

### Contacts between Ethiopia and South Arabia in the first millenium AD: an overview

Fabienne Dugast, Iwona Gajda

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# Pre-Islamic South Arabia and its Neighbours: New Developments of Research

Edited by

Mounir Arbach Jérémie Schiettecatte





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Proceedings of the 17th Rencontres Sabéennes held in Paris, 6–8 June 2013

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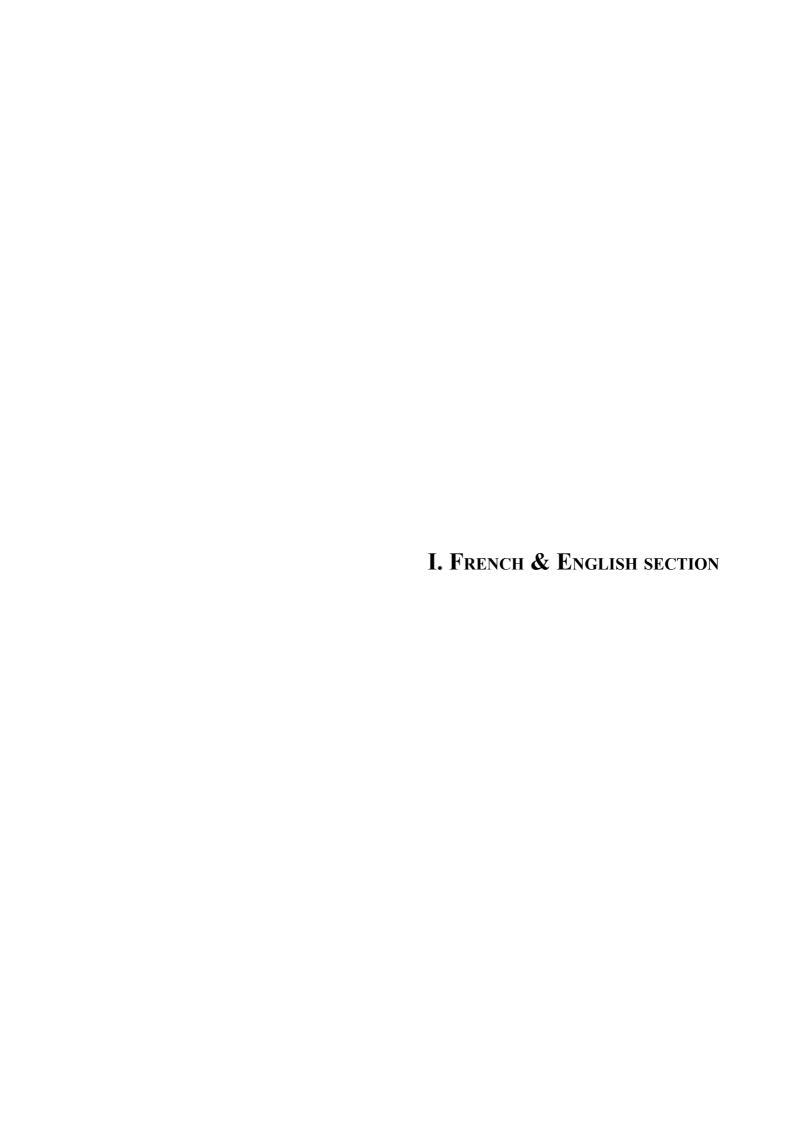
### Table of contents

#### I. French & English section

Two silver vases of Greco-Roman style from the 'treasure of wādī Dura''(Yemen) Sabina Antonini de Maigret, Christian Julien Robin	3
Qatabanian jars in the port of Sumhuram: notes on the trade by sea in South Arabia Alessandra Avanzini	13
Snake, copper and water in south-eastern Arabian religion during the Iron Age: the Bithnah and Masā evidence	fī
Anne Benoist, Cécile Le Carlier, Julie Goy, Michele Degli Esposti, Barbara Armbruster, Gaffar Attaelmanan	21
Qabr Nabi Hūd, le sanctuaire d'un prophète préislamique Christian Darles	37
Qabr Hūd revisited: The pre-Islamic religion of Ḥaḍramawt, Yemen, and Mecca Werner Dauм	49
Sur l'interprétation du terme bḥt : nouvelles suggestions Serge A. Frantsouzoff	73
Contacts between Ethiopia and South Arabia in the first millennium AD: an overview Fabienne Dugast, Iwona Gajda	79
Pottery in Sacred Contexts.Everyday Equipment – Tableware for Ritual Meals – Offerings? Sarah Japp	95
Sacred spaces in ancient Yemen – The Awām Temple, Ma'rib: A case study Mohammed Maraqten	107
Permanence et évolution d'un modèle de temple sabéen : le temple Bar'ān Solène Marion de Procé	135
Ethio-Sabaean libation altars – First considerations for a reconstruction of form and function Mike Schnelle	143
Process of the formation of the image of South Arabia in the Greek literature in the Classical and Hellenistic periods	152
Barbara Szubert	153
Paul Yule, Michael Raith, Radegund Hoffbauer, Harald Euler, Kristoffer Damgaard	159

#### II. ARABIC SECTION

نقش سبئي جديد من نقوش الإهداءات دراسة في دلالاته اللغوية والدينية [A new Sabaic dedicatory inscription: study of its historical and semantic features] فهمي علي بن علي الأغبري
آثار مستوطنة العصيبية إحدى مدن ضواحي ظفار عاصمة مملكة سبأ وذي ريدان [The ancient settlement at al-'Uṣaybiyya. A city on the outskirts of Zafār, the capital of the kingdom of Saba' and dhū-Raydān] حالد علي العنسي
اكتشافات أثرية من العصر السبئي المتأخر في مدينة شُقرة معطيات جديدة حول شعائر وطقوس الدفن المتبعة في القرن الأول الميلادي في موقع الحصمة [Archaeological discoveries of the late Sabaean period in the city of Shuqra. New data about funerary practices in use during the 1st century AD at the site of al-Ḥaṣma] حالد عبده محمد الحاج
ثلاثة نقوش قتبانية جديدة تذكر الإلهة ''ذات فنوتم'' [Three new Qatabanic inscriptions commemorating the goddess Dhāt-Fanūtum] جمال محمد ناصر الحسني
نقوش سبئية ورسوم صخرية أخرى من جبل قروان [More Sabaean inscriptions and rock drawings from Jabal Qarwān] علي محمد الناشري
نقش سبئي جديد من نقوش الإهداءات المقدمة إلى الإله إلمقه بعل (ح د ث ن ن) [A new Sabaic inscription dedicated to the god Almaqah Master of HDTNN] محمد علي القيلي
نقش قتباني جديد من نقوش الاهداءات دراسة في دلالاته اللغوية والدينية [A new Qatabānic dedicatory inscription: historical and semantic features] إبراهيم الصلوي
ثلاثة نقوش جديدة تذكر الإله الأوساني (بلو) [Three new dedicatory inscriptions commemorating the Awsanite god <i>BLW</i> ] أحمد بن أحمد باطايع, جمال محمد ناصر الحسني



Depuis leur création en 1997, les Rencontres Sabéennes ont vocation à réunir annuellement les spécialistes de l'Arabie méridionale préislamique et des régions voisines, archéologues et épigraphistes, afin de présenter l'avancée des recherches récentes dans la discipline.

Chaque année, un thème privilégié est proposé sur lequel les participants sont invités à se pencher. À l'occasion des 17<sup>e</sup> Rencontres sabéennes, qui se sont tenues à Paris les 6, 7 et 8 juin 2013, ce thème fut « La religion dans l'Arabie préislamique : territoires du sacré et espaces sacrés ».

Au moment où la situation ne permet plus de conduire de travaux de terrain en Arabie du Sud et où la communauté scientifique se consacre à la synthèse d'un corpus épigraphique et archéologique abondant, les religions arabiques préislamiques apparaissent comme l'une des clés de compréhension de ces sociétés et comme un élément-clé dans la définition des identités locales.

Ce thème était motivé par une question principale : dans quelle mesure les cultes et pratiques religieuses structurent-ils le paysage et la société de l'Arabie préislamique ? Cette question se déclinait autour de plusieurs registres : origine des panthéons arabiques ; lien entre forme architecturale, divinité et entité territoriale ; rôle du pèlerinage dans la définition des identités ; extension géographique des cultes voués aux différentes divinités de l'Arabie préislamique ; conséquences de l'émergence des pratiques monothéistes sur les temples païens ; ruptures et continuités entre pratiques préislamiques et islamiques.

Dans ce volume, outre les chapitres qui portent sur ces questions, plusieurs contributions sont consacrées à l'actualité de la recherche en Arabie méridionale et sur son pourtour. C'est ici l'occasion pour plusieurs spécialistes yéménites qui continuent à œuvrer sur le terrain de présenter les résultats de travaux inédits. En dépit des circonstances difficiles, nous ne pouvons que saluer leur ténacité dans la poursuite de leurs activités de recherche.

Nous tenons enfin à remercier l'ensemble des institutions qui, par leur soutien financier, ont permis la tenue et la publication des 17° Rencontres Sabéennes : l'UMR8167 Orient et Méditerranée (CNRS, Université Paris 1, Université Paris Sorbonne, EPHE) ; l'UMR7041 Archéologie et Sciences de l'Antiquité (CNRS, Université Paris 1, Université Paris Ouest) ; le programme Coranica [ANR-10-FRAL-018-01] de l'Agence Nationale de la Recherche et de la Deutsche ForschungsGemeinschaft ; le Labex Resmed [ANR-10-LABX-72] ; le Labex DynamiTe [ANR-11-LABX-0046] ; l'Université Paris-Sorbonne ; le CEFAS et le ministère des Affaires étrangères français.

Nous remercions enfin MM. Derek Kennet et St John Simpson d'avoir accepté la publication de cet ouvrage dans la série des monographies de la *British Foundation for the Study of Arabia* des *British Archaeological Reports*.

