to Siravo, the explorer Burton described the typical courtyard in Zanzibar as a storage area (1997:32).
- The "long narrow rooms" are inherent to the early Swahili rather than the Omani house, whose room width is the same, due to similar construction techniques, but which,

due to layout, is more conventionally rectangular (figure 7).

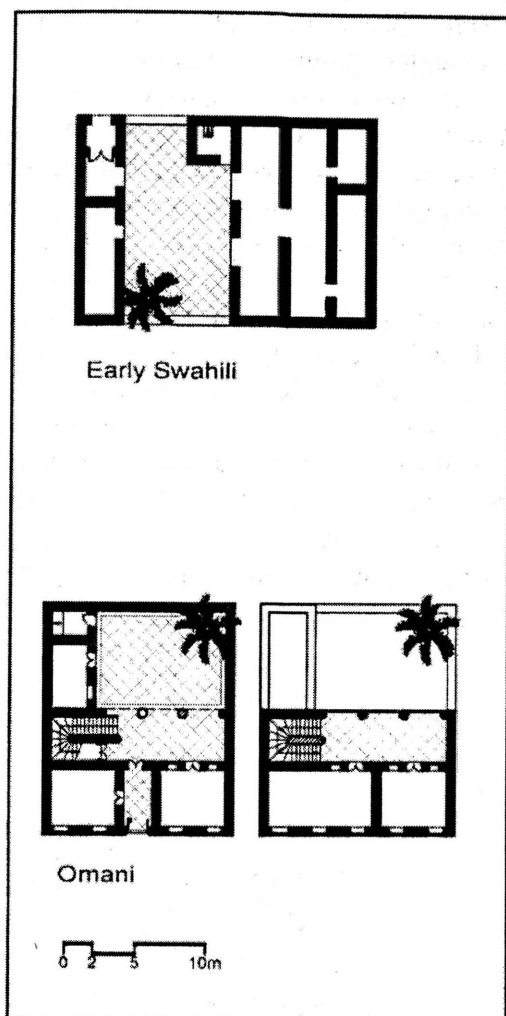


Figure 7
The plan form of an early Swahili house compared with that of an Omani house in Zanzibar City (Steyn).

- This parapet configuration is not common in Zanzibar at all – on the East Coast the openings in the parapet referred to are mainly found on Omani forts and seem to have a defensive function (Fig. 8).

No other author mentions the flat roofs of Stone Town being used as terraces. In cultures where roofs are used as living spaces they generally feature some sort of screens for privacy, which these houses do not have.

Such discrepancies in African architectural history seem clear proof of

the need to review and update the existing literature.

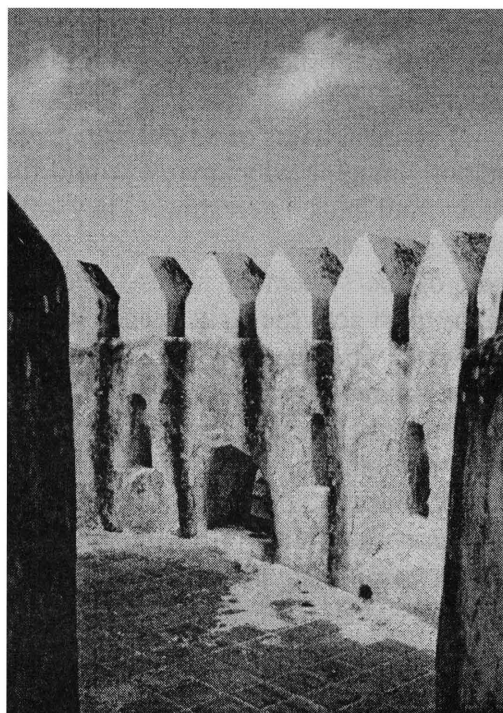


Figure 8
The openings in the crenellations of the Lamu Fort (Steyn).

Obstacles encountered during field surveys

The method of investigation was to visit as many examples of Swahili and Arab stone houses, as well as nearby thatched wattle and mud houses, as possible and to survey selected representative examples with an electronic measuring device and a camera. Surveys had to be sufficiently detailed to allow accurate “as is” plans, sections and elevations to be drawn, once back in South Africa.

