

Excavations on the Coral Mosques of the Maldives

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Abstract

This report presents the results of an archaeological mission done in the Maldives archipelago located to the south-west of India, in the Indian Ocean. In November 2017, we carried out archaeological excavations and surveys as well as collected oral traditions on two sites, the Fandiyaaru Mosque and Koagannu Cemetery in Hulhumeeddho town on Addu Atoll and the Friday Mosque of Fenfushi on Alifu Dhaalu Atoll. Two outcomes were expected from our mission: first, to provide new scientific data on the coral mosques of the Maldives in order to improve the chances of success of nomination of the mosques on the World Heritage List of UNESCO; then to support the conservation project of the Maldivian government and international organisations such as UNESCO and the World Monuments Fund (WMF). One major question during our excavation was the continuity of the settlements from pre-Islamic cultures and influences from Buddhist architecture on local Islamic architecture.

Keywords

Maldives – Indian Ocean – Islam – mosques – Buddhism

1 Introduction

This report presents an area totally ignored by Islamic archaeology, the Maldives. The Maldives archipelago is located to the south-west of India, in the Indian Ocean. The Maldives is made up of atolls, or groups of 1,196 islands, 200 of which are inhabited (Fig. 1). The Maldives has between 180 and 200 *khutba* (Friday) mosques, which equates to practically one mosque per island (Forbes, 1983: 67–8; Reynolds, 1984). The Maldivian mosques differ greatly from their Indian counterparts. Except for two or three examples (including the one in Malé, the capital city) the Maldivian mosques do not have minarets. The mosques are not oriented strictly towards Mecca as per the norms of Islam and the orientation of the *qibla* wall at 12.5° north-west is incorrect. Maldivian mosques do not have a niche for the *mihrāb* and sometimes not even a *mihrāb*, something that is very unusual for a mosque. However, the uniqueness and best feature of Maldivian mosques is probably their building material, the sea coral.

The first settlers in the Maldives were migrants who came from Kerala in the fifth or fourth century BC. These migrants were followed by people from Sri Lanka. Buddhism

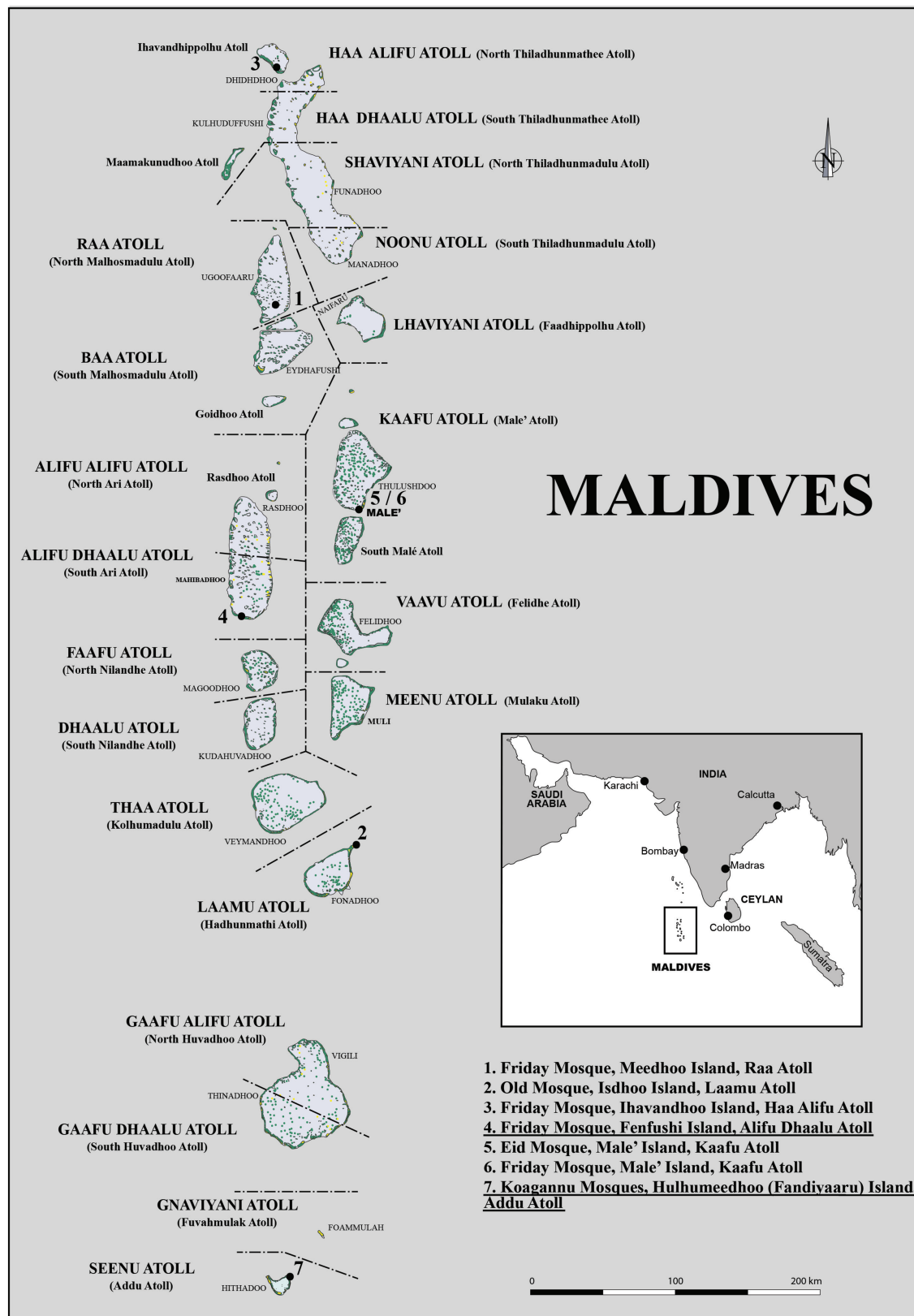


FIGURE 1
 Map of the Maldives and the six monuments selected for the current UNESCO listing, plus one site unlisted and excavated
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arrived in Sri Lanka circa 250 BC and probably in the Maldives circa 200 BC. The first phases of settlement ended at the beginning of the first millennium (Forbes, 1983: 43–4). Buddhism was firmly established in the Maldives between the first and second centuries. Islam was introduced to the Maldives by merchants coming from the Malabar Coast between the seventh and eighth centuries (Forbes, 1983: 47). The Maldives has been integrated into the Muslim trading system since the ninth century and it was influenced architecturally by cultures all around the Indian Ocean, such as Yemen, Hormuz, Oman, Persia and India, as well as Gujarat and the Deccan Plateau. It was not until the twelfth century that Islam became the main religion of the Maldives. According to tradition, most of Maldivians converted to Islam in 1153. The people broke the idols, razed the temples to the ground and adopted Islam (Bell, 1940: 16–18, 203–4).

In January 2017, as an expert in Islamic architecture in the Indian Ocean, I (Pradines) was invited by UNESCO, the Department of Heritage of the Maldives and the World Monuments Fund (WMF) to participate in a workshop on the coral mosques of the Maldives. During the UNESCO workshop, one major question emerged about the date and chronology of Maldivian coral mosques, but also their relationships, continuity or influences with Buddhist architecture, the predominant religion before Islam in the region. Today, all the Maldivians are Muslims and there is no more Buddhist community.

In November 2017, we started an archaeological project in the Maldives, with the Aga Khan University (AKU) in partnership with the Heritage Department of the Maldives and the Maldives National Defence Force (MNDFF), with the support of the Max van Berchem Foundation and UNESCO New Delhi. Our main objective was to fill the lack of data related to the Maldivian coral mosques history by carrying out archaeological excavations and surveys as well as collecting oral traditions. Our scientific work was important to create a corpus that could serve the needs of the Maldivian government, UNESCO and the WMF for conservation purposes and to add the Maldivian mosques to the World Heritage List.

Two sites have been selected for our first mission. The first site was the Fandiyaaru Mosque and Koagannu Cemetery in Hulhumeedhoo town on Addu Atoll. This major archaeological site of the Maldives is very well known for its tombs and mosques. Unfortunately, in 2017, this site was not yet part of the list of proposed sites nominated for the UNESCO World Heritage List. According to local tradition, the Fandiyaaru Mosque was founded in 1586 and the monument is believed to be the earliest coral stone building in the country. The cemetery compound is the largest of the Maldives, comprising three other small mosques, 15 mausoleums and 500 coral tombstones. This important Maldivian site, located in the southern atoll, was the perfect place to explore the uniqueness of the ancient Maldivian mosques. The second site was the Friday Mosque of Fenfushi on Alifu Dhaalu Atoll, which was renovated between 1692¹ and 1701 during the reign of Sultan Mohamed of Dheevadhu on the site of an earlier mosque built by Kalhukamanaa and which is still in use today. According to very long-standing oral tradition, the mosque is surrounded by a pre-Islamic structure with a huge Buddhist bathing tank. The traditions of the lacquer work and woodturning Maldivian crafts originate in this island too. Our mission in Fenfushi was also to implement the previously created map and to survey the relationship between the Buddhist pre-Islamic settlement and the Islamic settlement.

Two outcomes were expected from our mission. We aimed first to provide new scientific data on the coral mosques of the Maldives in order to improve the chances of success of nomination of the mosques on the World Heritage List; then to support the conservation project of the Maldivian government and international organisations

such as UNESCO and the WMF. We organised archaeological test pits to provide a chronology for the Maldivian mosques that were never previously scientifically investigated and to see if some structures predated the mosques and Muslim cemeteries. One major question was the continuity of the settlements from pre-Islamic cultures and influences from Buddhist architecture on local Islamic architecture. Secondly, we introduced and created the first field school of Islamic archaeology of the Maldives, to train the staff of the Heritage Department in this specific discipline.

2 Koagannu Cemetery, Hulhumeedhoo Island (Addu Atoll)

Our first fieldwork took place 3–13 November 2017 on Hulhumeedhoo Island, Addu Atoll, which is located in the most southern part of the Maldives (Figs. 1 and 2). Our excavations were conducted in Meedhoo City within the Koagannu Cemetery's enclosure. Hulhumeedhoo is not on the UNESCO Tentative Heritage List despite the fact that this site is considered to be the oldest and largest cemetery in the Maldives with 500 coral tombstones and 15 mausoleums.