À Paris, le 26 mai 2015 Jérémie Schiettecatte & Mounir Arbach

## Contacts between Ethiopia and South Arabia in the first millennium AD: an overview

Fabienne Dugast, Iwona Gajda<sup>1</sup>

#### Abstract

Relations between northern Ethiopia and South Arabia in Antiquity have been much discussed, most publications focusing on the first millennium BC. Relations during the first millennium AD have received less attention, apart from studies of dramatic events during the 6th century. A general framework of these contacts is proposed, along with new observations about contacts between the two sides of the Red Sea, in particular from the 1st to the 6th century AD. During ancient times, the two cultures seem, at first sight, to be quite different; but a closer look at the evidence from inscriptions and excavations (architectural features and building techniques) discovers that the two areas maintained contacts, which varied over time, and often evolved in like manner.

To us today, Ethiopia and South Arabia seem to be different countries with completely different cultures. In ancient times too, the civilizations on the two sides of the Red Sea seem distant from each other. In the early stage of its history however, the Ethiopian civilization was very close to the South Arabian: the same 'monumental' architecture, the same script, the same pantheon (with additional local deities). All of this is evidence of close contacts as early as the 8th century BC, perhaps even earlier. 2 But what happened afterwards? By the first millennium AD, the Ethiopian civilization seems to have gone its own way, diverging from the South Arabian. The architecture seems completely different. Different languages were spoken, even though all were Semitic with many similarities. The Ethiopian alphabet had evolved and gradually became distinct from the South Arabian, which had not changed much over the centuries. Religions on the two sides of the Red Sea were apparently different, even though we know very little about religion in northern Ethiopia during the first centuries AD, apart from the names of a few deities such as Mahrəm (Arès), Astar, Beher or Medr. In South Arabia, several deities were worshipped, each kingdom having its own

This investigation will not be restricted to the earliest phases of these relations. Instead, we would like to provide an overview of interactions during the first millennium BC and the first millennium AD. Given insufficient advances in field research, it is difficult to formulate general statements. Nonetheless, we would like to propose a general framework with significant points, since we think that the grounds for making new observations on this subject have improved. Our effort to reconsider contacts between these two civilizations stems from our study of sources in epigraphy and architecture.

A first observation can be made: the rise and development of civilizations on both sides of the southern part of the Red Sea occurred during periods of intense commercial activity. In the early first millennium BC (as of the 8th century BC), civilizations in South Arabia and northern Ethiopia arose and grew rapidly thanks to the development of long-distance trade with the Near East and Mediterranean. After the turn of the Christian era, the increase in trade by sea between Rome (the whole Mediterranean Basin) and India boosted economies in the southern Red Sea. Axum (Aksum) and Himyar appear for the first time in sources from the 1st century AD. Both these kingdoms played a major political and economic role from that time up till the 6th century.

Trade seems to have been a major factor in relations, which oscillated between cooperation and rivalry and, at times, climaxed in warfare. From the 8th till the 6th centuries BC, relations between South Arabia and northern Ethiopia were, as far as we can determine, peaceful. For the first millennium AD, our main sources are South Arabian inscriptions, very few Ethiopian inscriptions, a few texts by classical authors and hagiographies (as of the 6th century). These sources make it clear that, from the start of the 3rd century AD onwards, the Ethiopians had the ambition of conquering South Arabia, their motives surely being economic. Let us take a closer look at these contacts and their impact on the politics and cultures of both civilizations.

pantheon. In the middle of the 4th century AD, the Ethiopian king Ezana converted to Christianity, while the Ḥimyarite kings adopted a monotheism strongly marked by Judaism around AD 380. Apparently, the civilizations on the sides of the Red Sea were unlike each other. But contacts still existed, and it is worthwhile investigating the sources in an effort to better understand their nature and effects

Historical and epigraphic topics presented by I. Gajda; architectural topics presented by F. Dugast.

<sup>&</sup>lt;sup>2</sup> See, for instance, DE MAIGRET & ROBIN 1998; WOLF & NOWOTNICK 2010; and GERLACH 2013.

#### Contacts during the first millennium BC

During the 8th–7th centuries BC, monumental architecture and inscriptions appeared in Ethiopia, at the same time as in South Arabia, perhaps a few decades later. Some of the monumental architecture in Ethiopia closely resembles the South Arabian. The alphabet used for inscriptions is almost identical — with a difference of a single letter transcribed as  $\dot{s}$  or  $s^3$  representing a sibilant that apparently did not exist in the local language; and the language was very close to the Sabaic spoken in South Arabia with some differences that can be explained in two ways: either the language spoken at that time in northern Tigray was very close to Sabaic, or else the language spoken locally was a different Semitic tongue that influenced the Sabaic used for inscriptions.

The question debated for half a century now, and especially during the last decade, is how did this civilization arise in Ethiopia and what impact did it have on the local population. One answer is that Sabaeans had colonized northern Tigray. Drewes and Schneider have discussed this hypothesis according to which small groups of colonists, perhaps merchants from South Arabia, brought with them new architectural techniques, alphabet and a new religion. 3 Robin has suggested that the Ethiopian civilization was closely related to the South Arabian even before the development of an alphabet and, furthermore, that the South Arabian kingdom of Saba' exercised a kind of control over Ethiopia. 4 This suggestion is interesting: close relations could have existed between South Arabia and Ethiopia before the development of monumental architecture and an alphabet; however, there is no evidence of Saba's political domination over Ethiopia in the early first millennium BC. 5

During this phase, when relations between the Ethiopian and South Arabian cultures first became visible, the monumental architecture and inscriptions in both regions were very similar. This phase did not last long in Ethiopia however, probably not longer than the 6th–5th centuries BC. About one hundred short rock inscriptions discovered in eastern Eritrea might date from a later time. What happened after this initial phase? We do not really know. The second part of the first millennium BC in Ethiopia can, for the time being, be qualified as the 'obscure centuries'. Only field research can help dispel this obscurity, hopefully soon.

Surprisingly, sources on the second half of the first millennium BC from South Arabia, whether epigraphic or archaeological, are also less abundant. There are fewer inscriptions than from the first half of the first millennium BC. Since they are often difficult to date, the chronology remains uncertain. For archaeologists too, this period is relatively obscure, owing to a 'gap' in findings at several sites.

## The rise of Axum and Ḥimyar in the first millennium AD

What was the situation on both sides of the Red Sea after the turn of the Christian era? We know more about the first millennium AD thanks to a large corpus of South Arabian inscriptions, several Ethiopian inscriptions and classical texts. As of the 1st century AD, both South Arabia and Ethiopia apparently entered a period of political and economic change with more intense economic activity. In South Arabia, a new political power arose, the kingdom of Himyar, that would play a major role for more than five centuries. Himyar probably emerged at the end of the 2nd century BC 6 and became dominant during the 1st century AD, when Ḥimyar and Saba' were unified as a single kingdom. On the other side of the Red Sea, a new political power also arose: the kingdom of Axum. It was first mentioned in the 1st century AD, in the Periplus *Maris Erythraei* and by Pliny.

Despite the obscure origins of both Himyar and Axum, what impelled their rise was, without any doubt, long-distance trade, a factor of rapid growth for both countries: not only Roman trade of course, as navigation on the Indian Ocean developed, but also Indian, Axumite and Himyarite trade; seaborne obviously, but also by caravan overland. Trade by land did not completely collapse as trade by sea intensified; it diminished but nevertheless continued in the first centuries AD, according to the archaeological remains from caravan cities, like Nagrān or Qaryat, and written sources.<sup>7</sup> The 2nd century AD was a period of war in South Arabia. Saba' and Ḥimyar split, several kingdoms were fighting each other, forming and breaking coalitions. We do not know what was happening in Ethiopia since there are few written sources that cannot be clearly dated. The results of archaeological excavations at Bieta Giyorgis prove that Aksum and its region were developing.8

In the 3rd century AD, the kingdom of Axum seems to have become powerful and wealthy. Its kings started coining money. <sup>9</sup> The Ethiopians intervened in conflicts in South Arabia, taking advantage of the disorder there, and obviously trying to take control of the country. Our main sources about contacts between South Arabia and Ethiopia during the 3rd century are South Arabian inscriptions. There is nearly no data from Ethiopia. The kingdoms in South Arabia continued warring against each other during the 3rd century, but a new actor had come on the scene: the kings of Axum and their armies. <sup>10</sup>

<sup>&</sup>lt;sup>3</sup> Drewes 1959, 1962; Schneider 1976; and more recently, Schneider 2003 and Philippson 2009: 269–270.

<sup>&</sup>lt;sup>4</sup> See Robin in DE MAIGRET & ROBIN 1998: 788, 793-794.

See our recent discussion of this hypothesis in our paper "Reconsidering contacts between Southern Arabia and the highlands of Tigrai in the Ist millennium BC" presented in 2012 at the 18th International Conference for Ethiopian Studies organized at Dire Dawa on October 29–November 2 (to be published).

von Wissmann 1964; Beeston 1975; Avanzini 1985; Robin 1989 b; Tindel 1994; Yule 2007.

<sup>&</sup>lt;sup>7</sup> See for instance Ansari 2010; Robin 2001.

<sup>&</sup>lt;sup>8</sup> Fattovich et al. 2000.

<sup>&</sup>lt;sup>9</sup> Munro-Hay 1984, 1989.

<sup>&</sup>lt;sup>10</sup> See Robin 1989 a.

