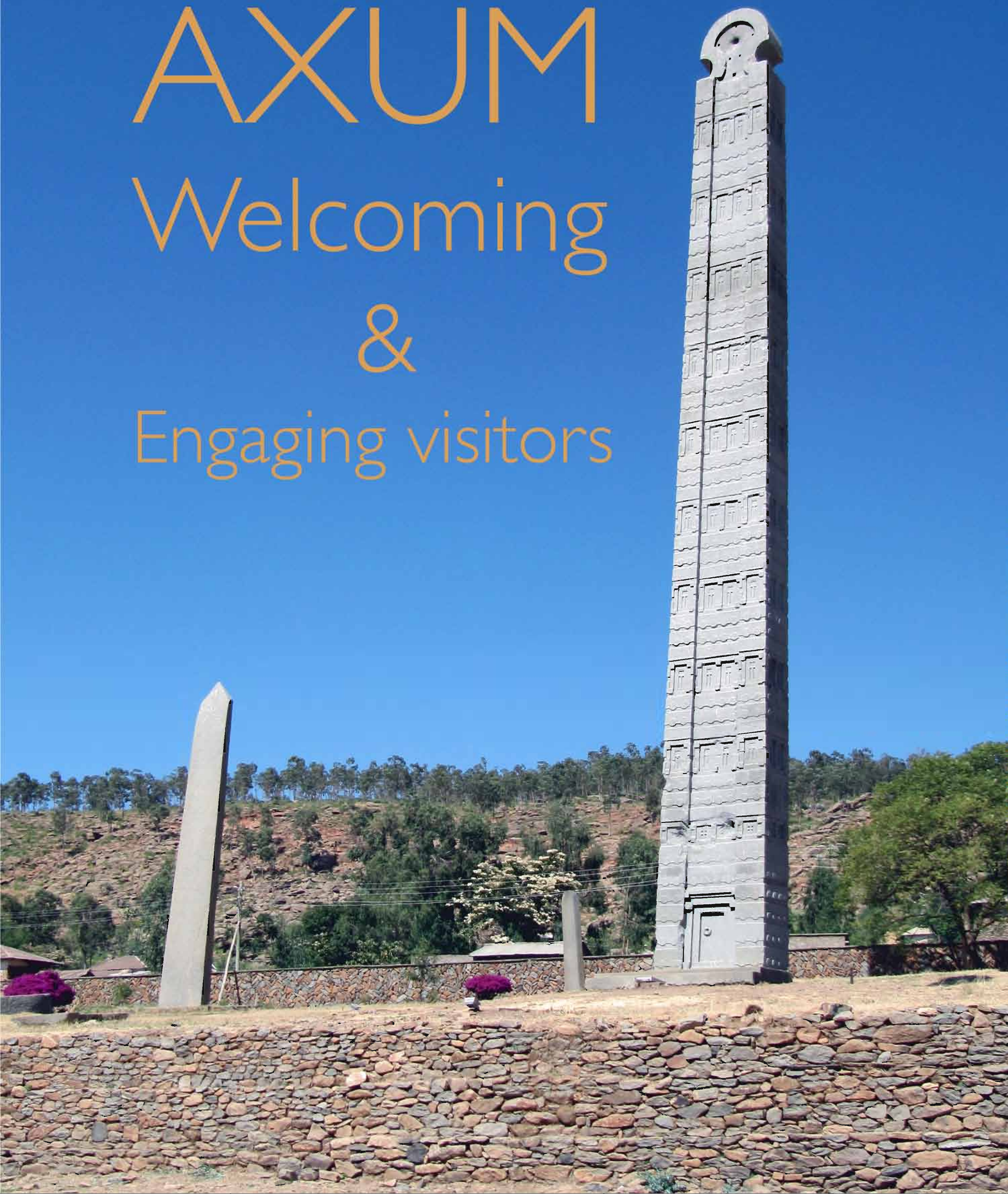


AXUM

Welcoming
&
Engaging visitors



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NATURE OF SUBMISSION: Design Research

This Design report records a creative design approach together with the development of original ideas resulting in an integrated proposal for presenting Axum's rich tangible and intangible heritage to visitors to this important World Heritage Town.

This innovative proposal seeks to use local resources and skills to create a distinct and memorable experience for visitors to Axum. It relies on engaging members of the local community to manage and 'own' the various 'attractions' for visitors, hopefully keeping a substantial proportion of earnings from tourism in the local community.

The proposal combines attitudes to Design with fresh approaches to curatorship that can be applied to other sites. In this study, propositions are tested in several schemes relating to the design of 'Interpretation centres' and ideas for exhibits that would bring them to life and engage visitors.

ABSTRACT:

Axum, in the highlands of Ethiopia was the centre of an important trading empire, controlling the Red Sea and channeling exotic African merchandise into markets of the East and West. In the fourth century (AD), it became one of the first states to adopt Christianity as a state religion. Axum became the major religious centre for the Ethiopian Coptic Church. Axum's most spectacular archaeological remains are the large carved monoliths – stelae that are concentrated in the Stelae Park opposite the Cathedral precinct. In addition to these major monuments, Axum is endowed with many less tangible and monumental assets that can be brought to life to make the experience of visiting this ancient centre memorable.

This study, based upon proposals commissioned by the Government of Tigray Province, develops ideas through 'Design Research' to investigate possibilities for enriching visitor experience in the context of a rich archaeological site where the current community are proud descendants of the inhabitants of a long lost empire. The Axumite Empire's legacy is a rich and uniquely African cultural heritage that expresses itself through religion, history, mythology, crafts and cuisine. The proposal seeks to demonstrate how these less tangible assets can be harnessed to complement the magnificent stelae to make a visit to Axum memorable and informative.

AXUM

WELCOMING & ENGAGING VISITORS

This report is based on a visit to Axum organized by Peter Rich Architects of Johannesburg who had won the tender to prepare a Master Plan to develop Axum as a major centre of tourism in Ethiopia, taking advantage of its rich archaeological remains and its pivotal role in the Ethiopian Coptic Church. Axum is listed as a UNESCO World Heritage site. I was invited to participate in the team and joined them in Axum in November 2009.

During our stay in Axum we made a presentation of our preliminary work to representatives of Government, the municipality, tourism commission and local stakeholders. At that stage the focus of my work was in developing ideas for Interpretation Centres to help orient visitors on their visits, set up strategies for signage and conveying information in relation to archaeological sites and make suggestions about paving and streetscape enhancement.

I ceased my involvement with the project in January 2010, but continued to work on ideas I had started to develop during and after my visit to Axum.

My focus has been to examine how best to distribute Interpretation Centres in Axum in relation to its geography and the distribution of major fixed attractions. I have considered how visitors may be offered engaging experiences showcasing and drawing upon aspects of Axum and Ethiopia's unique history, way of life and customs. I have done this by suggesting ideas that may be developed further.

Influxes of visitors from different cultures where material circumstances are vastly different can bring their own problems to communities that have been relatively isolated. My aim in the suggestions that I propose is to try concentrate as much local involvement as possible in the making and maintaining of exhibits as well as managing the facilities that cater to visitors.

The images used in this report are from various sources. Many were taken during our visit. The better ones are the work of Obie Oberholzer, a well-known S African photographer who was part of the team. Drawings from publications are acknowledged. Many images were taken from web sources – these have not been credited as it is not intended that this report be circulated widely in its present form.



There are two appendices to this Report:

Appendix A – Further thoughts on Interpretation Centres

(produced after the January 2010 but not incorporating all the ideas included in this report)

Appendix B – Axum Signage & Paving (extracts from presentation made in Axum in November 2009)

AXUM



The town of Axum is sufficiently small for easy walking access to most of the major archaeological remains and centres of religious interest

Axum is rich in its real and potential attractions. Some are spectacular in their own right – others can support interesting stories or embody potentially memorable experiences that can, with appropriate development, enrich a visit lasting several days.

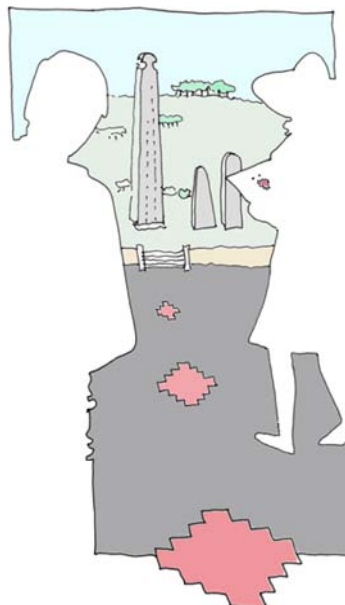
Axum is a small town with areas of major interest concentrated in a compact zone around the main Stele Park and the Cathedral.

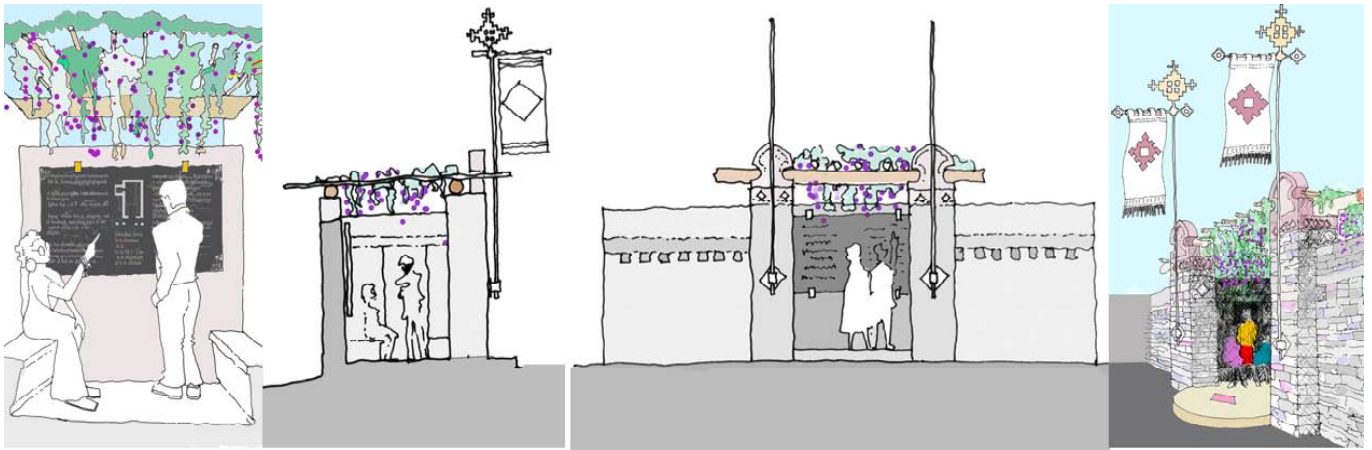
Since the various themes that could interest visitors are so varied, it seems logical to propose that each broad theme has a separate identity.