The cemetery is surrounded by a modern cement wall and located next to the beach to the north of the island (Fig. 3). The current enclosure is much larger than the old cemetery as can be seen on our plan. The orientations of the contemporary enclosure wall and the graves of the cemetery are also different – this point is significant to understand the restructuration of the site during the twentieth century. During our survey we did the first inventory of the visible burials by counting the tombstones (Figs. 4 and 5). The cemetery is divided by clusters of large parallel rectangles of small vertical stones. In these clusters there are individual tombs simply made of two tombstones, one above the head and one above the feet of the buried individual. Others are family enclosures with several graves. Three groups of tombs can be distinguished according to three spatial patterns including complex funerary enclosures and individual graves. A minimum of 650 graves has been recorded, with 223 belonging to the first cluster, 282 to the second and 145 to the third. Many tombstones are located along the same alignment as the walls delimiting the compounds and these tombstones might not be in situ but may have been reused. Numerous walls and mausoleum podiums have been reused either to partially or entirely build new graves. This reutilisation of tombstones and mausoleums demonstrates the use of the cemetery on the *longue durée* until the present day. Some tombs to the east of the Fandiyaaru Mosque are surrounded by large blocks with very fine mouldings but it is difficult to say if they originate from Buddhist monuments or if they were created later. The largest tombstones are located to the north-east of this mosque, which forms the centre of the funerary compound. According to local traditions, the biggest tomb in the cemetery was, apparently, the oldest. Another important funerary enclosure stands near the Fandiyaaru Mosque and, according to local tradition, the tombs in the enclosure are the graves of Hassan Didi and his wife, Khadija Manika, and date from the eighteenth century. The enclosure is made of spolia from an old mosque or an old tomb. The enclosure n°3 protects two tombs with openwork stele of a regional type known only to the south of the Maldives. Some funerary enclosures are more characteristic than the others, such as the enclosure n°7 with a large grave; the enclosure n°14 with a beautiful carved podium; the enclosure n°15 surrounded by high walls; the enclosure n°24 with large stelae; and, of exceptional quality, the enclosure n°59 with large carved mouldings and five or six tombstones within the enclosure.

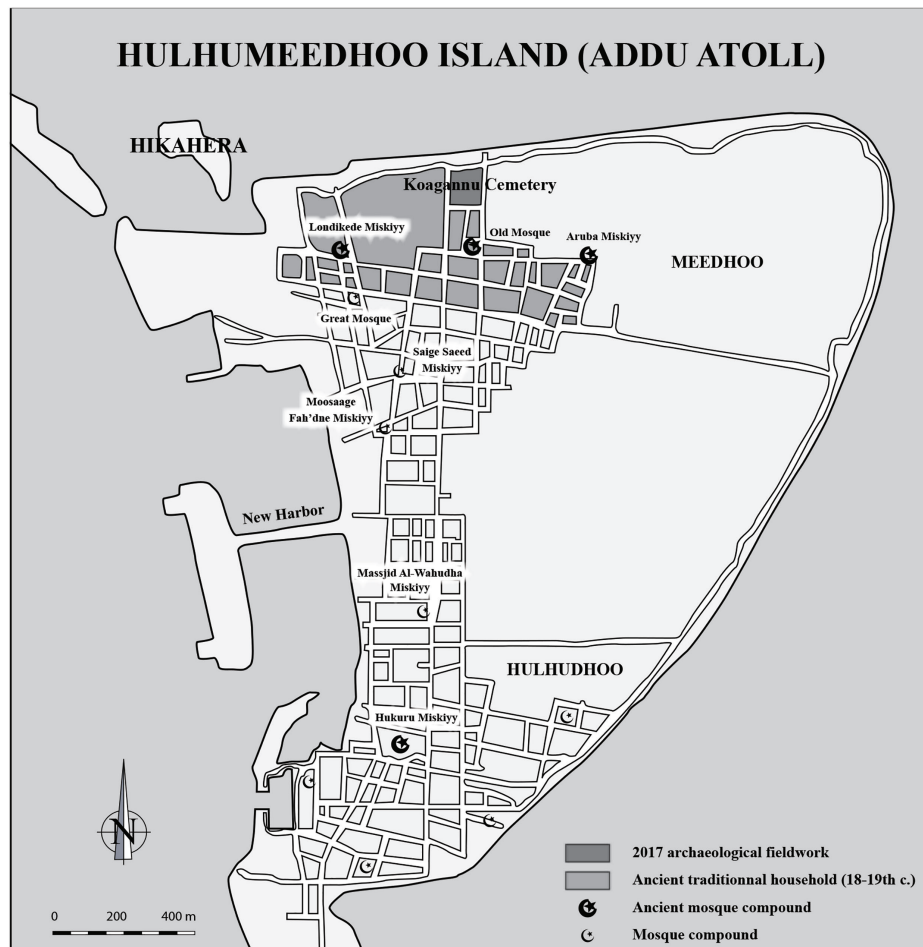
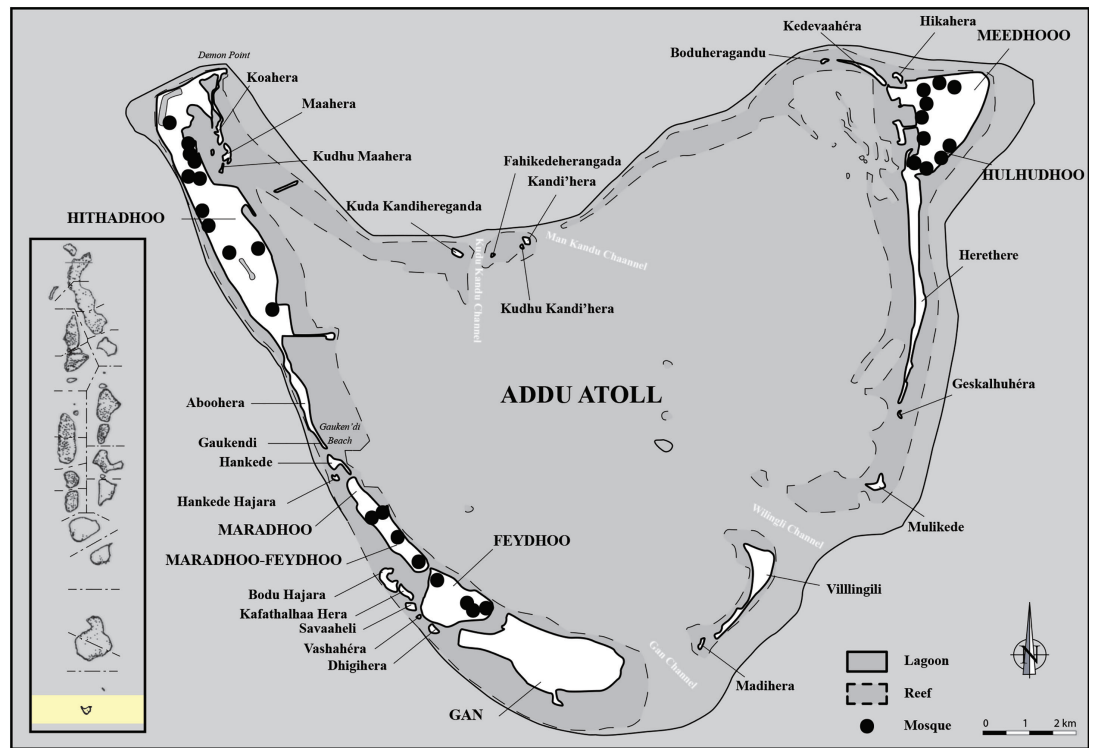


FIGURE 2
Plans of Addu Atoll
and Hulhumeedhoo
Island
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FIGURE 3
Compound of Koagannu
Cemetery in Hulhumeedhoo
Island

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Originally, six small mosques were built in the funerary compound, but only four remain (Fig. 4): Koagannu Mosque (1397), Boadha Mosque (1403), Athara Mosque (1417) and Fandiyaaru Mosque (1586). Each mosque has its own ablution well. The mosques of the cemetery are oriented to the west, and not strictly oriented towards Mecca and their *qibla* walls face west $30^{\circ}4'$. According to the inhabitants there were originally six mosques; however, fifty years ago, two mosques were destroyed, and their wells back-filled. The cemetery is still used today, and a funeral took place during our excavations; when people dug the grave, they found a sill of a coral mosque not far from a depression corresponding to a well, which allowed us to locate one of the missing mosques.

Only the mosque n°2 is still in use today, probably because of the Sheikh Yusuf Gadir al-Yamani Saniany mausoleum next to it. According to his *nisba*, Sheikh Yusuf could have been from San'a' in Yemen. Other traditions (Carswell, 1975–7, 1976) indicate that he was more likely of Moroccan origin or even Shirazi. Apparently, he arrived in the Maldives in the twelfth century. Near the mosque n°2 and the tomb of the saint, a long metal pole is standing, and it had been used to weigh babies that were weak or ill. The weights of the babies were then exchanged in food offerings such as bananas and other fruits for Sheikh Yusuf's blessing and protection.

After a survey of the site, we decided to do three test pits on two of the four mosques (n°1 and n°3). A first test pit was set up on the north-west corner of the *qibla* wall of Boadha Mosque (mosque n°3) and a modern extension of the mosque. The trench's location was thought to provide relative chronology between the two structures. The excavations were finally stopped after the discovery of some stones indicating a burial pit behind the *qibla* wall. The layer 4 contained Chinese ceramics sherds for the European market.

According to oral tradition, the Fandiyaaru Mosque is the oldest mosque of the compound. So far it is the best-preserved mosque of the cemetery (Figs. 6 and 7), with no restoration; no modern rendering or cement was added to the primitive structure except for a modern veranda built all around the mosque by the end of the twentieth century. The presence of the still-preserved fine plaster on the lower mouldings of the podium demonstrates that Maldivian mosques were all covered with a fine, white

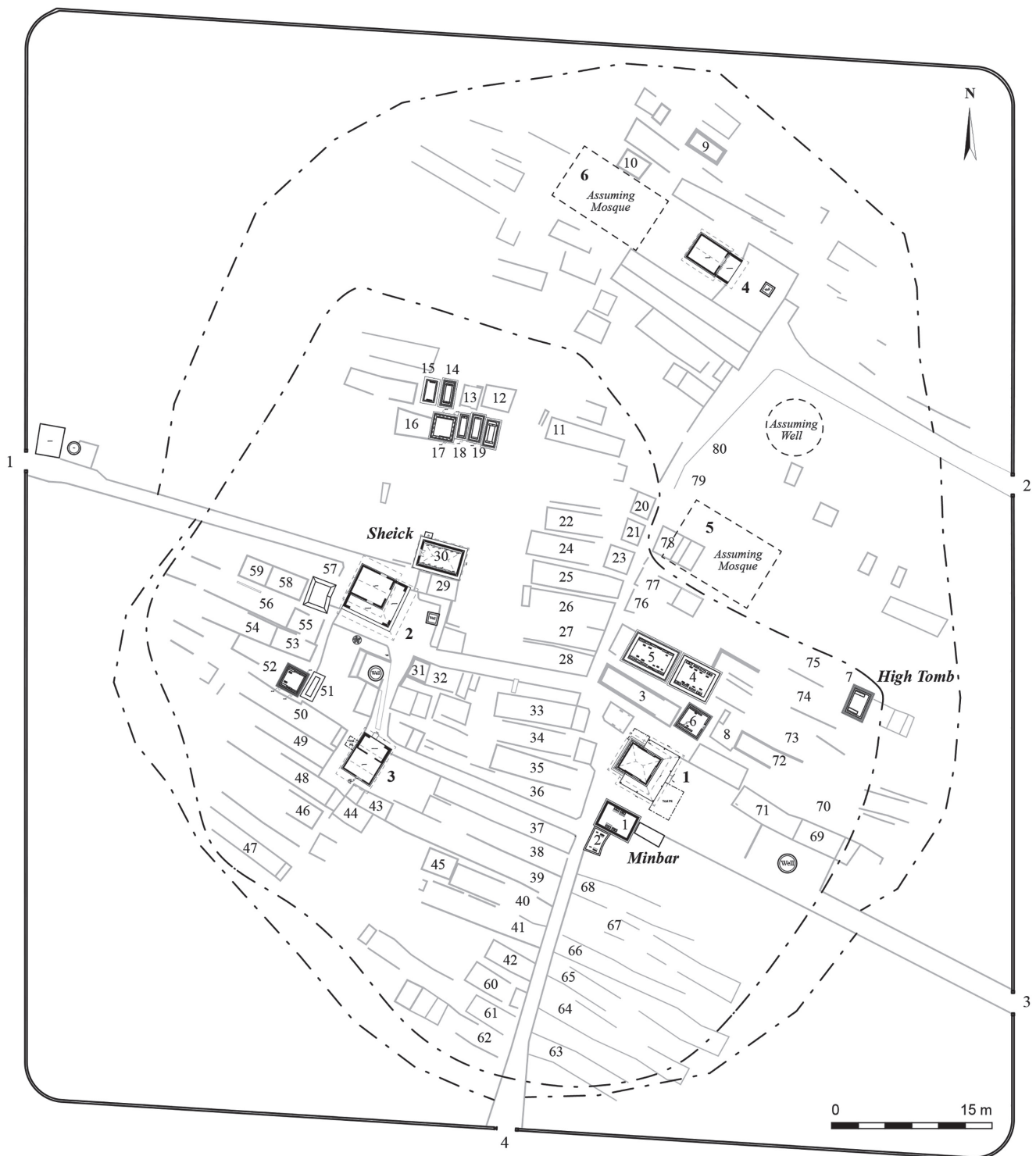


FIGURE 4
Plan of the compound of
Koagannu Cemetery in
Hulhumedhoo Island
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gypsum rendering, which allowed the coral to retain all its freshness and original whitish colour.