Diplomatic relations were established between Saba' and Axum. The Sabaean king Alhān Nahfān received an embassy from the Axumite king Gadara who negotiated an alliance. <sup>11</sup> A coalition of Sabaeans, Ethiopians, and Ḥaḍramis waged war on Ḥimyar. <sup>12</sup> But the Sabaean/Ethiopian alliance fell apart. <sup>13</sup> During Sha'rum Awtar's reign, the Sabaeans helped the Ḥimyarites and their king, Li'azz Yuhanif Yuhasdiq, to chase the Ethiopian army out of Zafār, the Ḥimyarite capital. Soon afterwards though, the Ḥimyarites joined the Ethiopians to fight against the Sabaeans. Another reversal of coalitions must have occurred, since, in the middle of the 3rd century, the Ethiopian army once again occupied Zafār for seven months. <sup>14</sup>

Several South Arabian inscriptions, both Himyarite and Sabaean, report attacks by Ethiopians, the Ethiopian army, Ethiopian groups ('hzb 'hbšn) or "Ethiopian hordes/pillagers" (b'b't 'hbšn). 15 For much of the 3rd century, Ethiopian forces were apparently present in western South Arabia, on the Tihāma plain where they attacked tribes and cities and tried to conquer strategic places. 16 At times, they seized the Himyarite capital Zafār, 17 Aden, 18 the Himyarite port and the northern merchant city of Nagrān. 19 They apparently tried to take control of the South Arabian trade network. Axum had visibly entered a phase of strong growth and expansion.

The Himyarites finally managed to drive the Ethiopians out of South Arabia, probably around AD 260-270, according to the al-Mi'sāl 5 inscription. 20 Soon afterwards, the kingdoms of Himyar and Saba' were unified under the Himyarite king Yāsirum Yuhan'im and his son Shammar Yuhar'ish. The latter managed, at the end of the 3rd century, to annex the kingdom of Hadramawt and thus unify all of South Arabia. It is worth pointing out that the Himyarite king who won the last major battle against the Ethiopians and helped drive them out of the country would, soon afterwards, unify South Arabia for the first time in its history. Ethiopian incursions and the presence of Ethiopian armed groups in South Arabia during the 3rd century might have been a significant factor accelerating the unification of South Arabia under Himyarite kings. The sovereigns of South Arabian kingdoms, who had been fighting against each other, must have realized that the neighbours lurking on the other side of the Red Sea were a menace for the whole region — further evidence of the power of Ethiopia at that time.

#### **Ambitions of the kings of Axum**

The situation changed completely in the 4th century. The Himyarite inscriptions no longer mention the presence of Ethiopian forces in South Arabia. The only mention of Ethiopia occurs in inscription Ir 28 from the reign of the Himyarite king Karib'īl Watar Yuhan'im; it refers to an embassy that came back safely from Ethiopia.

Fourth-century Ethiopian sources draw an interesting picture of Axum's attitude towards South Arabia.

The title of Ezana, the famous king who reigned ca. the mid-4th century, was "king of Axum, Ḥimyar, Raydan, Ḥabashat, Saba', Salḥīn, Seyamo and Bega, king of kings". 21 Immediately after Axum, Ezana enumerated the main territories in South Arabia (Himyar, Saba') and the royal castles (Raydān, Salḥīn) to which he claimed control. However the many epigraphic sources from South Arabia clearly tell us that this domination did not actually occur at that time. The title might be reminiscent of a title used by a 3rd-century predecessor, but which is not documented. Ezana actually celebrated his victories in Africa in several inscriptions, some of them in different versions. On two stelae, there is an inscription in Greek on one side and, on the other, an inscription in Ge'ez, but in South Arabian script, as well as a third inscription in Ge'ez in the nonvocalized Ethiopian script. 22 The versions in the South Arabian script are curious imitations of South Arabian inscriptions. They borrow South Arabian words to render Ethiopian phrases: for example the Ge'ez ngš / ngšt, "king of kings" was replaced by an incorrect mlk/mlkn; and Ge'ez wld, "son", with South Arabian bn. The ornamentation of the two inscriptions in South Arabian script has never been attested in South Arabia (Fig. 1). 23 Another peculiarity of these two inscriptions is that all words end with the letter -m, corresponding to the Sabaic indefinite article, which normally stands at the end of names. In these inscriptions however, the letter -m is attached to all words including verbs and prepositions — a peculiar way of 'making up' the inscription so it looks more South Arabian.

Why did Ezana make this effort to commemorate his victories and conquests in Africa through inscriptions that look — but are not — South Arabian? Who was supposed to read them? Certainly not South Arabians, since they would not understand. Why did Ezana go back to the South Arabian alphabet? Probably for reasons related to the prestige of the South Arabian culture and, perhaps also because of his ambition to control South Arabia.

<sup>&</sup>lt;sup>11</sup> See the inscription CIH 308.

<sup>&</sup>lt;sup>12</sup> NNAG 13 + 14.

<sup>&</sup>lt;sup>13</sup> Ja 635; Ja 631; Ir 12.

<sup>14</sup> ROBIN 1989 a: 151, according to the MAFRAY al-Mi'sāl 3/8-9 inscription.

<sup>&</sup>lt;sup>15</sup> See the inscriptions MAFRAY al-Mi'sāl 3/2, 8-9; 5/16; Ja 635/23-24; Ry 533/21; Ja 631; Ja 574; FB-Maḥram Bilqīs 2. See also Bāṣaoṭih 1991: 395-398.

<sup>&</sup>lt;sup>16</sup> Robin 1989a: 149–152; Вагаоїн 1991: 395–398.

<sup>&</sup>lt;sup>17</sup> Ja 631; MAFRAY al-Mi'sāl 3/8-9.

<sup>&</sup>lt;sup>18</sup> MAFRAY al-Mi'sāl 5/15-18.

<sup>&</sup>lt;sup>19</sup> Ja 635/23-24; Ja 577/8-12.

<sup>&</sup>lt;sup>20</sup> MAFRAY al-Mi'sāl 5/12–20; Rовін 1989 а: 151.

<sup>&</sup>lt;sup>21</sup> See the inscription *RIÉ* 185 I/1–2, in Ge'ez but in South Arabian script: *mlk | 'ksmm | w-d-Ḥmrm | w-Rydnm | w-Ḥbštm | w-Sb'm | w-Slhm | w-Symm | w-Ksm | w-Bgm | mlk | mlkn*. Other versions of Ezana's title appear in the inscriptions in Ge'ez but in South Arabian script (*RIÉ* 185 bis I/1–3); in non-vocalised Ethiopian script (*RIÉ* 185 II/1–3; 185 bis II/1–3); in vocalised Ethiopian script (*RIÉ* 187/1–3; 188/1–4; 189/2–4), and in Greek (*RIÉ* 270/1–5; 270 bis/1–4; 271/6–9).

<sup>&</sup>lt;sup>22</sup> *RIÉ* 185 I and II, *RIÉ* 270; *RIÉ* 185 bis I and II; *RIÉ* 270 bis.

<sup>&</sup>lt;sup>23</sup> RIÉ 190 (on the other side of the stele is an inscription in Greek, RIÉ 271), and RIÉ 186, which could also be ascribed to Ezana.



Fig. 1. Inscription RIÉ 186 = DAE 8 (Axum), fragment (Littmann 1913: pl. II).

Nevertheless, Ezana did not manage to bring South Arabia under his domination. Did he actually intend to conquer it? Probably not. South Arabia, now unified, was strong; and it would have been risky to launch an invasion. Ezana seized lands around Axum and sent expeditions northwards, conquering Kush (probably Meroe). Meanwhile, on the other side of the Red Sea, the Himyarite kings were organizing military expeditions to the north, to central Arabia.

Almost two centuries after Ezana's reign, a successor to the throne of Axum, the negus Kālēb or Ella Aṣbəḥa, fulfilled the ancient ambition of conquering South Arabia. The head of his army, Abraha, declared himself king of South Arabia; and the Ethiopians controlled the country for several decades. King Kālēb's royal title proclaimed control over South Arabia in terms similar to those used by Ezana, mentioning Ḥimyar, Saba' and royal castles (Raydān and Salḥīn). <sup>24</sup> How strange that Kālēb had inscriptions engraved in Ge'ez but with the South Arabian script! This king apparently used the South Arabian alphabet for the sake of prestige and as a commemoration of the victory over South Arabia. The inscriptions describe his successful expedition against the Ḥimyarites and the conquest of the whole country.

#### **Architectural features**

Contacts between these two countries did not just involve war and royal ambitions, not even during the first millennium AD. The use of South Arabian script, as by Kālēb in the 6th century, may be evidence of nothing more than the prestige of South Arabian culture. Nonetheless, the way Ezana wrote his own language using two different scripts, the one from centuries earlier, would attest more than just a kind of 'resurgence'. Similar cultural traits had obviously developed on both sides of the Red Sea throughout the centuries, from the very first millennium BC till the end of the first millennium AD, whatever the contacts were in such or such period. <sup>25</sup> Sabaean artists and craftsmen — some of them being explicitly said to be stonemasons (*grbyn*) coming from Ma'rib <sup>26</sup> — have been documented in having worked in Ethiopia since the 8th century BC, at Yeha, Haoulti-Melazzo, and other wellknown sites, even in Eritrea, as far as a few elements are concerned — for the most part incense burners, 27 and other

<sup>&</sup>lt;sup>24</sup> *RIÉ* 191.

<sup>25</sup> On the relations between northern Ethiopia and southern Arabia in the first millennium BC, see the recent synthesis in Gerlach 2013: 258–261.

<sup>&</sup>lt;sup>26</sup> See RIÉ 26, 27 & 30 (Gobochela), RIÉ 39 (Yehā). See more recently NEBES 2011: 163.

<sup>&</sup>lt;sup>27</sup> RIÉ 31 (Gobochela): ylbb / grbyn / hqnyl 'lmqh, "Ylbb, worker in stone dedicated to Almaqah"; MG 4 = DAI 'Addi 'Akawaḥ 2008-2 (Mäqabər Ga'əwa): b-nhy / w'rn / hqny / hyrhmw / grbyn / bn / hd'n / 'lmqh /, "With the guidance of W'rn, Hyrhm, worker in stone, son of Hd'n, dedicated (this monument) to Almaqah".

kinds of religious 'ex-voto', sometimes referring to their performance. <sup>28</sup> In the Axumite period, evidence is less clear of such a transfer of culture except in architecture, either in techniques or arrangements. <sup>29</sup> Several studies however have been carried out since the beginning of the 20th century, giving details on the site of Axum, <sup>30</sup> and on several sites in Eritrea: Tokonda, <sup>31</sup> Cohaito, <sup>32</sup> Matara, <sup>33</sup> Adulis. <sup>34</sup> This kind of evidence can even be seen on a very remote site we are now excavating on the eastern edge of the highlands of Tigray. <sup>35</sup> But is there any continuum in architecture between a so-called 'pre-Axumite' period — the first millennium BC — and the Axumite kingdom — in the first millennium AD?