To help visitors explore what Axum has to offer, this proposal envisages a series of small 'Interpretation Centres' focused on several key themes arranged along a clear walking route.

Initially, visitors make their way to the prominent Stele Park, either on foot, bus or trishaw. This wide and recently paved route would not have any distracting attractions along it.

Having arrived at the spectacular Stele Park, opposite the Cathedral, visitors gain access to it through the first Interpretation Centre, from which others of similar appearance are visible, identifying stations along a clearly marked route.





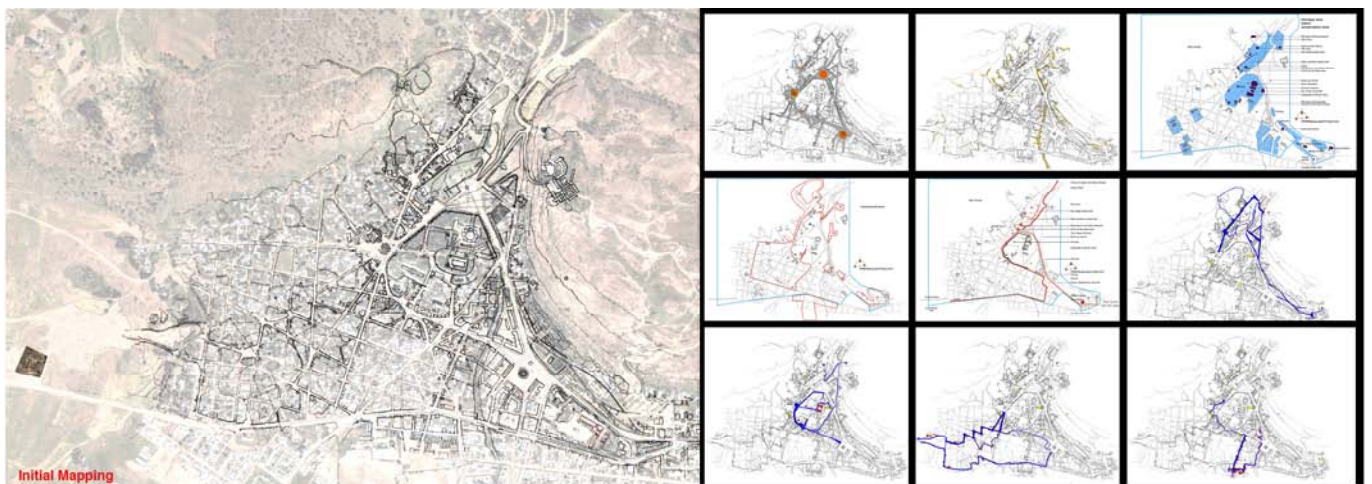
Sketch of proposed approach for building 'Interpretation Centres' – Local materials and familiar details – Prominence gained through banners
The example shown is for a very small version of such a Centre.

ARGUMENT FOR INTERPRETATION CENTRES

Interpretation Centres could be 'themed' around Axum's numerous assets. These have the potential of being developed into coherent, interconnected and varied support elements designed to enrich a visitor's stay in Axum and provide dignified involvement of local people.

To achieve these ends, ideas embodied in Interpretation Centres could be guided by several principles:

- **FIRSTLY**, related to each of several themes, displays or activities that would be of interest to visitors that could harness local skills and crafts. The number of Interpretation Centres would depend on a number of considerations. They could be made gradually so that what is found to be good can be continued and what is found not to work can be learnt from.
- **SECONDLY**, Interpretation Centres offer employment for 'custodians', with options of having the people who look after them also running a small business related to tourism or local trade (or both). This would help make these important elements part of the community and provide employment.
- **THIRDLY**, different approaches to ideas behind Interpretation Centres and how best to relate them to physical assets and to one another have been developed. It is worth describing two contrasting approaches:



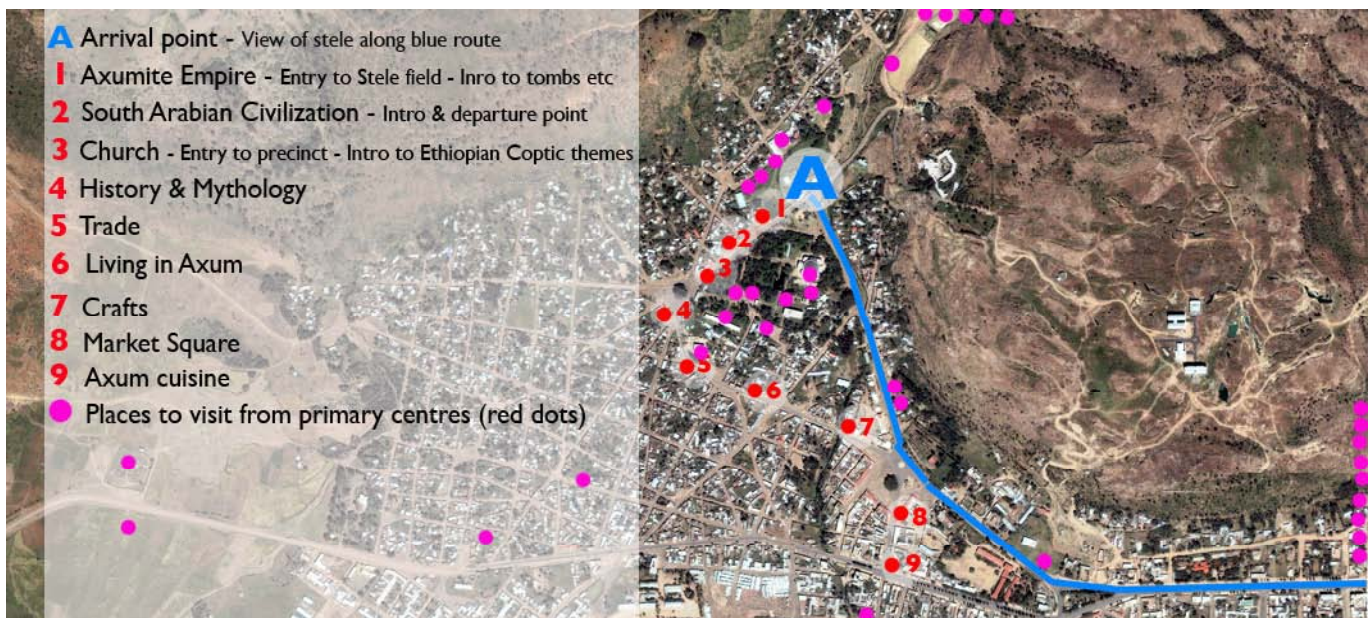
Mapping of Axum for presentation 26 November 2009 – Maps on right show different walking routes related to various themes – Approach A

APPROACH A) RELATED CENTRES ON DISTINCT ROUTES:

This was the approach that was being developed in the early stages of the project. The approach has several advantages but there are also drawbacks. The distribution of 'endowments' and their relative importance makes it hard if not impossible to develop any 'walk' or route system that introduces visitors to a particular theme and then takes them in a logical sequence to various others related elements.

Problems arise on routes where items of minor importance are located near prominent assets in another 'Family' of attractions. It would be hard, in these circumstances not to create confusion.

Using this approach, it is also difficult to introduce a particular theme related to a set of 'endowments' in a place where there is only a minor 'asset' given that visitors, have seen images of the iconic elements of that family and already have expectations about what is important and what they want to see. For example: if a walk related to stone remains from the Axumite empire were to start near the centre of town (the most likely starting point for most visitors), they would be going past a series of throne bases before arriving at the Stele Park, which would be prominently in their view during some of this journey. It is unlikely that visitors would linger at secondary locations when they could see a more spectacular one not too far away.



Main arrival route – direct to spectacular Stele Park – Shown in BLUE - No interpretation centres visible on this route. Entry to Stele Park via Interpretation Centre 1. Interpretation Centre 2 visible from Interpretation Centre 1. Similarly, 3 from 2 and so on. At each Primary Centre directions for visits to other related places (pink) are given. **Approach - B**

APPROACH B) PRIMARY INTERPRETATION CENTRES WITH LINKS AND DIRECTIONS TO SITES

Another approach, the one I currently favour, is to have a prominent and introductory Interpretation Centre close to a major attraction in a particular family of attractions, with a series of subsidiary satellite centres or clear signage at, or close to other attractions of a similar nature. This approach would allow the main Centre to introduce themes, explain how other attractions contribute to the overall story and explain how these can be reached by foot or by other forms of transport. To make this approach work efficiently, the key Main Interpretation Centres would be concentrated in an area close to the major iconic attractions. In Axum this is not difficult to do.

The Stele Park is adjacent to the Cathedral precinct and not too far from other tourism related locations such as the retail outlets that sell local crafts and 'antiques'.

There are a number of additional potential attractions that could enhance and pleasantly prolong the experience of visiting Axum. These do not depend on spectacular monuments but on telling other engaging and interesting stories and providing memorable experiences. These types of centres are less tied to specific locations and could be used as elements reinforcing a walking route that passes all the important Primary Interpretation Centres. Attractions of this type could be developed incrementally over time in response to new ideas and visitor feedback. Criteria for their location could include building on clues offered by existing activities at various sites such as the cluster of retail outlets on the route from the Mercato to the Stele Park or on the Main Street of Axum where Restaurants are located.

Locations could also be selected to reinforce presence along a 'Tourist Route' with the aim of achieving visibility from one centre to the next.

Further reasons for placing Interpretation Centres in particular locations may include enhancing the appearance of a particular view by hiding some structure that detracts from Urban quality or creating a point of emphasis along a route.