A small minaret or *minār* is located next to the mosque (Fig. 8). In the Maldives, the minaret is not connected to the mosque. This is a small tower with seven steps plus a small platform for the muezzin (72 × 69 cm). The staircase measures 2.64 × 1.1 × 1.64 m. A rectangular socket in the last step indicates most likely the presence of an original wooden balustrade. The minaret was also used as an outdoor minbar, because of the

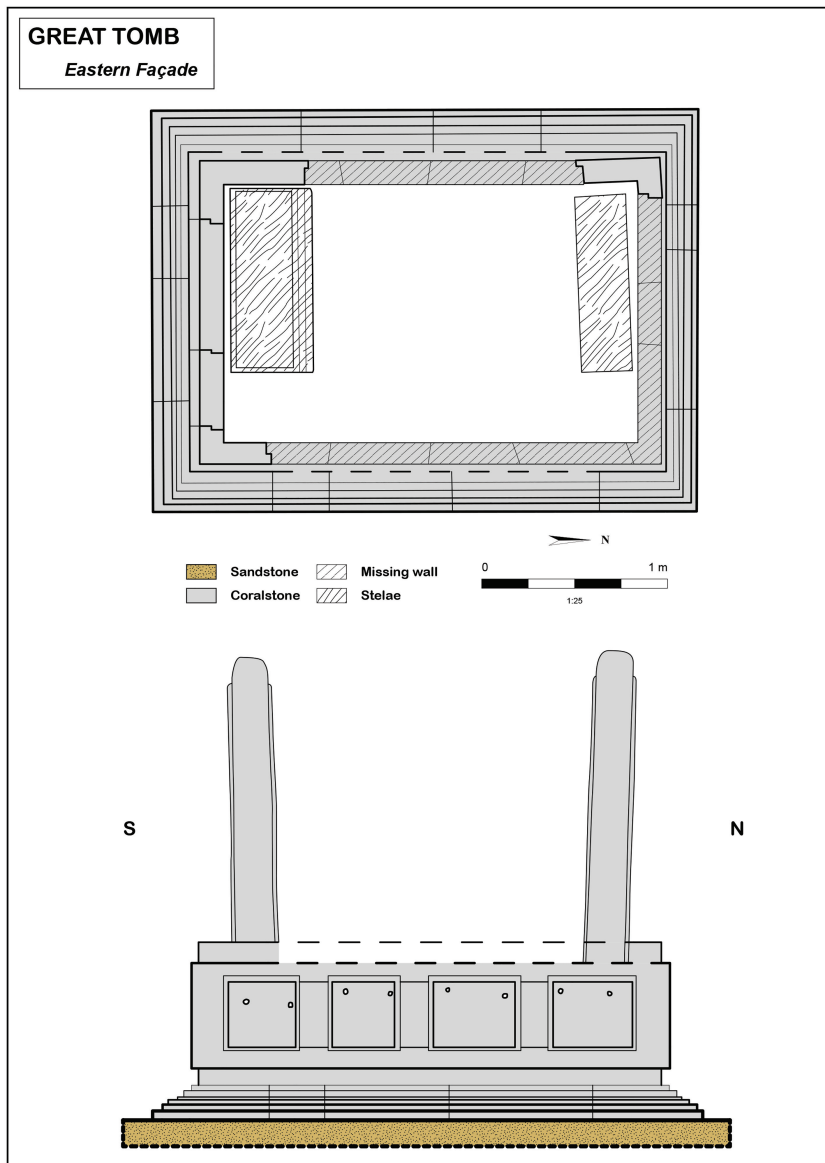


FIGURE 5
 Plan and elevation of the great tomb, Koagannu Cemetery
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FIGURE 6
 Fandiyaaru Mosque, Koagannu Cemetery
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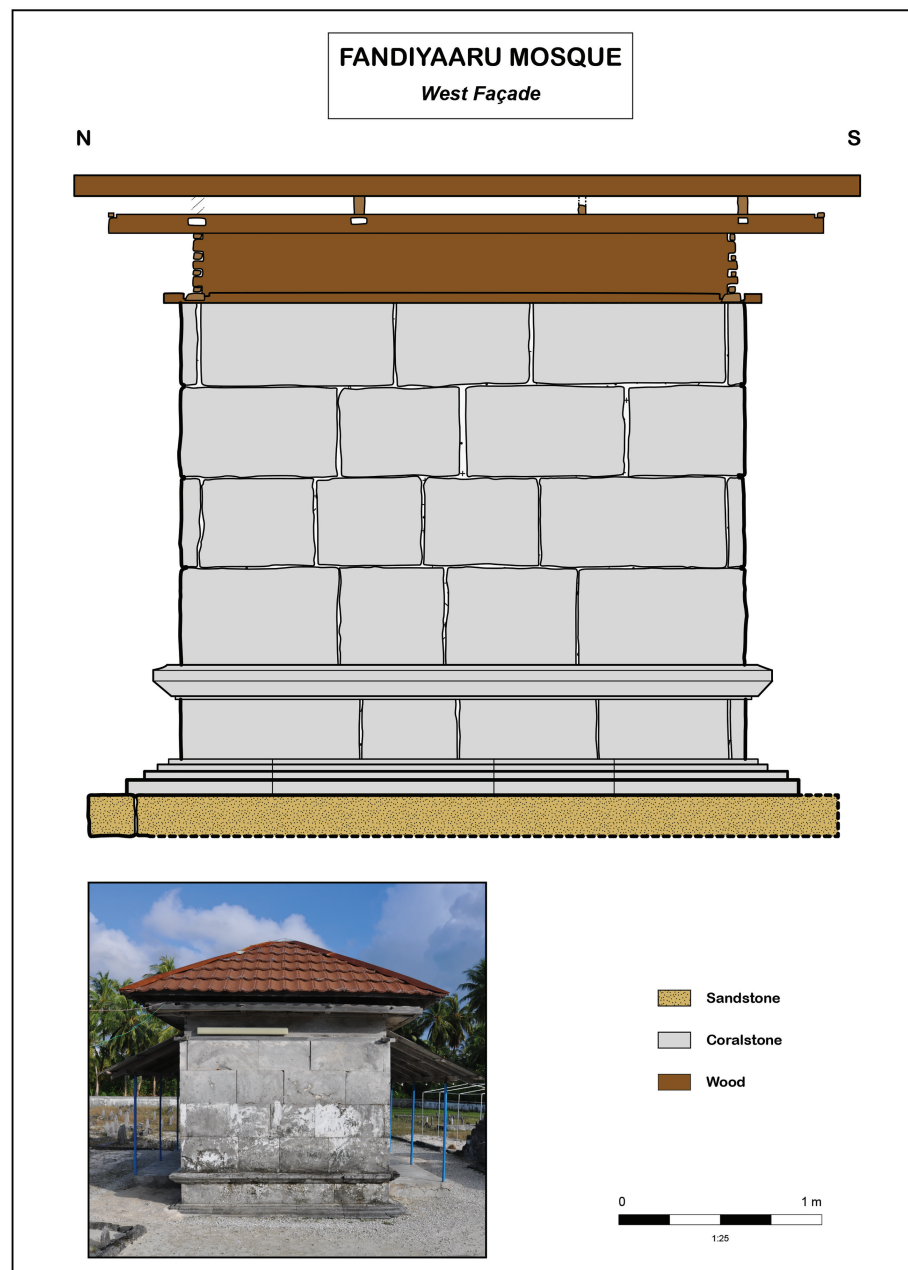


FIGURE 7
Elevation of the western façade
of Fandiyaaru Mosque, Koagannu
Cemetery
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size of the prayer room, which is too small to accommodate more than a dozen people. The outdoor prayer space is confirmed by the presence of a large open area to the east of the Fandiyaaru Mosque; the rest of the cemetery being densely occupied with tombs located all around the other mosques.

Our second test pit was by far our largest and deepest excavation on the site, and it was in front of the main entrance of the Fandiyaaru Mosque (mosque n°3) where a large empty prayer space was available to support an open area's archaeological investigation. The 5 × 3 m excavation reached a depth of 1.32 m and possibly descending to as far as 1.42 m in the south-east corner up to the water table. The pit was parallel to the eastern side of the modern veranda up to a step to the north and encompassing, to the south, a coral stone partially visible on the surface. Our third test pit was a 1.6 × 1.2 m rectangle located in the north-west corner of Fandiyaaru Mosque to the junction with the modern veranda extension (202) towards the east; incorporating a small part of the