## Yehā, Grat Be'al Gebri, Mäqabər Ga'əwa (first millennium BC)

The monument we know best, the Great Temple at Yehā was built during the 8th-7th centuries BC in a heavy masonry. According to A. de Maigret, the inside plan looks very much like the one at Barāqish in the Jawf<sup>36</sup> — on the Arabian side (Fig. 2). The monument consisted in fact of the same two main elements: first of all, a large hypostyle hall, divided by four rows of three pillars each — only the bases of which are preserved — into four aisles adjacent to a wider, central nave, two on either side; secondly, the chapels — usually more than one — set up at the rear part of the temple on a slightly higher level, as it was also the case at Barāqish, <sup>37</sup> and might also have been at Tamna'. Some 200 metres north-west of the huge temple at Yehā, Grat Be'al Gebri which seems to be 150 years older, 38 would as well have followed the same way of building-up as in South Arabia, as far as the remains are concerned: except for two pillars — one about 3.50 m, the other one 2.40 m in height — only the foundations of the walls have

<sup>28</sup> RIÉ 39 (Yehā): lhy / grbyn / bn / yqdm['l /] fqmm / dmryb / śl' / 'ttr / w'lmqh / mhrt / y[d]hw / wbnhw / hyrhm, "Lhy worker in stone, son of Yqdm'l Fqmm from Ma'rib dedicated the work of his hands and (the work) of his son Hyrhm".

been preserved. 39 The building was arranged on an eastwest axis and was erected on a foundation platform a few metres high, the walls of which were slightly stepped: according to I. Gerlach, the inside plan consisted of small interconnected rooms, but the identification of the building is still not sure. 40 Nonetheless, the access on the front wall consisted of a porch, in the very same way as at the Great Temple. The presence of one (Yehā) or two (Grat Be'al Gebri) regular rows of six pillars about 5 m ahead of the building evokes indeed a kind of propylon. 41 Rather than steles, the heavy pillars at Kaskase may as well be the evidence of a similar monument, though none have been excavated yet, 42 but which are reminiscent of similar monoliths erected — among others from South Arabia at Ma'rib (Saba'), Barāqish (Jawf), Tamna' (Qatabān), and related one-to-one to the gate-building of the temple of Bar'an (9th-4th cent. BC), 43 the one of Nakrah (7th-6th cent. BC) 44 and the so-called TT1 (7th cent. BC). 45 Apart from the pillars, both monuments show a kind of heavy masonry, made of rubblework faced on both sides with regular blocks more than 1 m long, carefully dressed and coursed by using either stretchers or headers, and dry laid <sup>46</sup> — a way of assembling well attested in the Jawf. <sup>47</sup> Besides, the blocks were precisely cut on all faces, and their outer face was coarse-stippled with a kind of drafted margin some 4 to 5 cm wide all around but slightly prominent, which is specific to South Arabian building techniques (Fig. 3). 48

Wood was also used at that early period, even if, according to I. Gerlach, not as much as in the South Arabian 'models' which included mudbrick filling. <sup>49</sup> It was frequent though for head pieces and door- and window-frames, even for thresholds, and posts supporting wooden ceilings — as it is nowadays. But it might also have been used together with stones as a kind of framework, as far as one may go by the presence of scorched beams crisscrossed with the courses of the walls at Grat Be'al Gebri. <sup>50</sup>

The temple formerly excavated at Mäqabər Ga'əwa, near Wukro, some 150 km south-east from Yehā, gives a new example of such resemblance, though in a rather modest execution and size. <sup>51</sup> According to P. Wolf — relying on <sup>14</sup>C analysis —, the monument goes back to the same period as the Great Temple at Yehā, <sup>52</sup> and the objects of

 $<sup>^{\</sup>rm 29}$  Anfray 1990: 104. See more recently Manzo 1995; and Breton 2011.

<sup>&</sup>lt;sup>30</sup> Krencker 1913: 107–131.

<sup>&</sup>lt;sup>31</sup> Dainelli & Marinelli 1912: 503–504.

<sup>&</sup>lt;sup>32</sup> *Ibid.*: 470–478; Krencker 1913: 148–152.

<sup>&</sup>lt;sup>33</sup> Anfray 1963: 87–112, 1967: 33–53; Anfray & Annequin 1965: 49–86.

<sup>&</sup>lt;sup>34</sup> Paribeni 1908: col. 437–572; Littmann 1906: 151–182; Anfray 1967: 3–26.

The project is part of a French-Ethiopian research programme, headed by Dr Iwona Gajda and Dr Fabienne Dugast from the CNRS (UMR 8167 Orient & Méditerranée, Paris), and supported by the French Ministry of Foreign Affairs (Paris), the French Centre for Ethiopian Studies (Addis Ababa), the Authority for Research and Conservation of Cultural Heritage (Addis Ababa), and the Bureau of Culture and Tourism of the Regional State of Tigrai (Makale and the Wukro Branch), as well as the *Tabia*'s administrator and officials from Kebele of Sawena.

<sup>&</sup>lt;sup>36</sup> DE MAIGRET & ROBIN 1998: 77–778; DE MAIGRET 2010 and the restitutions of both temples p. 778–779. Such similarities had already been noticed by KRENCKER 1913: 70–89, SCHMIDT 1982 b: 161–169; 1988: 78–98. For more comparisons with Barāqish, see DE MAIGRET & ROBIN 1993 and E. Gatti's restitution on p. 436, Fig. 3.

<sup>&</sup>lt;sup>37</sup> De Maigret & Robin 1993: 438.

<sup>&</sup>lt;sup>38</sup> Based on recent research and radiocarbon analysis performed by the Ethiopian-German Cooperation Project in Yehā, which places it at least as early as 800 BC: Gerlach 2013: 264.

<sup>&</sup>lt;sup>39</sup> Anfray 1997; Gerlach 2013: 267, Figs. 19 & 20.

<sup>&</sup>lt;sup>40</sup> GERLACH 2013: 266. See below.

<sup>&</sup>lt;sup>41</sup> See for Yehā: De Maigret & Robin 1998: 767; for Grat Be'al Gebri: Gerlach 2013: 264 & 267, Figs. 19 & 20.

<sup>&</sup>lt;sup>42</sup> Manzo 1995: 155.

<sup>&</sup>lt;sup>43</sup> Schmidt 1997–1998; Vogt 1998.

 $<sup>^{44}\,</sup>$  Breton, Robin  $et\,al.$  1981; De Maigret & Robin 1993: 435.

<sup>45</sup> Breton et al. 1997: 41-59.

<sup>&</sup>lt;sup>46</sup> *Ibid*.: 745.

<sup>&</sup>lt;sup>47</sup> See Breton 1998: 76–77.

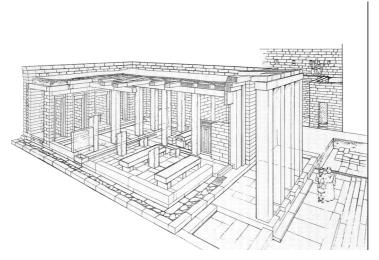
<sup>&</sup>lt;sup>48</sup> Yehā: De Maigret & Robin 1998: 745; Grat Be'al Gebri: Anfray 1997: 19. On the South Arabian origin of such a cutting, see Bessac in Breton (ed.) 2009: 48–49.

<sup>&</sup>lt;sup>49</sup> Gerlach 2013: 265.

<sup>&</sup>lt;sup>50</sup> Anfray 1997: 20; Breton 2011: 59.

 $<sup>^{51}</sup>$  Wolf & Nowotnick 2010.

<sup>52</sup> *Ibid*.: 369.



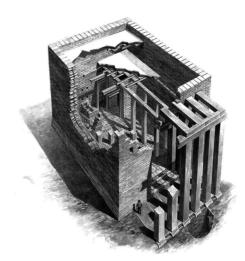


Fig. 2. Reconstitution of the temples at Barāqish, 9th–4th centuries BC (drawing E. Gatti in DE MAIGRET & ROBIN 1993: Fig. 3); and Yehā, 8th century BC (after DE MAIGRET 2010: Fig. 1).



**Fig. 3.** Stone masonry at the Great Temple at Yehā, 8th century BC (photo P. Neury).

cult refer to Almaqah, the main Sabaean god. Apart from a broad staircase, the temple had a porch about 2 m wide, which might have been a kind of propylon, the columns of which would have been made of wood; the rear part of the monument was divided into three rooms, less than 2 m wide, the central one being a chapel. 53 Though, instead of a hypostyle hall, it opened onto a hypaethral naos, since no remains of a roof have been found. This kind of arrangement all the same is known in the Jawf, maybe at an earlier date and anyhow in extra-muros shrines of rather modest size, among them as-Sawdā', 54 Ma'īn, 55 or even Waddum dhū-Masma'im in the Sabaean region. <sup>56</sup> All these architectural features, actually dated back to the early first millennium BC thanks to 14C analysis, give no more than evidence of straight links between northern Ethiopia and South Arabia at that time. The type of temple including a kind of 'propylon' and a hypostyle

## The so-called 'palaces' at Axum and Matara in the Axumite period

A large number of monuments from the Axumite period have been excavated, among others and apart from the port of Adulis on the Eritrean coast: <sup>61</sup> the famous and so-called 'Dungur palace' at Axum, or again the so-called 'palaces' at Matara F. Anfray excavated in the 1960s under three different hillocks in the main valley of the Akkele Guzay, Eritrea. <sup>62</sup> These monuments may go back to the 4th–6th centuries AD or so, as far as the archaeological material is actually concerned. Anfray described each of them as a whole, arranged around a central building which was surrounded by a regular succession of small rooms, in such a way that they enclosed a kind of huge courtyard running in between (Fig. 4). <sup>63</sup>

hall or even a hypaethral *naos* is in fact pretty well-known in the Jawf-Ḥaḍramawt basin, around Ma'rib and Ṣirwāḥ — heart of the Sabaean kingdom —, but also in the coastal plain of Tihāmah. <sup>57</sup> The stonework is clearly related to a Sabaean *savoir-faire* — maybe the wooden framework as well. <sup>58</sup> We used therefore to talk about Arabian influence during this specific period. But what occurred afterwards? Each country developed its own way of building-up, but not much is actually known. <sup>59</sup> According to R. Fattovich, the temples excavated at Haoulti and Melazzo would have had improvements based either on local techniques or Nubian influences. <sup>60</sup> Obviously though, the Axumite kingdom retained few architectural elements from the former period.