Along the routes linking Interpretation Centres and areas close to existing attractions and monuments, strict guidelines should be established for controlling the scale and appearance of any new buildings and structures, by establishing a conservation area. Particular attention should be paid to signage – ideally with embargoes on illuminated and mechanically produced signs.



Typical entrances to buildings and precincts, built of natural stone. This modest style of building is distinct and pervasive enough to suggest itself as the model for Interpretation Centres.

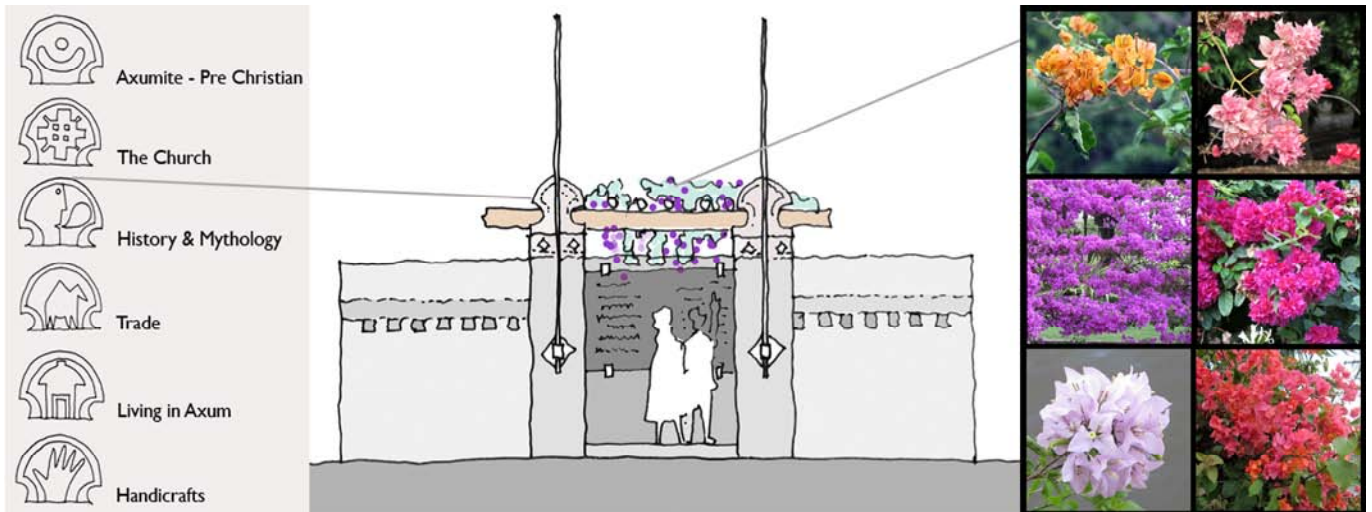
APPEARANCE OF INTERPRETATION CENTRES

These structures should be modest in appearance and harmonise in scale and form with existing buildings. Visitors from other countries would appreciate hand-made buildings that looked like they belonged to the place rather than structures that remind them of where they have come from.

Modest construction using local stone and traditional details borrowed from existing buildings would help convey an atmosphere of 'authenticity' and charm, while at the same time making it clear that the purpose of these structures was to inform and service visitors who would be interested in what they contain and explain rather than striving to draw attention to themselves. The structures should be clearly identifiable by having a common appearance providing visitors with reassurance that they are indeed at an Interpretation Centre.

Identity can be achieved by careful design of the 'hard' building by using appropriate and well-executed details, where handmade elements convey richness, character and connectedness with local forms. In addition 'Presence' can be amplified by additional subsidiary architectural elements like flags and banners. Local weavers, using traditional skills can make these. They can be in bright colours, incorporate simple designs, be washed when needing refreshing and can be replaced relatively cheaply. Because they are given motion by breezes, they will draw attention to themselves and the structures they are associated with. This approach could cement a stronger identity to a family of buildings than approaches using conventional signage,

which would, in any case, be alien in the non-commercial environments where many of the structures will be located.



Early sketch of an Interpretation Centre. The walls are built of coursed rough stone with a few elements of trim with a smooth finish and possibly some relief carving. Signage and information panels, with sandblasted lettering, using craftsmen and upgraded equipment at the local stoneworks at Adwa could make these modest buildings smart and distinctive. Areas roofed over would be kept to a minimum with shade provided in walled courtyards by pergolas supporting Bougainvillea creepers – creating areas of welcome dappled shade where visitors can rest.

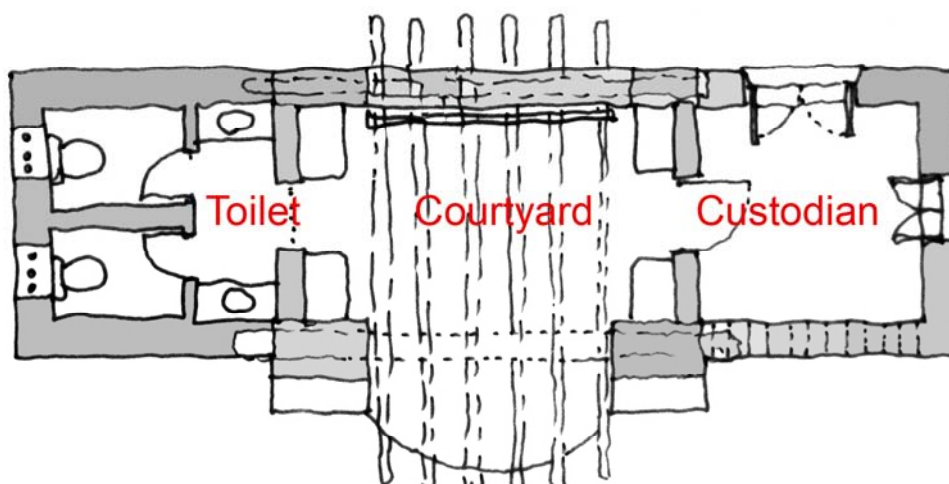
ADDITIONAL FACILITIES AT INTERPRETATION CENTRES

Sanitary Facilities:

Visitors from other countries feel insecure when sanitary facilities to standards that they are accustomed to are not available.

In any overall plan for Interpretation Centres, the distribution of those with such facilities should be carefully considered. In those centres that include such facilities, the person responsible should maintain the facilities according to a strict regime of hygiene. This person/custodian could be remunerated for providing this service by being allowed to run a business associated with tourism from the Interpretation Centre he or she oversees.

Following suggestion B above, using primary and satellite centres, those with sanitary facilities could be distributed logically and economically, in areas where it would make sense to include for water supply and drainage infrastructure. The provision of septic tanks as practiced in the hotels in the town, with the systems that exist for pumping them out would be adequate until other methods become viable. The arrival of the new water main in Axum may to some extent ease the problems associated with providing these facilities, but it should make sense to rationalize their distribution.



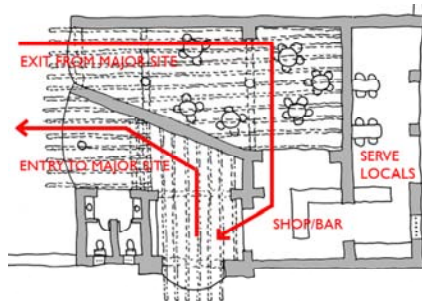
A minimal Interpretation Centre - No displays – Only facilities: Information in Courtyard, Toilets and Custodian

APPENDIX – A :

Sketches of suggested layouts for Interpretation Centres serving different themes

REFRESHMENTS:

It would be logical for some centres to provide refreshments in areas set aside for the purpose. Soft drinks, bottled water as basic provisions, could be supplemented by coffee (with or without a coffee ceremony). Offering these facilities could provide extra income for a custodian. Careful design of layouts could also allow for sales to local residents without compromising the control of entry based on the need to gain income from visiting tourists.



Gateway to a major site or precinct.

In this suggestion, the 'Custodian' runs a shop/bar, controls access to the site and maintains the toilets.

The plan allows for the business to serve local people

CONTROL OF ENTRIES:

The methods chosen for collecting revenue from visitors should influence the design of entries and exits of Interpretation Centres.

Entry to each Centre could be conditional on payment of a small fee. Arrangements for pre-purchase of 'Passes' would encourage visits to more Centres and could reduce delays and confusion at entries.

Producing prepaid 'passports' for visits to Centres so that they could be endorsed with distinctive stamps on entry could encourage children and teenagers to persuade their visiting parents to prolong their visits.

- **Involvement of the local community and the Ethiopian public:** Hopefully, interpretations of Axum's rich endowments, cultural and religious heritage along with things that contribute to its present day identity will be recognized as being of value by local residents and particularly by school children. Hopefully children will be encouraged to visit the Centres either as formal school groups or individually. Once patterns of tourist visits become known and predictable, it will be possible to offer incentives for school visits to take place at other times.
- **Signage and written material:** Any written material related to Interpretation Centres, including signage, explanations and descriptions, should always appear in Amharic and English. (Should Tigrinya be included? – Most foreign visitors are likely to manage English). As part of any detailed design proposal, setting up carefully considered typographic templates for various orders of information must play an important part in establishing simple, direct and informative explanations and consistency of style. In the design of appropriate typography care should be taken to balance and harmonize the visual weight of Amharic and Roman fonts.

In the initial stages of this project, proposals were developed for signage and information panels to be made in sandblasted stone, using techniques developed for engraving lettering on rock. Using these technologies, easily adaptable to the established stoneworks in Adwa, locally made and durable signage could be made. Sponsorship for consumables such as the self-adhesive stencil masks (normally cut by digital plotters) could be sought. Initial enquiries of the 3M Corporation were encouraging.

Digitized alphabets in the Amharic script are available, making it possible to prepare and proofread and review all written material prior to engraving.