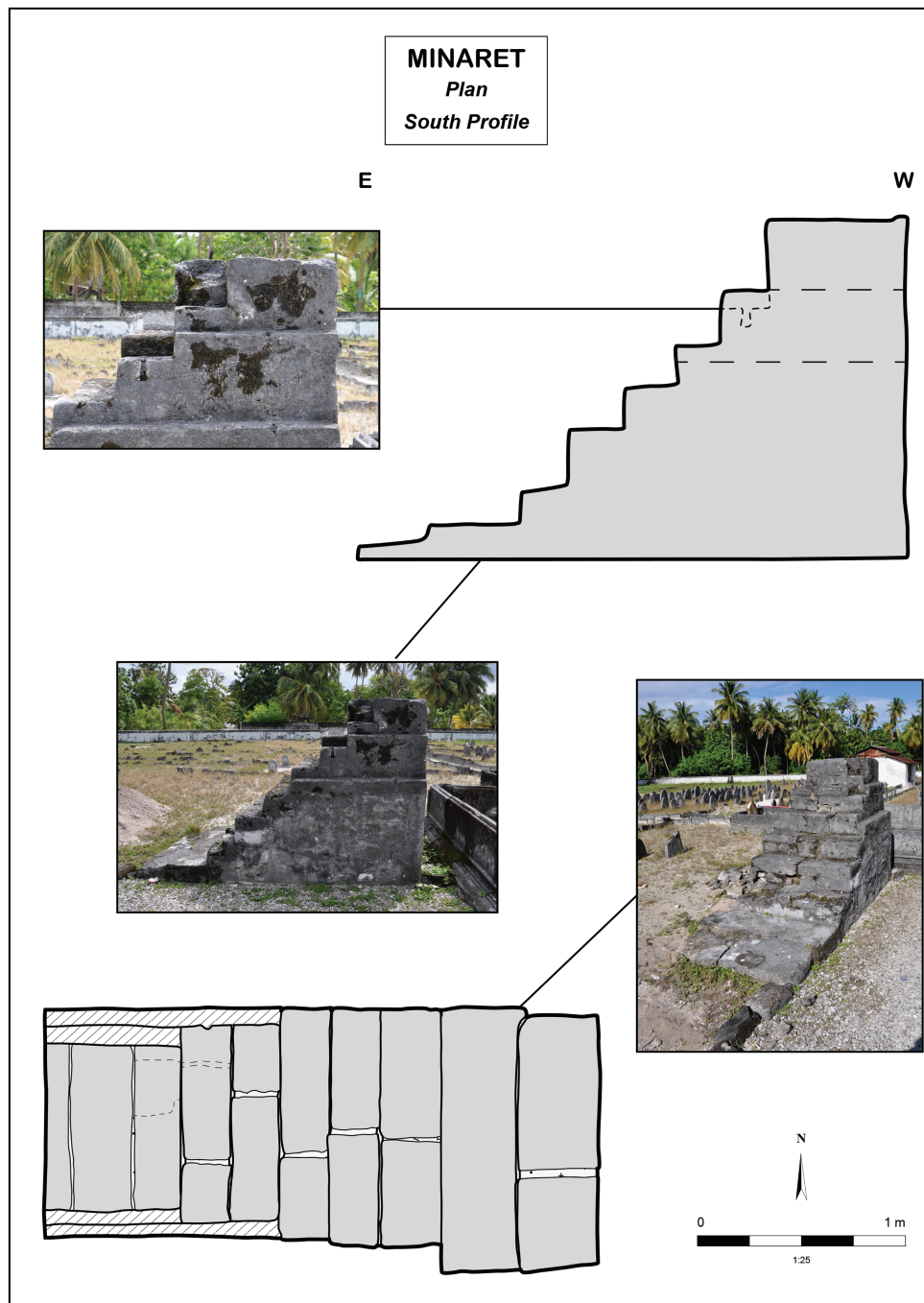


FIGURE 8
Minaret of Fandiyaaru Mosque,
Koagannu Cemetery
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western side of the mosque (Figs. 10 and 11). The purpose of this test pit was to confirm the stratigraphy from the test pit n°2 and to locate the *varuaa kan*, a pot with offerings traditionally buried to the north-west corner of the Maldivian mosques (“*varuaa*” meaning spiritual gift and “*kan*” meaning corner).

Five phases of occupation from the fourteenth to the twentieth centuries have been identified on the site of Koagannu Cemetery (Fig. 12).

First, the site was occupied before the construction of Fandiyaaru Mosque. The 30 cm thick organic layers (SU 210–308²) reveal an important human activity and occupation through the presence of large amounts of very tiny charcoal inclusions, the occurrence of four seashell species with cooking fire marks and a possible coral structure (AU 307). Although we cannot be sure whether this phase was definitely related to a Buddhist

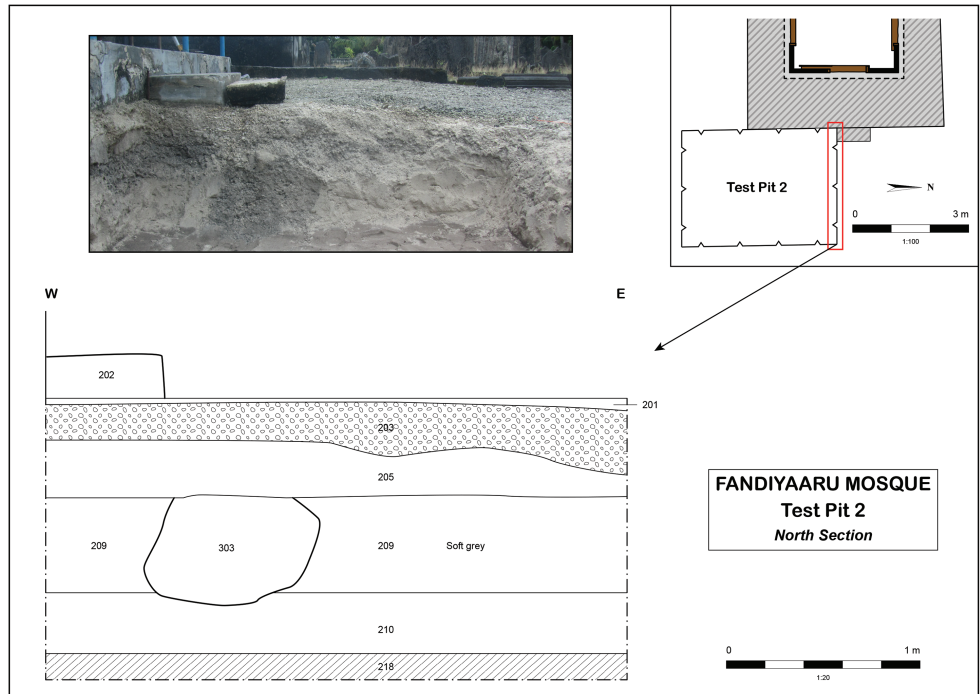


FIGURE 9
Plan and north section of test pit 2 showing its relationship with the Fandiyaaru Mosque
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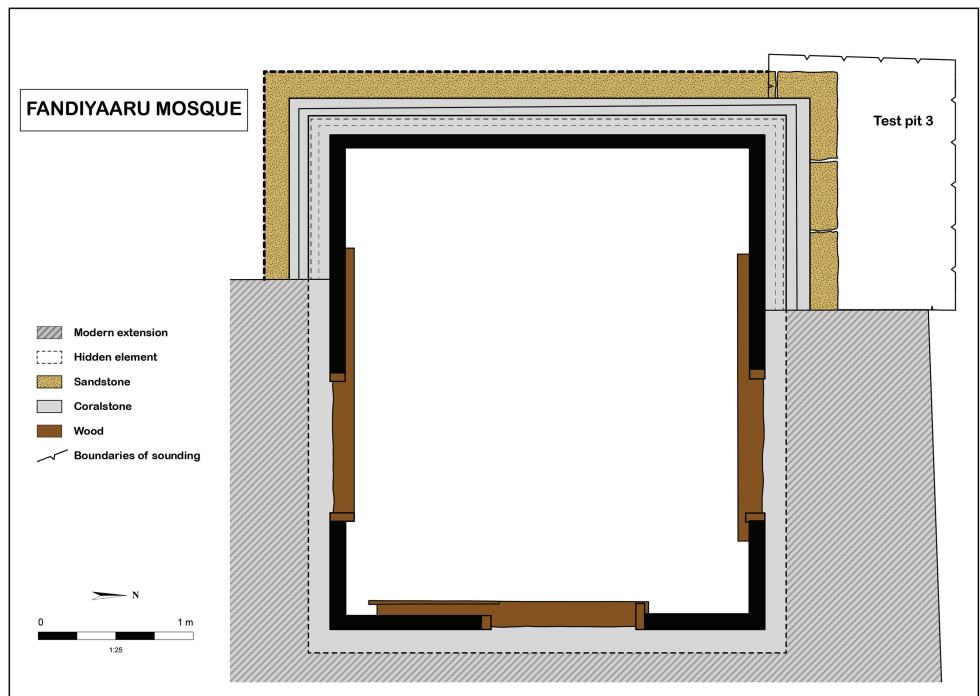


FIGURE 10
Plan of the Fandiyaaru Mosque and location of test pit 3
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or a pre-Islamic period or even an early Islamic period, a generic denomination was adopted when referring to phase 1, that is, the pre-mosque period. There is no evidence that this phase was a Buddhist occupation layer, or even a religious site. However, there is no doubt that, whoever those people were and wherever they came from, they arrived on a virgin land without any earlier human occupation, as they settled directly on the natural sandy substratum (SU 211).

The second phase (SU 209=306) is almost sterile of anthropic material. This level could have been a temporary abandonment of the site, a natural disaster (tsunami), a change in human activity and use of the land, or simply a backfilling and levelling of the



FIGURE 11
Test pit 3, Fandiyaaru Mosque
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area before the construction of the mosque. The presence of one Indian carinated rim piece of pottery suggests that phase 2 dates back to the fifteenth century. The second phase ends with the layer SU 205 in front of the main entrance of Fandiyaaru Mosque and the layer 303 in its north-western corner. Finally, the three subcircular pits (SU 206, 207 and 208) were the last activity recorded for phase 2.

Phase 3a corresponds to the construction of Fandiyaaru Mosque during the sixteenth century. The foundations AU 305 ($4.04 \times 3.68 \times 0.2$ m) were made of one single course of sandstone blocs (Fig. 13). The whole structure rests on a stepped platform. This 19 cm high rectangular coral podium has four moulding steps: the lowest and largest one forms a $3.83 \times 3.34 \times 0.08$ m rectangle, whereas the uppermost and smallest one measures $3.21 \times 2.7 \times 0.03$ m. Above it, the first course of the wall measures $3.21 \times 2.7 \times 0.09$ m and has only 29 cm of its height visible from the ground surface. The façade walls of the mosque were built with five courses in dry masonry, without any binding agent, nor