<sup>53</sup> Nebes 2010: 216–228.

<sup>&</sup>lt;sup>54</sup> Breton (ed.) 2011: 11-34, Fig. 27.

<sup>&</sup>lt;sup>55</sup> Breton 1998: 66–67 & 75.

<sup>56</sup> SCHMIDT 1982 а: 91-99.

 $<sup>^{57}</sup>$  See for example Breton 1998.

<sup>58</sup> See below.

<sup>&</sup>lt;sup>59</sup> See for different considerations in Manzo 2005, and Breton 2011.

<sup>&</sup>lt;sup>60</sup> FATTOVICH 1990. See for the description of both sites Leclant 1959, and DE CONTENSON 1963.

<sup>&</sup>lt;sup>61</sup> Paribeni 1908: col. 465–474; Littmann 1906: 172–182; Dainelli & Marinelli 1912: 519–523; Anfray 1974.

<sup>&</sup>lt;sup>62</sup> Anfray 1963, 1967; Anfray & Annequin 1965.

<sup>63 &#</sup>x27;Monument A': Anfray 1963: 97; 'Monument B': Anfray & Annequin 1965: 50–56; 'Monument C': *ibid*.: 62–64; 'Monument D': *ibid*.: 65–68.

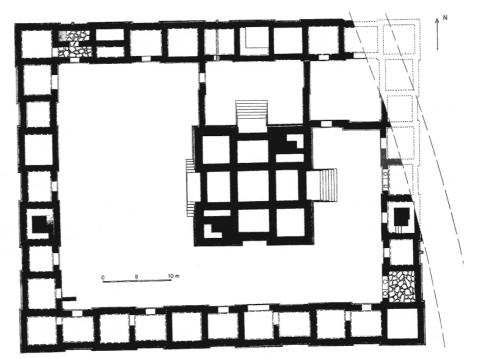


Fig. 4. Foundation plan of 'Monument B' at Matara, 4th–6th centuries AD (drawing Y. Beaudouin in Anfray & Annequin 1965: pl. XXIII).



**Fig. 5.** The northern plane wall of 'Monument A' at Matara, 4th–6th centuries AD (ANFRAY 1963: pl. LXVIII).



**Fig. 6.** Stonework including pillars in one of the rooms of the so-called 'Dungur palace', 4th–6th centuries AD (photo F. Dugast).

The central building was usually not very large — only some 12 to 17 m for each side —, but it looked monumental in spite of the rubble masonry it was made of. As Anfray pointed out, regular levelling courses were set up with slabs of schist every 0.40 to 0.50 m in height, giving a kind of stepped batter to each wall. It looks monumental as well because of the height of the walls — about 2 m —, the central plane wall systematically set back, without any opening save for the one or more stairways on the front walls leading to the upper level (Fig. 5).

The inside was divided into nine rooms, about 3 m each side, and arranged three by three. Some of these small rooms had one, two or even four round stonework pillars inside, topped by a slab of schist — the same arrangement we see at Axum, in the so-called 'Dungur palace' (Fig. 6). As it is, the inside rooms seem to have been mostly unavailable. Anfray stumbled hence over a problem: what was the use of these low-roofed rooms, cluttered up by one or more pillars, and which had mainly no opening,

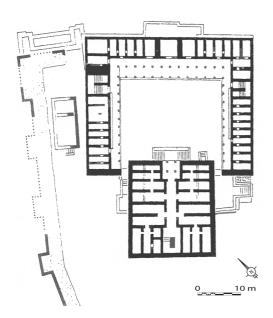
even inside? As he found a human skeleton with rings and chains in one of them — Matara A, room F —, he thought at first of a jail... <sup>64</sup>

#### Similarities with South Arabian architecture

Again, this kind of architecture features and building techniques may be compared to what occurred in South Arabia, either in the first millennium BC or AD. The peculiar way the central part of these complexes was built we know about in fact from years ago, thanks to J. Seigne and Ch. Darles, on a few sites in South Arabia, mainly in the wādī Ḥaḍramawt, but also in the Jawf, Ḥarīb and Bayḥān. 65 Among these, the site

<sup>64</sup> Anfray 1963: 96 & 103.

<sup>&</sup>lt;sup>65</sup> See especially Seigne 1982, 1991; Breton & Darles 1996; Breton et al. 1997: 41–67.



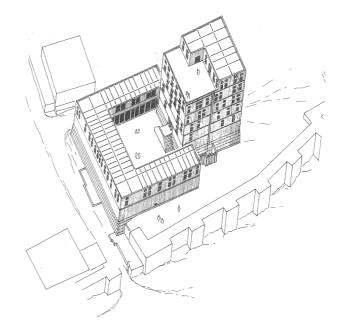


Fig. 7. Foundation plan and reconstitution of the palace of Shabwa, in its supposed 3rd-century state (drawing J. Seigne in SEIGNE 1991: Figs. 2 & 24).

of Shabwa (Ḥaḍramawt), gives the main examples of such houses from between the 4th century BC and the 3rd century AD. <sup>66</sup>

#### A raised platform as foundation

In actual fact, the general layout is hardly ever comparable to the one at Matara. Only the so-called 'royal palace' at Shabwa gives such an example, consisting of a main building about 20 m each side, which faced a courtyard on its main axis, surrounded by a regular succession of small rooms. As few of this kind of complexes, it could additionally include a portico which ran alongside the rooms, enclosing the courtyard on three of its sides (Fig. 7). It is actually difficult to say anything about the surrounding rooms since we only have the planning down of the walls.

Yet, the scheme of the main building consisted of a kind of raised platform, about 2 to 4 m high, without any opening or access — in the same way as in Ethiopia —, on which the house was built, on one or maybe two upper storeys. The main access to the first floor — or main floor as the basement of the platform had no opening — included a stairway set up on the front of the monument or on its side with a stair head to a porch. The basement enclosed several rooms, mainly small rooms. In quite a few cases the rooms seem laid out in a grid, the compartments of which were filled with gravel and pebble, and made them useless for storage or anything else. Unlike Matara though, the outside walls were built in a massive masonry, using squared stones, slightly stepped at their bases.

The floor surface of the building was not very large — 15 to 20 m each side or so in both countries — but the way it was built made it compact enough to support several storeys in South Arabia, which involved a wooden structure and mudbrick filling. The evidence of such a framework has been well documented at the sites of Shabwa and Hajar am-Dhaybiyya, on the northern side of the wādī Dura'. 67 It consisted of wooden crosspieces set at regular intervals on top of the foundation walls, and joined up together by two horizontal beams slightly set back from the stone wall, each piece of wood made alternatively as a mortise or tenon for joining. This lattice formed hence the ground plates and made room for posts set up at regular intervals, two by two, for supporting the head plates and the upper storey or ceiling. The structure though suggests that there were difficulties joining the two wall frames at the corners, in such a way that the result looks like a stacked framework that has no parallel in any building technique using filled frame, which usually includes counterbraces and other wooden pieces in order to buttress the timber framing all together with the corner junctions (Fig. 8). 68

As far as one may go by the great monoliths of Axum — as it has been related to on more than a few occasions <sup>69</sup> — the kind of wooden structure might have occurred in the Axumite architecture as well, not only for the ceiling framework the terracotta models of houses from Haoulti to

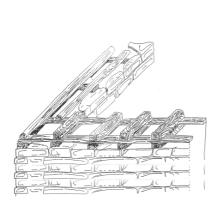
A wooden framework

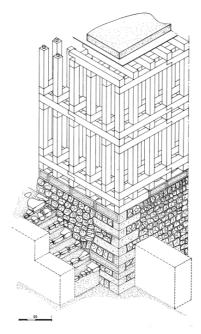
<sup>67</sup> Breton et al. 1998: 98-99.

<sup>&</sup>lt;sup>68</sup> For more details see also Darles, in Breton (ed.) 2009: 89-90.

<sup>&</sup>lt;sup>69</sup> LITTMANN & KRENCKER 1906: 23–31; KRENCKER 1913: 10–28; VAN BEEK 1967: 113–122; BUXTON & MATTHEWS 1971–1972: 56–58 & Figs. 1 & 6; ANFRAY 1990: 105–107; SEIGNE 1991: 163–164; MANZO 1995: 157–158.

<sup>66</sup> Breton (ed.) 2009.





**Fig. 8.** Diagram of wooden framework at Hajar am-Dhaybiyya in Yemen (after Breton *et al.* 1998: Fig. 5) and reconstitution of the house's walls at Shabwa (drawing Ch. Darles in Darles 2009: Fig. 20 b; and J. Seigne in Seigne 1991: Fig. 20).

give an example. <sup>70</sup> Though, instead of mudbrick — which might not have been much used in northern Ethiopia, unless in Eritrea <sup>71</sup> — stonework would have involved levelling courses along with such a framework of beams and crosspieces. Relevant examples of such an assembling is given either by Debra-Damo's monastery (south Addigrat, on the eastern edge of the plateau) or the ancient church at Asmara (Eritrea), <sup>72</sup> which have both been erected, according to tradition, shortly after the 6th century AD. Both consisted of a wood-stone framework, including horizontal beams and crosspieces which have rounded ends that extend out of the external facing walls, and are related to 'monkeys' heads' (Fig. 9).