The initial studies on stone signage and paving of principal walking routes are included in **APPENDIX – B**

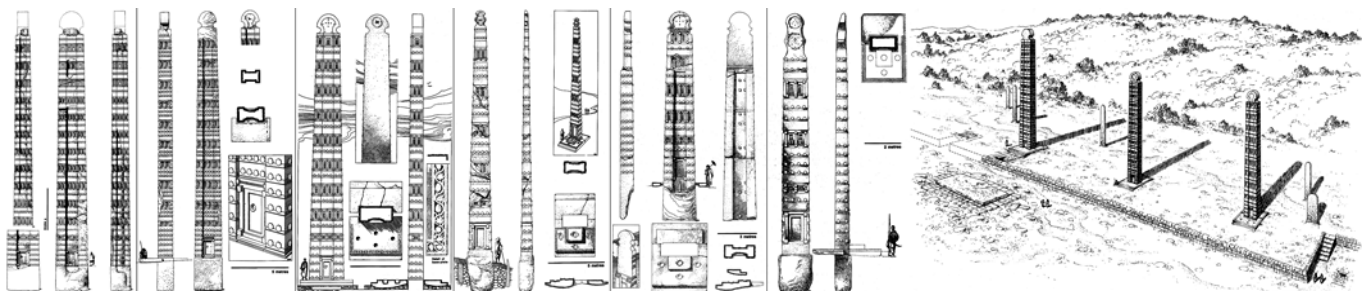
POSSIBLE THEMES: INTERPRETATION CENTRES

Below, I've arranged a series of suggestions for themes (and sometimes locations) for Interpretation Centres. They are in the form of notes, exploring possible directions of thinking – In many cases more interesting, relevant and up-to-date ideas might be appropriate. For successful approaches to be developed, brainstorming and diverse contributions should form part of creative cycles that will hopefully lead to rich and varied outcomes. Suggestions, other forms of input and criticisms from local and international experts as well as stakeholders and residents need to be considered to augment the quality of what can be offered.

Once themes have been identified, appropriate narratives must be developed, capable of telling stories easily without being simplistic and condescending. Balancing stories with one another will require good editorial skills and imagination. Developing displays using images, models and artefacts that can illustrate and supplement the narratives are important skills that should be brought to the project at the right time. I believe that wherever possible, items to be displayed should be made locally. This will mean that the work in preparing them will remain in the local economy and when repairs and upgrading are necessary, the skills will be available. This approach can also contribute to local pride and an ownership association with things produced to inform visitors at a level beyond the making of souvenirs.



Axum's unique and spectacular monolithic Stelae. These monuments were made when the Axumite Empire was at its height. In addition to those with elaborately worked shafts, with representations of buildings of many stories, there are less elaborate monoliths, ranging from those that are carefully smoothed and squared to others that retain the rough shape of large unworked standing stones. Many of the Stelae are no longer standing and lie broken where they have fallen. Associated with the stelae are numerous underground tombs with varied plan arrangements, some with complex and regular arrangements of chambers.



Left: Measured drawings of the stelae made by the Deutsch Aksum-Expedition 1906, led by Dr. Enno Littmann. Right: Three dimensional reconstruction of standing stelae.

Orthogonal drawings of Stelae from: David W. Phillipson. *The Monuments of Aksum* (based on the work in AD 1906 of the Deutsche Aksum-Expedition...Addis Ababa: Addis Ababa University Press, 1997.

Three dimensional reconstruction: David W. Phillipson. *Archaeology at Aksum, Ethiopia, 1993-7*, Vol. 2, London: Brit. Inst E Africa, 2000

ANCIENT REMAINS – AXUMITE EMPIRE

Including stele, tombs, thrones and palaces – focusing on the distinctiveness of Axumite Civilization at the height of the Empire. This would be the major Interpretation Centre. Many visitors are drawn to Axum because of the spectacular Stelae. These monuments will be at the top of the list of things to see and most would be keen to see them on arrival. A Centre associated with these wonderful artefacts should be easy to select as the first one to visit. The location of the Stele Park is very prominent and visible from some distance proclaiming itself as a focal point. Once visitors are 'captive' they can be given a hint of other things worth visiting.

An Interpretation Centre associated with the Stelae should form the major entrance to the Stele Park. It should explain the most up-to-date theories about their origin, purpose and sequence of erection and how they relate to other archaeological remains.

At this Interpretation Centre, visitors should be made aware of the pivotal importance of the Axumite Empire in late antiquity as a major trading state linking the Roman Empire with Sub-Saharan Africa by land routes and the East and Far East by sea and land. Explanations of this background should form the subject of major displays.



Coins of the major Empires in Eurasia from the 4th Century when the Axumite Empire was at its height. King Ezana converted to Christianity in AD 325 making it the first state to use the cross on its coins. (as shown on the gold coin, left). By 350 AD, the Empire had conquered the Kingdom of Kush, parts of what is now the Sudan, Southern Egypt, Yemen and parts of Saudi Arabia.

At this Centre, it may also be appropriate to introduce visitors to the existence of substantial archaeological remains from a previous culture (South Arabian) at some distance to Axum at Yeha. Reference to remains from this civilization found close to Axum should be made. (Models, photographs).

From within the centre, it should be possible, by careful design, to frame carefully selected views of the most important stele(s), to build anticipation.

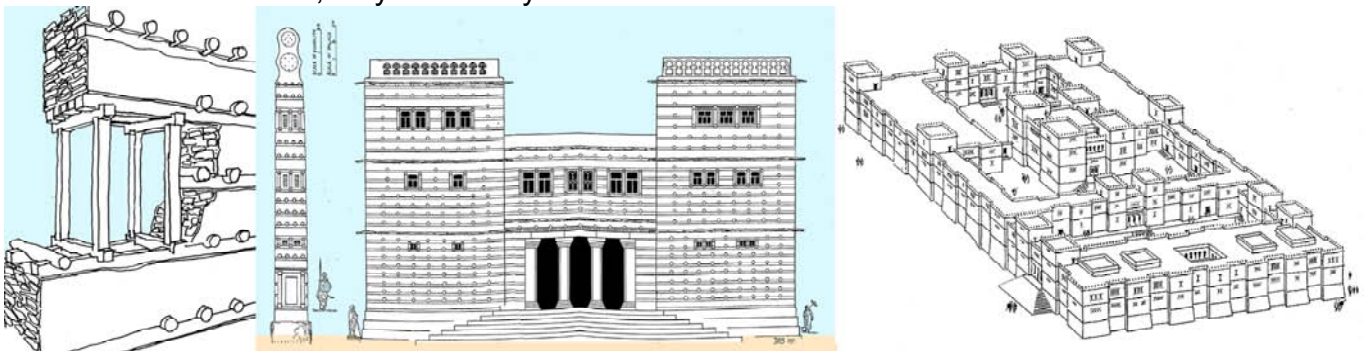
At this major 'Entrance' Facility, visitors should be alerted to the existence of other Stele groupings, tombs and thrones and the remains of palaces within the Axum area, so that they can plan subsequent visits. Those within walking distance should be identified, with distances and time required to get to them suggested, reinforced by a clear system of signage that is robust and capable of inspiring visitors that they are unlikely to get lost in a friendly African town.

Careful planning of this 'Entrance' Facility may incorporate a sloping floor or ramp that could help make at least parts of the Stele Park accessible to disabled visitors in wheelchairs.

Interesting stories could be narrated by several methods – a careful balance between graphic (written, images, drawings) and physical objects needs to be found, focusing on methods that are economically achievable and will not degrade rapidly with time.

Possible stories worth telling (by no means an exhaustive list):

- Who built the stele, why were they built and what are the current theories?



Conjectural reconstruction of an Axumite Palace with suggestions of its construction might be represented in the monumental stelae. From: Buxton, D. R. and Matthews, D. 'The reconstruction of vanished Aksumite buildings', *Rassegna di Studi Ettiopici*, 25, 1974, pp. 53-77.)

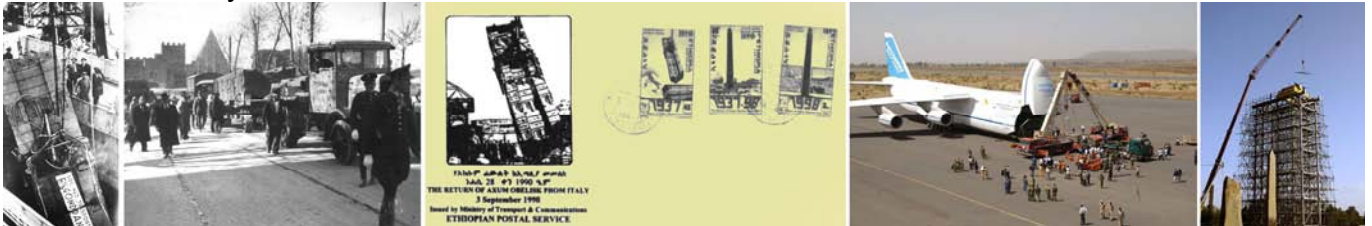
- Do the Stele give clues to the types of architecture that might have been used in the parts of palaces that have since disappeared?

- Where were the large stones quarried?



Left – Views at the quarries at Gobedra hill near Axum where some of the stelae originated. Right – Conjectural representation of the process by which the stelae were erected. Photographs by Obie Oberholzer.

- How were they brought to the site?
- How were they erected?
- Tell the story of the removal of a Stele to Rome and its return.



The 'Rome' Stele looted as a war trophy by Mussolini's Fascist regime in 1937 and erected in Rome. It was returned to Axum in 2005 and re-erection was completed in 2008.

- Compare the sizes of the stele at Axum with Egyptian obelisks in Egypt and those taken as trophies to Rome, Constantinople (Istanbul), Paris, London etc. This could be interesting information to many of the visitors who would be familiar with some of these monuments.



Comparing the Axum stelae to Egyptian obelisks – The stelae of Axum are larger and more elaborate than these more famous monoliths dispersed in several major cities on four continents. Those in Rome and Istanbul were taken there as trophies by the Romans.

- How do the stele relate to the tombs?
- Questions and explanations relating to tombs and thrones could form part of displays.



Left – Plan of Axum, showing the location of major archaeological remains from the Axumite Empire (Pink highlight). Photographs from the left: Mausoleum, located underground in the Stele Park area - Dungur Palace just West of Axum opposite the Gudit Stele field. Popularly known as the Palace of the Queen of Sheba but thought to have been the residence of a prosperous Aksumite, built between 4th and 6th Centuries AD. – Coronation Thrones (bases) in the Cathedral precinct. – King Ezana's Inscription: Ethiopian version of the Rosetta stone, pillar inscribed in Sabaeen, Ge'ez and Greek. AD 350 - records King Ezana's military campaigns in Ethiopia and southern Arabia, as well as his quest to return the Ark to Aksum from Lake Tana (*Lonely Planet*) - Right: Mai Shum, popularly known as the Queen of Sheba's bath. This large ancient reservoir is still used as a source of water by the people of Axum.