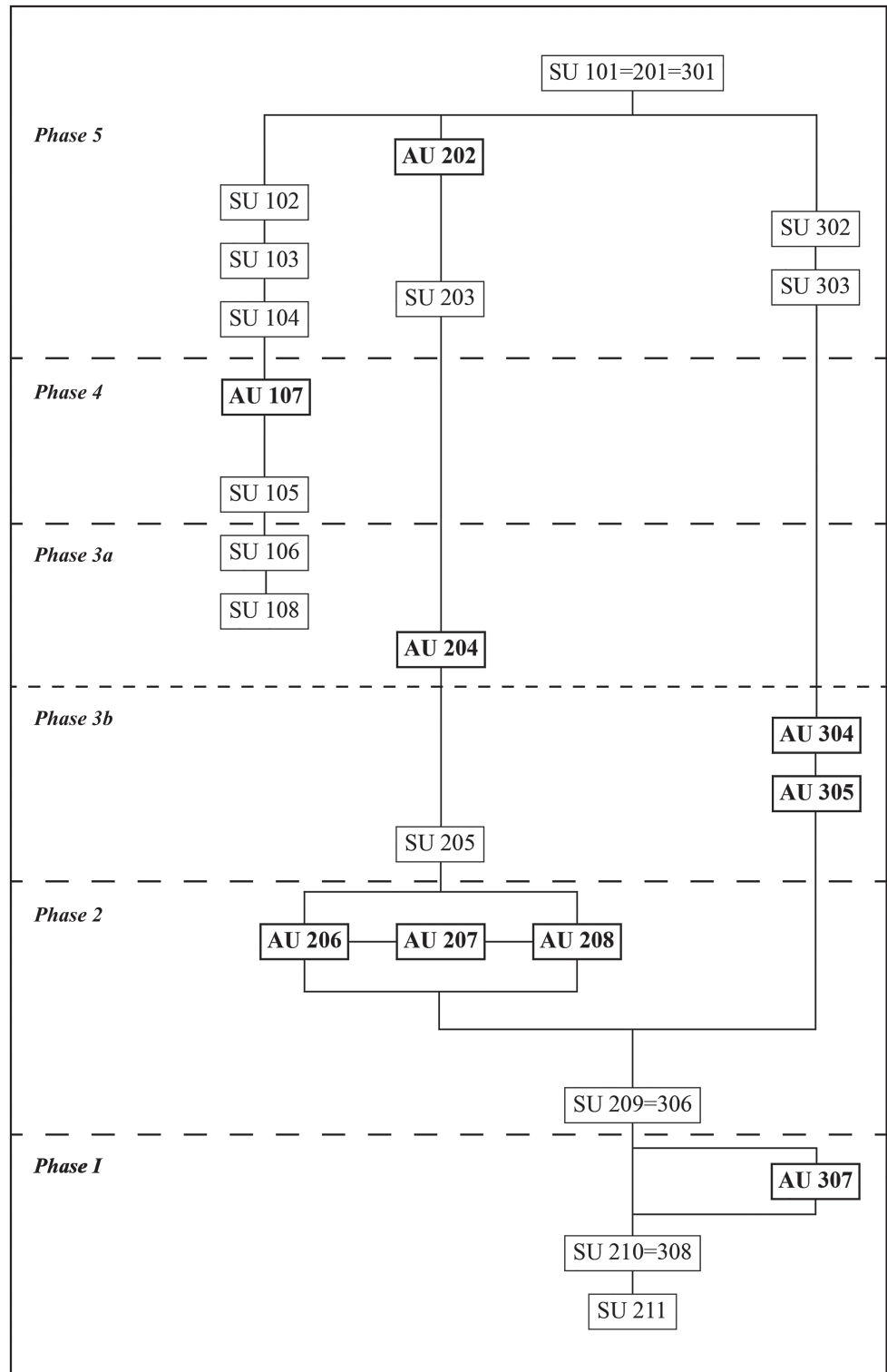


FIGURE 12
Stratigraphic diagram of
Koagannu Cemetery
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lime mortar, and the walls have an elevation of 1.78 m. The upper part of the structure is made up of wooden intertwined elements and so carpentry supports a modern tin roof. In the past, Maldivian mosques were covered with palm leaves roofing. Moreover, the presence of a well and a pathway are linked to the construction of the mosque, but it is difficult to tell whether the footpath was used to connect the mosque up to the door entrance. Phase 3b shows that people needed to increase the prayer area to accommodate as many worshippers as possible. The two parallel walls (AU 204), 10.08 m apart

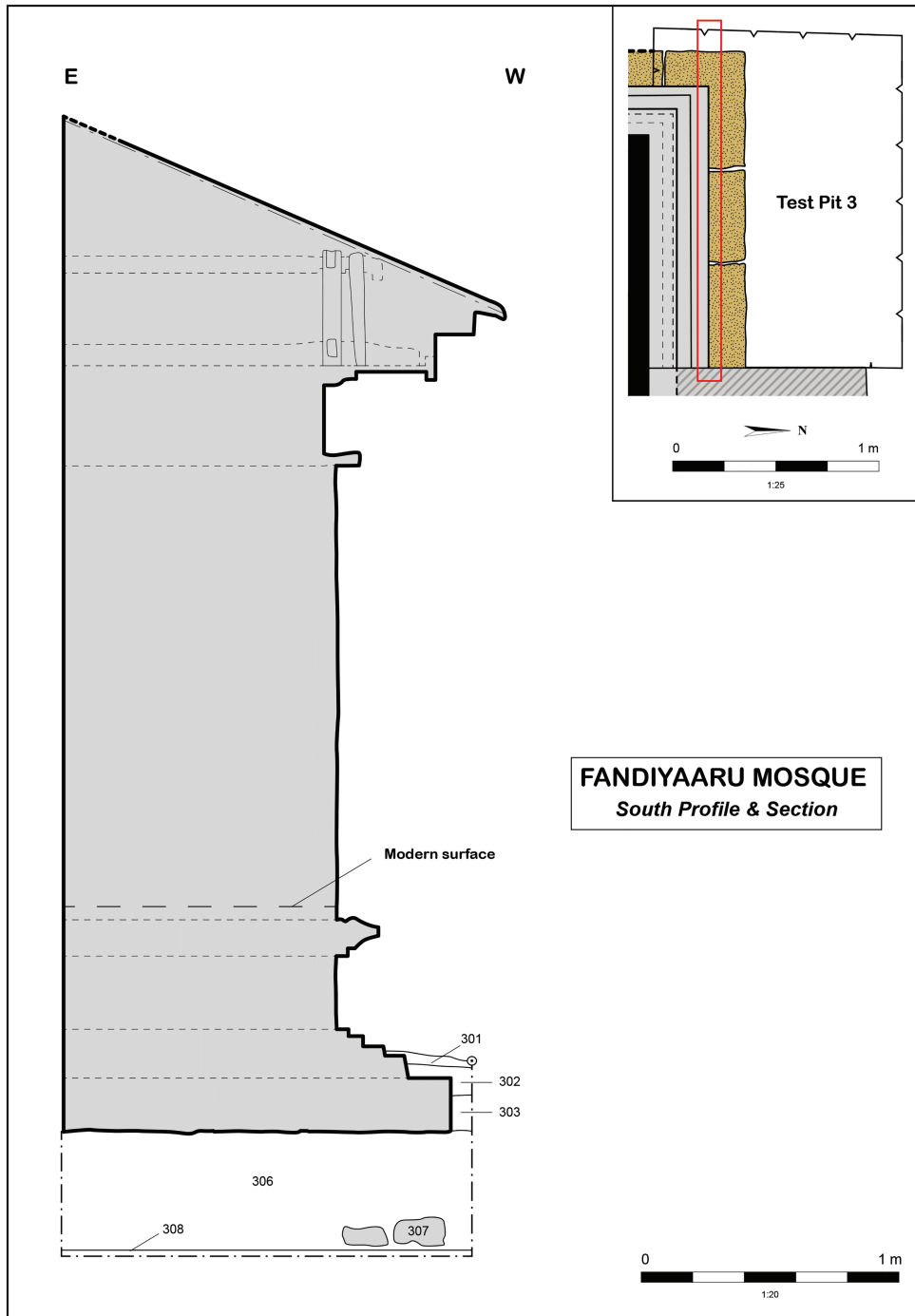


FIGURE 13
South section of test pit 3 and
its relationship with Fandiyaaru
Mosque's basement
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and 1.28 m away from the eastern side of the mosque, cut the layer 205 that is dated to the sixteenth century. It is possible that the construction of the minaret belongs to either this phase or to phase 3a. Our study of the building construction phases shows that at least two of the Koagannu mosques were most probably built in a single phase during the sixteenth century.

The grave 107 behind the *qibla* of Boadha Mosque seems to be a good marker of the fourth phase. The burial site may date to the seventeenth to eighteenth centuries based on the materials found in the layer 105, and three fragments of a Chinese porcelain dish made for British market. A similar complete dish is stored in the archaeological museum's collection in Malé. Although the excavation did not provide any further insight into this phase, most of the tombs in the cemetery must be dated from phase 4 based

on the stratigraphy. And, therefore, the mosques predate the cemetery and most of the tombs were built during the seventeenth and eighteenth centuries.

Most of the old mosques in the Maldives were renovated between the seventeenth and eighteenth centuries with new roofs, lacquer works and *qibla* extensions. The Koagannu mosques were not renovated, maybe because they were too far south of Malé, the political centre of the sultanate. Perhaps it is because the Koagannu mosques were not renovated in the seventeenth to eighteenth centuries that they have been seen as the oldest of the Maldives. It is their simplicity and their small size that encouraged previous specialists to consider them as “older” (Jameel, 2016: 98, 120–31).

Phase 5 is well characterised by the construction of a modern veranda AU 202 built around three sides of Fandiyaaru Mosque. The cement verandas with metallic tin roofs were only added to the four Koagannu mosques in the late twentieth century. The mosques remain a religious attraction nowadays, fuelled by the local traditions surrounding them. The mosque n°2 is still in use today, mainly for prayers and worship directly linked to the mausoleum of a saint, that of Sheikh Yusuf.

To conclude our mission in Hulhumeedhoo, we organised a survey of the island on 9 November 2017. Three ancient mosques, which are still in use, have been inventoried on our map and they are perfectly aligned on an east – west axis, south behind the site of Koagannu Cemetery (Fig. 2). This axis is particularly interesting; it seems that the mosques delineate the size of the old settlement and it is also in this area that all the old houses of the island are located. The Friday Mosque of Meedhoo, Meedhoo Hukuru, is located in the middle of the village to the south of Koagannu Cemetery. To the east stands the Stadium Mosque or Arube Mosque and to the west a small mosque called Londi Kede Mosque. Three old tombstones were found during some works that were carried out in the street next to the Londi Kede Mosque on 4 November 2017. Finally, the most important discovery of our survey was to inventory a very old mosque located to the south of the island in Hulhudhoo village and probably contemporaneous with the mosques of the Fandiyaaru Cemetery. This small, ruined mosque is located in a cemetery adjoining the Hulhudhoo Hukuru Mosque ($0^{\circ} 35' 43.3''$ S, $73^{\circ} 13' 37.0''$ E). It is also in this area that Bell (1940: 138–55) discovered the Buddhist stones that were reused to make the new pier in the harbour. The ancient Hulhudhoo Mosque confirmed that the whole island was densely occupied and the two villages, Hulhudhoo and Meedhoo, had their own separate great mosques that date back to the beginning of the Islamisation in Addu Atoll.

3 Aasaary Mosque, Fenfushi Island (Ari Atoll)

The second site that we surveyed and excavated was Fenfushi Island in Ari Atoll (Fig. 14). During our mission from 16 to 23 November 2017, we were able to dig two test pits on the Friday Mosque, known as Aasaary Mosque.³ We were able to do an open-area excavation in an area that was not occupied by graves to provide information regarding the relationship between the Friday Mosque and the so-called Buddhist bathing tank (Figs. 14 and 15). This tank was said to have been built during the Buddhist era of the Maldives.