#### A frequently used building technique

Very recently, buildings of the same type have been excavated at Wakarida, about 70 km north-east of Wukro, two hours trail from Edaga Hamus, on the far eastern edge of the highlands of Tigray — to the east of Sewne, a village depending on Sa'esi'e Ts'ada Emba *woreda*. 73

#### Wakarida, on the far east highlands

At first sight, Wakarida seems not to be on any commercial road, nor to have any contacts — at least major contacts — with the highlands: the site lies on the western slope of the chains of mountains, and turned therefore more toward Afar than toward the Axumite kingdom. One would hence

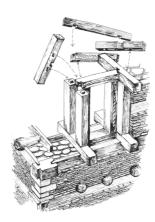




Fig. 9. Diagram of wall structure including a window frame in Ethiopia during the Axumite period, based on Debra Damo (after D.H. Matthews in Buxton & Matthews 1971–1972; Fig. 1).

expect to find scattered farms: conversely, on one of the outcrops overlooking a large valley called May Ayni, walls have been found that suggest remains of several buildings, and hence a kind of built-up area, not to say a town, going back to the Axumite period. <sup>74</sup>

Two monuments have been partly excavated so far — one on top of the outcrop (A building), the other on the eastern slope (D building). The ground plan of A building was basically a square (13 m each way), the mid-portion of each side systematically recessed (Fig. 10). The only remains are a kind of low podium — only 0.50 to 0.60 m high —, the facing walls of which consisted of rubble masonry connected with regular levelling courses set up with slabs of schist in such a way as to have small steps — in the very same way as at Matara. A broad stairway headed the north-

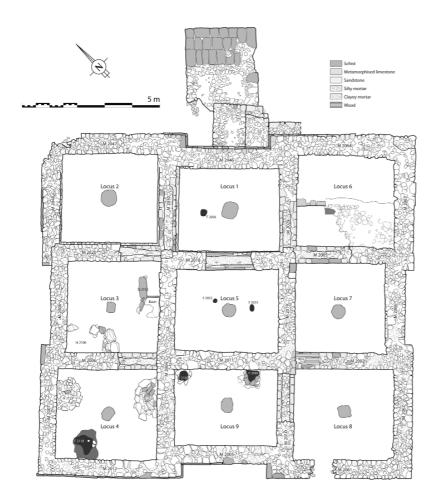
 $<sup>^{70}\,</sup>$  DE CONTENSON 1963: 44 & pl. XXXVIII & XXXIX – dated back to the 3rd cent. BC & and the 1st cent. AD.

<sup>&</sup>lt;sup>71</sup> Dainelli & Marinelli 1912: 532; Anfray 1974: 751, 1990: 95–105.

<sup>&</sup>lt;sup>72</sup> Buxton 1968: 51-60.

The study of the site and its environment has been carried out since 2011 thanks to J. Charbonnier, S. Antonini and X. Peixoto (excavation), V. Buffa, A. Benoist, C. Verdellet and V. Bernard (ceramology), O. Barge, E. Régagnon and Y. Callot (environment). See all fieldwork reports 2011, 2012 & 2013 on http://halshs.archives-ouvertes.fr.

Relaying to coins, archaeological material as pottery, and <sup>14</sup>C analysis giving radiocarbon dates between AD 245 and 389 (-1725 +/- 25 cal. BP) on top of the outcrop, and between AD 380 and 537 (-1625 +/- 30 cal. BP) on the eastern slope.



**Fig. 10.** Foundation plan of A building at Wakarida, 3rd—4th centuries AD (drawing J. Charbonnier).

eastern side, and lead to a small platform (2  $\times$  1.10 m) ending at the façade.

The inside platform was divided into nine rooms arranged three by three, six of them having a round stonework pillar in the middle, topped by a horizontal slab of schist situated at floor level for bolstering it. Apart from rubble stones spread all over the site, almost nothing from above this level was left, and it is difficult to say whether the construction of the walls involved ground plates or any wooden framework together with stone levelling courses. Clues could be found as to the positions of doors. Thresholds were actually set a few centimetres above the floor and were made of two horizontal beams, one on each side of the doorway, topped by a third horizontal one. Excluding the access leading to the central part, all the doors apparently opened at the inner corner of each room. As a result, the inside plan of the house would have consisted of nine small rooms about 10 m<sup>2</sup> each, including maybe a post in the middle. It is at least difficult to imagine a second storey since the walls were only 0.50 to 0.60 m wide.

The building may be identified as an ordinary house, since few of them seem to have been established as well all around the outcrop. It might have been surrounded by a regular succession of small rooms, enclosing a kind of courtyard in between, and hence could have been the residence of some wealthy people. Instead of being erected on a huge platform as is usually known, its situation on top of the outcrop might have signalled the social or political

importance of its inhabitants. Though, the platform of the other building on the eastern slope was much larger, and seems there to have corrected the unevenness of the ground. Its plan was slightly different, of a more oblong nature, with only six rooms arranged two by two, as far as the remains are concerned, largely damaged by the local people (Fig. 11). It, too, was surrounded by a succession of rooms, some of them also built on a podium in which storage jars have been found, but no real courtyard. The way of building-up was the same, the inside arrangements quite different, and though of difficult identification.

#### Private houses, palaces or religious monuments?

Wakarida is obviously not the only remote site at the far edge of the highlands. Several others have in fact been found in and out of the same valley. It may yet be difficult to assert if it was really a town or a village as one would usually consider it, since we do not know much about the socio-political aspects of the Abyssinians at that time. How in fact were Matara and other similar 'cities' ruled? What were indeed these so-called 'palaces': were they set apart or part of a town? Where and how did the local people live: were they self-governing farmers, groups of small pastoral communities, <sup>75</sup> or under the control of the kingdom, even in a remote location like Wakarida?

<sup>&</sup>lt;sup>75</sup> See among others D'Andrea 1997; Finneran 2007; Phillipson 2009.



Fig. 11. The western wall of D Building and its surrounding rooms at Wakarida, 4th-6th centuries AD (photo X. Peixoto).

The characteristics of this type of house in South Arabia have been completed thanks to the presence of dedicatory inscriptions inserted into the foundation basements, some of them describing some structural parts of the house through the use of specific terms, <sup>76</sup> to which R. Loreto related on the basis of the available architectonic and structural data. <sup>77</sup> As a result, this type of construction has been identified with residential buildings, usually found in urban contexts, and well-attested in South Arabia since the 7th century BC. They are defined as 'on basement buildings' or 'tower houses' — like most houses in contemporary Yemen.

The reason why such houses were built in South Arabia on a huge platform might have been geological, in order to make the house steadier because of the ground which was saturated with salt at Shabwa. It might have been also because of seismic activity, if not for a plain defensive purpose. <sup>78</sup> At Wakarida, the platform might have simply corrected the unevenness of the ground. Beyond such explanations, the reasons could have been for the most of a cultural or a symbolic nature. Anfray would then have been right when he identified Matara's monuments as 'palaces'. But they were not very far from each other — this holds too for Wakarida —, and at least some of them would merely have belonged to wealthy people — as at Shabwa.

The set of buildings along with the inside arrangement of these 'tower-houses' — as far as the remains are concerned — seem though to have been different in both countries in spite of the technical elements they shared. The main house in Ethiopia seems to have been basically

As it is, the built-up context at Shabwa provides a welldefined model as might be possible in Ethiopia. The actual context of most of these monuments in Ethiopia would have made J.-F. Breton suggest distinguishing a third model, namely a 'villa'. 79 Apart from the 'classical' connotation it may have, which could induce thinking of Roman influences or such, as this designation would call on a general ground plan of the complex arranged around the courtyard but not the 'tower house' as it was in Ethiopia. Then again, we know nothing about the surrounding rooms, which in the villae linked to farming, and would allow thinking of a sort of feudal system of which we have no evidence in Ethiopia. On the other hand, and according to I. Gerlach, owing to its small interconnected rooms, Grat Be'al Gebri might have been an administrative building, perhaps though with a religious function. 80 As it is again, and given the presence

a square less than 20 m each side, including nine rooms arranged three by three, without any corridor; it was different in South Arabia, as a corridor ran lengthwise across the whole building, and opened on either side in different rooms. Besides, none of the 'tower-houses' in South Arabia had additional housings all around, enclosing a courtyard, but in very few cases associated then with 'palaces'. The size could have make the difference between a 'common' or a wealthy people's house limited to a 'tower-house', from a 'palace' which would have included wings behind a U-shaped stoa facing a huge courtyard. All the same, the so-called 'palaces' at Matara or Dungur might have included a kind of 'towerhouse', as they were in South Arabia, probably though of a lesser number of storeys due to the narrowness so far as to the heaviness of the wood-stone walls, which might have been unstable in their height.

<sup>&</sup>lt;sup>76</sup> AGOSTINI 2008. Inscriptions related as well to houses with two or more storeys.

<sup>&</sup>lt;sup>77</sup> LORETO 2011.

<sup>&</sup>lt;sup>78</sup> Seigne 1991: 162.

<sup>&</sup>lt;sup>79</sup> Breton 2011: 66–68.

<sup>80</sup> Gerlach 2013: 266. About both functions, private or religious, whatever



**Fig. 12.** The building of a corner of Kaleb's tomb at Axum, 6th–7th centuries AD (photo F. Dugast).

at its rear part of what Anfray identified as a funerary vault, one of the Axumite building at Matara — Matara D — might have been a religious monument of a rectangular plan ( $10 \times 15$  m). §1 A very similar building was reported much earlier by Conti Rossini, at Aggula Čerkos, near Makale, nearly none of which is preserved today, but which he identified either with an Axumite church §2 since a new church was actually erected just nearby... It definitely seems difficult to look for any functional or social distinctions where there is no structural evidence — at least currently as the only remains we have are the raised platforms.