Monuments within walking distance such as the important Tombs of Kaleb and Gabra Maskal, the Tomb of Bazan etc. could have their own small Interpretation Centre built in a style similar to those related to other Axum attractions. In some situations, having an Interpretation Centre

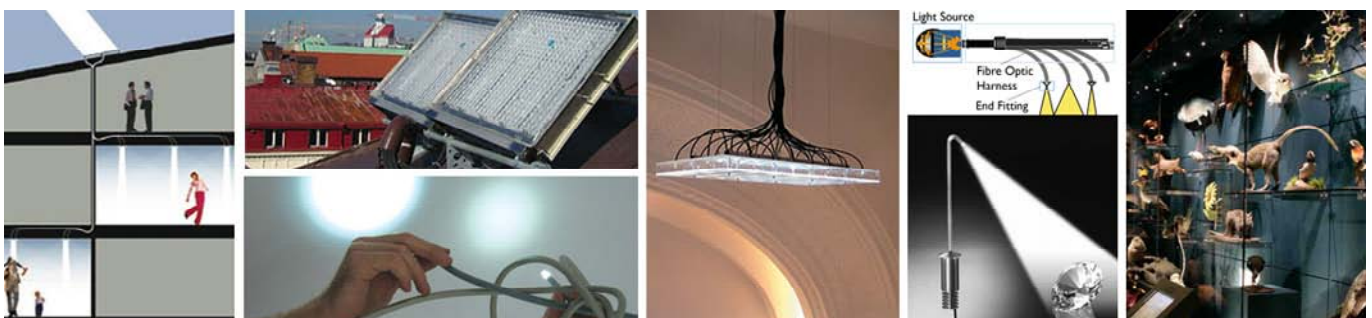
as an Entrance feature may be excessive or confusing. In these cases, other forms of identification and signage would be appropriate. For example, the Throne bases within the Cathedral precinct should be identified discretely, as any new structure within the precinct would be too dominant and detract from what is there. These ancient thrones continued to be used in later periods for coronations of Ethiopian Kings and Emperors. A careful study of importance and likely interest should be made of all remains so that interpretation treatments, way-finding systems and suggested logical itineraries can be developed.



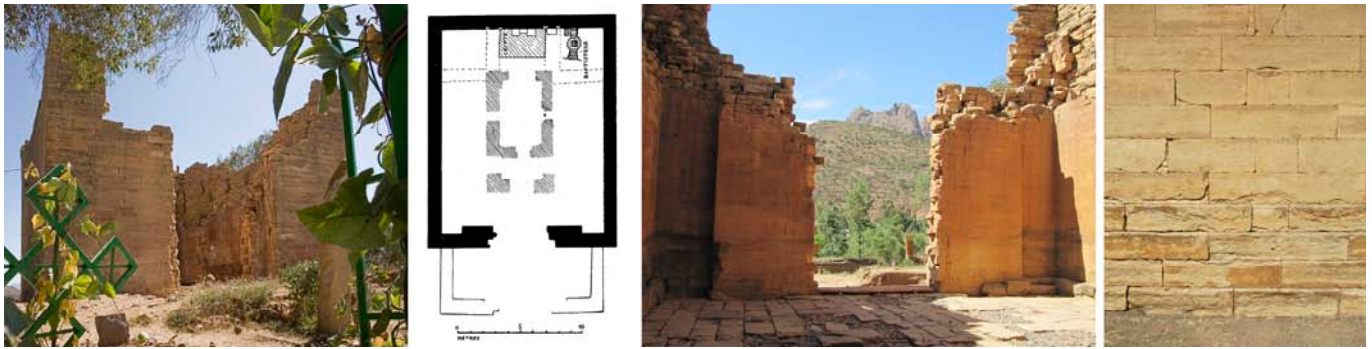
Oblique aerial view of Dungur Palace and plan. These remains are on the outskirts of Axum within walking distance or a short trishaw ride from the Central Cathedral/Stele Park area. Across the road from the palace is the Gudit Stele field (some of the standing stones can be seen in the photograph). These stones are not highly worked. There are tombs associated with this stele field. The model on the right was photographed in the Axum Museum – it represents a reconstruction of a major Axumite Palace from the height of the Empire. Such a model, with informative cutaway views into internal spaces could be made by students of architecture if proper and accurate archaeological and reconstruction data were to be provided.

At the site of the Dungur Palace there should be an Interpretation Centre where models of Palaces, plausible methods of construction (above existing levels) and relationship with the stele could be illustrated by scale models made by students of architecture – possibly in Addis Ababa under the direction of experts informed by the latest scholarship. Information displayed should always look fresh, with clear, interesting and concise content. Lighting strategies should be carefully considered. Approaches worth investigating include:

- **Flat Graphics Panels:** What methods of producing simple flat graphics panels are available in Axum, Addis? Are standards of production adequate? How durable are the results? What systems can be implemented to ensure that texts are properly translated and proofread? How can consistency and graphic continuity be ensured – what languages?
- **Information on Screens:** It may be economic to have some or most information displayed on plasma screens. This approach is likely to become competitive and could attract sponsorship for the supply of hardware. Information could be displayed as carefully paced looped powerpoint sequences or short video clips. Media companies could contribute suitable and informative video clips (Ethiopian TV, foreign companies producing documentaries etc.). Encouraging sponsorship in kind, combined with contributions from acknowledged experts in history and archaeology could make this approach economically viable. Well-conceived moving images can help create vibrant and memorable displays.
- **Physical objects – Replicas & representations:** Authentic objects worthy of Museum display should be concentrated in Museum facilities and not dispersed in Interpretation Centres. Models, reproductions etc should be used as part of carefully considered narratives.
- **Lighting:** Ethiopia has very even daylight hours throughout the year because of its proximity to the Equator. These hours coincide with those that visitors would be visiting Monument sites – during daylight hours. Very efficient systems of lighting, using fibre-optics have been developed recently, allowing for efficient and precise direction of natural light. Advantages of these developments mean that objects within display cases can be well illuminated without the need to change bulbs and maintain light fittings. Companies in Germany (Schott) and Sweden (Parans) who are leaders in this field could be approached to consider sponsorship in kind.



Diagrams and images explaining fibre-optic systems of lighting. These have been used successfully in museum displays for some time. Combined with solar light collectors these systems could be very efficient in providing effective, dramatic and permanent lighting solutions for Interpretation Centres in Axum.



Sabean temple at Yeha – circa 600 BC. The oldest masonry structure in Sub-Saharan Africa. This building, belonging to a South Arabian culture is constructed with superbly wrought ashlar blocks standing to a height of 10 metres. The temple has been used as a church. Plan from: J. Doresse. 'Les premiers monuments chrétiens de l'ethiopie et l'église archaïque de Yéha,' *Novum Testamentum*, Vol. 1, Fasc. 3 (Jul., 1956)

ANCIENT REMAINS – SOUTH ARABIAN

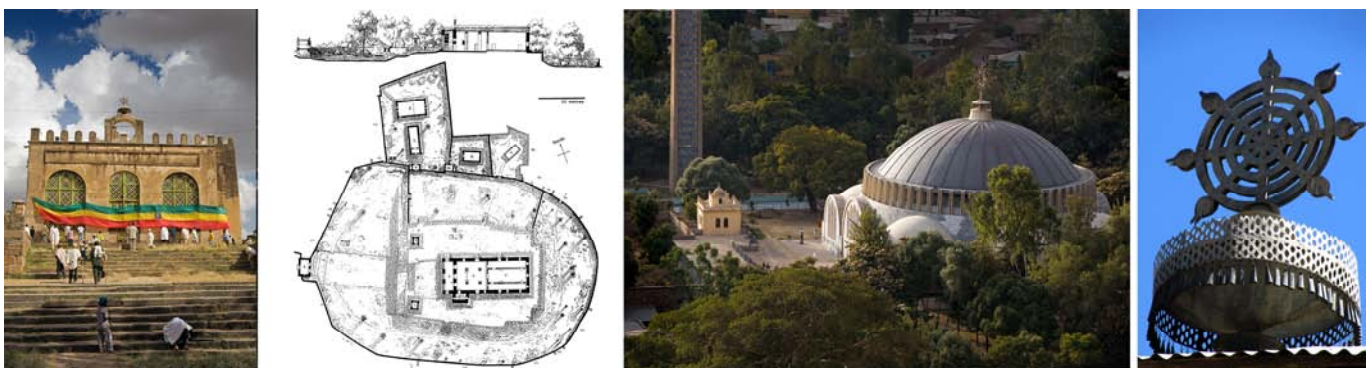
Even though spectacular remains from this period are outside Axum at Yeha, some foretaste of this civilization should be represented in Axum. This could be done in a major Interpretation Centre covering all aspects of Ancient remains (as mentioned above) or it could form a separate Centre, from which transport departs for Yeha. Here, other aspects of this period could be represented with models and images of major archaeological finds related to this period. The location of this Centre in Axum could benefit from being close to or visible from the Centre featuring Ancient Axumite remains.



Left: detail carving from Yeha, incorporated into the façade of a church built close to the temple illustrated above in the 1950s. The animals represented in the carving are Ibex – an antelope sacred to Sabaeans. Similar carvings on a plaque currently in the Louvre from a site in Arabia, across the Red Sea from Yeha shows similar depictions of Ibex. The inscriptions on the stone in the second image from the left are in the Sabean script. These stones are from excavations at the Yeha Temple and housed in the Church treasury nearby. On the far left of the image there is a representation of a crescent moon (horizontal) with a star. This symbol is associated with Sabean and Pre-Christian Axumite monuments and is also found on coins. The ruins on the extreme right are of the Temple of the Moon at Marib in South Arabia (currently Yemen) – a major centre of Sabean civilization.

THE CHURCH

- This is a very major theme. Accessible narratives can be built around emphasising that Religious traditions in Axum are part of a living culture that has its roots at time when much of Europe (from which a significant number of tourists would come) was in a state of barbarism during and after the collapse of the Roman Empire.



Maryam TSION Cathedral (Church of Zion) – the present church as seen in the image (left) and in the plan was built by the Portuguese in the mid-16th century after the destruction of the original church by Sultan Mohammed Gran. The new domed cathedral was inaugurated in 1964 to designs by Doxiades. Plan of old cathedral from: Phillipson, *Monuments of Aksum*, 1997.