The large rectangular area excavated was located between the south-western side of the mosque, to the north of the well and the bathing tank's entrance. Just above the ground surface we noticed some lines of stones that indicated a buried structure. The structure followed the same orientation as the mosque, and it was composed of two architectural elements (Figs. 15 and 17). The first one was a circular wall 30 cm thick

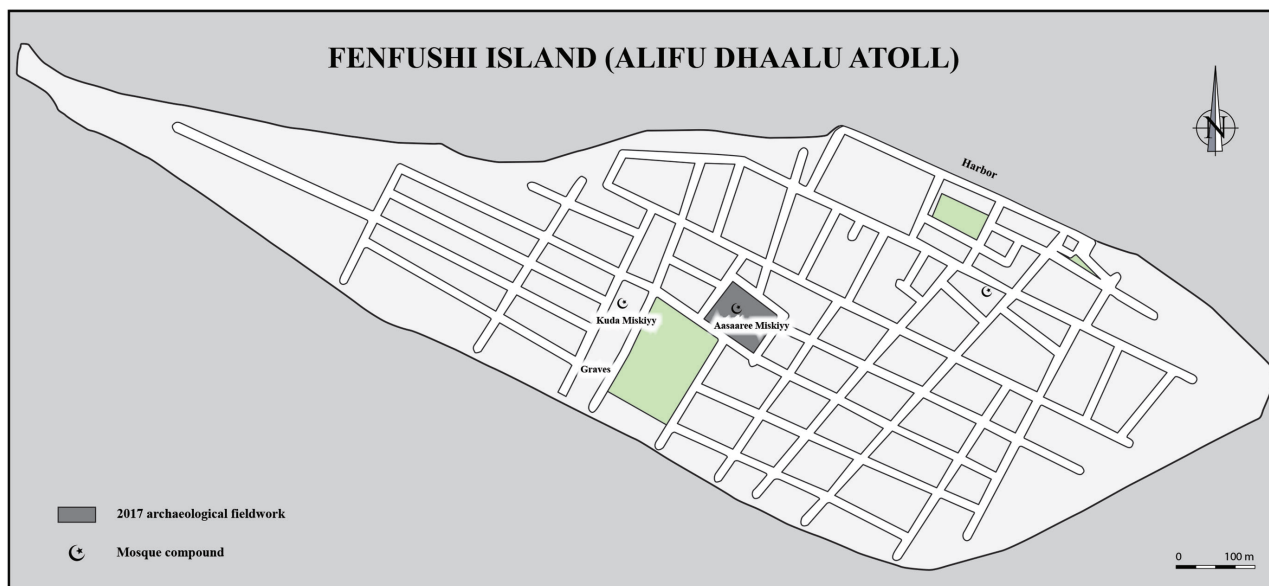
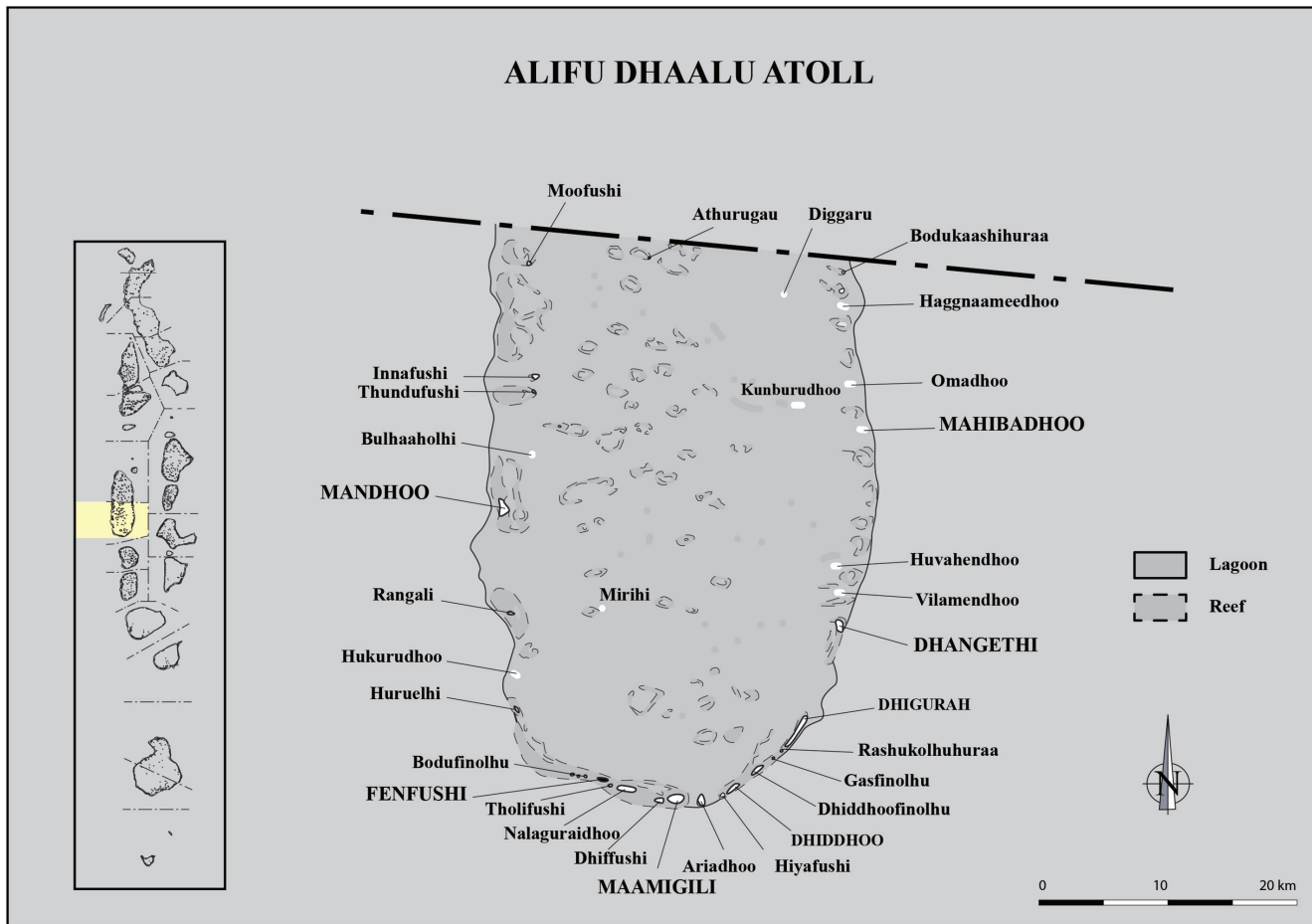


FIGURE 14
Plan of Alifu Dhaalu Atoll and
Fenfushi Island
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FIGURE 15
Aasaary Mosque compound on
Fenfushi Island
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(AU 102). The internal diameter of the structure was 2.85 m and the external diameter was 3.34 m. The wall was covered internally by two thick renders of 9 cm and 21 cm, respectively; this brownish hydraulic mortar was very strong, a mixture of lime made of fresh coral and charcoal. The excavation revealed a small staircase attached to the circular structure with a flight of seven steps leading to a modern brass tap at 82 cm beneath the ground surface. The water table started to emerge at the base of the stairs. The circular construction 102 was indeed a water tank used to store fresh water for the community. It is well known that the islanders of Fenfushi had water supply issues in the past, and at least two traditional water supply rain-fed cisterns were constructed.

All the layers that we excavated were dated from the twentieth and twenty-first centuries due to the occurrence of modern rubbish, in particular fabric, plastic and aluminium, including a coke can. These evidences, and the presence of a modern brass tap,



FIGURE 16
So-called Buddhist bathing tank
on Fenfushi Island
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FIGURE 17
Modern and ancient water tanks
near Aasaary Mosque
© STÉPHANE PRADINES 2017



FIGURE 18
Stratigraphic sections, test pit 2,
Aasaary Mosque
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suggested that the building was built and used during the end of the twentieth century. This was confirmed by one of the eldest islanders who told us that the water tank was built in the 1980s to compensate for the lack of fresh water on the island. At the request of the Antiquity Department, we backfilled the old water tank for safety reasons.

The second excavation was a trench measuring 2 m long and 1.4 m wide located to the south-eastern side of the mosque, near the main entrance. This test pit was done in a corner, between the main podium supporting the mosque and the foundations of the main entrance of the mosque (Figs. 18 and 19). The upper layer excavated showed some fishing evidence: hooks, weights for fishing nets, fish bones in the layers SU 203 and 205. These hard, brownish sand layers contained fish bones, five fishing lead weights, three cowries and one piece of Chinese blue and white porcelain. Furthermore, eight identical lead fishing weights and one cowry were found within the layer 206 just below the SU 204. These occupation levels were not linked to the construction of the mosque and are all posteriors to the building. Under a level of soft, greyish-brown, fine sand covering the whole area of the test pit, we exhumed a destruction layer over a dark, blackish-brown sand layer 208 with many charcoals of large size. Three charcoal fragments were sent to Beta Analytic laboratory for a radiocarbon dating.⁴ The stratigraphic unit 208 is dated from circa 1538 to 1635, \pm 30 years (Fig. 20). None of the earliest layers were disturbed because the layer 208 sealed all the previous archaeological levels.