There is a vast difference between working in rural villages and in urban situations. Referring specifically to the Swahili Coast, Leslie writes that a village is a collection of huts of persons of the same family with their wives and relatives, which form a close social entity. In total contrast, the tenants who might occupy a house in a town like Dar es Salaam and Zanzibar City are often

allocated one room per household and are usually from a number of Bantu-speaking tribes or other nationalities, including Arab and Indian (1963:71-81). For them the house is a dormitory, not a home.

The inhabitants of a rural village can seldom imagine why anyone would find their mud huts interesting. They often struggle to survive and shelter is simply part of the system of needs, especially since most activities take place outdoors anyway. In such a situation field surveys and observations could take a long time before any significant patterns are recognized, if ever. Interviews rarely reveal settlement patterns simply because they are fully integral with social custom (figure 9).



Figure 9
Plan layout and perspective view of a rural homestead surveyed near Gedi, 15 km south of Malindi, Kenya (Roodt & Steyn).

Expatriates could be valuable sources of information. Nancy Galloway, a British citizen resident on Zanzibar Island, has remodelled a number of houses in Stone Town, including her own house and the building housing her tour operation. Ms Galloway claims that she was astonished at the spaciousness of the houses, which only became apparent

when more recent partitioning and infill panels were demolished as she tried to get more light and air into the buildings. Such observations are often a very convenient point of departure.

In towns like Zanzibar City and Lamu many houses are owned by government or absentee landlords and occupied by a number of tenants, or in some cases even squatters. It is often relatively easy to trace the stages of development, since alterations to the original structures were clearly recognizable, due to unsympathetic methods and materials. An analysis of the illustrated example revealed how the building responded from single household occupancy in a colonial dispensation to multifamily occupancy in a democracy (figure 10).

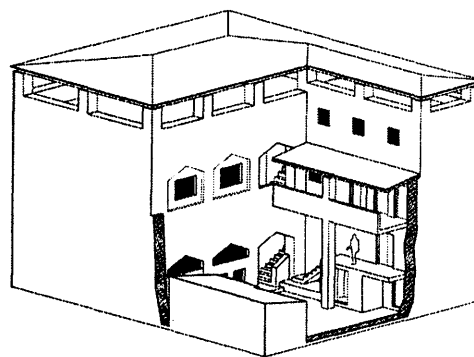
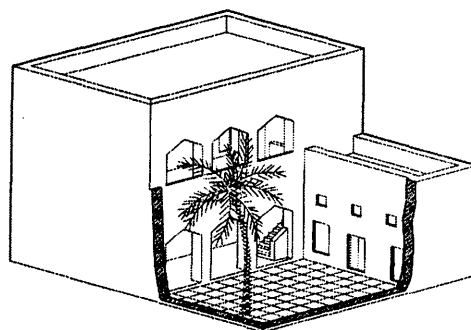


Figure 10
Isometric view of an Omani house on Kajafacheni Street, Stone Town, Zanzibar City, surveyed in 2000, below and a speculative interpretation of the original form above (Steyn).

The inhabitants are usually highly suspicious and very often hostile. The

only way to gain access is to ask somebody from the neighbourhood – a merchant or craftsman – to negotiate a fee with the occupants. Even so, some tenants are bound to resent this intrusion, which could lead to some very awkward situations!

In both instances, therefore, the biggest obstacle was gaining access. The researcher must have a streamlined and efficient way of working, since there is usually not an opportunity to return. But most important is probably a trust-inspiring, friendly and relaxed attitude.

Methodological guidelines

The time has come for a reliable database of African architecture. The purpose would not only be to authenticate the existing data by testing against the real world, but also to search for new data. Real measured drawings are required – not more examples from the literature. This means physical visits to sites to record data correctly (Fig. 11).

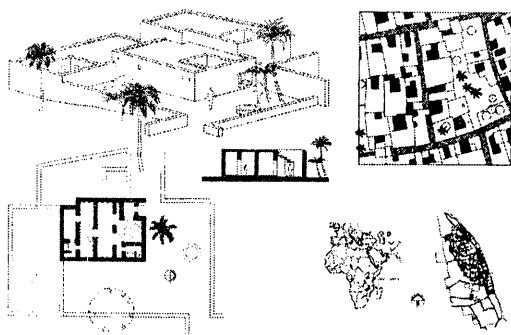


Figure 11
Information on this Lamu house, surveyed in 2001, includes neighbourhood, town and locality maps, plans, sections and three-dimensional views. To that can be added good data on its context and historical development (Steyn)

We have to accept Anderson and Rathbone's view that, due to extreme diversity, a common methodology or theoretical approach is unfeasible. They are referring to African urban history,

but the same obviously applies to traditional architecture (2000:9).