- This Centre should form an entrance to the Cathedral Precinct somewhere along the wall near the large tree with steps (close to the pillar of Yared). Visitors arriving at the Stele Park

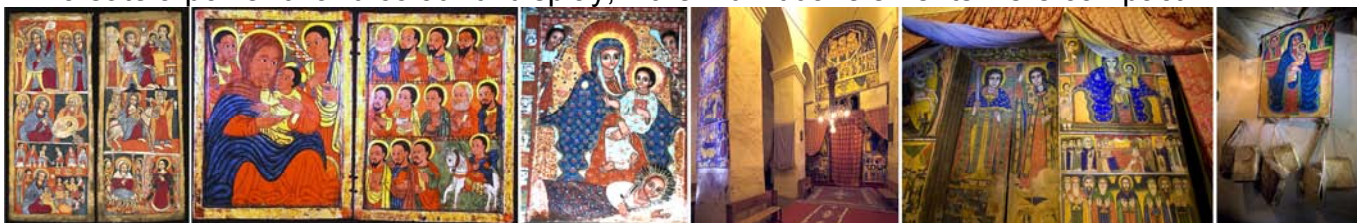
– the most probable first destination, could move naturally to this Centre as their next destination. Ideally, the centres would be visible from one another.

- Because parts of the Cathedral complex cannot be visited by women, special ways of explaining and conveying information about these places should be included in any display.



Traditional religious paintings photographed in 2009. These paintings were being displayed along the walls enclosing the Cathedral precinct. They were being offered for sale by their painters to priests and monks visiting Axum for a religious festival. The style and treatment of the images and their arrangement observe strict conventions as can be seen by the two images of St. George on the extreme right, painted by different artists. These paintings on canvas are fixed to the walls of churches by attaching them to mud plaster, internally or externally.

- Traditional religious paintings could be used as the major element conveying narrative and atmosphere. A series of themes could be selected to emphasise how many of the Biblical stories familiar to Europeans and Americans are also part of the Coptic tradition.
- The stories of local saints, their exploits and attributes could bring to life aspects of this religious tradition that differ from those that overseas visitors may be familiar with.
- Paintings related to the Calendar of Saints (one or more for each day of the year) could create a powerful and colourful display, if the individual elements were compact.



Left: Religious diptychs on timber panels. Middle left: painting of Mary & Child with the donor below. Middle right: Interior views of paintings in the old Cathedral (Maryam Tsion) in Axum. Extreme right: Painting of Mary & Child in the Church Treasury at Yeha. Note how similar conventions are rigidly followed in the representation of this theme in several of these paintings.

- Alternatively, possibly at a later date, a separate Centre could be set up on the theme of calendars of Saints and Festivals.
- Calendars of religious festivals with video clips of major ceremonies would help visitors understand how vibrant the traditions are.



Above – Meskal. This festival, held in September, commemorates the finding of the True Cross.



Timkat – Epiphany: Colourful festival that includes processions of the Tabot (Ark of the Covenant). Celebrated in Axum & throughout Ethiopia

- Rituals – (again through video clips), vestments and artefacts can be used to highlight the richness of religious practices. Sound would play a major part in conveying the distinct qualities and atmosphere of these ceremonial occasions.



Axum is the site of Ethiopian coronations. Many of the crowns of past Emperors are kept in the Church of Our Lady Mary of Zion. Axum's coronations asserted the Emperor's legitimacy as a descendant of Menelik I, son of the Queen of Sheba (Makeda - Bilqis) and King Solomon. Other exquisite metalwork related to the Ethiopian Coptic Church includes elaborate crosses shown in the procession on the right hand image. The drawing of the crown (Centre) is from: Dr. Richard Andree. *Das Buch der Reisen und Entdeckungen ... Afrika. Abessinien, das Alpenland unter den Tropen*, Leipzig, 1869.

- Some of the very valuable and exquisite metalwork in crowns, crosses and other ritual objects could be reproduced by local jewellers in baser metals and then plated in gold. With proper lighting these objects could be very impressive exhibits indeed.
- Illuminated religious texts on vellum with illustrations could also be reproduced. The making of these artefacts is still a living tradition that has ceased to be practiced elsewhere. Illuminators at work would be fascinating to many visitors.



Illuminated manuscripts: these religious works are written in the Ge'ez script of the liturgical language of the Ethiopian Orthodox Church. The texts and illustrations are on vellum and the sacred books are often stored in monasteries and churches. Some are ancient. The ones shown in these images are mostly in the collection of the British Library.

- The custodian of this particular Interpretation Centre would ideally be someone from the Church. Possibly a monk whose work includes the writing of religious texts and images.
- Music written by Yared and illustrations of his notation could enliven this Interpretation Centre. The sounds of drums, actual examples and video clips showing them used in religious ceremonies would contribute a unique African feel to the experience.

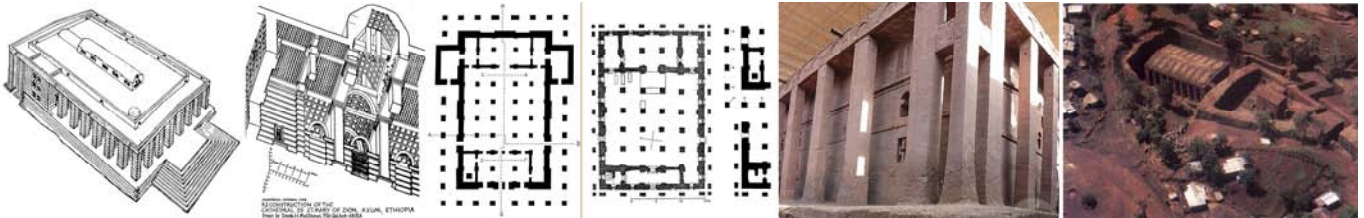


Saint Yared – the Sixth Century semi-legendary Ethiopian musician credited with developing the musical notation of the Ethiopian Orthodox Church. The image on the left shows Yared gaining inspiration from birds. The green enclosure surrounds the sacred Pillar of Yared - a site of veneration and one of the resting places of the Tabot during processions. The image (centre-right) shows drums being used in a religious ceremony in Axum. On the far right, a priest is chanting from a book with the musical notation invented by Yared.

- Reconstructions and explanations of what is thought to have been the original form of St. Marian Tseyon could be a highlight of any exhibit. Models and diagrams could tell the story. (See: this earlier Church Illustrated in: Phillipson, David W. 'Aksum', *Azania: Archaeological Research in Africa*, 38: 1, 2003, pp.1 — 68, from Buxton & Matthews 1974.) also: D.R. Buxton and D. Matthews, 'The Reconstruction of Vanished Aksumite Buildings,' *Rassegna di studi etiopici*, XXV (1971-72), fig. 20-21.



Pilgrims arriving in Axum for a religious festival.



Reconstruction of the original 4th Century Maryam TSION Cathedral (Church of Zion) in Axum published in Buxton & Matthews 'The Reconstruction of Vanished Aksumite Buildings', 1972 compared to Medhane Alem at Lalibela. The authors argue that the rock-cut Lalibela building commemorated the form and arrangement of important Axum church.

- The relationship of the idea and form of this ancient church to that of the church of Medhane Alem at Lalibela could be explained if these theories are currently accepted.
(Heldman, Marilyn E. 'Architectural Symbolism, Sacred Geography and the Ethiopian Church', *Journal of Religion in Africa*, Vol. 22, Fasc. 3 (Aug., 1992), pp. 222-241)
- Explanations of the origin and history of other major structures in the Cathedral precinct should be given, including the new Cathedral designed by C Doxiades and the original building that is claimed to owe something to Portuguese visitors of the 16th Century.
- Some explanation of the pre Christian structures to be found in the Cathedral precinct should be included, focusing on how they have been incorporated into Coptic religious ceremonies and practices.



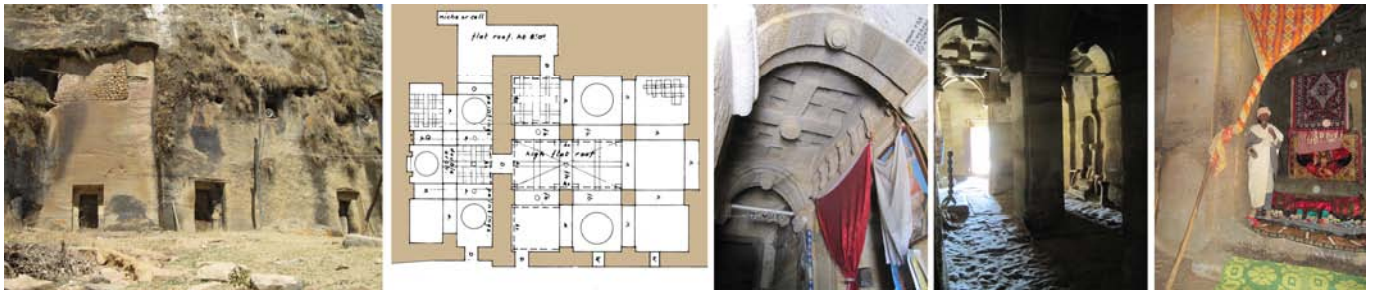
Church of the Four Animals (Arbatu Ensessa) in Aksum. This building is seldom entered by visitors but is reported to have better paintings internally than other churches in Axum. See: David W. Phillipson 'Aksum an Archaeological Introduction and Guide', *Azania XXXVIII*, 2003.

- At this major Interpretation Centre, directions should be given to visitors of how to reach other Church related structures in the Axum area, including the Church of the Four Animals, Abba Pantaleon etc.



Left: The small church of Abba Pantaleon perched on a hilltop to the East of Central Axum, thought to occupy an ancient religious site. Plan of the church from: D W Phillipson (ed.) *The Monuments of Aksum* 1997. Right: Church of Enda Yesus adjacent to the Stele Park. This church surrounded by paintings on its external wall is difficult to visit.

- Directions for getting there with a description of what to expect should be included. Where appropriate, there could be local mini versions of the Interpretation Centre structure to identify the monument.