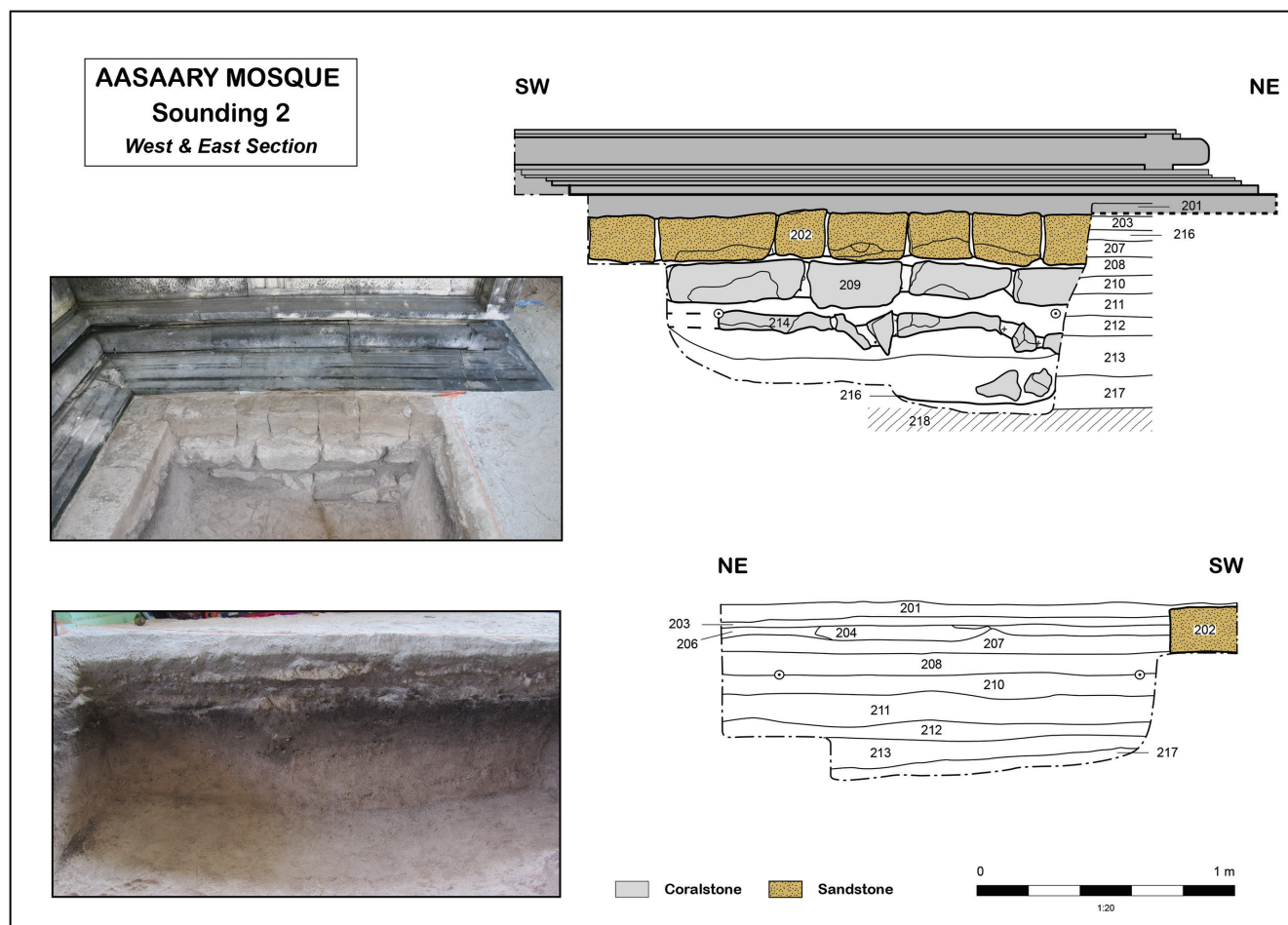


FIGURE 19
Stratigraphic diagram of Aasaary
Mosque, Fenfushi Island
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The foundation walls, with seven courses supporting the main podium and four courses supporting the staircase entrance, were built during the same period over one single course of sandstone beach-rock of a different size, 4–5 cm long and 2–8 cm thick. According to Jameel (2016: 50–3), the *veligaa* or beach-rock was always used as foundations on one course for all the Maldivian mosques. But the sandstones that we found in Fenfushi did not correspond to the layout of the actual mosque. The old building is not positioned under the main entrance of the modern mosque. The mosque of Fenfushi was built on a previous building made of sandstone. This older building had been built on the current mosque's location. The existence of this previous building was proved after the excavation of the layers SU 208, 210 and 211, revealing another architectural structure (AU 209) upon which the foundations of the present mosque (202) were established. This older structure was composed of four well-cut white beach-rock (Fig. 19) and then covered by the modern mosque's central podium's basement. Under the levels SU 212 and 213, we exposed another course of this foundation wall (AU 214). The second course of the first building's substructure, composed of five white, thin beach slabs, was excavated up to a level where the earliest and the deepest stones (three in total) had been found in the layers 217 and 218 at a depth of 82 cm. We stopped our excavations at the water table.

During our stay in Fenfushi, we interviewed several elderly people of the island, according to whom the ancient bathing tank was given to the community by Sultan Mohamed Dhevvadhu (r. 1692–1701) as a royal gift to support the community and provide fresh water to the inhabitants of Fenfushi. This information suggests, first, that the tank was not linked to a Buddhist phase and, second, that the tank was not

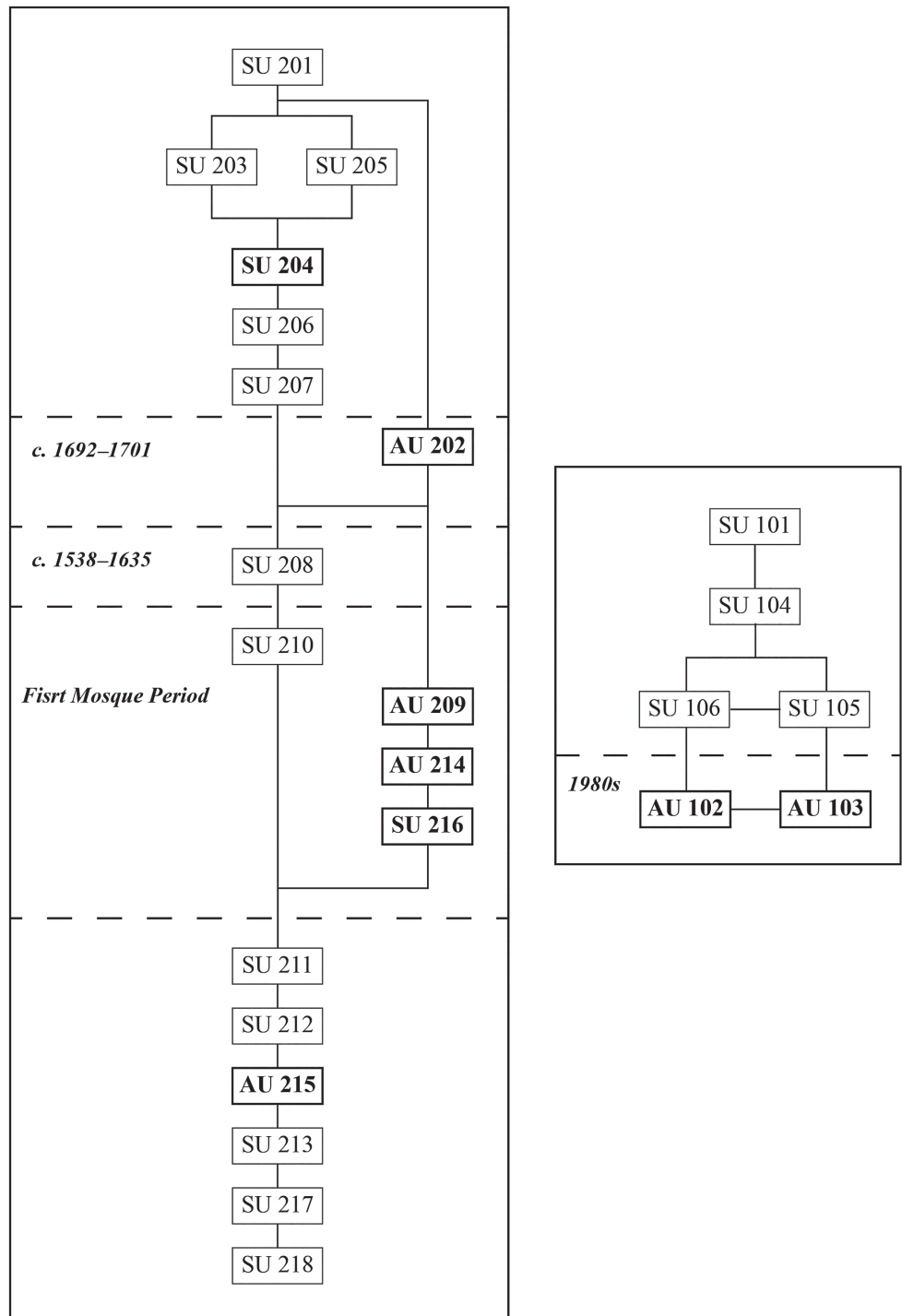


FIGURE 20
Aasaary Mosque compound and
extended archaeological area with
Kuda Mosque
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linked to the construction of the mosque. The “rediscovery” of a very similar modern structure, a rainwater tank built in the 1980s, to store and provide fresh water for the islanders supports the idea of an Islamic water tank and not a Buddhist bathing tank. Subsequently, the so-called old Buddhist bathing tank should be interpreted as the first large water tank ever built on the island. Thus, the groundwater and rainfall enabled both water tanks to be filled even though there were also some wells located around the mosque.

Furthermore, the oral tradition mentions that the current mosque was also built during the reign of Sultan Mohamed Dhevadhhu above an earlier mosque which,

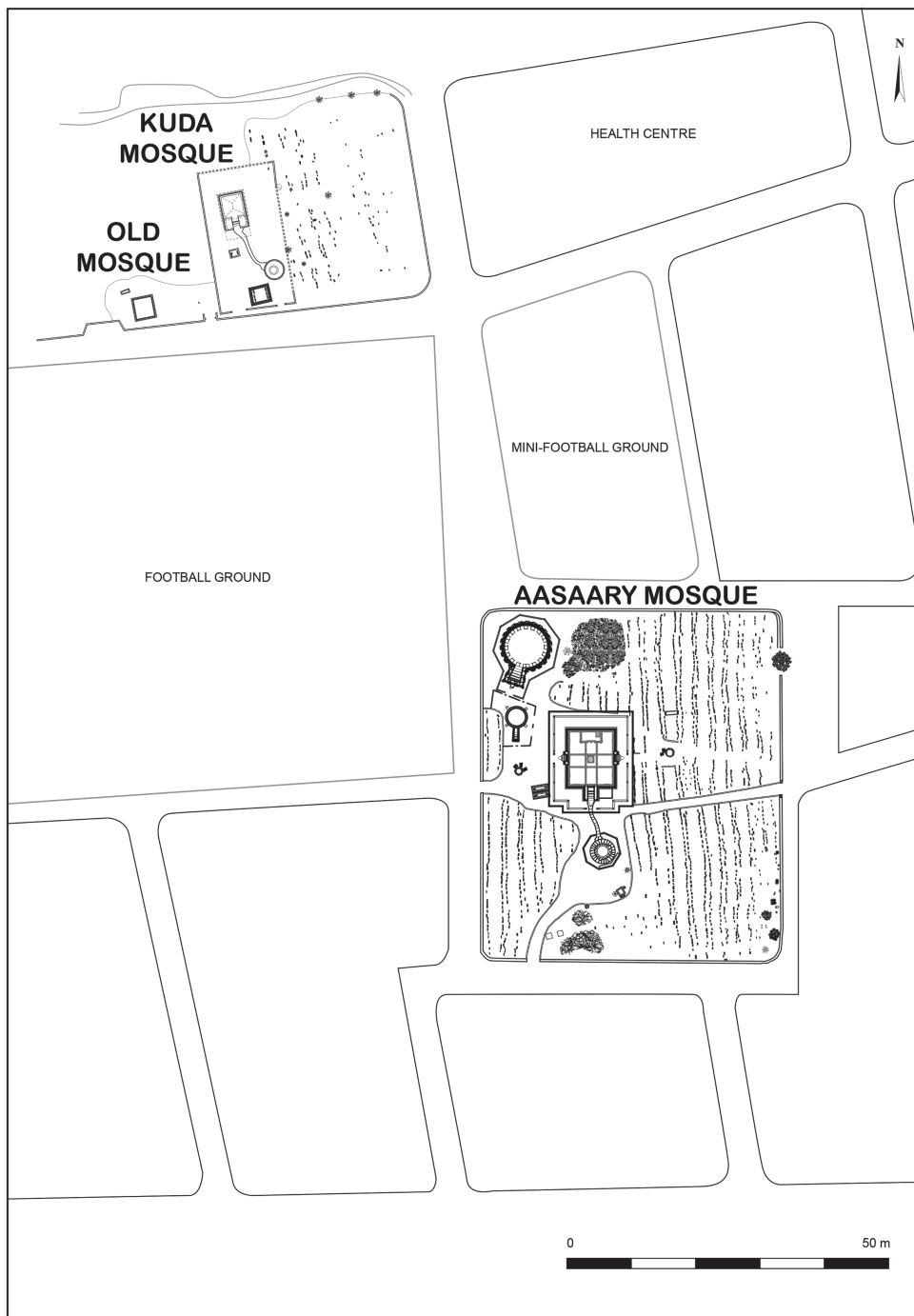


FIGURE 21
Plan and section of the “old mosque,” Kuda Mosque site, Fenfushi Island
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it was said, had been constructed by one of the former royal couples of the region, Kalhukamanafaanu and her husband. Our second test pit revealed the foundations of a previous building under the actual mosque. Although it was not possible to give a date to this building due to the lack of datable material, this first mosque was destroyed circa 1538–1635, in other words about a century and a half before Mohamed Dheevadhu’s reign. This information supports the hypothesis that the sultan did not demolish the first mosque but rather he wanted to rebuild this sacred place for the community. The sultan also cared about the well-being of his community, with the construction of a large water tank.