#### Transfer and transmission of culture

Be that as it may, the presence in such a remote and modest site as Wakarida — whatever it was — of a specific kind of monument we know of all over the Axumite kingdom, shows how much these specific architectural features were part of an ongoing transfer of practices that originated back in the very first millennium BC — or even earlier. At that period in fact, definite elements were improved which still involved in the first millennium AD. Some of them might have come from South Arabia, or vice versa — among which the raised platform and the wooden framework marked out at Grat Be'al Gebri in the early first millennium BC, or even

the way the outer faces of the regular blocks were coarse stippled with a prominent drafted margin all around.

Each of these elements were used down through the centuries in both countries, but with slight differences. The heavy masonry, still in use in the raised platforms in 3rdcentury South Arabia, has been moved on in the Axumite architecture actually made of rubble masonry; though most of the buildings still involved the same hewed blocks slightly stepped in order to reinforce their corners — as it was at Matara and plainly at Axum, the tombs of Kaleb and Gabre Masqal or Enda Mikael (6th cent. AD) (Fig. 12). Walls were all the same stepped, slabs of schist being used in order to level courses every 0.40 or 0.50 m in height. Besides, the drawing of the plane walls, alternatively recessed and in projection, we know of in the Axumite architecture, was already used either at Grat Be'al Gebri in 800 BC 83 or even more protruding at Tamna', on the other side of the Red Sea, in the 7th-4th centuries BC. 84 Window and door frames probably underwent similar improvement in both countries, only the stele at Axum and again a few troglodyte churches show it, either petrified or of wood. Though the stacked timber framing and mudbrick filling, familiar to Shabwa, and obviously to Eritrea as well, might already have been used, but together with stonework at Grat Be'al Gebri in the early 800 BC, and later on as it was at Debra-Damo in order to reinforce the rubble masonry. At least, J.-F. Breton wondered in the 1980s whether some of the South Arabian achievements were or not of Ethiopian origin... 85

Whatever were their contacts, both countries were continuously in interaction, even when, for long periods, there seems to have been no direct contact. They shared a similar natural environment, both were active in longdistance trade: these areas often evolved in parallel, if not alike. Several cultural traits were handed down over the centuries, among them: the Sabaean script for writing Ethiopian languages and construction techniques. These would make us consider a firmly fixed tradition — not to say only resurgence — that passed on traits from different domains that had been shared earlier with South Arabia. Though, the phenomenon of South Arabian influence upon northern Ethiopia is still difficult to assess since not much on the historical and economical context is really known or understood. At least, other contacts and relations obviously occurred all the same with other regions, among others Sudan and Egypt, India and North Arabia. 86

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the building in South Arabia, see DE MAIGRET 2005: 106-107.

<sup>81</sup> Anfray & Annequin 1965: 65-68 & pl. XLV.

<sup>82</sup> CONTI ROSSINI 1928: pl. xl, first discovered by Hozier 1869: 137. See more recently Fesseha Giyorgis 1987.

<sup>83</sup> GERLACH 2013: 266-267.

<sup>84</sup> Darles, in Breton (ed.) 2009: 90.

<sup>85</sup> Breton, in Breton, Audouin et al. 1981: 185.

<sup>&</sup>lt;sup>86</sup> See already Anfray 2012: 20.

#### References

#### Sigla of inscriptions

For the sigla of Ethiopan inscriptions, see Bernand *et al.* 

For the sigla of South Arabian inscriptions, see *Sabaic Dictionary* and STEIN 2003.

DAE: Deutsche Aksum-Expedition: see LITTMANN 1913.

DAI 'Addi 'Akawaḥ 2008-2: see Nebes 2010.

MG 4: see Gajda et al. 2009.

RIÉ: see Bernand et al. 1991.

FB-Mahram Bilqīs 2: see Bron 2012.

MAFRAY al-Mi'sāl 3 and 5: see Robin 1981 and Müller 2010: 28–31 (Mi'sāl 5).

#### **Sources**

*Periplus Maris Erythraei*, ed. L. Casson, Princeton, Princeton University Press, 1989.

Pliny, *Natural History*, ed. H. RACKHAM (The Loeb Classical Library), Cambridge (Mass.) – London, Heinemann, vol. II (Books III-VII), 1943 (reed. 1969); vol. IV (Books XII-XVI), 1945 (reed. 1968).

#### References

#### AGOSTINI A.

2008 Le iscrizioni di costruzione sudarabiche. Lessico, archeologia, società, PhD dissertation, University of Florence.

#### Anfray F.

- 1963 "La première campagne de fouilles a Matara, près de Sénafé (novembre 1959-janvier 1960)", *Annales d'Éthiopie* 5: 87–112.
- 1967 "Matarâ", *Annales d'Éthiopie* 7: 33–53.
- 1974 "Deux villes axoumites : Adoulis et Matara", in *Quarto Congresso Internazionale di studi Etiopici (Roma 1972)*, Rome, Accademia nazionale dei Lincei: 745–765.
- 1990 Les anciens Éthiopiens, Paris, A. Colin.
- "Considérations sur quelques aspects archéologiques des relations de l'Éthiopie et de l'Arabie antiques", in Y. Beyene, R. Fattovich, P. Marrassini, A. Triulzi (eds.), *Etiopia e oltre. Studi in onore di Lanfranco Ricci*, Naples, Istituto universitario orientale: 17–25.
- 1997 "Yéha. Les ruines de Grat Be'al Gebri. Recherches archéologiques", *Rassegna di Studi Etiopici* 39: 5–23.
- 2012 "Observations sur la construction axoumite", in A. Bausi, A. Brita & A. Manzo (eds.), *Æthiopica et orientalia. Studi in onore di Yaqob Beyene* (Studi africanistici, serie Etiopica 9), Naples, Università di Napoli, vol. 1: 3–22.

#### Anfray F. & Annequin G.

1965 "Matarâ, deuxième, troisième et quatrième campagnes de fouilles", *Annales d'Éthiopie* 6: 49–86.

#### Ansari A.

2010 "Qaryat al-Fāw", in A. Al-Ghabban, B. André-Salvini, F. Demange, C. Juvin & M. Cotty (eds.), Routes d'Arabie: archéologie et histoire du royaume d'Arabie Saoudite, Paris, Somogy – Musée du Louvre: 311-363

#### AVANZINI A.

1985 "Problemi storici nella regione di al-Ḥadā' nel periodo preislamico e nuove iscrizioni", *Studi Yemeniti I. Quaderni di Semitistica* 14: 53–115.

#### Bāfaqīh M.A.

1991 L'unification du Yémen antique. La lutte entre Saba', Ḥimyar et Ḥaḍramawt du f<sup>er</sup> au ur siècle de l'ère chrétienne (Bibliothèque de Raydān, 1), Paris, P. Geuthner.

#### BEESTON A.F.L.

1975 "The Himyarite problem", *Proceedings of the Seminar for Arabian Studies* 5: 1–7.

#### BERNAND E., DREWES A.J., SCHNEIDER R. & ANFRAY F.

1991 Recueil des inscriptions de l'Éthiopie des périodes pré-axoumites et axoumites I-III, Paris, De Boccard.

#### Breton J.-F.

- 1998 "Les temples de Ma'in et du Jawf (Yémen) : état de la question", *Syria* 75: 61–80.
- 2011 "Relations between Ethiopia and South Arabia: problems of architecture", *Annales d'Éthiopie* 26: 53–77.

#### Breton J.-F. (ed.)

- 2009 Fouilles de Shabwa IV Shabwa et son contexte architectural et artistique, du 1<sup>er</sup> s. av. J.-C. au 11<sup>e</sup> s. ap. J.-C. (Bibliothèque archéologique et historique 190), Sanaa, CEFAS Beirut, IFPO.
- 2011 Le sanctuaire de 'Athtar Dhû-Riṣâf d'as-Sawda (Arabia Antica 7), Rome, L'Erma di Bretschneider.

#### Breton J.-F., Audouin R. & Seigne J.

1981 "Rapport préliminaire sur la fouille du "château royal" de Shabwa (1980-1981)", *Raydan* 4: 163–191.

#### Breton J.-F., Robin Ch. & Ryckmans J.

1981 "Le sanctuaire minéen de NKRḤ à Darb aṣ-ṣabī (environs de Barāqish). Rapport préliminaire (première partie)", *Raydan* 4: 249–261.

Breton J.-F. & Darles Ch.

1996 "Les maisons-tours dans l'Antiquité", in P. Bonnenfant (ed.), Sanaa, architecture domestique et société, Paris, CNRS Éditions: 449–457.

Breton J.-F., Darles Ch., Robin Ch. & Swauger J.-L.

1997 "Le grand monument de Tamna' (Yémen), architecture et identification", *Syria* 74: 33–72.

Breton J.-F., McMahon A.M. & Warburton D.A.

1998 "Two seasons at Hajar Am-Dhaybiyya, Yemen", Arabian Archaeology and Epigraphy 9: 90–111.

Bron F.

2012 "Une nouvelle inscription du règne de Laḥay'athat Yarkham, roi de Saba' et dhū-Raydān", *Semitica* 54: 81–89.

BUXTON D.

1968 "Äthiopische Architektur im Mittelalter", in G. Gerster (ed.), *Kirchen im Fels, Entdeckungen in Äthiopien*, Berlin – Köln – Mainz, Kohlhammer: 51–60.

BUXTON D. & MATTHEWS D.

1971–1972 "The reconstruction of vanished Akumite buildings", *Rassegna di Studi Etiopici* 25: 53–77.

DE CONTENSON H.

1963 "Les fouilles de Haoulti en 1959, rapport préliminaire", *Annales d'Éthiopie* 5: 41–52.

CONTI ROSSINI C.

1928 Storia d'Etiopia: dalle origine all'avvento della dinastia salomonde, Milan, Lucini.

D'ANDREA C.

1997 "Ethnoarchaeological research in the Ethiopian highlands", *Nyame Akuma* 47: 19–26.

Dainelli G. & Marinelli O.

1912 Risultati scientifici di un viaggio nella Colonia Eritrea, Florence, Tip. Galletti e Cocci.

Darles Ch.