Rock cut church – Maryam Wokro – A worthwhile day-trip from Axum. This church has an elaborate interior with domed and beamed ceilings in small compartments. The whole space is carved out the living rock. Drawing from: Ruth Plant. *Architecture of the Tigre, Ethiopia*. London: Ravens Educational and Development Services, 1985.

- At the major Interpretation Centre focusing on issues related to the Church, directions, images and models of major religious sites in the broader Axum region should be given. These could include Yeha, Maryam Wokro, Debre Damo and any other accessible church or monastery ready to receive visitors. Factors guiding selection would include the possibility of visiting a church interior with many of the walls covered in paintings and ideally, a round church, preferably with a thatched roof – this would introduce visitors to a form of Christian Church unique to Ethiopia.



Debre Damo Monastery, The oldest surviving church in Ethiopia, founded in the 6th Century, is located on a spectacular and remote mountain-top West of Adigrat. It is accessible only by rope. The exterior walls are constructed with alternating courses of limestone blocks and timber bands held together at right angles to the faces of the wall by cross timbers that project prominently on the exterior. These 'Monkey Heads' are a distinctive characteristic of Axumite architecture and can be seen celebrated in stone on the more elaborate Stelae in Axum. This building is the only genuine survivor of this style of building. The interiors of the church have many ancient original paintings.

- Visitors could rendezvous at this Centre for day-trips to these remote religious buildings, with tour guides endorsed by whatever authority has oversight of the management of Interpretation Centres.



Typical circular church, particular to Ethiopia. The Church of the Four Animals in Axum was originally in this form, until it was reconstructed in the 1960s. from: Dr. Richard Andree. *Das Buch der Reisen und Entdeckungen ... Afrika. Abessinien, das Alpenland unter den Tropen*, Leipzig, 1869. Right: Painted church interior – These images are from Debre Birhan Selassie Church in Gondar. The walls and ceilings of part of an Interpretation Centre could be painted in a similar fashion with explanations of the iconography – there are painters today who observe the conventions of this type of painting.

HISTORY AND MYTHOLOGY

- Develop ways of portraying the rich narratives related to Axum & Ethiopia. These themes could be housed in a single Centre or split into several, each one with a narrower theme. Splitting themes so that one/several Centre(s) focused on History while another/others focused on myths – could also offer attractive options. Centres under this broad category could be added over time as certain themes appear to be popular.
- Interpretation Centres focusing on Historical or Mythological themes could be anywhere in a sequence of such structures. They could be used to provide a visible destination between Centres whose themes fix them in their location.
- First thoughts are to portray the stories in paintings made by local painters. I've seen some that capture some of these very well.



Sequence of images depicting the Queen of Sheba (Makeda) corresponding with and meeting King Solomon. Such paintings could be made to explain the rich and complex stories that blend history and myth.

- There are the stories related to the Queen of Sheba visiting Solomon rendered beautifully in sequential frames.



Further examples of groups of images telling the story of the Queen of Sheba's relationship with Solomon – These stories provide legitimacy for several lineages of Ethiopian Monarchs who trace their Ancestry to King Solomon.



The Ark of the Covenant (Tabot) was brought to Ethiopia (Axum) in ancient times. Its exact location is secret but representations form part of the Timkat religious ceremonies where the Tabot is revealed at the climax of the ceremony. In Axum the Tabot is stored in the treasury (building in the central image). Right: The Ark of the Covenant in a European Mediaeval Illuminated manuscript and as a central theme in popular Hollywood productions.

- The story of Queen Giudit has potential for development in this form of representation. At the other end of the spectrum, there are depictions of factual and relatively recent events like the Battle of Adwa. Existing paintings of this important event are marvellous evocative documents.



The Battle of Adwa is the subject of many paintings showing the proud moment when Ethiopian forces defeated an advanced Italian army intending to make the country a colony in 1896 during the 'scramble for Africa'. Ethiopia thus became the only major African country to remain independent of colonial rule. In both paintings, St George appears in the sky, protecting Ethiopian forces.

- Custodians at these centres could be painters or illuminators, who in return for looking after the facility could have a studio for their work. The custodian could then sell his or her work to visitors.

- Part of these Centres could focus on oral history. Short stories could be spoken and acted. For visitors from Ethiopia, Tigrinya and Amharic would be used. There are a growing number of school age students who manage well in English – they could contribute in this area with training, to produce engaging enactments that would also reinforce local involvement with tourism in a dignified way.

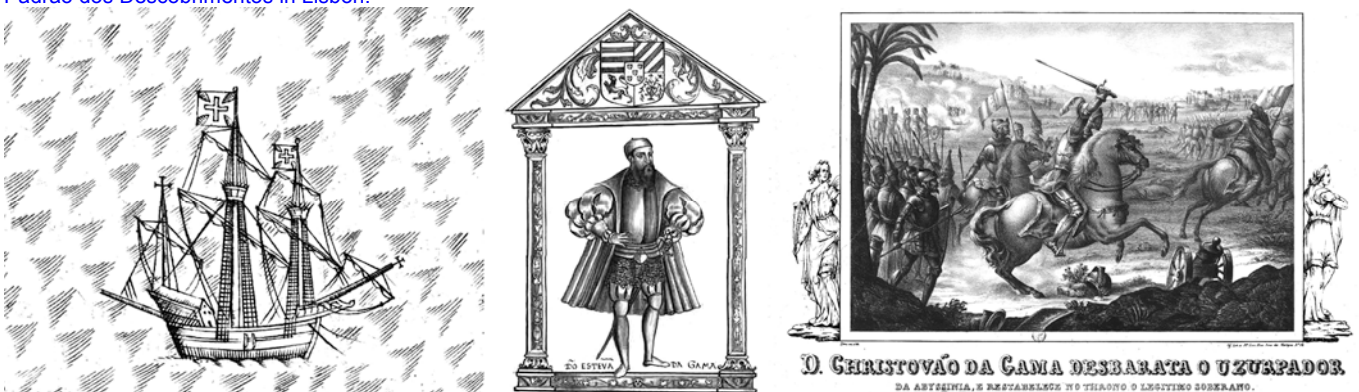


The kingdom of Prester John – the legendary Christian Priest/King was the subject of many stories and quests by Mediaeval Europeans. The image on the left shows a detail in a Sixteenth Century map of the Indian Ocean (by Diogo Homem) with an image of Prester John in Ethiopia on a throne ruling over his mountain kingdom. The second image from the left shows the whole map. The detail of a similar map (Centre) shows Prester John in the mountains near the Red Sea, ruling over several kings in ornate tents.

- Reproductions of images produced in Mediaeval and Renaissance Europe showing the mythical kingdom of Prester John could complement local material, helping to illustrate rich and diverse narratives of how Ethiopia has been part of European History and Mythology for many centuries.



Pêro da Covilhã was sent on a mission in 1487 by King Joao II of Portugal to discover the land of Prester John and the source cinnamon. When he arrived at the court of the Ethiopian Emperor, he was forbidden to leave but was well treated and remained in Ethiopia for the rest of his life and was able to inform later visitors about the remote and isolated kingdom. The image on the left is an idealized portrait of Covilhã on the Padrão dos Descobrimentos in Lisbon.



Cristóvão da Gama, son of Vasco da Gama accompanied his brother (Centre) Estêvão, Portuguese Viceroy of India, in a campaign against the Turks in the Red Sea. On their return to Massawa, Cristóvão was sent with an expeditionary force to aid the beleaguered Emperor of Ethiopia Gelawdewos whose realm had been invaded by Ahmad Gragn. Cristóvão won several battles but was eventually captured and killed (1542). Gragn dispersed his army thinking the threat was over but da Gama's remaining soldiers combined with the Emperor's forces and defeated the invaders.



Several engravings of Ethiopian Emperors in European publications. On the far right, Emperor Tewodros II who reigned until 1868.



In 1868, Britain invaded 'Abyssinia' over diplomatic misunderstandings. The 'expeditionary force' defeated the Ethiopian army at Arogye and Emperor Tewodros retreated to the mountain fortress of Magdala which was besieged, bombed and looted, with vast amounts of treasure being taken from the citadel, much of it still in Britain. The Emperor committed suicide. The image – far left from *Punch* shows Britannia forcing the Ethiopian Emperor to release the prisoners whose arrest had caused the dispute.



Emperor Haile Selassie addressing the League of Nations in Geneva in 1936 after Ethiopia had been invaded by Mussolini's Italy. Italy waged modern warfare including the use of chemical weapons against ill equipped local forces. The images on the right are of an Italian Victory parade in Axum and the Viceroy – Rudolfo Graziani outside the old Cathedral.



The Rastafari movement reveres Haile Selassie as a messianic figure who will lead a future golden age of righteousness and prosperity. It derives its name from Ras Tafari as Heile Selassie was known before his coronation as Emperor in 1930. The Rastafarian colours are derived from the Ethiopian flag.

- Another area worth exploring in relation to these themes or as a stand-alone Centre is the phenomena of, Rastafarianism with its Caribbean origins, distinctive music (Bob Marley, reggae) etc. Connections of Marcus Garvey to Pan Africanism could bring these themes to life. These ideas do not necessarily have very direct connections with Axum, but they could be of interest to Afro-American, Caribbean and African visitors with reminders that Ethiopia was exemplary in retaining and defending its culture from external incursions.



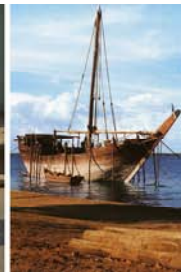
Famine in Ethiopia in the 1970s contributed to the downfall of Haile Selassie and continued during the Derg regime.

- To develop ideas under this broad umbrella, lists of interesting stories should be collected and proposed for discussion and development. Some process of prioritising themes and sketching out appropriate treatments would help balance these stories and give some idea of how important this approach may be.



The Soviet backed Derg, a Communist inspired military regime took over the country in 1974. Mengistu Haile Mariam, became its undisputed leader in 1977. Red Terror, Civil War and invasion from Somalia resulted in massive militarization which contributed to famine and large numbers of refugees who fled the country, creating, for the first time an Ethiopian diaspora.

AXUMITE EMPIRE – TRADE



At the height of its power and influence, Axum controlled much of the trade entering the Red Sea bound for the Middle East, Egypt and the Mediterranean.