Nevertheless, the sultan might have had some political agenda behind his public generosity.

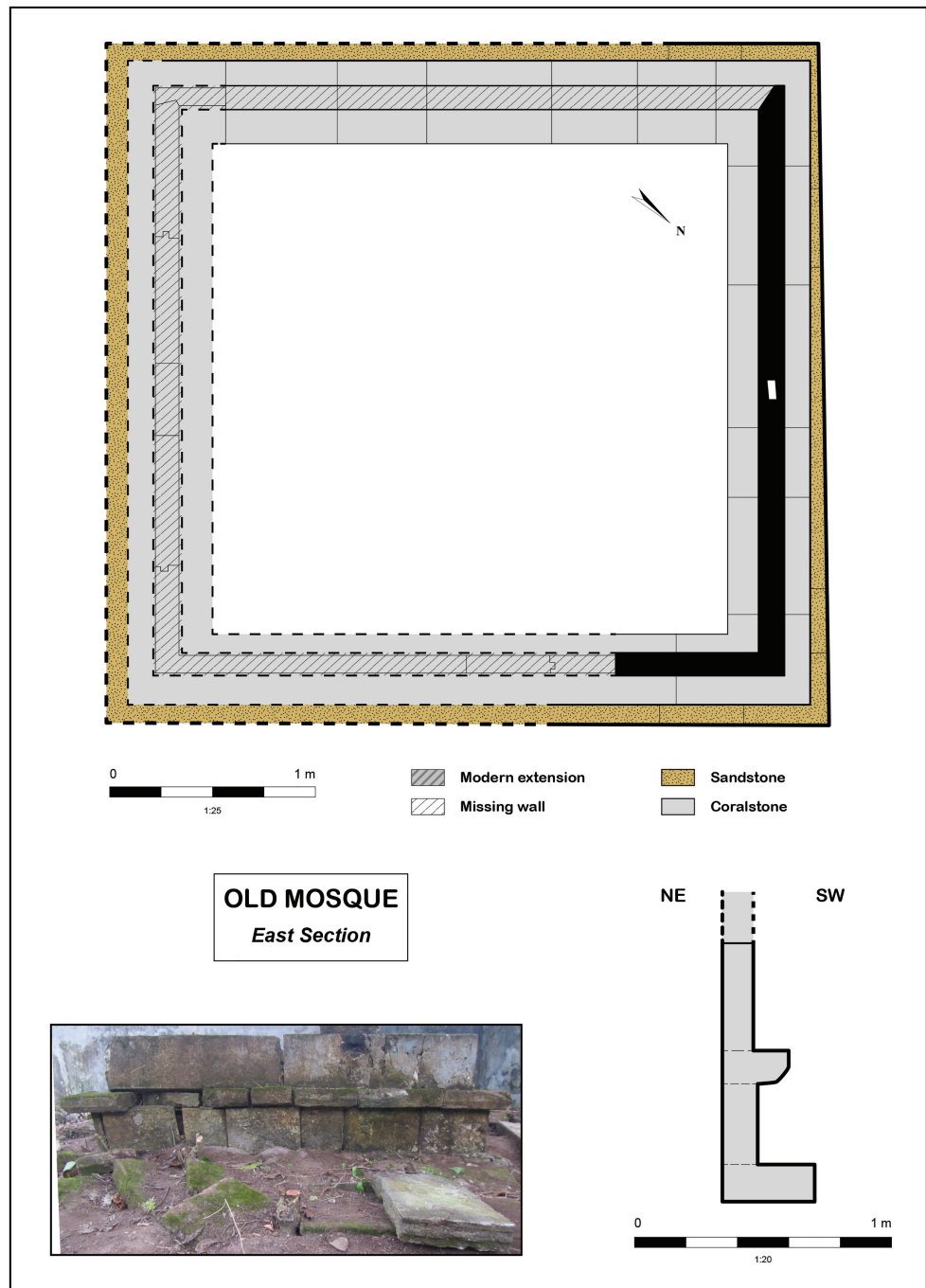


FIGURE 22
 Old sandstone mosque near Kuda Mosque
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He might have wished to reconnect his family with the large tombs built on the southern side of the old Friday Mosque. These tombs belong to Al-Wazeerul Haaju Hassan and his wife who was the King of Malé’s daughter. Again, according to tradition, Al-Wazeerul Haaju Hassan might also have built Kuda Mosque, which is located to the north-west of the Aasaary Cemetery in another funerary compound where, according to an official document, Faiykolhu, Kalhukamanaa’s son, Mohamed Mathukkalaa, was buried next to the Kuda Mosque. Our survey and our new plan reveal that the archaeological zone in Fenfushi needs to be extended to the north-west to include the graves next to the beach and the two mosques behind the football ground (Figs. 20 and 21). To the north-east of the modern mosque, which was built seventy-five years ago, seven rows of old tombstones were recorded. The old houses of the eighteenth to nineteenth centuries,

to the east of the Aasaary Mosque, also need to be added to the management and conservation plan.

In conclusion, our excavations and survey in Fenfushi enabled us to understand the true function of the so-called Buddhist bathing tank with the excavation of a similar modern structure. We were able to establish a relative chronology of the Aasaary Mosque's construction and the existence of an earlier building underneath. Our investigation showed that both structures were separated by a destruction/reconstruction layer that was possible to date precisely. Thus, the Aasaary site has a long history with six main occupation phases:

- (i) the building of a first mosque;
- (ii) its destruction circa 1538–1635;
- (iii) the rebuilding of the mosque around the time of Mohamed's reign;
- (iv) the building of the huge water tank contemporary to the second mosque or posterior;
- (v) the construction of the modern water tank circa 1980, and its destruction a few years later;
- (vi) the old water tank and the mosque were protected by modern cement walls all around them in the late twentieth century. The walls surrounding the mosque and the bathing tank were built on 22 September 1997 according to an inscription engraved in the cement.

4 Conclusion

Our main objectives were to fill the lack of knowledge of historical data related to the Maldivian coral stone mosques by carrying out archaeological excavations, surveys, as well as recording local oral traditions.

Our major question was the relationship between the Buddhist monuments and the mosques by verifying the information published by Bell (1940: 198–204) and, later on, by Jameel (2016: 78–9) regarding the continuity or the influences of Buddhist architecture on local Islamic architecture. Our results served not only the scientific community but also the needs of the Maldivian government, UNESCO and the WMF for conservation projects and to add the coral mosques to the World Heritage List.

The site of Fandiyaaru in Meedhoo is a major archaeological site of the Maldives, well known for its large cemetery. The Fandiyaaru mosques were chosen first to add the southern Maldivian atolls and sites to the World Heritage List, and to document the relationship between the Buddhist and the Islamic occupation periods. In Hulhumeedhoo (Fandiyaaru Mosque) we created the first plan of the cemetery compound including the four mosques and the whole cemetery. Three test pits were dug around two mosques within the compound. Our major discovery was to contradict the stated fact that the site was built on a previous Buddhist site. We did not find any evidence of this, despite the indisputable fact that there was a Buddhist occupation on the island; instead, our excavations revealed that the Islamic site (mosques and cemetery) was not built on previous pre-Islamic buildings. Our excavations also revealed that the site was not as old as it was described by the oral tradition. The site does not date from the twelfth century but more likely from the sixteenth to the seventeenth centuries. During our survey of Hulhumeedhoo Island, we discovered another old and small mosque to the south of the island. This ruined mosque was located in a cemetery adjoining the Hukuru Mosque in Hulhudhoo village. This mosque is extremely similar to the mosques in Fandiyaaru and it should be also protected by international and local authorities.

In Fenfushi, we implemented the map previously created by the Maldivian authorities. We added on the archaeological map another old mosque and a further modern

mosque, including another ancient cemetery. Our plan will be extremely important in the future as it considerably enlarges the zone that needs to be protected. During our excavation of the Aasaary Mosque, we discovered the architectural remains of a previous mosque. This mosque was built before the sixteenth century according to radiocarbon dating on the charcoals in the destruction layer of the first building and prior to the construction of the second mosque. This date ties in well with local tradition and the epigraphic study of the cemetery tombstones (Kalus and Guillot, 2005) and the calligraphy used to decorate the second mosque. Our test pits also confirmed that there were no pre-Islamic settlements or Buddhist structures under the old mosque. This mosque was very similar to the old mosque found in the bush to the north-west of the main site. We excavated a modern cistern and this excavation enabled us to reinterpret the so-called old Buddhist bathing tank. No evidence was found to corroborate the interpretation of a pre-Islamic Buddhist bathing tank. In fact, our investigations suggest that the bathing tank was a water tank built by the sultan for the local community. Our archaeological excavations and surveys provided details of a complex history of the Fenfushi village probably with one or two old mosques made of sandstone between the twelfth and sixteenth centuries and then a second phase, after the sixteenth century, with a new mosque and a large water tank for the community; the cemetery enclosure wall was built later on.

Finally, our excavations to the north and the south of the Maldivian atolls produced very similar observations. We did not find any pre-Islamic structures under the old Maldivian mosques as expected. On the two sites that we investigated, the mosques were not built on Buddhist temples. Some test pits were dug in the Great Mosque in Malé by our colleague Mauroof Jameel and he did not find any evidence of previous pre-Islamic buildings. Our “non-discovery” helps us to gain a better understanding of the relationship between oral tradition, history, architecture and archaeology, which allows us to propose a new chronology of the Maldivian monuments and their relationship with previous religions and cultures. The Maldivian mosques have been strongly influenced by Buddhist architecture; however, according to our excavations, even though some of them might have reused some building material from previous pre-Islamic structures, the Maldivian mosques were not built on Buddhist temples. The coral stone mosques of the Maldives simply demonstrate a strong influence and continuity of Buddhist architecture on the local Islamic architecture.

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Preliminary Bibliography

- Bell, H. (1940). *The Maldives Islands: Monograph on the History, Archaeology, and Epigraphy*. 1st ed. Colombo: Ceylon Government Press; reprint (2002) Malé: Novelty.
- Carswell, J. (1975–7). China and Islam in the Maldives Islands. *Transactions Oriental Ceramic Society* 41, pp. 119–98.
- Carswell, J. (1976). Mosques and Tombs in the Maldives Islands. *Art and Archaeology Research Papers* 9, pp. 26–30.
- Forbes, A. (1983). The Mosque in the Maldivian Islands: A Preliminary Historical Survey. *Archipel* 26, pp. 43–74.
- Jameel, M. (2016). *Coral Stone Mosques of Maldives: The Vanishing Legacy of the Indian Ocean*. Los Angeles: Gulf Pacific Press.
- Kalus, L., and Guillot, C. (2005). Inscriptions islamiques en arabe de l'archipel des Maldives. *Archipel* 70, pp. 15–52.
- Reynolds, C. (1984). The Mosques in the Maldives Islands: Further Notes. *Archipel* 28, pp. 61–4.

Notes

- 1 All dates are AD/CE.
- 2 Archaeological layers are labelled "sU" for stratigraphic units, walls and built structures are labelled "AU" for architectural units.
- 3 Ari_Fenfu_M1 (Aasaary Mosque or Mosque n°1) S2-208; Sector 1 (water tank) or Sector 2 (Mosque entrance).
- 4 Beta number-484790, site reference Ari_Fenfu_M1_S2_US208.