From the brief overview above, some tentative guidelines emerge for architects who hope to contribute to the broad-based research referred to in the introduction.

Since South African schools of architecture simply do not prepare their graduates for historiographical research, there is generally very little they can currently contribute, beyond measured drawings.

The built environment, however, is an ecosystem for human activities. Interpretations of traditional architecture could never be credible unless researchers become much more aware of the subtle interaction between culture, an artificial phenomenon, nature and habitat.

Such a project must unquestionably be an interdisciplinary study, must be tightly focused and must be geographically delimited.

What architects should be able to contribute towards such a project is research on typologies for land use and the shaping of space and form. In collaboration with the engineering sciences the use of materials, energy, climate control and construction techniques could be explored, as well as airflow between buildings and shadow patterns. Work on the historical dimension, the theory of settlement development, socio-cultural factors, contextual considerations and organizational systems requires the involvement of other sciences, including anthropologists, archaeologists and historians.

Interdisciplinary communication not only requires a common typological protocol, but also a common language. A longer-term involvement with a community is preferable to a "record-and-run" approach, and it is advisable to learn the terminology in the lingua franca of the area. In Swahili, for

instance, many terms are commonly used. Some are:

- *Baraza* – A stone bench adjacent to the entrance door on the street.
- *Boriti* – Round mangrove pole used as a roof beam.
- *Daka* – An entrance porch with stone benches.
- *Mabati* – Corrugated iron sheeting used to roof over the flat roofs as a protection against the tropical rain.
- *Makuti* – Roofing tile woven from palm thatch.
- *Msana* – Elongated room in a Swahili house.
- *Mtaa* (pl. *mitaa*) – Cluster of buildings forming a ward, sometimes based on family and ethnic affinities. Several such wards make up a neighbourhood.
- *Sebule* – The entrance or informal reception hall.
- *Zidaka* – A matrix of wall niches, framed with decorative plaster mouldings.

There is, however, an opportunity for architects – with their training in exploratory and creative thinking – to develop skills to make a unique contribution. All societies are in a state of flux. Schoenbrun suggests, “shared histories of technological achievement offer the evidentiary basis for returning to Africa the search for African solutions to African problems” (1997). A problem-driven agenda for researching traditional architecture could enable architects to combine the normative principles of precedent with the organizational and generative nature of typologies to develop descriptive and predictive phenomenological models of settlement.

Conclusion

Traditional African architecture has been neglected for far too long, and the potential to learn from it simply

ignored. The field, within a single project is, however, so wide that only interdisciplinary cooperation could hope to achieve viable results.

There is no “grand theory” for the unfolding of African history. The broad stream was, however, severely disturbed in the 19th century by a number of factors: Omani and Portuguese occupation in the east and south-east respectively, and British colonialism in the far south, and in between not only the Great Boer Trek and Zulu expansionism, but also the slave trade. But all these traumatic events simply preceded – and were overshadowed by – probably most disruptive of all: the “scramble for Africa”.

In view of this chaotic and fuzzy nature of African history, a strict methodologist approach is not propagated. Architecture is the most tangible manifestation of a culture. And an architect’s most convincing contribution would probably be the building-physical, rather than the qualitative dimension. Furthermore, what is needed is consensus on typology, data from primary sources, focused long-term fieldwork, credible arguments and bold syntheses, and finally, lively interdisciplinary discourse.

Sources cited

- Allen, J. de V. 1993. *Swahili origins: Swahili culture & the Shungwaya phenomenon*. London: Currey.

Anderson, D. and Rathbone, R. (editors). 2000. *Africa’s urban past*. Oxford: Curry.

Bahn, P.G. (ed.). 2000. *The atlas of world archaeology*. London: Time-Life.

Bourdier, J-P. and Minh-Ha, T.T. 1996. *Drawn from African dwellings*. Bloomington: Indiana University.