2009 "Des formes et des formules architecturales originales ?", in J.-F. Breton (ed.), Fouilles de Shabwa IV – Shabwa et son contexte architectural et artistique, du f<sup>er</sup> s. av. J.-C. au Iv<sup>e</sup> s. ap. J.-C., Sanaa, CEFAS – Beirut, IFPO: 83–105.

DE MAIGRET A.

2005 "Recent discoveries in the 'Market Square' of Tamna'", in A.V. Sedov & I.M. Smilianskaia (eds.), Arabia Vitalis. Studies on Arab Orient, Islam and Ancient Arabia in Honour of V. V. Naumkin, Moscow, Institute of Asian and African Countries: 346–353.

2010 "Il grande tempio di Yéha (Etiopia) ed i templi minei di Barāqish (Yemen)", in F. MAZZEI & P. CARIOTI (eds.), Orient, Occidente e dintorni... Scritti in onore di Adolfo Tamburello, Naples, Università di Napoli "L'Orientale", vol. II: 773–781.

DE MAIGRET A. & ROBIN Ch.J.

1993 "Le temple de Nakrahl à Yathill (aujourd'hui Barāqish), Yémen. Résultats des deux premières campagnes de fouilles de la mission italienne", *Comptes rendus de l'Académie des inscriptions et belles-lettres* 137/2: 427–496.

1998 "Le Grand Temple de Yéha (Tigray, Éthiopie), après la première campagne de fouilles de la Mission française (1998)", *Comptes rendus de l'Académie des inscriptions et belles-lettres* 142/3: 737–798.

Drewes A.J.

1959 "Les inscriptions de Melazo", *Annales d'Éthiopie* 3: 83–88.

1962 Inscriptions de l'Éthiopie antique, Leiden, E.J. Brill.

FATTOVICH R.

1990 "Remarks on the Pre-Axumite Period in Northern Ethiopia", *Journal of Ethiopian Studies* XXIII: 1–33.

FATTOVICH R., BARD K.A., PETRASI L. & PISANO V.

2000 The Aksum Archaeological Area: a preliminary assessment, Naples, Istituto Universitario Orientale.

Fesseha Giyorhis.

1987 *Storia d'Etiopia*, Naples, Istituto universitario orientale [text in Italian and Tigrignā].

Finneran N.

2007 *The Archaeology of Ethiopia*, London, Routledge.

Gajda I., Gebre Sellassie Y. & Berhe H.

2009 "Pre-Aksumite inscriptions from Mäqabər Ga'əwa (Tigrai, Ethiopia)", *Annales d'Éthiopie* 24: 33–48.

GERLACH I.

2013 "Cultural contacts between South Arabia and Tigray (Ethiopia) during the early 1st Millennium BC. Results of the Ethiopian-German cooperation project in Yeha", Zeitschrift für Orient-Archäologie 6: 255–277.

HOZIER M.H.

1869 The British Expedition to Abyssinia: compiled from authentic Documents, London.

#### Krencker D.

1913 Deutsche Aksum-Expedition II, Berlin, G. Reimer.

#### LECLANT J.

1959 "Haoulti-Melazo (1955-1956)", *Annales d'Éthiopie* 31: 83–100.

#### LITTMANN E.

- 1906 "Preliminary report of the Princeton University Expedition to Abyssinia", *Zeitschrift für Assyriologie* XX: 151–182.
- 1913 Deutsche Aksum-Expedition, IV. Sabäische, Griechische und Altabessinische Inschriften, Berlin, Verlag von Georg Reimer.

#### LITTMANN E. & KRENCKER D.

1906 Vorbericht der Deutschen Aksumexpedition, Berlin, Königliche Akademie der Wissenschaften.

#### LORETO R.

2011 "South Arabian inscriptions from domestic buildings from Tamna' and the archaeological evidence", *Arabian Archaeology and Epigraphy* 22: 59–96.

#### Manzo A.

1995 "Considerazioni sull'architettura dell'Etiopia antica", *Rassegna di Studi Etiopici* 39: 155–172.

#### Munro-Hay S.C.

- 1984 *The Coinage of Axum*, New Delhi, Manohar Publications Somerset, R.C. Senior Ltd.
- 1989 "The al-Madhāriba Hoard of Gold Axumite and Late Roman Coins", *Numismatic Chronicle*, 1989: 83–100, Figs. 22–29.

#### MÜLLER W.W.

2010 Sabäische Inschriften nach Ären datiert. Bibliographie, Texte und Glossar (Akademie der Wissenschaften und der Literatur, Mainz, Veröffentlichungen der Orientalistischen Kommission 53), Wiesbaden, Harrassowitz.

#### NEBES N.

- 2010 "Die Inschriften aus dem 'Almaqah-Temple in 'Addi 'Akaweh (Tigray)", *Zeitschrift für Orient-Archäologie* 3: 216–237.
- 2011 "An Inscription in Ancient Sabaic on a Bronze Kettle from Färäs May, Tigray", *Ityoppis* 1: 159–166.

#### PARIBENI R.

1908 "Ricerche nel luogo dell'antica Adulis", *Monumenti antichi* XVIII/3: col. 437–572.

#### PHILLIPSON D.W.

2009 "The First Millennium BC in the Highlands of Northern Ethiopia and South-Central Eritrea: A reassessment of cultural and political development", *African Archaeological Review* 26: 257–274.

#### ROBIN Ch.J.

- "Les inscriptions d'al-Mi'sâl et la chronologie de l'Arabie méridionale au III<sup>e</sup> siècle de l'ère chrétienne", *Comptes rendus de l'Académie des inscriptions et belles-lettres*: 315–339.
- 1989 a "La première intervention abyssine en Arabie méridionale (de 200 à 270 de l'ère chrétienne environ)", in T. Beyene (ed.), *Proceedings of the Eight International Conference of Ethiopian Studies*, Addis Ababa, Institute of Ethiopian studies, vol. 2: 147–162.
- 1989 b "Aux origines de l'État Ḥimyarite: Ḥimyar et Dhû-Raydân", in M.M. IBRAHIM (ed.), Arabian Studies in Honour of Mahmoud Ghul: Symposium at Yarmouk University. December 8-11, 1984 (Yarmouk University Publications, Institute of Archaeology and Anthropology Series 2), Wiesbaden, Harrassowitz: 104–112.
- 2001 "La caravane yéménite et syrienne' dans une inscription de l'Arabie méridionale antique", in F. Sanagustin (ed.), *L'Orient au cœur, en l'honneur d'André Miquel*, Paris Lyon, Maisonneuve et Larose Maison de l'Orient Méditerranéen: 207-216.

Sabaic Dictionary: Beeston A.F.L, Ghul M.A., Müller W.W. & Ryckmans J.

1982 Sabaic Dictionary (English-French-Arabic), Louvain-la-Neuve, Peeters – Beirut, Librairie du Liban.

#### SCHNEIDER R.

- 1976 "Documents épigraphiques de l'Éthiopie V", *Annales d'Éthiopie* 10: 81–93.
- 2003 "Remarques sur les inscriptions sabéennes de l'Éthiopie pré-Aksumite", in J. Lentin & A. Lonnet (eds.), *Mélanges David Cohen : études présentées à l'occasion de son 85*e anniversaire, Paris, Maisonneuve et Larose: 609–614.

#### SCHMIDT J.

- 1982 a, "Der Tempel des Waddum Dū-Masma'im", in *Archaologische Berichte aus dem Yemen* I, Mainz, Philipp von Zabern: 91–99.
- 1982 b "Zur altsüdarabischen Tempelarchitecktur", in *Archaologische Berichte aus dem Yemen* I, Mainz, Philipp von Zabern: 161–169.
- 1988 "Ancient South Arabian sacred buildings", in W. DAUM (ed.), *Yemen*, Innsbruck Frankfort: 78–98
- 1997–1998"Tempel und Heiligtümer in Südarabien. Zu den materiellen und formalen Strukturen der Sakralbaukunst", *Nürnberger Blätter zur Archäologie* 14: 20 ff.

#### SEIGNE J.

1982 "Les structures I, J et K de Mashgha", in J.-F. Breton, R. Audouin, L. Badre & J. Seigne, *Le wâdî Hadramawt. Prospections* 1978-1979, Aden, Yemeni Center for Culture and Archaeological Research: 22–23.

1991 "Le château royal de Shabwa : architecture, techniques de construction et restitutions", in J.-F. Breton (ed.), "Fouilles de Shabwa II. Rapports préliminaires", *Syria* 68: 134–143.

#### STEIN P.

2003 Untersuchungen zur Phonologie und Morphologie des Sabäischen (Epigraphische Forschungen auf der Arabischen Halbinsel 3, Deutsches Archäologisches Institut, Orient-Abteilung), Rahden/Westf, Marie Leidorf.

#### TINDEL R.D.

"The Rise of the Himyar and the Origins of Modern Yemen", in N. Nebes (ed.), Arabia Felix, Beiträge zur Sprache und Kultur des vorislamischen Arabien. Festschrift Walter W. Müller zum 60. Geburtstag, Wiesbaden, Harrassowitz: 273–278.

#### VAN BEEK G.W.

1967 "Monuments of Axum in the light of South Arabian archaeology", *Journal of the American Oriental Society* 87: 133–122.

#### Vogt B.

1998 "Der Almaqah-Tempel von Bar'an ('Arsh Bilqis)", in *Jemen – Kunst und Archäologie im Land der Königin von Saba*, Ausstellung im Kunsthistorischen Museum Wien, 1998-1999, Vienna, Kunsthistorisches Museum – Milan, Skira: 219 ff.

#### VON WISSMANN H.

1964 "Ḥimyar, Ancient History", *Le Muséon* LXXVII: 429–499.

#### WOLF P. & NOWOTNICK U.

2010 "The Almaqah temple of Meqaber Ga'ewa near Wuqro (Tigray, Ethiopia)", in *Proceedings of the Seminar for Arabian Studies* 40: 367–380.

#### YULE P.

2007 *Himyar. Spätantike im Jemen*, Aichwald, Linden Soft.