- An Interpretation Centre celebrating the importance of the Axumite Empire at its height could allow this important theme to be highlighted rather than making it subservient to other narratives.
- The products of trade that Axum handled could be displayed with illustrations of their origin supported by maps of trade routes at different times.
- Luxury goods such as Frankincense, Myrrh etc could be shown in their traded form as dry granules. The incense could be burnt.
- Fragrances of various types could be made so that a series of exhibits could be experienced by the sense of smell.
- In a courtyard of the Interpretation Centre, live trees from which the valuable resins are derived could be displayed.



Frankincense, grown in parts of Ethiopia and Arabia controlled by the Axumite Empire was much in demand as an ingredient for fragrances and as incense burnt as part of religious rituals. It was a valuable commodity and was included in the gifts given to the infant Jesus by the Three Kings of Christian Mythology, as shown in the painting on the left – Adoration of the Magi (1462) by Andrea Mantegna (Getty Museum).

- The story of the three kings bringing gifts to the infant Jesus, could help give images to these stories. Balthazar, is often depicted as Ethiopian in Western Art and Biblical stories as bringing Frankincense.



Myrrh, another fragrant resin, grown in Ethiopia and Arabia was much in demand as an ingredient for perfumes and medicines throughout the ancient world. Resins and perfumes could form important parts of displays, engaging the sense of smell.



Civet musk, a highly valued as a fragrance and stabilizing agent for perfumes. It was much prized in ancient times with civets being bred so that the secretions from their perineal glands could be removed. Chanel No. 5, claims that natural civet has been replaced with a synthetic substitute since 1998.

- Other trading items originating in the Axumite Empire, such as ivory, gold, slaves etc. should be represented, while those imported in exchange such as metals, oil etc would explain how commerce was balanced and maintained across long distances, making Axum and its ports on the Red Sea cosmopolitan.



Ivory was among the luxury trade goods originating in the Axumite Empire, brought to its territory through extensive trading routes into the interior of Africa.

- Coins, including descriptions and models of Axum's unique bi-metallic currency should be explained at this centre. Reproductions of the coins at a larger scale could be made and organized in sequences showing reigning monarchs against timelines. These explanations could include images or models of coins from other contemporary Empires.



Examples of Axumite coins. The gold coins (Left) are Pre-Christian and have a crescent moon with a star as an emblem (between the two holes) The coins on the right date from the Christian era and have crosses in the same position. The coins on the right are bi-metallic: bronze and gold – a unique feature of some Axumite coins.

- Methods of reproducing coins three dimensionally at a larger scale should be investigated. The technology for three-dimensional printing exists. This would be an exhibit that could seek sponsorship by banks.
- Associated with this centre, rides on camels and donkeys could be organized so as to introduce the means by which goods travelled.
- From this centre, visitors could be directed to visit the market with its vibrant trading, bargaining and the smells of vegetables and spices. For some visitors accustomed to sanitized supermarket shopping, this would be a memorable experience.
- This Centre would probably benefit by being located relatively close to the others so that visitors could move from one to another easily.



Recent views from the market in Axum.

CRAFTS

- Crafts practiced in and around Axum provide evidence of very long traditions and simple, pre-industrial methods of manufacture. It is unusual for visitors from industrialised countries to see everyday things and luxury items made by skilled people.



A silversmith making traditional Ethiopian jewelry (left) Weavers making traditional cotton cloth on handlooms.

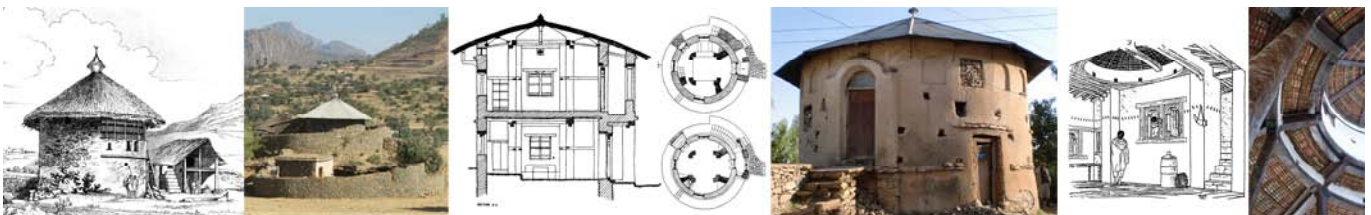
- An Interpretation centre where craftsmen and women could be seen making jewellery, basketwork, weaving cloth would be popular, especially if visitors could buy things directly from those who made them.
- Near the Cathedral Precinct, I was shown a group of buildings that were described as having been set up for the manufacture and sale of crafts. Ideas of reviving this facility with a management plan and methods of integrating it into tourist visits, should be explored.
- What has contributed to the fact that this facility appears to be bypassed by the tourist circuit? Lack of marketing? Lack of presence? Unfortunate management? Competition from elsewhere? Understanding these issues may suggest solutions that could contribute to making this place viable. If not, the opportunity of engagement and interest offered by crafts should be given another home.



Colourful baskets are used for many purposes and are part of live traditions. In the two middle images different vessels with distinctive shapes and colours can be seen for sale in regular street markets in Axum.

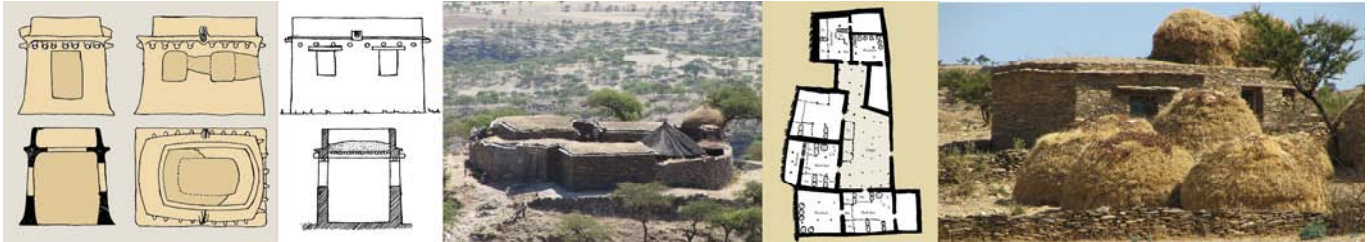
LIVING IN AXUM

- Axum has interesting modest domestic buildings. Many visitors would be curious to understand how people live in such a town. It would be an opportunity for them to understand that such buildings and structures have formed the basis of settlements from the earliest times.
- Two basic types of building could be celebrated in this 'Centre':



Traditional round buildings in Tigray. Left, image from Henry Salt. *A Voyage to Abyssinia ... 1814* showing a building he resided in for some time, with views of present day examples. The interiors are simple but carefully crafted, particularly in the construction of traditional roof framing – as seen in the image on the far right. Centre drawing from: Naigzy Gebremedhin 'Some traditional types of housing in Ethiopia', in Paul Oliver (ed) *Shelter in Africa*, London: Barrie & Jenkins, 1971. Interior view from David W Phillipson. *Archaeology at Aksum, 1993-7*, vol.2, London: British Institute in E Africa & Society of Antiquaries of London, 2000

- The round buildings, of which there are few left, but that once predominated the town, some of these have double storied spaces with beautifully made internal ceilings.



Another ancient tradition for domestic buildings in Tigray. On the left, drawings of a prehistoric clay model of a dwelling compared to a contemporary farmers house. (model from Halouti). Images right – similar buildings in rural areas today.

- Rectangular structures that predominate today. It could be shown that models of structures similar to these were found in models excavated in Halouti just outside Axum dating from before the Axumite Empire. (Contenson, H. de. Les fouilles de Haouti en 1959. — Rapport: http://www.persee.fr/web/revues/home/prescript/article/ethio_0066-2127_1963_num_5_1_1331)
- Careful thought should be given to creating engaging displays and narratives that would allow visitors to feel that they have entered a timeless way of living, very different from where they have come from.

FOOD



Growing, harvesting and grinding teff – a staple grain of this region. The hand grindstones show are still used.



Traditional cooking of injera on a flat clay plate. On the left, view of a market with lids used over the cooking plate in Injera stoves.



View in a rural kitchen with traditional cooking stove (mitad or mogogo) and food storage in clay pots. In the middle image corn is being pounded in a mill and on the right, the boy is drying dung for fuel.

- Part of the structured tourist experience should include a restaurant where visitors can see food being prepared traditionally, from the grinding of the teff to the making of injera, spicy dishes and other delicacies. For this, some form of stage, with the wood-fired stove and clay plate should form the centerpiece of the action. Ingredients, grains and other foods should be stored visibly and prepared as they would normally be.



Injera being served with various types of stew (wat) and salad. The meal is eaten with the right hand using pieces of injera to pick up bites of different foods laid out on a bed of Injera. The mesob – tabletop is woven from straw supports the Injera which is shared by several people at a meal. Utensils are not normally used.

- The restaurant area would have the beautiful injera basketwork tables with appropriate stools. Fresh grass on an earth floor could contribute to an authentic experience. (For those who found this awkward, traditional restaurant seating could be provided).
- Coffee ceremonies could take place at this Centre or they may be made the focus of a smaller Centre dedicated exclusively to coffee with the stories of its origin as a beverage in Ethiopia.



Legend has it that coffee originated in Ethiopia when a goatherd noticed that his flock became excited when they ate the beans from the coffee tree. Coffee is prepared in a traditional ceremony in which all stages of its preparation take place from the roasting of green beans to their grinding and brewing.

- In addition to showing the preparation of food and serving it in a traditional way, some local products such as coffee and wild honey could be sold.
- A Centre dedicated to food should have an appearance that connects it with the family of other Interpretation Centres, but it may be best to locate it on Axum's main street where there are other restaurants and more likelihood of nightlife.

Bibliography:

In addition to the works listed above in relation to particular items and illustrations, the following two works offer valuable overviews of Axum (Aksum), its important archaeological remains, its rich history and its ongoing role as the major Centre for the Ethiopian Orthodox Church.

Stuart Munro-Hay. *Aksum – An African Civilization of Late Antiquity* 1991 – web edition:
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David W. Phillipson 'Aksum an Archaeological Introduction and Guide', *Azania, Archaeological Research in Africa*, 38:1, 2003, pp. 1-68.

Pedro Guedes – November 2010.