- Clark, G. 1957. *Archaeology and society: reconstructing the prehistoric past*. 3rd ed. London: Methuen.
- Connah, G. 2001. *African civilizations: An archaeological perspective*. 2nd ed. Cambridge: Cambridge University Press.
- Denyer, S. 1978. *African traditional architecture*. New York: Africana.
- Egenter, N. 1992. *The Present Relevance of the Primitive in Architecture*. Lausanne: STRUCTURA MUNDI.
- Elleh, N. 1997. *African architecture: evolution and transformation*. New York: McGraw-Hill.
- Frescura, F. 1985. *Major developments in the rural indigenous architecture of Southern Africa of the post-difiqane period*. Johannesburg: University of the Witwatersrand. Unpublished PhD thesis.
- Frescura, F. 1981. *Rural shelter in southern Africa*. Johannesburg: Ravan.
- Garlake, P. 2002. *Early art and architecture of Africa*. Oxford: Oxford University Press.
- Garlake, P.S. 1966. *Early Islamic architecture of the East African Coast*. London: Oxford University Press.
- Ghaidan, U. 1975. *Lamu: A study of the Swahili town*. Nairobi: East African Literature Bureau.
- Ghaidan, U. 1976. *Lamu: a study in conservation*. Nairobi: East African Literature Bureau.
- Guidoni, E. 1975. *Primitive architecture*. London: Faber and Faber.
- Hakim, B.S. 1986. *Arabic-Islamic cities: building and planning principles*. London: KPI
- Hodd, M. 1997. *East Africa handbook*. Bath: Footprint.
- Jencks, C. and Kropf, K. (eds.) 1997. *Theories and manifestoes of contemporary architecture*. London: Academy Editions.
- Kirkman, J. 1975. *Gedi*. Nairobi: National Museums.
- Lanier, R. and McQuillan, D.A. 1983. *The Stone Town of Zanzibar: a strategy for integrated development*. Commissioned by the United Nations Centre for Human Settlements. Unpublished working document.
- Lawrence, R.J. 1987. *Housing, dwellings and homes: design theory, research and practice*. Chichester: John Wiley.
- Leslie, J.A.K. 1963. *A survey of Dar es Salaam*. Nairobi and London: Oxford University Press.
- Leupen, B., Grafe, C., Körnig, N., Lampe, M. and De Zeeuw, P. 1997. *Design and analysis*. Rotterdam: OIO.
- Lewcock, R. 1971. *Zanj, the East African Coast. Shelter in Africa*. Edited by P. Oliver. London: Barrie & Jenkins, pp. 80-95.
- McEvedy, C. 1995. *The Penguin atlas of African history*. Penguin Reference Books.
- Mazrui, A and Shariff, I. 1994. *The Swahili: Idiom and identity of an African people*. Trenton: N.J.: Africa World Press.
- McKern, S.S. and T.W. 1974. *Living prehistory: an introduction to physical*

- anthropology and archaeology. Menlo Park, Cal.: Cummings.
- Middleton, J. 1992. The world of the Swahili: An African mercantile civilization. New haven: Yale University.
- Muturo, H. 1979. In unpublished Master's thesis. Map provided by the National Museums of Kenya.
- Norberg-Schulz, C. 1985. The concept of dwelling. New York: Rizzoli.
- Papanek, V. 1995. The green imperative: Ecology and ethics in design and architecture. London: Thames & Hudson.
- Pevsner, N. 1963. An outline of European architecture. 7th ed. Harmondsworth: Penguin.
- Rapoport, A. 1969. House form and culture. Englewood Cliffs: Prentice-Hall.
- Reader, J. 1999. Africa: A biography of the continent. New York: Knopf.
- Rudofsky, B. 1977. The Prodigious Builders. London: Secker & Warburg.
- Rudofsky, B. 1964. Architecture without architects. London: Academy Editions.
- Schoenrun, D.L. 1997. Contributing to the internet discourse on Bantu dispersal. dshoenb@uga.cc.edu.
- Siravo, F. 1996. Zanzibar: a plan for the historic Stone Town. Commissioned by the Aga Khan Trust for Culture – historic cities support programme. Zanzibar: Gallery.
- Talib, K. 1984. Shelter in Saudi Arabia. London: Academy Editions.
- Vitruvius. First century AD. The ten books of architecture. Translated by M.H. Morgan in 1916. Republished in 1960. New York: Dover Publications.